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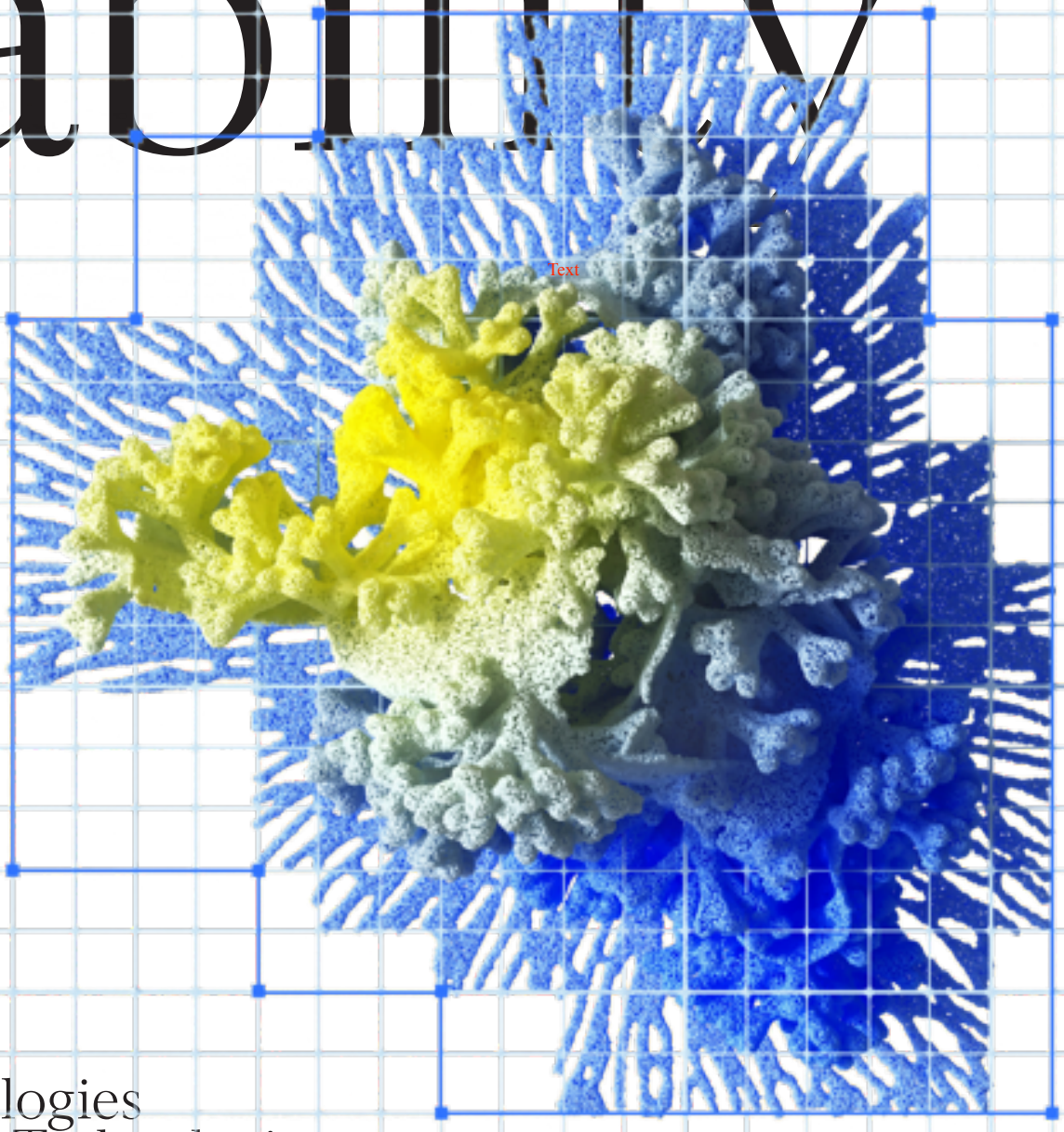
Cohabitability



Ecologies and Technologies of Living on Earth

Institute of Philosophy
Filosofický ústav AV ČR

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ABSTRACTS

Wednesday, 8th October 2025

Keynote

Noortje Marres
Postnormal: On the impossibility of co-existence with technology in the street

The idea of the "postnormal" has recently been put forward by sociologists to capture the growing sense of ontological insecurity in contemporary societies. Here, everyday ways of doing, working and living are increasingly challenged, while underpinning mechanisms of solidarity, such as universal access to utilities like clean water, are under threat, and the capacity of state and industry to solve collective problems is called into question. There is a growing realisation that, in the wake of proliferating crises of economy, environment, politics and culture, "there will be no return to normal."

How should we approach the relations between technology and society under these circumstances? In this lecture, I will address this broad question by exploring a particular predicament which I believe is key to our post-normal condition, and the role of technology in it, which I call "the trial of co-existence." I will explore this predicament in the style of empirical philosophy, by examining how it plays out in a number of everyday situations involving the introduction of new technologies, such as automated vehicles, into a particular social environment, namely the street.

The cases make clear that even as human, natural and technical entities must share the living environment of the street, their respective conditions of existence—what allows them to thrive in this setting—stand in tension, or even, are mutually exclusive. I conclude with some reflections on how trials of co-existence shed light on the more general problem of solidarity in ecologically-challenged, technology-intensive societies.

Noortje Marres is Professor in Science, Technology and Society in the Centre for Interdisciplinary Methodologies at the University of Warwick, UK. She studied sociology and philosophy at the University of Amsterdam and the Ecole des Mines (Paris). Noortje has published two monographs *Material Participation* (2012) and *Digital Sociology* (2017) and has led various research projects investigating public engagement in technological societies, in areas such as sustainable living and automated mobility. Noortje is currently completing a third book which examines technology trials beyond the laboratory—of automated vehicles, facial recognition and Covid tests—as critical interfaces between science, engineering, nature and society. She is also Visiting Professor in the Centre for the Media of Cooperation at the University of Siegen, Germany, and External Faculty at the Institute for Advanced Studies at the University of Amsterdam.

Panel 1
Infrastructures of thought and action: Conceptual toolkits for thinking cohabitability

Franciszek W. Korbański

Future histories: A critique of climate scenario production framework

Scenarios, originally developed in the military-industrial complex of the Cold War America and by oil and gas multinationals like Shell, have recently risen in prominence as sites for producing scientific representations of the future. All three IPCC working groups rely on scenarios as part of their practice, making them a key tool shaping the response to the current climate emergency by the science-policy interface (Warde, Robin and Sörlin 2021). Although widely used, they are not unproblematic: some refer to scenarios as the most controversial elements of the IPCC process (Edwards 2010). Others observe how these performative (Oomen et al. 2021) socio-technological imaginaries (Jasanoff and Kim 2009) exert so much power over the political sphere that they can be described as "tools of influence" (Andersson 2020).

I take such concerns as my departure point and observe how scenarios are characterised by several critically significant tensions. One of them appears at the intersection of two logics operative in scenarios: of the *qualitative* stylized storylines pre-emptively (Puar 2017) mapping out the sphere of possible futures and of the *quantitative* numerical integrated assessment models. This allows me to further theorise scenarios as a site of the encounter between the digital and the analogue (Massumi 2021), the multiple and singular, the rhizomatic and the arboretic (Deleuze and Guattari 2023). Ultimately, I analyse scenarios as shaped by a temporal tension between representation of a virtual *object-to-come* and expression of an *already-present* logic of neoclassical economy and neoliberal capitalism. Expanding on Doganova's recent work on valuing the future (2024) I theorise scenarios as a peculiar political and epistemic *technology*.

To theoretically address all these tensions, I take a question central for the philosophy of Gilles Deleuze—how is new possible?—and restate it in the context of climate science's dependency on scenarios in their current form. Can scenarios offer ways to creatively think the much needed novelty and difference (what Wark (2004) calls hacking) and escape the limitations of capitalism, whether green or not (Buller 2022)? Or are they merely reproducing the ossified patterns, offering us not much more than repetitions of the past, "future histories" (IPCC 2000), narratives already foretold and shaped by the forces of the "habit" (Massumi 1992)? Are they—to speak with Berardi (2017)—generations according to the existing code, or can they become sites of emergence and novel configurations, of new radical futurisms and difference (Demos 2023)? One way to think about the potential of novel forms of cohabitation—my project argues—leads through an investigation of the sites where the worlds we are told we can (and cannot) inhabit are produced.

To answer such questions my doctoral project engages in a close reading of the key publications from the IPCC and scenario research/design community—including Special Report on Emission Scenarios and selected IPCC Reports—to question the mechanisms and assumptions inbuilt in what I label "scenario production framework." The project builds on my training in philosophy and human ecology and on 14 months of doctoral research.

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Franciszek W. Korbański: Originally from Poland. MA in Philosophy from the University of Copenhagen (2015) and MSc in Human Ecology from Lund University (2023), currently pursuing a PhD at Roskilde University College, Denmark (2024–2027). I was a speaker at Aarhus University AIAS *Earth Sensations* Conference (2022), University of Copenhagen *Not This Time* Conference (2023) and Giessen University *Bouncing Forward* Conference (2023); research assistant (2022) to Andreas Malm and Wim Carton's *Overshoot*; a chapter contributor to *Future Narratives, Scenarios and Transformations in the Study of Culture* (upcoming: 2025).

Ivan Gutierrez

From metrics to technomoral habits for cohabitable futures

Smart-forest sensor nets, wildfire-prediction dashboards and personal carbon-tracker apps are praised for hectares saved or tons of CO_2 averted. Such first-order outcome metrics are important, yet they leave a blind spot: how do these tools shape the moral agency of the people and institutions that rely on them? Building on postphenomenology and Environmental Virtue Ethics (EVE), I would like to set out an evaluation framework that addresses this question.

Shannon Vallor's notion of technosocial opacity warns that the long-range consequences of climate tech are easily obscured by short-term success indicators. Postphenomenological work by Ihde and Verbeek (among others) shows why technologies are not neutral, but mediators that shape perception and action, sometimes eroding, sometimes cultivating the dispositions we need for living well in more-than-human communities. Recent tech-ethics scholarship therefore calls for virtue-based second-order criteria that judge systems by the habits they encourage rather than the tons of CO_2 they prevent.

Consider smart-forest sensor networks. When dendrometer and sap-flow data are harnessed solely to maximise timber yield, the technology mediates the forest as a controllable asset and nudges users toward extractive habits. The same sensors, however, can be configured to sense micro-drought stress or nocturnal growth pulses, revealing complexities that escape the eye attuned to timber yields. In that mode the system *cultivates* virtues like attentiveness, by drawing foresters into close, continuous observation; and humility, by exposing how partial their prior knowledge was. Whether the sensors become tools of hubris or of care, then, depends less on the carbon numbers they help deliver than on the technomoral habits they embed in day-to-day forest stewardship—precisely the dimension outcome metrics cannot capture.

By marrying postphenomenological mediation theory with EVE's character focus, the paper answers the conference's call to rethink "ecologies and technologies of living on Earth." It offers a conceptual toolkit for ensuring that technologically-driven climate action not only cuts carbon but also cultivates the technomoral habits on which true cohabitability depends.

Ivan Gutierrez, Ph.D. is a researcher in the "Conflict and Technologies in the Anthropocene" work-package of the Institute of Philosophy, Czech Academy of Sciences. His work bridges environmental virtue ethics, postphenomenology and AI governance within the large-scale CoRe project on societal resilience. Ivan earned his doctorate in philosophy at Charles University (2018) and has taught philosophy and tech-ethics courses at Charles University, Anglo-American University and various international exchange student programs. A bilingual Spanish–English scholar fluent in Czech and French, he has published and translated on technology and phenomenology.

Kim Burgas and Hrudaya Yanamandala

Translational imagination: Role-playing to build interconnected health

Human, animal, and environmental health are deeply interdependent. Yet most healthcare institutions continue to treat patients as individual, siloed entities. They miss the opportunity to see health in a way that is networked and ecological (One Health), and in doing so, perpetuate systems that fragment and minimize holistic approaches to health.

This view is also shaping how treatments and diagnostics are designed. The increased focus on personalized medicine and genetics research in cancer further individuates health at a time we need to be thinking about it at the systems level and impacts the way projects are funded for research. Research suggests some 70% to 90% of cancers may be the result of external factors such as behavior and environment, yet our focus continues to remain on the individual. Similarly, when environmental or behavioral impacts are considered, they are framed in terms of personal behavior change. Systems refrain from talking about interconnectedness for holistic health and rarely focus on prevention strategies.

Earth's habitability is a question of interconnected health. Technocrats would have us think the solution is more technology to solve the problems of today, without a stated vision for where we are heading, why and for whom. We argue the failure of our current health systems to think in a new way is one of *imagination*.

There is growing recognition of imagination as a value approach for systemic change. Building off our previous work designing role playing games (RPG) to explore interconnected, relational care in future health situations, we argue that RPGs can be a powerful tool for imagining alternative futures. Our prior game workshops, though not initially framed around ecological health, naturally uncovered these themes through play and world-building.

Although there is increasing momentum towards using play to think about complex, wicked problems, the outputs of imaginative play are rarely translated into broader systems of care. Building off the concept of translational research in medicine, moving from research to real-world application, we propose the idea of *translational imagination*: moving envisioned futures into practice. Drawing from solarpunk, speculative design, and game theory, we argue the present is fertile ground to intentionally design games that not only spark imagination but also create pathways for translating visions through prototypes into research, policy, and care practices.

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Kim Burgas (she/they) is a Design Strategist at Memorial Sloan Kettering Cancer Center, focused on bringing innovation to care delivery. Her background is in UX design and sensory sociology. Kim is a 2025 Global Fellow in End-of-Life Care and an Order of the Good Death Fellow.

Hrudaya Yanamandala (she/her) is a Design Strategist at Memorial Sloan Kettering Cancer Center. Hrudaya uses creative methodologies to imagine futures for social innovation. Previously, she worked at the Center for Urban Pedagogy and the United Nations Foundation. Hrudaya has a bachelor's degree in Engineering and an MFA in Social Design.

Panel 2
New technologies:
Technodiversity for more-than-human worlds

Friderike Spang
AI, democratic innovations, and the political inclusion of animals

Non-human animals (henceforth simply "animals") are profoundly affected by political decisions. From agricultural policies and welfare regulations to urban planning and climate strategies, animals are directly and indirectly affected by political processes. Yet they remain structurally excluded from political decision-making, with no institutionalized means of participation or representation. This issue has gained attention through the "political turn" in animal ethics, which argues for recognizing animals as political agents whose interests deserve representation (Cochrane, Garner, & O'Sullivan 2016). Existing models, such as differentiated animal citizenship (Donaldson & Kymlicka 2011) or animal trusteeship (Cochrane 2018), typically rely on human proxies. This raises concerns about anthropocentric bias and the limited access humans have to animals' perspectives.

This paper explores whether artificial intelligence (AI) might help address this challenge. Specifically, I examine how democratic innovations, i.e., participatory mechanisms designed to enhance the inclusiveness of political decision-making (Smith 2009; Elstub & Escobar 2019), can be adapted through AI to more adequately represent animal interests. Democratic innovations include deliberative mini-publics, participatory budgeting, citizens' assemblies, and digital platforms. These are already often supported by AI; for example, through natural language processing to summarize deliberative input, and algorithmic tools to select diverse participants (Landemore 2020; Mikhaylovskaya 2024). A prominent example is *Pol.is*, which maps areas of (dis)agreement across large groups.

Building on these developments as well as recent advances in using AI to gather data on animal communication (Ryan & Bossert 2024), I argue that AI-supported democratic innovations could be extended to include animals. More concretely, I propose three possible applications: (1) AI-based simulations could model the effects of proposed policies on animal wellbeing; (2) AI-generated deliberative prompts could introduce animal-relevant concerns into discussions; and (3) AI-generated narratives, grounded in species-specific data, could convey animal perspectives in emotionally resonant terms, thus fostering more empathic consideration of animal concerns.

I suggest that compared to human proxy models, AI-supported animal representation offers several advantages. It is scalable, allowing representation of multiple species across deliberative contexts without requiring domain-specific expertise. It is data driven, processing extensive behavioural datasets at a scale unattainable for humans. It is traceable, with outputs that can be reviewed and analysed; and it is adaptive, as models can be updated with new ecological or

ethological data. For these reasons, AI based models could enable more systematic and species-specific representation of animals in political decision-making. However, such models are not without risks, including oversimplification, overfitting, and the reinforcement of human-centric norms. Since AI systems reflect the datasets they are trained on, they may reinforce biases inherent in these datasets. While this paper does not aim to resolve these challenges, it identifies them as crucial concerns for future research. Overall, however, the argument is that AI-supported democratic innovations can offer a promising step toward a more just interspecies society.

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Friderike Spang is Postdoctoral Researcher at the Center for Environmental and Technology Ethics - Prague (CETE-P). Prior to joining CETE-P, she was Senior Researcher at the University of Lausanne, Switzerland. She earned her Ph.D. from the University of Western Ontario, Canada. Her research spans political philosophy and applied ethics. In political philosophy, she works on theories of compromise, disagreement, and deliberative democracy. In applied ethics, her work focuses on animal and environmental ethics. At CETE-P, her research combines these areas with technology ethics. Specifically, her work explores how democratic innovations and associated technologies can be used to represent the interests of non-human animals and future generations in political decision-making. Her work has been published in journals such as *Journal of Applied Philosophy*, *Political Studies Review*, *Politics and Animals*, *Journal of Deliberative Democracy*, and *Journal of Agricultural and Environmental Ethics*.

Štefan Oreško and Adela Lešková Blahová
Why we want caring machines. On simulated reciprocity and the question of responsibility

As AI systems increasingly operate in domains shaped by moral and affective labor, such as healthcare, education, welfare, and climate and ecological crisis response, they are frequently described as "supportive," "responsive," or even "caring." These descriptions do more than anthropomorphize technologies. They reflect a shifting ethical landscape, where the language of care is increasingly attached to systems that cannot reciprocate care.

In this paper, we explore what we call *simulated reciprocity*: the appearance of mutual care in human-AI interactions, where no actual relationship exists. Building on feminist ethics of care, particularly the work of Joan Tronto and Virginia Held, and posthumanist perspectives on care in the work of Maria Puig de la Bellacasa, we understand care as a relational, context- bound practice involving responsibility, attentiveness, and vulnerability. These thinkers remind us that care is not a feeling or a function, but an ongoing ethical commitment to others, both human and more-than-human. We also draw on scholars such as Lucy Suchman and Shannon Vallor, whose critical approaches help us question where agency and responsibility truly lie in human-AI relations.

Our central argument is that narratives of "caring machines" function as a form of *reflective care displacement*: they shift moral responsibility away from human and institutional actors, while also pointing to genuine, unmet demands for care in a world marked by ecological and social neglect. This displacement obscures not only the extractive infrastructures behind AI systems, but also distances us from the fragile, mutual responsibilities at the heart of ethical life. Rather than asking whether AI can or should care, we ask: What does it mean that we want these systems to appear caring? And what does that desire reveal about our ethical and political condition in a time of crisis?

We develop this argument through a critical and conceptual approach, grounded in care ethics and supported by close readings of public narratives and ethical framings of AI in care-related contexts. This paper thinks with cohabitability not as a theme to respond to, but as an ethical orientation, one that asks us to take seriously the politics of care and the systems we build to carry or avoid its weight.

Štefan Oreško is a researcher at the Institute of Philosophy, Slovak Academy of Sciences, a public research institution in Bratislava, Slovakia. His research focuses on the ethical and philosophical aspects of artificial intelligence, particularly how AI systems are perceived, interpreted, and integrated into society. He is especially interested in issues of anthropomorphization, responsibility, and how intelligent technologies reshape human–machine relations. He previously worked in the field of AI ethics at the Kempelen Institute of Intelligent Technologies (KInIT) and has published on various ethical and societal issues related to AI.

Adela Lešková Blahová is Associate Professor at the Department of Ethics, Institute of Philosophy and Ethics, Faculty of Arts, University of Prešov, Slovakia. Her research and teaching focus on environmental ethics, bioethics, and nursing ethics, with increasing attention to the ethical and political implications of artificial intelligence. She is particularly interested in how care, responsibility, and vulnerability are reshaped in the context of AI and ecological crisis. She also

works in the field of ethical education, emphasizing interdependence and justice as key ethical values. She is the author or co-author of several academic publications.

Arnaud Gane
Materiality, narratives, and ethics of living systems modelling: Ambiguities and perspectives

Contemporary projects aimed at modelling living systems, particularly through the Internet of Animals and the use of connected chips for tracking wildlife movements and behaviours, are part of the modern project of elucidating and mastering nature. This presentation seeks to interrogate the materiality of these technologies, the narratives that accompany them, and, above all, the zones of ethical ambiguity they open up in our relationships with non-human living beings.

On the one hand, these technologies promise to significantly expand our knowledge: they facilitate the prevention of zoonotic diseases and natural disasters and support conservation efforts, such as the reintroduction of raptors in southern France, which I have studied. These systems contribute significantly to the rise of movement ecology, which has the beneficial effect of challenging overly simplistic associations between species and their environments (Nathan & Giuggioli 2013). However, these devices are also embedded in a broader logic of controlling life, inherited from systemic thinking and Cartesian reductionism. This approach, critiqued by Derrida (2008: 44) as an "alteration [...] in the being-with that humans share with what they persist in calling the animal," questions the boundaries between care, surveillance, and instrumentalization. The explicit ambition of these projects to uncover the secret behaviors of animals and to monitor wildlife seems to align with a geo-constructivist desire to control the systems that make our planet livable (Neyrat 2019; Zhang 2020). The narratives accompanying these innovations, often centered on pioneering researchers like the German Martin Wikelski, contribute to a mythology of progress where technology is equated with ecological salvation—a theme prevalent in environmentalist discourses and conservation project narratives. Moreover, the applications of these technologies extend far beyond conservation: the massive collection of behavioral data and the development of these technologies can serve a broader political economy, potentially paving the way for new forms of exploitation or commodification of living beings (Büscher et al. 2014).

This presentation will outline my research directions on this topic, which will lead me to conduct fieldwork directly with the Max Planck Institute in Germany and the ARGOS project in France, which I have already begun to study. To explore the ethical ambiguities in depth, I will examine debates surrounding the notion of the animal-machine, particularly perspectives that complicate this often overly simplistically criticized concept (Agamben 2003; Derrida 2008). Regarding the use of chips in conservation, I will explore resonances with the literature on rewilding, a movement rich in imaginaries and narratives but offering a wide range of interpretations concerning its compatibility with capitalism and technology (De Vroey 2023; Jørgensen 2015; Lorimer & Driessen 2016). Rather than deciding on the acceptability or dangers of these devices, the aim is to highlight avenues for exploring the plurality of their uses and effects and to question the conditions for cohabitability with the techno-ecological trouble, as proposed by Donna Haraway (2015) and Bernard Stiegler through the concept of the *pharmakon*, where technology is both remedy and poison (Stiegler 2020).

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Arnaud Gane has been a doctoral student at UC Louvain, Belgium, since 2024. His research focuses on practitioners of nature conservation, with a particular emphasis on rewilding. He is interested in the epistemic, political and ontological implications of conservation biology in relation to modernity. He is working on a thesis entitled "A Wild too Modern: In Search of the Object of Contemporary Conservation Science. Ethnography of conservation projects in French-speaking Europe." He plans to explore the relationship between modernity, technology and conservation through a multisited ethnography of organisations that manipulate the concept of wild. He holds two Master degrees in ecology, the first in philosophy from the Université Lyon-III and the second from Sciences Po Toulouse (humanities), France.

Panel 3
The big picture: Planetary governance & health

Denis Chiriac

Planetary ontologies and technopolitics: Ethical challenges in geoengineering governance

Contemporary philosophical debates regarding the climate crisis and technological responses to it continue to critically examine concepts such as sovereignty, planetary responsibility, and the ethics of intervention. Central to these philosophical explorations is the controversial notion of geoengineering, a complex category synthesizing techno-optimistic ideals and the dystopian realities of the Anthropocene. Deeply rooted in dialectical tensions, geoengineering represents a persistent philosophical aporia, embodying contradictions between ethical aspirations of planetary salvation and their problematic implementation within existing power structures.

Our research investigates the ontological foundations of geoengineering (Szerszynski 2016), emphasizing its profound ambiguity: simultaneously an expression of technological control over nature and a symbol of still unrealized utopian aspirations for planetary coexistence. Through a philosophical lens, this analysis explores how intrinsic and instrumental values associated with different planetary ontologies continue to be interpreted and contested in contemporary technopolitical discourses. Critical philosophical questions thus emerge: Can geoengineering be appreciated as a theoretical construct holding intrinsic value independent of its geopolitical context? (Hulme 2014; Buck 2019) How do contemporary philosophical frameworks, particularly those analyzing planetary ethics, sovereignty, and responsibility, help navigate the conceptual tension between utopian ideals of planetary salvation and dystopian experiences of technological intervention? (Latour 2018; Chakrabarty 2021).

Our study identifies three distinct ontological paradigms structuring contemporary debates about geoengineering. The first, instrumentalist ontology, derived from Cartesian and Baconian traditions, conceptualizes Earth as an object of technological manipulation and justifies geoengineering intervention as a logical extension of scientific progress. The second, systemic ontology, inspired by complex systems theory and Earth sciences, recognizes the fundamental limits of human knowledge and control, advocating for a cautious approach based on recognizing the emergent and unpredictable character of planetary systems. The third, relational ontology, rooted in indigenous cosmologies and non-Western philosophies, challenges the nature-culture dualism and proposes governance models based on recognizing interdependence and the rights of non-human entities.

Drawing on interdisciplinary philosophical discourses, especially studies on technopolitics and critical theory of the Anthropocene, this paper examines how divergent testimonies of optimism and skepticism toward geoengineering reflect broader ideological cleavages in contemporary societies. Our analysis demonstrates that current debates regarding the legitimacy of

geoengineering are limited by the dominance of the instrumentalist perspective and the reduction of ethical problems to utilitarian risk-benefit calculations. This epistemic reduction systematically marginalizes alternative ontologies and perpetuates colonial power structures in global climate governance, as convincingly argued by Bińczyk (2018) in her analysis of Anthropocene rhetoric.

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Denis Chiriac is a researcher specializing in philosophy, slavic literatures, and religion. He is currently a PhD candidate at Moldova State University. His doctoral thesis, titled "The Concept of the New Man: Between Cosmism, Communism, and Transhumanism," explores intersections among philosophical ideas, ideological constructs, socio-spiritual aspects, and emerging technologies. Besides his research, he translates books from Russian and actively participates in international conferences. His academic background in Orthodox theology, Slavic languages and cultures (Russian and Polish), and the history and culture of religions enables him to undertake original inter- and transdisciplinary approaches in his research.

Martin Vrba
Designing the climate. The meaning of atmotechnics for planetary habitability

What does it mean to speak of a climate emergency? The term designates a planetary condition in which the very atmosphere has become the site of an urgent ethical-political struggle. It is the starting point for a multi-generational project to evade an extinction-level event. While the climate crisis affects all life on Earth, its impacts are distributed asymmetrically in time and space across geography, generations, and social strata. We are caught in the same storm, yet we are not on the same boat.

This paper explores the emerging necessity of co-designing shared atmospheric conditions through technical means. It introduces the concept of atmotechnics as a response to the limits of conventional mitigation strategies. Atmotechnics marks a shift to planetary thermopolitics, from territorial sovereignty to globally coordinated climate modulation. Rooted in the reality of accelerated climate breakdown and increasing scepticism towards the practical attainability of Paris Agreement targets under current conditions, it argues for the necessity of deep decarbonisation (large-scale deployment of negative emissions technologies) and desolarisation

(temporary and limited deflection of solar radiation). These two constitute a conceptual pair under the umbrella of atmotechnics: While deep decarbonisation addresses the cause of warming by repairing the carbon cycle, desolarisation engages with the symptom—overheating—by creating a solar shield to regulate the Earth's energy input. The purpose of the latter is to prolong (or reopen) the window of opportunity to societal transformation, which is happening far too slowly to succeed. While there is no technological solution to the climate crisis, there is also no way to tackle climate change without technological invention. Contrary to the geoengineering discourse that is gaining popularity in recent years, I argue that climate might never be engineered, as the required precision of climate models and their predictions will be lacking (in the short term, at least).

Instead, the concept of atmotechnics calls for climate co-design as an open-ended, reflexive thermopolitical project for the Anthropocene. Rather than following the divide between the natural (ecology) and artificial (technology), we may understand humans as atmotechnical animals: Being highly vulnerable to meteorological conditions, we rely on creating our own microclimates to survive and thrive in otherwise hostile conditions. Warming and cooling our surroundings is a necessary collective, thermopolitical practice evolving from tribal fires to large-scale air conditioning, and near-future planetary atmotechnics.

Alongside the philosophical conceptualisation of atmotechnics, the contribution will also provide concrete examples of some of the most promising atmotechnical practices: ongoing research programs, conservation of natural carbon sinks maintained by Indigenous communities, soil carbon sequestration projects, initiatives on just deliberation on solar radiation management that emphasise the voices from Global South, as well as an overview of current European stance on the issue. Although atmotechnics will need to play an increasingly important role in maintaining the planet's habitability, they are still rather underdeveloped and a marginal theme within the climate discourse. This paper aims to make a modest contribution to change that.

Martin Vrba: Over the past decade, I have volunteered as a climate and environmental activist, worked as a contributing climate editor, and freelanced as a climate journalist, focusing on European cross-border projects. Since May 2025, I have been a PhD researcher at Erasmus University Rotterdam, under the supervision of Professor Yuk Hui. In my PhD project, I focus on the philosophical conceptualisation of climate technologies within the framework of technodiversity and cosmotechnics (as developed by Yuk Hui), while expanding the concept of atmotechnics presented in the work of Peter Sloterdijk.

Lijuan Klassen
Who speaks for the planetary? Towards an ethics of planetary health(s)

Since its first mention in *The Lancet* in 2014, "planetary health" has become a prominent concept for those seeking to integrate concerns for human health with the preservation of habitable conditions on Earth. In contrast to other concepts that conceptualise the present as a crisis caused by human influence such as "climate change" or the "Anthropocene," the discourse of planetary health seems to promote an explicitly affirmative, solution- oriented, if not hopeful, outlook focused on the theme of an interconnectivity between human existence and nature. This vague relation is at times visually illustrated by spherical networks of linked-up nodes, at others as a scaled-down

green and blue marble held in a human's hands. What emerges is a trope of the planet as a globe, a graspable and computable whole (Gabrys 2017), seeming to speak with one voice. But who—following Gayatri Spivak's famous provocation—speaks for the planetary? Through which processes of mediation is the planetary configured and how is the passage between "sickness" and "health," from "contaminated" to "pure" nature, made evident, understood or activated?

In this presentation, I aim to analyse contemporary visualisations of "planetary health" in regards to how such representations render (in)visible complex environmental, social and political problems operating on different temporal and spatial scales. Drawing on the notions of *planetarity* (Spivak 2015) and *cosmopolitics* (Stengers 2010) I seek to move from an understanding of the planetary as a computable whole in which the "human" is its universal agent, to a differentiated ethics of the lived reality of planetary health(s). I demonstrate how the trope of interconnectivity risks obscuring the ethical ambiguity at the heart of planetary cohabitation—the demand to bear our responsibility for the precarious lives of others who we do not immediately perceive, love, know, or care for (Butler 2012).

Lijuan Klassen is a PhD candidate at the Rachel Carson Centre for Environment and Society, at LMU in Munich, Germany. Her dissertation focuses on the subject of Planetary Health from an environmental humanities perspective. Before working in the Dutch cultural field and until recently at Gropius Bau, Berlin, she graduated from the research master in Cultural Analysis, at the University of Amsterdam, where she explored the ecological entanglements and histories of "camouflage."

Panel 4
Stories from the field: Ecological-technological entanglements

Rigas Karampasis
Digital archipelago: Virtual and vanishing ecologies in Tuvalu's climate futures

As rising seas threaten Tuvalu's physical territory, this Pacific Island Nation has embarked on a radical and unforeseen action: encoding sovereignty, culture, community, collective memory and land into algorithms and digital datasets. This paper explores how Tuvaluans navigate the simultaneity of land submergence and virtual reincarnation, approaching cohabitability as a dynamic negotiation between ecological precarity and technological innovation and improvisation. Drawing on four months of ethnographic fieldwork in Funafuti, and Suva and Melbourne's diaspora communities, the analysis centers on Tuvalu's *Future Now Project*, a government-led initiative to digitize land, governance, and cultural practices in the Metaverse. By examining three interlocking domains—*infrastructures of connection* (the Vaka submarine cable, Starlink satellites, tv domain revenues), *affective algorithms* (grief, scepticism, and hope in digital futures), and *sovereignty as service* (blockchain-backed citizenship, online marriage certificates, digital passports)—this study challenges the ecology/technology binary. It reveals how Tuvaluans reconstitute cohabitation through hybrid practices: elders applying fragrant oils to the dancers and singers in the fatele, while younger residents of Funafuti livestream the festivities; seawalls competing with servers; and migration pacts like the Falepili Union with Australia coexist with LiDAR scans of vanishing coastlines.

The findings of this research showcase an imbalance between the government's visions of digital perpetuity and grassroots critiques of "digital colonialism" (Nothias 2025). While Minister for Transport, Energy, Communication, and Innovation, Mr. Simon Kofe, for example, envisions a sovereignty and overall continuation beyond the terrestrial, other interlocutors encourage focus on actions and practices of tangible climate resilience instead. But which infrastructures and cosmologies—made by whom—define 21st century cohabitability? By analyzing Tuvalu's digitization through Krause and Eriksen's (2023) framework of "volatility," this paper argues that in the Anthropocene, cohabitability demands *relational plasticity*: attentiveness to how communities reinterpret, reframe and recompose belonging across the physical and the virtual. The paper concludes by looking at indigenous epistemologies of the *fenua* (land, sea, people, community, ancestral memory) as a counterpoint to Western techno-utopianism, proposing pathways for cohabiting uncertainty through decentralized, adaptive practices.

Rigas Karampasis is an MA candidate in Social Anthropology at the University of Oslo, and an Onassis Foundation scholar. His MA thesis, *Tuvalu E-Scapes: An Island Nation's Digital Journey in*

the Face of Climate Change (2025), draws on ethnographic fieldwork in Tuvalu, Fiji, and Australia to study the effect of climate change in Tuvalu, and to analyze how digital infrastructures are employed to reconfigure sovereignty amid ecological crisis. Rigas has worked as a research assistant for the ERC-funded project PORTS at UiO (2023–2025), and is scheduled to present at the European Society for Oceanists Conference (2025).

Gabrielle Tabares Fagundez and Susanne B. Unger
The tinkering tide: Interspecies fishing as situated ecotechnology in the Global South

The bottlenose dolphins of Santo Antônio dos Anjos Lagoon, in Santa Catarina, in southern Brazil, engage in a rare and remarkable form of cooperative foraging with artisanal fishermen, particularly during grey mullet migrations during the winter months. This practice—dating back at least 170 years—is transmitted maternally among dolphins and culturally among human fishers. The resulting relationship is built on attentiveness, deep ecological knowledge, and long-standing interspecies relationships, in which dolphins are often individually named and known across generations.

This form of fishing has a technical character that is both creative and adaptive and is based on observing environmental signals such as seasonal cycles and tidal patterns. Instead of relying on drones or sonar, this practice demonstrates the ability of human and animal intelligence to come together to confirm an equitable mode of cohabitation and coexistence. This practice challenges dominant assumptions about the separation between nature and culture, and offers a compelling model of how ecology and "technology" (understood here as traditional artisanal technique) can work synergistically.

Over time, a variety of inventive and adaptive fishing practices have emerged from the collaboration. These cooperative methods involve different techniques and tools. In some cases, fishers use small canoes, while in others they fish standing in usually waist-deep water. Cast nets, or tarrafas, are consistently employed across all locations. Certain dolphins, regarded as particularly skilled—affectionately known as good dolphins—help the fishers by signaling the presence of fish, either by leaping from the water or making specific splashing gestures.

This relationship is an example of cohabitability between dolphins and humans in a shared ecological space. They interact in mutually beneficial ways, demonstrating the connection between technology and nature, as well between ecological knowledge and practical techniques.

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Gabrielle Tabares Fagundez is a postdoctoral researcher in law at the Federal University of Santa Catarina (UFSC), Brazil, with a CNPq fellowship (2024–2025). Her research focuses on human rights, climate change, and socioenvironmental justice. From March to May 2025, she was a visiting scholar at the Rachel Carson Center (LMU, Germany), also supported by CNPq. Gabrielle holds a PhD in Law (UFSC), has international research experience in Portugal, and is affiliated with Speak4Nature. She was awarded a Swiss Government Excellence Scholarship for a 2025–2026 postdoc at the University of Fribourg.

Susanne B. Unger is a lecturer at the Rachel Carson Center for Environment & Society at the University of Munich. She trained as a linguistic anthropologist with an emphasis in visual anthropology. Her research areas include human-animal relationships and multispecies research. She earned a BA in gender studies and psychology from the University of Michigan Ann Arbor, USA, a MA in linguistic anthropology from the University of Toronto, Canada, and a PhD in linguistic anthropology along with a graduate certificate in film, television, and media from the University of Michigan Ann Arbor, USA.

Varvara Borisova and Jiří Bartoš
Swarming companions: Ecological intimacies of insect-farming

As existing food production models reach their limits, insects have captured the attention of researchers and producers as a promising alternative source of protein. Insect-based products are promoted as being more sustainable in production, nutritious, and beneficial for metabolic health (Nowakowski 2022). Yet, despite the promises of the insect protein, concerns over its integration into our food ecosystems persist, particularly in terms of the scalability of insect farming (Biteau 2025), ultra-processing of raw insect ingredients (Malila et al. 2024), and the "yuck" factor that is an obstacle to consumer acceptance (Belluco et al. 2017).

This paper, co-authored with Mr. Bartoš, an enthusiastic Czech mealworm breeder, presents an alternative model of insect farming that is not driven by the logic of scaling up. Mr. Bartoš operates a small-scale mealworm farm in a small utility room of his house. The insect-based food he produces is consumed by his family members and sometimes offered to the village community he is a member of. His farming continues the tradition of food self-provisioning (Daněk et al. 2022) and cohabitation with animals. The mealworms—fed kitchen scraps, housed in stacked drawers, and cared for daily—have become part of a household ecosystem. Not being a revenue-driven enterprise, this practice rests on domestic production, sustainability efforts, and low-tech innovation.

Drawing upon Donna Haraway's (2003) notion of companion species, we, together with Mr. Bartoš, examine his relationship with mealworms as an ongoing and situated process of mutual dependency and ecological intimacy. In conversation with Eben Kirksey's (2019) call to "[learn] how to love and care for invertebrates, and their microbial companions, in an era of extinction," we

approach the farm as a (bio)political response to the climate change, which builds on mutual respect, adaptation, and care, instead of mastery and control.

Rather than viewing insect farming solely as a technofix solution to the ecological crisis and shortcomings of industrial food systems, we attend to the affective and ethical relations that emerge within this multispecies metabolic system. Living with mealworms creates new ways of cohabitability, where attention, care, and bodily proximity engender alternative forms of ecological responsibility. This paper contributes to broader discussions on how (food) futures might be cultivated through more-than-human intimacy, care, and experimentation.

Varvara Borisova is a junior researcher at the Institute of Sociology of the Czech Academy of Sciences and Ph.D. candidate at the Charles University Prague. She specializes in the anthropology of medicine and technology.

Jiří Bartoš is a software engineer and insect breeder. He started his mealworm farm in 2021 and has been an active member of the insect farming community ever since. Mr. Bartoš offers courses for insect breeders, provides online consulting, and helps beginners set up their farms. He is also a member of the Association of Insect Producers and Processors.

Thursday, 9th October 2025

Keynote

Jussi Parikka
Light, heat, data: Invisual agriculture

Agriculture is a particularly interesting operational sphere of contemporary culture and environmental data. It is central to many of the climate change (mitigation) plans, measures and policy; it links directly to the models concerning planetary boundaries and flows of nutrients; it also concerns food security both in geopolitics and weaponization of food, including use of designed starvation of entire civilian populations.

Agriculture is also the broad area of experimentation for data technologies and institutions where the "smartness mandate" (Halpern and Mitchell) extends beyond the sphere of the city onto the countryside. As such, it is also an example of multiscalar sensing of more-than-human world of (agricultural) plants. Data becomes a framework for a new kind of a circulation of facts, projects, projections, value, valuations, operations, and abstractions concerning agriculture.

In this talk I will investigate the variations of light in agriculture with a view especially toward architectures of such cultural techniques (e.g. greenhouses and artificial light) as well as modes of sensing (e.g. hyperspectral sensing). Treating agriculture as light helps to connect it to concerns of aesthetics beyond visible and tease out some of the aspects how it can be discussed as an invisual (Mackenzie and Munster 2019; Parikka 2023) regime of control. Invisual refers to such practices of images and light that do not necessarily function in the register of "visual," thus positively bothering what we mean by practices of light and visuality. Treating agriculture as "heat" links it to contemporary computational cultures (Steyerl 2025) as much as to practices of simulation of different environmental conditions.

The talk draws on my on-going research into "abstract agriculture" that tries to understand the histories and current impact of datafication of plant life, especially that of agriculture.

Jussi Parikka is professor of Digital Aesthetics and Culture at Aarhus University, Denmark, where he is also the co-direction of the Environmental Media and Aesthetics research program. He holds a visiting research professorship at University of Southampton (Winchester School of Art) and is the author of several books on media, digital culture, and cultural theory alongside his long-standing interest in histories and contemporary practices of art and technology. His recent books include the co-authored *Lab Book* (2022), *Operational Images* (2023); and the co-authored *Living Surfaces* (2024). https://www.au.dk/en/parikka@cc.au.dk

Panel 5
Air as commons:
Theories of air and encapsulation

Baldeep Kaur
Air as an element of the commons

Popular political uprisings around the world over the last five years have seen the recurrence of slogans that reference common breathing room. The repetition and movement of this trope across the 2020 BLM movement to the 2025 protests in Greece signal shrinking room for the maintenance of collective life and organising as a collective against imperial interests. In this talk, I attach the idea of air as an element of the commons with the ongoing collapse of terrestrial forms: civilian infrastructure, multi-species habitats and waste containment systems. As the weather fluctuates and terrain shifts quickly, political organising on the ground must find new ways of theorising and securing the conditions of collective life. Highlighting the centrality of the respiratory slogans in the political left in recent times, I argue for renewed attention to the way the element of air has been conscripted into capitalist accumulation and the methods that might aid its release into relations that prioritise cohabitation and collective life.

Baldeep Kaur is a doctoral candidate in the DFG-funded RTG Minor Cosmopolitanisms at the University of Potsdam, and teaches at the University of Rostock, Germany. They study how colonial power is consolidated during large-scale technological transitions and switches between resource regimes. Alongside their thesis, a longer-term project is to imagine velocities of academic work that nourish slow work and protect slow workers. They are affiliated with the Laboratory: Anthropology of Environment | Human Relations at the Institute for European Ethnology at Humboldt Universität zu Berlin, and are a member of a DFG Network on discard studies called Waste in Motion.

Madeline Becker
Commons and capsules: Thinking air and cohabitability through the automobile

This presentation will consider cars as an interesting node in thinking through air as commons. Fossil-fuelled automobiles in particular produce emissions that contribute to shared air pollution, turning ancient terrestrial matter into (problematic) air. The individuals within the car, however, avail themselves of extensive air filtering and, as it is intriguingly called, air "conditioning" (as well as heating). Notions of co-habitability are troubled: Car drivers are buttressed through hyper-individualism, borders that separate the individual from their environment, epitomised in the form

of the car. At the same time, the extent of smog effects in dense areas can be traced through maps of Paris, where significant shifts in transportation towards mass transit and bicycles have transformed levels of certain pollutants in the air. Cars thus constitute capsules against the commons—evident in the relations to air, but also in how such vehicles individualise transportation. The presentation will unravel the idea of the automobile as a capsule, promoted by car designs and advertisement, by tracing the journey of fossil fuels from the deep reaches of the earth, through cars, into air ingested by people, animals, and plants—a journey that renders air commons shared by past, present, and future inhabitants of this planet.

Madeline Becker is a researcher at the Cultural Studies Department at Rostock University, Germany. She studied English Literature and Culture and European History at Otto-von-Guericke-University Magdeburg, Germany, and at Bath Spa University, UK. She has recently completed her doctorate. Her dissertation explores how nature, wildlife and environmental documentaries mediate environmental crises and their particular materialities. She has published research within the environmental humanities, material culture studies, and gender studies. Her current research project (Habilitation) investigates material artefacts and their histories, examining how they shape cultural conceptions of femininity, define its boundaries, influence the social roles assigned to women, and manipulate, regulate and control the female body.

Kylie Crane
Remedial-air-media

Air is essential to organic life; it is properly elemental, that is, common in a very basic sense. Air is the basis for cohabitation within and across species. At the same time, air—"this common interface of terrestrial life" which "continues to be compromised" (Aerocene Manifesto)—is (mostly) unseen, and (predominantly) unfelt. What do we make of air as media? If media "form the infrastructural basis, the quasi-transcendental condition, for experience and understanding" (Mitchell and Hansen), this holds true for air. But: What practices do we engage when we wish to foreground the background, represent this media, make visible the invisible? This presentation will probe some practices of representing air, in particular air-borne pollutants, toxicants, and other threats to cohabitations that tend to rescind from representation.

Kylie Crane is Professor of Cultural Studies at the University of Rostock, Germany. Her most recent book *Concrete and Plastic: Thinking Through Materiality* was published 2024 OA with Bloomsbury Academics. Other recent publications investigate fungi in culture, nuclear cultures, and ruins and wasteland more broadly; in addition, some handbook articles on postcolonial ecocriticism are in progress. She is currently working on projects and publications on wetlands spaces, (environmental) externalisations, and everyday material cultures.

Panel 6
Arts of cohabitability

Mateusz Borowski

Feral media. Mediation as cohabitation in the photographic practices of sustainable darkroom

The point of departure for the present paper is the definition of media as "environments, containers of possibility that anchor our existence and make what we are doing possible" (John Duhram Peters, *Marvelous Cloud*, 2015). As media scholars argue, practices of photographic image-making have been crucial as instruments of gaining knowledge of and wielding power over natural environments. At the same time photographic media provided a template for the representational methods of getting access to non-human realities with exploitative purposes in view. Set in this context, the present paper investigates the relationship between medial (in this case photographic) practices and the ways of inhabiting the world by humans. As has been argued in numerous studies, modern practices of image-making not only critically contributed to creating the concept of nature as conquerable and controllable, but also, through their carbon footprint and toxicity, have kept significantly exacerbating the current ecological crisis. Therefore, in times of the ongoing climate and environmental emergencies, when feral forms of life proliferate, also mediation as a foundation of cohabitation requires a thorough re-thinking and re-design.

In my paper I approach this problem by looking at the projects of artists gathered under the aegis of the UK research collective Sustainable Darkroom—Hannah Fletcher, Ed Carr and Scott Hunter—who modify photographic technologies of image-making and invent medial dispositives and techniques of developing images with plants and environmental factors as contributing agents. In their respective projects these image-makers not only look for ways of doing photography in a sustainable way, but also work out specific technological and aesthetic practices to turn plant bodies into media that co-produce images and at the same time process human-produced waste. For example, instead of photographic paper Fletcher, Carr and Hunter use natural materials, such as leaves or soil, and rely on sunlight to produce images which they subsequently exhibit as artificial fossils. Also, they use hyper-accumulating plants to extract heavy toxic metals from photographic fixers and then repurpose them to develop black and white photographs. Also, their speculative practices point to the necessity of re-evaluating the fundamental modern assumptions about media as means of conserving and stabilizing the image of the world. In Sustainable Darkroom images are effects of mediation within more-than-human collectives, and therefore they are manifestly impermanent, only partly readable and ever-changing due to the constant impact of environmental agents. Paying attention to the specificity of the practices of each of these image-makers, I analyse the projects carried out in Sustainable Darkroom as practices that are *bona fide* speculative—not only innovative, but also pointing to ways of mediating qua coinhabiting the world alternative to those practices of mediation that dominated in the era of extractive coloniality.

Mateusz Borowski is a Professor at the Department for Performativity Studies at the Jagiellonian University, Kraków, Poland. He holds a PhD from Johannes Gutenberg University in Mainz, Germany, and the Jagiellonian University. Currently his main areas of interest are green humanities, counterfactual discourses and speculative fabulations in the context of the environmental crisis. He is Principal Investigator in the research project *After Climate Crisis. Non-Scalable Survival Strategies in Speculative Fabulations of the Last Two Decades* (2022–2026) funded by the Polish National Science Center. In 2025 as recipient of Fulbright Slavic Award he is visiting scholar at University of Illinois in Chicago, USA.

Janusz Waligóra
Coevolution and coexistence: Prehuman and posthuman transformations of zoe in contemporary literature

This presentation offers a reflection on the idea of cohabitability as a proposed principle of existence—the shared persistence of multiple forms of life within a single, mutable space of the world. Referring to the concept of zoe (Rosi Braidotti)—the universal, active, and egalitarian dimension of life—as well as to scientific knowledge about the common origin of humans and other organisms, I examine how contemporary literature prepares the ground for such coexistence or engages in a reckoning with the hegemonic position of the human over non-human subjects.

Using the poetry of Wisława Szymborska as an example, I discuss prehuman processes of transformation and the dynamics of evolutionary change, captured through a poetics of loss and reduction. I analyze the poetic concept of temporal compression and condensation, realized by attributing to a single "I" the evolutionary experiences encompassing several billion years, from the beginnings of life on Earth. Following Szymborska, I highlight anatomical transformations and lines of genetic inscription that preserve the most ancient shifts and kinships among organisms. In turn, by examining the work of younger-generation authors, including the poetry of Radosław Jurczak, I reveal posthuman and nonhuman perspectives on the world. When even the colonists of Mars belong to history, the cosmic universe becomes the domain of bio- and cybertechnologies that assume the role and position once held by humans, as in the poem "The Third Generation of IBM Watson Computers Learns to Speak" (from *Zakłady holenderskie* [Dutch Book]).

I also investigate how contemporary poetry, conscious of anthropocenic and capitalocenic entanglements, constructs new models of human identity or—in an elegiac-speculative mode—portrays the void left by humanity when "there is no more pain." Furthermore, I focus on artistic strategies of autonomy and engagement that—in the face of the climate crisis—redefine the human's current position in the world and suggest the imperatives to which literary art is subject today. Through the prism of poetry, I observe the human as no longer the sole point of reference, but rather as one among many actors in the web of life (Bruno Latour). By analyzing literary works that depict life as a common, fragile, and entangled process, I seek to answer how contemporary literature contributes to strengthening a sense of shared responsibility for the world and to building an ethos of community.

Janusz Waligóra: Ph.D. with habilitation, Professor at the Institute of Polish Philology, University of the National Education Commission in Kraków. He is the author of *The Prose of Tadeusz Różewicz* (2006) and *Neither Ritual Nor Carnival...* (2014), and co-author of *A Pact for the School* (2011), *Education in Times of the Digital Plague* (2016), and *The School Theater of Interaction* (2016). His research focuses on contemporary literature, Holocaust and memory studies, and environmental humanities: bio-communities, anthropogenesis, cross-species communication, animal studies, and the ecological engagement of literature.

Beáta Pántya and Orsolya Lazányi
Revealing more-than-human beings through art-based multisensory methods in healing garden design

Growing ecological awareness emphasizes the interconnectedness between humans and the natural environment, reinforcing that human health and ecosystem health are linked together, one cannot exist without the other (One Health). As the environmental crises deepen and mental health challenges rise, innovative solutions are needed to foster both ecological health and human well-being. Healing gardens offer a promising approach, providing healing spaces that reflect our symbiotic relationship with nature.

The Healing Garden Living Lab in Hungary, established as part of the COEVOLVERS Horizon Europe project, aims to re-design the garden of a psychiatric hospital. Our research methodology is designed to observe the garden as a complex environment where multiple species interact, engaging with both human and non-human inhabitants and recognizing their equal importance.

Our Living Lab develops a set of art-based methods that help us get a deeper understanding of the environment by connecting through our senses. Sarah J. Bell's concept of engaged witnessing is an important approach in our research, as it fosters openness and sensitivity towards more-than-human beings of the garden. Through sensory garden walks and sitting observations we develop a deep, embodied connection to the space, uncovering micro-worlds and subtle phenomena that might otherwise go unnoticed. These observations are supported by visual and auditory technologies which extend our human senses and abilities to capture the garden. Timelapse videos map the dynamics of the landscape over extended periods that are difficult to observe in real-time, revealing seasonal transformations and behavioural patterns. Aural experiences are also important in the healing garden design because they have a deep impact on well-being and contribute to a therapeutic environment. Soundscape analysis helps to identify areas of therapeutic potential and guide interventions to eliminate disruptive noises. We also observe the presence of certain species by recognizing their sounds, helping us gather information about the diversity of wildlife.

Our research employs Timo Maran's Ecological Repertoire analysis to analyse the data of multispecies environments. With umwelt analysis we explore the species' sensory and behavioural interactions with the environment, and identify functional relationships among species, their resources, and threats. We explore ecofields—specific patches that fulfil species' needs, such as foraging or nesting areas. Affordance mapping highlights environmental features that support species' life functions, like surfaces for movement or shelter structures. By integrating these methods, we reveal patterns in more-than-human interactions and map the presence or absence of affordances, especially for key species.

The synthesis of these methods and practices allows a deeper understanding of the healing garden as a living system. This novel approach based on art-based multisensory methods not only reveals the presence and needs of more-than-human beings but also informs design decisions that can enhance both human well-being and ecological health.

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Beáta Pántya: Environmental Social Science Research Group (ESSGR), Hungary, visual researcher in the Coevolvers project creating multisensory research of more-than-human species and natural elements by developing art-based data collection and processing methods.

Orsolya Lazányi: Environmental Social Science Research Group (ESSGR), Hungary. She obtained her doctoral degree in ecological economics through action research conducted in an environmentally and socially committed organization. Currently, she is involved in research projects focusing on sustainable food systems and strengthening the connections between nature and people.

Panel 7
Bridging the divide: Philosophy of eco-tech

Melanie Sehgal

Relearning cohabitability? Techniques of sensing and the arts of noticing

This paper argues for a revaluation of "techniques"—understood as embodied, situated forms of knowledge—as central to addressing the ecological and existential challenges of the Anthropocene. Departing from the polarized ecological debates that either reject technology in favor of a romanticized return to "Nature" or place excessive faith in technological solutions such as geoengineering, the emphasis on techniques opens up a middle ground, as techniques are not considered as antithetical to technology but as complementary and co-constitutive.

The paper begins by outlining the epistemological specificity of techniques, foregrounding their capacity to mediate and transform human experience. This framework is then applied to the question of how the Anthropocene is sensed and experienced as its testing ground and field of application. The issue of sensing and experiencing the climate crisis is so crucial because it once highlights the power and the limits of an overreliance on technology to respond to the climate crisis and points to the need to develop new bodily techniques of sensing in view of working towards more habitable futures. While next to everything we know about the changes the earth system is undergoing is known through technological sensors (Gabrys 2016), these transformations are also felt bodily—though in uneven, asynchronous, and often imperceptible ways. Toxicity, for instance, frequently escapes direct perception, becoming felt only through illness or the slow violence of ecological degradation. In such contexts, especially where technological monitoring is unavailable, low-tech or vernacular techniques of sensing become vital (Tironi 2018). Drawing on insights from Science and Technology Studies (STS), in particular from the work of Jennifer Gabrys, Nerea Calvillo, and Manuel Tironi, the paper presents case studies that illustrate the entanglement of technologies and techniques. Against dominant Western and neoliberal logics of technocratic "quick fixes," it explores how techniques might recalibrate perception and enable alternative, more situated engagements with environmental change in view of relearning cohabitability.

In its concluding section, the paper proposes that the humanities have a vital role to play too, in fostering techniques of sensing in view of creating more habitable futures. Finding examples in Bruno Latour's advocacy for practices of meticulous description and Anna Tsing's "arts of noticing," developed in the context of multispecies ethnography, it explores how alternative sensibilities might emerge through scholarly practices as well, offering ways of attuning to the world that diverge from the logic of extractivism. Ultimately, this paper calls for a reconfiguration of the sensory and epistemic regimes that shape our responses to the planetary crisis, advocating for techniques that enable to relearn an ethics of cohabitability.

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Melanie Sehgal is Director of Research at the Institute for Basic Research into the History of Philosophy at Bergische Universität Wuppertal, Germany. She is the author of *Eine situierte Metaphysik: Empirismus und Spekulation bei William James und Alfred North Whitehead* (Konstanz University Press 2016; forthcoming in English at Bristol UP), *More-than-Human Aesthetics: Venturing Beyond the Bifurcation of Nature*, co-edited with Alex Wilkie (Bristol: Bristol UP 2024), and numerous articles on process philosophy, pragmatism, aesthetics, and transdisciplinary practices in the context of a warming planet.

Enrico De Martin Topranin

Simondon and political ecology: Inventing new relations between humans, nature, and technology

Gilbert Simondon can be understood as an ecological thinker. I aim to bring out the strong transformative and imaginative potential of his work through an analysis of the concepts of *milieu* and technical activity. I will highlight how, for Simondon, this transformation is conceived as a broader political transformation of the relations between the human, the non-human and technology. The concept of *milieu* refers to the general context from which relationships—whether biological, cultural or technical—emerge. Human, natural and technical are thus placed in continuity by the potential always present in every configuration but not yet expressed (Simondon 2020). This potential—the preindividual—remains latent within the associated *milieu* (Barthelemy 2012). Technical activity, understood as an operational paradigm, is presented by Simondon as a privileged form of mediation capable of establishing a new relationship between humans and nature. Informed by natural and human dynamics, technical activity can enable the recovery of the potentialities present within the *milieu*. In this way, new meanings and relations between human, technology and nature can emerge (Simondon 2017).

The ecological dimension of Simondon's thought has already been partly addressed, both from a theoretical (Hui 2017) and a political perspective (Novaes de Andre 2008; Lindberg, Barthélémy and Duhem 2022). These studies have shown how Simondon's bio-anthropological conception of the technical object in Simondon can provide valuable tools for a political ecology. My aim is to radicalise the insights offered by the studies mentioned above. Simondon's relevance lies not only in his description of technical objects: there is a political tension which calls for a broader political and social transformation. In *Du mode d'existence des objects techniques*, Simondon claims that the human, natural and technical domains are alienated from their expressive potential. From this diagnosis, Simondon argues for a threefold process of liberation aimed at the radical transformation of the interconnections between humans, natural and technology.

For Simondon, political action is conceived as an act of invention (Bardin 2015), rooted in imagination (Simondon 2014). I argue that this political action—simultaneously human, natural and technical—enables the development of new techno-political-natural imaginaries to counter the various entropic processes unfolding on a global scale. By highlighting the deconstructive dynamism of the *milieu* and the transformative nature of the technical operations, I seek to underline how the imaginative and inventive force of Simondon's thought. The ecology proposed by Simondon suggests the urgency to think of new ways of producing technologies starting from the preliminary consideration of environmental and social effects. It indicates the importance of a political action rooted into the interdependence between natural, technical and social environments.

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Enrico De Martin Topranin (he/him) is a PhD student in Philosophy at the University of Pisa, Italy. His research explores the intersections of labour, technology, and political ecology through the lens of Gilbert Simondon's philosophy and early Italian Operaismo.

Andrea Gammon
Environment, technology, and philosophy of maintenance

Why is philosophy of technology so separate from philosophy of the environment? In 1999, Maria Banchetti explained the division between them in a way critical of both fields: "Environmental ethics overemphasizes wilderness and views human technological activity negatively," and on the other side, "Philosophy of technology displays a 'naïve anthropocentrism,' focusing the role of

devices and machines on social, political, and economic affairs to the exclusion of ecological concerns" (Banchetti, cited in Kaplan 2017: 2). Despite the efforts of Banchetti (and others) in the meantime to bring these fields into closer contact and engagement, philosophy of the environment and philosophy of technology remain largely separate, although philosophers of technology more recently have paid attention to technologies' material and environmental impacts, and environmental philosophers have become more embracing of the technological aspects of the environments we inhabit and create.

This talk is part of a larger project in which I explore the growing subfield of maintenance and repair in philosophy of technology as a promising approach for bringing the fields of environmental philosophy and philosophy of technology together. In philosophy of technology, maintenance and repair move the emphasis from technological development, innovation, and ideal functioning to how technologies are kept up, reconstructed, and creatively transformed over their lifespans (Young & Coeckelbergh 2024). That all things are time-bound and vulnerable to malfunction and breakdown is foregrounded, and relations and practices of care and attentive labor are central. How might maintenance and repair then forge connections between philosophy of technology and philosophy of the environment? In this talk I introduce and motivate maintenance and repair studies for this purpose. I illustrate how maintenance highlights the human and nonhuman workings of environments (rather than only technologies) using two cases of environmental, or landscape maintenance and repair from the Netherlands. At different levels—one, a major engineering works project, and the other the quotidian operations of grounds and facilities upkeep—these cases ask us to broaden what we consider "environmental" beyond ideas of naturalness to consider environments that are already the subject of ongoing human intervention and (attempts at) control, and the technologies used in their maintenance and repair.

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Andrea R. Gammon is Assistant Professor of Ethics and Philosophy of Technology at TU Delft in the Netherlands. Her academic background is in environmental philosophy (M.A. University of Montana, 2013; PhD Radboud University Nijmegen, 2018). Andrea coordinates the ethics and philosophy teaching at TU Delft and is involved in several research projects that intersect philosophy of the environment and philosophy of technology. Her main research develops maintenance and repair studies as an approach for bridging these fields.

Panel 8
Ambivalences of multispecies entanglements

Lukáš Senft and Tereza Stöckelová
Multichemical entanglements and the inflammability of post-industrial life

In the aftermath of industrialization, life forms—along with landscapes, households, and foods—have become increasingly permeated by a multitude of toxic substances. Intensive agriculture, as well as the cosmetics, automotive, and pharmaceutical industries, are just a few sectors whose products shape industrialized modes of living while simultaneously undermining their sustainability. Nano- and microplastics, flame retardants, pesticide residues, and other synthetic particles combine into "chemical cocktails" whose effects interact and amplify one another, often forming unpredictable assemblages (CHEM Trust 2022).

While existing social science scholarship has examined various forms of the slow violence of toxicity (Nixon 2011; Davies 2019), the multiple agencies of chemical cocktails have remained under-theorized as a distinct object of inquiry. Drawing on ethnographic research on phytotherapeutic practices conducted in the Czech Republic, we explore possible modes of cohabitation with these products of post-industrial metabolism and consider their implications for environmental and metabolic justice. In particular, we focus on the foraging, cultivation, and use of healing herbs—plants that embody both therapeutic substances and complex chemical cocktails—and analyze how phytotherapeutic activities mitigate toxic permeability.

Given their malleable, reactive, and rather unpredictable nature, these entangled chemicals exhibit characteristics of both fluid objects (Mol 2000) and fire objects (Law and Singleton 2005). However, we argue that, in view of their complex and cumulative inflammatory effects, they cannot be fully captured by either concept. Drawing on recent work by Porkertová and Stöckelová, we explore these chemicals as "inflammable objects"—ambiguous materials woven into the everyday fabric of "life as usual," yet harboring the potential to ignite sudden ecological and health emergencies. The inflammatory agency and effects of chemical cocktails generate new forms of toxic uncertainty (Javier and Swistun 2008), challenging the prospects of habitable futures. We thus engage chemical cocktails as de-romanticized doppelgängers of multispecies entanglements—assemblages that demand careful compartmentalization to limit porosity and sustain partial detachment.

Lukáš Senft focuses on food production, multispecies ethnography, and the modes of expertise on and use of medicinal plants in public healthcare and self-care. [ORCID:0000–0001-9297–7721]

Tereza Stöckelová specializes in the social studies of science, technology, and medicine. Currently, she develops the concept of extended metabolism, engaging new, technologically mediated forms

of biosociality and health, and examines the food and energy technologies shaping the emerging Anthropocenic condition. [ORCID: 0000-0001-9251-7987]

Leni Charbonneau
Resistant ecologies in deep-time: Mediating cohabitation through amber

This is a snapshot of the early biocoenosis (Fig. 1)—the sharing of an ecological niche or habitat—between an ancestral whitefly and a thrips. The pair was captured some 125 million years ago, when climatic stress triggered the immune response mechanisms of an ancient conifer, secreting resin that would eventually harden into the substance known today as amber.

Fig. 1

Since the above entrapment, the affinities between the whitefly and thrips have long endured. In the late Mesozoic (~66mya), the two were among the first insects to pollinate flowering plants—with flowers being a recent biological innovation of the period. As the bugs nurture their young in the shelter of leaves and stems, they assist plants in dispersing pollen and engendering floral futures. The kinship between the insects and plants survives to this day; whiteflies are a common pest to agroindustry, while thrips routinely disrupt global commodity exports. These economic disturbances are compounded by the resistance the insects routinely exhibit to pesticides engineered against them. Meanwhile, both knowledge of these evolutionary relationships and subsequent management strategies directed at them rely on harvesting information from deep bio-geological pasts.

Accordingly, amber is an invaluable resource to earth-history scientists (re)constructing planetary narratives. As an organic substance, it is a micro-historical ecology. However, as the story of the thrips and whitefly illustrates, these sciences are not merely implicated in studies of the past but are also deployed towards contemporary anthropogenic logics—often with implications for deep futures. Amber is thus also biotechnology used towards various ends and temporal sensibilities (Fig. 2).

This paper shares my anthropological research around amber, its use in earth-history science, and the stories of cohabitation it often contains (Fig. 3). I aim to contribute deep-time perspectives to the questions of cohabitability, ecology, and technology through two sections. The first shares ethnographic reflections on how ecological substances like amber are rendered as technological through acts of mediation, primarily through different regimes of valuation, extraction, and circulation. Precisely how given actors render amber as technological has an effect on the narratives of planetary history that emerge. I propose that the tensions underlying technological mediations provide a generative space, and that thinking with multispecies relationships across deep-time enables new frameworks for tracing how truth claims about planetary processes are produced and acted upon.

Secondly, I turn to my ethnographic field—Lebanon, where some of the most paleontologically-valuable amber is sourced. Amber-bound ecological relationships—like the thrips and whitefly—endure largely because of the preservationist affordances of phosphorus. Paradoxically, the same landscape yielding these remarkable preservations is now subject to acts of destructive militarism, including the illegal deployment of white phosphorus munitions. Little is known about the long-term ecological effects of white phosphorus, though the consequences are intimately known by local inhabitants. With phosphorus and through a multispecies lens, I discuss divergent and convergent paradigms of preservation, decay, resistance, and consequentiality. I conclude by reflecting on my work to put paleontological temporal logics in conversation with those living amidst military imperialism and discuss emergent reformulations of cohabitation and resistant ecologies.

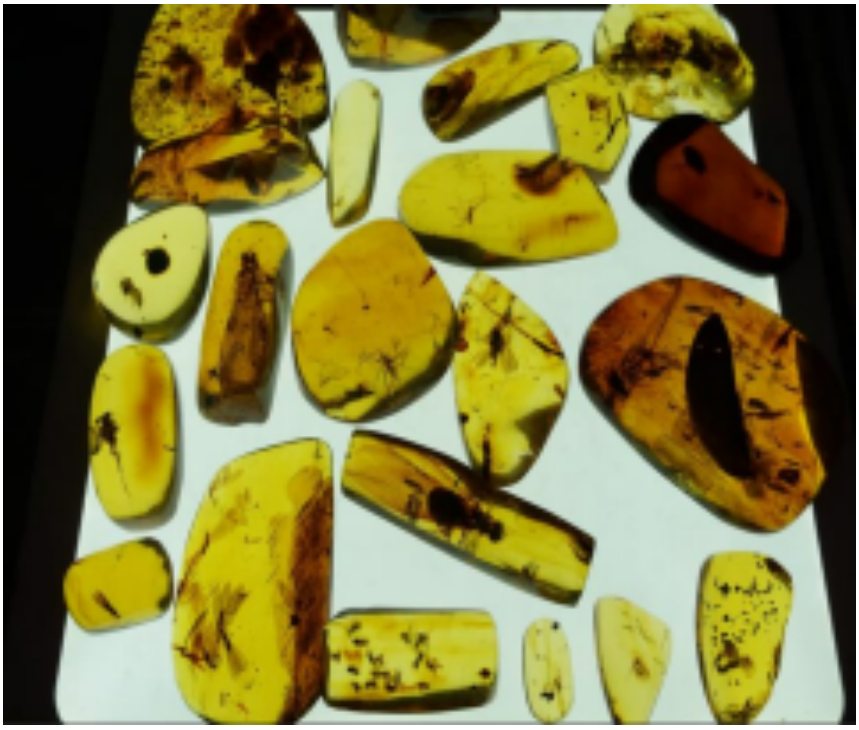

Fig. 2

Fig. 3

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Leni Charbonneau is a doctoral research fellow at the Institute for Social Anthropology at the University of Oslo. She is a part of a project titled *Amber Worlds: A Geological Anthropology for the Anthropocene*, through which she conducts ethnographic fieldwork within Lebanon. Drawing on her background in environmental history and human geography, her research connects the ecologies of war and imperial violence to earth-history science and its modes of knowledge

production. Her approaches are rooted in feminist, queer, and anarchist theory and method, and are supported by the praxis of growing food and giving back to the soil.

Martin Tremčinský
Information tinder-box: Cohabitability with fire in the age of cyber-physical insecurity

This paper introduces the concept of the information tinder-box to critically rethink our present entanglement with digital and energy infrastructures through the lens of cohabitability. Building on and revising Paul Virilio's notion of the "information bomb," which depicted global media systems as tools of unilateral imperial power, the tinder-box metaphor foregrounds a more intimate, domestic, and ambivalent relationship with technology. Historically, the tinder-box was a household device that made fire—and thus warmth and survival—possible, yet always carried the latent risk of ignition and disaster. Today, this metaphor is reactivated through our cohabitation with renewable energy sources, such as solar panels and grid-scale batteries, which bring energy production into the private sphere while introducing new vulnerabilities via their digital connectivity and new potentially dangerous and highly flammable materials. These technologies embed potential hazards—cyberattacks, equipment malfunctions, and geopolitical influence—within the everyday, transforming the household into a precarious zone of both ecological promise and political exposure. The paper argues that we no longer live with fire metaphorically or materially, but with a constant risk of what Hannah Landecker frames as inflammation: our infrastructures, environments, and intimate spaces are increasingly co-constituted by inflammable systems. This condition demands a new politics and ethics of cohabitability—one that navigates the tensions between sustainability, autonomy, and security. Through this framework, the tinder-box becomes a figure not only of risk, but also of shared negotiation and responsibility in an era marked by cyber-physical insecurity and environmental transformation.

Martin Tremčinský is a postdoctoral researcher at the Institute of Sociology of the Czech Academy of Sciences. He specializes in science and technology studies of digitalized economies, focusing on various topics, from cryptocurrencies, to automation of labour, to the use of artificial intelligence. His current research analyzes the use of digital technologies in the ongoing energy transition.

Friday, 10th October 2025

Keynote

Joanna Zylinska
Bio-AI: The aesthetics and ethics of digital ecologies

This talk proposes the concept of Bio-AI, with Artificial Intelligence understood not just as an external computational network but as a relational technology of life that modulates its biological and social aspects. Building on the concept of digital ecologies, it will start from interrogating how generative AI systems, with their capacity to both animate and exhaust planetary resources, reshape cohabitability today. We know that AI infrastructures are inseparable from extractive and destructive practices: they consume vast amounts of energy, rely on precarious human labour and accelerate ecological degradation. Their generative promise thus rests on necropolitical foundations (to use Achille Mbembe's term) that determine whose lives and habitats remain viable—and whose are permitted to vanish. Taking on board the justifiable concerns about the necrotic aspects of Bio-AI, I will look at large-scale immersive data installations to speculate on the extent to which the aesthetic experience of generative AI can make us re-experience the very sensation of being alive, with all its flows and fractures. Just as Walter Benjamin saw in early cinema potential for estrangement from, and—more importantly—agitation about, the overarching logic of modern industrial capitalism, I will read generative AI art as creating a new mode of collective experience that can allow us to feel, think and understand things otherwise from within our shared techno-social setup. I will then suggest that engagement with AI works which acknowledge our material entanglements with AI infrastructures can open up new theoretical and activist pathways between "the pixel flow" and "the sweat flow," with aesthetics extending a bridge to ethics. The talk will close with a modest proposal for an ethics of digital ecologies: an idea that pursues more equitable forms of coexistence for various beings across different media-ecological niches. This idea will also be performed through a recent visual project of mine, *Les fleurs du métal*.

Joanna Zylinska is a writer, artist, curator and Professor of Media Philosophy + Critical Digital Practice at King's College London. She is an author of a number of books, including *The Perception Machine* (2023), *AI Art: Machine Visions and Warped Dreams* (2020) and *The End of Man: A Feminist Counterapocalypse* (2018). An advocate of "radical open-access," she is a Co-Director of Open Humanities Press. Her art practice involves experimenting with different kinds of image-based media. Zylinska is currently researching perception and cognition as boundary zones between human and machine intelligence, while trying to map out scenarios for alternative futures.

Panel 9
Thinking cohabitability through architecture & design

Clemens Finkelstein

Designing for a planetary politics: From cohabitability to cogenesity

Critical spatial practices, such as architecture, are under pressure to redefine their political responsibilities in an era marked by escalating climate crises, political turbulence, and transformative technologies. While "habitability" often implies anthropocentric ideals of resource management or territorial control, such frameworks fail to address the complexities of planetary existence. In response, this paper introduces the notion of cogenesity as a vital evolution of cohabitability—envisioning not only coexistence but also a proactive, generative interdependence among a diverse array of agents and agencies that constitute our planetary condition.

Building on developments in planetary humanities, geophilosophy, and the histories of science and technology, this paper proposes an architectural perspective that acknowledges nonliving, living, and technological agencies. Engaging with recent planetary thinking— illustrated by Jonathan Blake and Nils Gilman's *Children of a Modest Star*, Yuk Hui's *Machine and Sovereignty*, and Blaise Agüera y Arcas's *What Is Life?*—it examines how diverse intelligences, ranging from microbial life to AI and ALife, can inform emerging models of planetary governance. By emphasizing the role of these varied intelligences, cogenesity advocates for radical expansions of the political community to encompass both more-than-human and more-than-biological domains.

To ground this conceptual framework, the paper examines specific architectural and environmental examples: early twentieth-century geophysical observatories designed as sensitive mediators of planetary phenomena, contemporary multispecies urban habitats that enable collective decision-making among humans, microbes, and plants, and proposals for future AI-supported monitoring stations that translate ecological processes into governance-oriented data.

These examples highlight architecture's potential as a diplomatic medium, fostering interactions among radically different actors without subsuming their differences into oversimplified frameworks. By shifting the focus from providing mere shelter to enabling dynamic negotiations, translations, and reciprocity among diverse planetary agencies, architecture emerges as an active practice of planetary politics. Ultimately, the paper advocates for redefining architecture's ethical and political commitments to reflect the radical interconnectedness and unevenly shared vulnerabilities that define our planetary condition. By embracing cogenesity, it envisions architectural practice as a pivotal means of cultivating inclusive, responsive, and genuinely planetary political communities.

Clemens Finkelstein is a historian of the built environment and a theorist in the planetary humanities, probing the technoscientific, post/colonial, and planetary histories of the built and natural environments. He holds a Ph.D. in the History and Theory of Architecture (with certifications in the History of Science and Media) from Princeton University and earned an M.Des. with a Commendation for Outstanding Achievement from Harvard University, where he was a Fulbright Scholar. His transdisciplinary practice spans curation, publishing, teaching, and art-science collaborations. His most recent book is *Planetary Forest* (DISTANZ, 2024). More information can be found at clemensfinkelstein.com.

Erika Szymanski

Against control: A microbepunk proposal on the logics, ethics, and aesthetics of more-than-human built environments

Control is an endemic orientation across biology and biotechnology, from commonplace (but technically inaccurate) statements about how genes control biological characteristics to the sometimes-explicit, sometimes-implicit assumption that addressing global crises and building more sustainable futures requires increasing biotechnical control over other creatures. Yet hierarchical control-oriented relationships fail to describe much of what is now known about the complexities of biological structure and function. Human attempts to control other creatures, biotechnically mediated or otherwise, are always imperfect. And expectations that relationships across scales are organized around control reflect the values and knowledges of only a small number of humans. To envision biotechnical responses to present polycrises that do not simply repeat the paradigms that brought those crises about, we need alternatives to thinking through control.

In this presentation, I suggest that the logics, ethics, and aesthetics of control and alternatives to control are inseparable in imagining how technologies might be applied in more-than-human ecological contexts. I illustrate this point through a discussion of microbiomes of built environments. Now that microbial communities are recognized as ubiquitous, engineerable, and therefore useful in bioengineering, numerous research groups are working to manipulate microbial communities in and around buildings. Some, working through a control-oriented paradigm, are aiming to innovate strategies to keep pathogens out, diagnosing and treating "sick" buildings and maintaining healthy ones. Others are developing strategies to use non-disease-causing microbes to satisfy building functions in sustainable ways, and exploring varied possibilities for configuring microbe-human domestic relations in doing so.

Drawing on recent research on domestication, more-than-human science policy, and my own work on metaphors for microbiomes, I suggest microbepunk as an additional logic, ethic, and aesthetic—alongside control and solarpunk—for cultivating more-than-human built environments. Whereas dominant narratives are organized around control (in ways that reproduce hierarchical inequities), and solarpunk is organized around abundance (in ways that can elide and marginalize labor), microbepunk is organized around conviviality (in ways that center the work and pleasures of relationality). I characterize microbepunk through existing cultural examples and my own experience of attempting to design a microbepunk workshop about multispecies response-able research practices in synthetic genomics. In doing so, I suggest reading control-oriented, solarpunk, microbepunk, and other multispecies bimagery as allegories of efforts and expectations

around merging technology and ecology. Ultimately, my goal is not to suggest a correct or optimal strategy to configure multispecies futures, but to pluralize ways of reflecting on the assumptions about more-than-human relations built into them.

Erika Szymanski is Associate Professor of Rhetoric of Science in the English Department and the Microbiome Cluster at Colorado State University, USA. Her work, primarily situated in STS, concerns words as scientific tools for constructing microbe-human and other multispecies working relationships through contemporary biotechnologies. As part of that remit, she aims to apply multispecies theory in the context of posthumanist STS to the development of more-than-human science policy, including more-than-human approaches to responsible research.

Alessio Gerola
Do artifacts have eco-politics? A convivial critique of biomimicry

Sustainable design approaches such as biomimicry, ecological design inspired by nature, give hope that by imitating nature's regenerative capacities we might be able to transition towards sustainable futures and escape the impending ecological collapse. These promises, however, are challenged by the risk that biomimicry may lead to new forms of exploitation of nature, leading to extractivist research, biopiracy, and techno-solutionism (Broeckhoven and Winters 2023). Taken together, these promises and risks are indicative of the ways in which sustainable design solutions may contribute to feed an ambiguous multiplicity of sustainable future imaginaries, from the radical visions of solarpunk to the techno-solutionist projects of ecomodernism (MacKinnon et al. 2020). The ambiguity of these imaginaries increases the risk that biomimicry and other sustainable technologies may undergo processes of elite capture that depoliticize the social and political challenges required by an ecological transition, reinforcing a blind faith in technological solutions to socio-ecological problems (Gerola and Robaey 2024). The ambiguity of biomimicry in relation to sustainable future imaginaries raises several questions at the intersection of technology, politics, and ecology, including whether biomimicry may become the next sustainability techno-fix and how it could be avoided. To think through this challenge, Ivan Illich's notion of tools for conviviality might prove fruitful to formulate an ethical approach to biomimicry that fosters convivial research practices as well as more socially and ecologically just designs (Illich 1975). How can more convivial research practices be carried out in bioinspired design? How can bioinspired technologies be designed to enable the flourishing of diverse human and non-human communities?

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Alessio Gerola is a PhD candidate in Ethics of Technology at the Philosophy Group of Wageningen University, Netherlands. He explores the potential and limitations of biomimicry as a sustainable design principle. Biomimetic technologies consist in the imitation or integration of natural design to solve technical problems, such as natural ventilation systems inspired by termite nests. As nature evolved very efficient solutions during 3.8 billion years of natural selection, bio-inspired and bio-integrated technologies promise to provide more sustainable and effective design solutions. As nature and technology become more and more integrated, the challenge is understanding how our relations to nature change along with our ability to control it. The project is part of the NWO Gravitation programme Ethics of Socially Disruptive Technologies (ESDiT) of the four technical universities in the Netherlands. Alessio is also interested in intercultural perspectives in philosophy, ethics and technology. As part of the European Network of Japanese Philosophy (ENOJP), he explores how East-Asian thinkers and concepts can help broaden our perspectives on technology, nature and society. Alessio has a background in philosophy at the University of Trento, Italy, and in philosophy and ethics of technology at the University of Twente, Netherlands.

Panel 10
Affirmative critique:
Reconceptualizing earthly communities

Judith Campagne

Grounding reflections on technology amidst the stones of the earth

Artist Patricia Domínguez's multimedia works embrace the entanglement of everything in life, underscoring how all particles are in relation to one another. Building on that, Domínguez (2024: 23) states that one of the problems of current reflections on the development, presence, and use of big data technologies is that they do not "have a root to the Earth, to life."

Hannah Arendt (1958: 2) expresses a similar concern for the relation between the development of new technologies and the earth in the prologue to her now famous *The Human Condition,* asking: "Should the emancipation and secularization of the modern age […] end with an even more fateful repudiation of an Earth who was the Mother of all living creatures under the sky?". To Arendt, the problems with the technological developments of her time was in how their consequences were put into words and by whom. One can read *The Human Condition* then as a plea for a renewed appreciation of political action, the acting in concert on our shared world through speech and deed.

Achille Mbembe argues in *The Earthly Community: Reflections on the Last Utopia* (2022) that megaprocesses such as capitalism and techno-molecular colonialism capture all of life in logics of linearity, which categorise and focus on finitude and hierarchy, thereby harming all forms of life. To contest the enclosing and categorisation of life, Mbembe (2022: 84) emphasises the urgency of "a *democracy of the living* that takes *multiplicity* and *sustainability* as the starting points for a new project of liberation not of the human subject alone, but of the living subject in all its extent."

In this presentation, I stage an encounter between Arendt's and Mbembe's political considerations in relation to technology. Both Arendt and Mbembe place technology and artifacts amidst the entangled earthly life. Additionally, both worry about how technologies of automation and quantification are overtaking (parts of) life. Yet, while Arendt is mainly concerned with preserving what is most *human* to her, namely political life, Mbembe builds a case for the necessity of a politics that preserves life *in all its figurations*. Through this encounter, I reflect on a *poethics* (politics, ethics, and poetics) of life, in which concepts such as entanglement, plurality, natality, multiplicity, and sustainability take centre stage. What I will demonstrate is that such a poethics is a useful lens to reflect on technological developments, especially amidst the ruins of capitalism.

Finally, such an encounter between the works of Arendt and Mbembe is a way to respond to Domínguez's call for the necessity to evaluate big data technologies in all their material compositions and to demonstrate how one can ground philosophical reflections on technology in

their material realities. Or, in different words inspired by the poet Fernando Linero, to reflect on how one can think about technological developments from "amidst the stones of the earth" (Poetry International, n.d.). Subsequently, this presentation also opens the category of philosophical reflection, to show how this can include artistic expressions too.

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Judith Campagne is a PhD candidate in Philosophy at Free University Brussels (VUB). The working title of her dissertation is: "A Poethics of Life: Natality, Technology, Refusals." This research centres around the works of Hannah Arendt, focusing on the political, ethical, and poetic impetuses of "natality." In light of this, Judith questions visions of futurity and forms of power around big data technologies. She especially relates this to critical refusals, drawing inspiration from, among other things, queer theory and the arts.

Monika Rogowska-Stangret
From affirmative critique to radical hope and back. Thinking the human otherwise as a speculative practice of cohabitability

In this paper I aim to show that today, in times of polycrisis that have become our lived, yet unequally distributed, reality, one of the tasks that is in front of the humanities is to rethink the human or to think the human otherwise. By thinking the human otherwise I mean, first, to conceptualize it away from the anthropocentric paradigms and, second, to reflect on the human in line with the critique of humanism coming from disability studies, critical race and Indigenous studies. This is done in order not to fall into the pitfall—diagnosed by e.g. Claire Colebrook (2023)—of using the posthuman approaches to the human only as a means to save the relationally fathomed human—yet another disguise for modern subject—at the expense of "others" deemed unworthy of saving. To do that we not only need responsible and careful theorizing and critical analysis but we also need potent and stirring imaginaries. Thinking and imagining, thinking and feeling, thinking and speculating are here closely entangled. As Friedrich Nietzsche (1982: 104) observed: "We have to learn to *think differently*—in order at last, perhaps very late on, to attain even more: *to feel differently*." "Thinking differently" might be, I reckon, stimulated by appealing to imaginaries and speculative practices. To these ends in this paper I offer two ways to approach the task of thinking the human otherwise.

First, situating my research at the intersection of critical posthumanities and feminist new materialism, I suggest to enrich affirmative critique with radical hope as practice. Appreciating the body of work that offered affirmative methodologies (Braidotti 2002; Grosz 2005; Latour 2004; Massumi 2002), I point out the need to push affirmative approaches to the extreme by developing them together with radical hope approaches (e.g. Hayes and Kaba 2023; Pascoe 2024).

Second, thinking with scholars coming from disability studies (e.g. Taylor 2024; Clare 2017; Goodley and Runswick-Cole 2014), critical race studies (e.g. Yusoff 2018, 2024) and Indigenous studies (e.g. de la Cadena 2014), I'm speculating on poetical imaginaries of thinking the human otherwise and I propose three speculative figures of the human: storyteller, surfer, and wanderer.

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Monika Rogowska-Stangret, Assistant Professor at the Department of Philosophy and Cognitive Studies, University of Białystok, Poland, is a philosopher conducting research at the intersection of feminist philosophy, environmental humanities and critical posthumanism, as well as a translator. She is a recipient of a number of national and international grants and awards, most recently the National Science Center supported her project *Anthropocene Ethics. Redefining the Concept of*

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Zofia Jakubowicz-Prokop

Is the Earth a tentacled god? Staying with the weird for today's and future coexistence

In recent years, the term "weird" gained still-growing popularity, stretching from literary and otherwise artistic creations (weird and new weird) to academic discourses (object-oriented-ontology, eco-weird). "The weird," as an aesthetic category, became established by the early 20th century pulp magazine of that name and by its most (in)famous writer, H.P. Lovecraft. The term's intrinsic connection to the author's racist, misogynist and xenophobic views makes it necessarily entangled with the history of racial, colonial and patriarchal violence. Thus, the weird seems an inescapably suspicious category, especially when used without critically addressing its Lovecraftian origins. And yet many theorists— seemingly following Donna Haraway's (2016) postulate—decide to "stay with the trouble" and reformulate, reappropriate and queer the weird to use it as a tool for dismantling the hegemony of white, cis-heterosexual, able-bodied subjects, or for uncovering (post)colonial capitalism's contradictions. Importantly, to an increasing extent, weird is being intercepted by eco-philosophy and used to describe the impossible and terrifying conditions of the extensive climate crisis. As such—and as primarily a literary concept—the weird seems to inspire the imaginings of the future, more-than-human coexistence.

The aim of the paper will be, primarily, to map the diverse use of the weird in ecologically oriented Western theory (on selected examples). Following theorists such as Donna Haraway, Timothy Morton, Reza Negarestani or Patricia MacCormack, I will ask: Can the weird prove useful as a tool in envisioning our near-future conditions of living with human and non-human others, in more-than-human world? Is the weird a productive category in describing capitalist-driven socio-environmental catastrophes that influence not only our possibilities of being-in-the-world, but also our relations with others and ourselves? Does the weird shutter the traditional norms and modes of thinking, or reinforces them by becoming merely fetishised aesthetic artefact?

Having mapped the weird environments of contemporary Western thought, I will, secondly, present my own understanding of the weird. The main concern will be the paradoxical structure of the weird, which—I will argue—reveals our alienation and estrangement *from* the world, as well as our organic affiliation *with* the world. As Alison Sperling (2017) and Dylan Trigg (2014) show, weird is what comes from the "outer space," and, simultaneously, what already exists in the most intimate, material places within us. It is ours and yet is not. I will reach for Luce Irigaray's notion of wonder (1984) to reflect on the weirdness' potential to disrupt normative meaning systems and to be an ethical point of reference for interacting with human and non-human others. I will stress the importance of "staying with the trouble" of the weird, instead of reducing it to one side of classical oppositions such as human/non-human, earthly/otherworldly, inside/outside, namable/unnamable, etc. Finally, I will argue that the weird remains an aesthetic category but also may be an ethico-onto-epistemological concept (Geerts and Carstens 2019) that participates in reconfiguration of ways in which we speak of the earthly world.

Zofia Jakubowicz-Prokop is a PhD candidate at the University of Warsaw, Poland. She works at the intersection of cultural studies, philosophy and literary theory, and her main research interests are feminist philosophy, posthumanism, environmental humanities, modernism and disability studies. Her doctoral thesis is dedicated to Polish modernist writer, Zofia Nałkowska, and the intersections of sexual difference and nature in her early prose. She published several articles in peer-reviewed journals and literary critique magazines. She works as a Junior Editor in *Matter: Journal of New Materialist Research*.

Panel 11
Ethics and politics of restoration

Linnea Luuppala

Cohabitability as an ethical framework for navigating trade-offs in ecological restoration

This presentation explores how the novel conceptual framework of "cohabitability" informs our understanding of the ethics of ecological restoration and opens new possibilities for developing restoration ethics. I will analyse ethical theories from the perspective of restoration to evaluate whether cohabitability provides a meaningful supplementary framework for assessing the main ethical theories (consequentialism, deontology, and virtue ethics) and relational ethical approaches.

Planet Earth is becoming increasingly uninhabitable due to large-scale human impacts damaging ecosystems and undermining ecological relationships. Ecological restoration, defined as "the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed" (Society for Ecological Restoration 2004), shows promise in addressing this damage. However, the ethical analysis of restoration has primarily focused on the restoration of "natural" landscapes prior to human disturbance, centring on non-human *ecological* relationships. Nonetheless, it also holds potential for repairing *ethical* relationships between humans and non-humans.

The "restoration debate" is an ongoing theme in environmental ethics with two potential limitations. First, much discussion centres on non-human nature and its restoration, excluding humans. The typical role is to clean up messes and leave ecosystems resilient and self-sustaining without further human intervention. Although restoration must acknowledge humans as both agents of environmental degradation and restorers, these perspectives limit meaningful co-existence and ethical relationships among non-humans. Second, the ethical debate on ecological restoration often overlooks ethical theories, focusing instead on environmental values. While values matter, the questions of whether and how humans should restore degraded ecosystems remain largely underexplored. These questions are critical as ecological and ecosystem restoration gain significance in environmental policy, exemplified by initiatives like the Kunming-Montréal Global Biodiversity Framework aiming to restore 30% of degraded ecosystems by 2030, the United Nations Decade on Ecosystem Restoration, and the EU Restoration Law. However, with the increase in restoration projects in a more uncertain world created by climate change, ethical issues—such as balancing trade-offs between restoration goals (ecosystem structure, function, and resilience) and societal values—highlight the need for restorationists to have ethical frameworks to navigate these complex decisions.

This presentation aims to address both of these gaps. First, it provides an analysis of various environmental ethical theories as applied to specific ethical problems and dilemmas concerning the ecological restoration of mire forests in Finland. The different ethical theories and their

responsiveness, along with their ability to offer guidance for restoration, are analysed. Finally, these ethical theories are evaluated from the perspective of cohabitability. I conclude that cohabitability provides a valuable lens through which to assess ecological restoration and a developing restoration ethic.

Linnea Luuppala is a grant researcher at the University of Jyväskylä, Finland, working on the *Ecology and Ethics in Mire Forest Restoration: Adequate Goals and Effective Strategies (SuoMet)* project. She is currently finalising her PhD in environmental philosophy at the University of Helsinki, focusing on the ethics of ecological restoration. Her research explores the conceptual and ethical dimensions of restoration and the human-nature relationship.

Maja Rup
Forms of more-than-human cohabitation in the context of renewable energy production

Global warming is a central factor driving the ongoing climate and environmental crisis, primarily caused by the combustion of fossil fuels, including for energy generation. One proposed solution to this crisis involves transitioning to more ethically sourced energy from so-called renewable sources, such as solar and wind power. While these sources are often labelled as "clean" or "green," they are not without environmental consequences. Issues associated with renewable energy sources (RES) include the extractivist practices required to obtain minerals and metals for infrastructure, as well as disruptions to local ecosystems (Dunlap 2021).

This paper explores forms of cohabitation between human and more-than-human beings in the context of renewable energy infrastructure. Offshore wind farms in the Baltic Sea serve as the case study. The analysis draws on environmental assessment documents related to the well-being of more-than-human organisms inhabiting these marine environments. The central question posed is whether more ethical forms of cohabitation between human and non-human entities are possible. Here, "more ethical" refers to a relational framework that enables more equitable conditions for both individuals and ecosystems to flourish—challenging the current paradigm in which human interests dominate. Is the RES infrastructure (in this case wind farms) conducive to the development of forms of cohabitation that take into account the needs of more-than-human living beings?

Guided by Alexis Shotwell's notion of ethical impurity—which argues that perfect ethical purity is unattainable (Shotwell 2016)—this paper considers conceptual tools that may help construct more ethical interspecies relations. In particular, it engages with Astrida Neimanis's hydrophenomenological notion of *bodies of water* (Neimanis 2017) and the low-trophic theory proposed by Marietta Radomska and Cecilia Åsberg (Radomska and Åsberg 2021), both of which offer perspectives for rethinking multispecies entanglements in the ongoing crisis.

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Maja Rup: PhD student at the Faculty of Philosophy of the University of Warsaw. Graduate in bioethics, philosophy and gender studies. Her main research interests are in ethical problems of climate and environmental crisis from feminist new materialism and critical posthumanism perspective. Prepares a dissertation on the ethics of renewable energy sources, with offshore wind farms being developed on the Polish coast as a case study.

Panel 12
Urban cohabitabilities

Daniel Gallano
Cohabiting the urban uncontrollability

From the perspective of evolutionary biology, the city is the result of human niche construction, the process of modifying the environment to increase habitability. Through ecosystem engineering, human societies produce spaces of multispecies cohabitation and cities can be seen as thriving ecological formations (Barua and Sinha 2022). However, through their technologies, capitalist societies have become dependent on fossil fuels (Malm 2016), which has proven to be an ecological trap (Meneganzin et al. 2020) and has made the world a less habitable place for many species, including our own. The urbanisation of nature (Heynen et al. 2006) is a major cause of this process, but at the same time cities are presented as the place for "eco-technological" solutions to the habitability crisis. I aim to address the problem of planning and building in unpredictability, by considering the wild nature of the artefact (Vogel 2015), i.e. how technologies and urban spaces escape control. I will present my work with the City of Cologne's Office for the Management of Green Spaces as a case study of how a city administration responds to climate change with mitigation strategies. I explore the perspective of the production of urban nature through an ethnographic method that pays attention to the co-shaping of landscape by humans and non-humans (Bubandt et al. eds. 2023). I will discuss the institutional understandings of ideals of "sustainable," "smart" and "cohabited" cities that underlie their planning strategies and technologies for maintaining the urban space habitable. I will also compare the case of Cologne with other recent studies on the design, governance and cohabitation of more-than-human cities (Heitlinger et al. eds. 2024; Wang 2024; Barua 2023; Stoetzer 2022) to highlight the relevance of the urban environment for imagining alternatives to the crisis of habitability.

Daniel Gallano is a doctoral researcher and scholarship holder at the a.r.t.e.s. Graduate School for the Humanities at the University of Cologne, Germany, and is affiliated with the research centre for the Environmental Humanities MESH. His research aims to investigate the aspect of independence from human control of the built environment in a context of precariousness and unpredictability. He completed his B.A. in Philosophy at the University of Turin, Italy, with a thesis on the role of imagination in the later Wittgenstein and his M.A. in Philosophy at the University of Turin on cohabitation with non-human species in the city.

Jonas Dahm

Concrete disruptions: Floating Berlin's more-than-human cohabitability in a rainwater retention basin

Constructed on stilts within a concrete rainwater retention basin in Berlin, "floating e.v." and its built environment provide structures and communities for more-than-human cohabitability. Reeds grow in the mud accumulating around wooden footbridges, recycled planks become islands for breeding ducks. Animals, fungi and plants use the site for nourishment and shelter. Their presence in turn connects with human demands to keep the basin open for collective, noncommercial use.

Floating not only shows that more-than-human cohabitation can foster viable alternatives in urban contexts. In a space officially designated as infrastructure, it proposes a more habitable future by focussing the basin's concrete as a critical zone of human and non-human interest alike. It is in such specific, situated interventions, I argue, that more-than-human cohabitation can be understood as a potentially political practice that can reveal and counter ongoing re-productions of nature/culture, technology/ecology and human/non-human separations imbedded in infrastructure, zoning, governance and beyond.

As a political struggle, striving for cohabitability can connect broader discussions about natureculture and the more-than-human to concrete practice. This is evident in the link of the association's own positioning as a "natureculture learning site"—working to overcome divisions of nature and culture through art, science and collective practice—and the e.v.'s decisions on some practical as well as technological levels. Examples of this can be seen in an interest to keep the basin flooded for wildlife as well as human use, going against the city's will to keep its infrastructure "clean," or the fostering of solutions such as nitrate-filtering toilets, hot compost or temporary modular structures.

Based on my own experience as a neighbor, co-creator and association member, I aim to critically examine floating as a site of ongoing more-than-human practice that provokes, negotiates, and possibly helps to link and politicize ecological, technical and social questions.

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Jonas Dahm is a PhD candidate at the DFG Research Training Group "Aesthetic Practice" at the University of Hildesheim, Germany. His dissertation explores more-than-human collaboration in musical and sound practices, focusing on the possibility of aesthetics as political articulation beyond the human. He studied Culture of the Metropolis (B.A., HCU Hamburg) and Culture, Arts & Media with a focus on Sound Studies (M.A., Leuphana University). Besides his academic work, he is active as a sound artist and journalist, contributing to Deutschlandfunk Kultur and other platforms.