

New Directions in Philosophy of Technology

June 4 - June 5 Workshop
June 5 - June 7 Group Collaboration Retreat

Organisers: Mark Thomas Young and Wessel Reijers (Paderborn University)

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Abstracts

Bruno Gransche

Textures of I Can – Prolegomena to a Formal Pragmatics of Capability

What do we need? What does it mean to say I can – and what happens to that I can when technical systems increasingly do it for me and transform its condition of possibility? Existing philosophical accounts of capability address isolated dimensions: I can know, I can act, I can want (epistemology, phenomenology, modal logic, capability approach(es), action theory, ethics,...) – but lack an integrative framework for how these dimensions condition each other and how technology reconfigures them as an interwoven complex.

What do I propose? This talk pitches a Formal Pragmatics of Capability (FPC) as a structural response to that gap. Building on the concept of capability as modal texture, it sketches how I can is always temporally constituted – present possibility texturing future actuality (nice link here to maintenance btw) – and how technology operates as a modal transformer of precisely these possibility structures. A linked concept, Modal Hermeneutics as a method of “how can I understand the I-can-textures”, is proposed for interpreting (partly) technically transformed possibility textures according to their genealogical conditions, normative claims, and transformative potential. This proposal combines Ricoeurs hermeneutics of the self with the focus of l’homme capable, Hubigs medium philosophy and Wiegerlings unpublished theory of resistancy (or friction) and many more – to be discussed...

What is the proposal good for? The talk closes by asking what such a framework could do for disciplines (i.e. reconsidering intelligence as a problem solving capability and problems as relational sets of (modal) resistencies etc.) that already work with capability – Technology Assessment, Foresight, RRI, strategic planning – and invites critical scrutiny of both the gaps identified and the framework proposed.

Andrea Gammon

What is maintenance theoretically good for? The philosophical offerings of maintenance [& repair]

Following more than a decade of scholarship in anthropology, sociology and STS, the approaches of maintenance, and to a lesser extent, repair, are of growing interest in philosophy of technology. Maintenance and repair turn attention towards the ongoing, durational, and quotidian work involved in keeping things – technologies, infrastructures, and systems – going, and for this, they challenge the prevailing framings of technology development centered on novelty and innovation. I am particularly interested in bringing the approaches of maintenance and repair into environmental ethical contexts to look at the built

environments and infrastructure – topics environmental philosophers have largely neglected in their proclivities towards the so-called natural, or less human managed environments. This talk is part of a larger project that does this.

I take the opportunity of this talk to discuss problems, or doubts, that currently preoccupy me in the early stages of this research project. These include pragmatic problems: what if there's no money in maintenance, and this fact explains and ensures maintenance's position as secondary to innovation, and as perennially overlooked? Methodological problems: how should philosophers, who unlike their anthropological counterparts, are not trained in ethnographic methods, actually study maintenance, which is so importantly physically situated and accomplished through the embodied relations of skilled practitioners with the material world around them? And theoretical questions: what is maintenance theoretically good for, that is, beyond the rich descriptions and calls for closer attention to the human co-workings with the material world? What do maintenance and repair offer philosophically? I use my own first but ongoing attempt at doing maintenance research of environmental infrastructure, a case I've chosen of a storm surge barrier in the Netherlands, as a way to present the problems this talk raises.

Samantha Copeland

Minding the Gap - getting serious about a logic of discovery

My recent work in the philosophy of science has been around the gap left between what inspires discovery and discovery itself, in our philosophical accounts. I suggest we look seriously at this gap - in this talk, I take abduction as a particular case of where the gap lies and how we can unpack its epistemology. I specifically propose two criteria of potential value*, and offer already-existing but philosophically neglected accounts that describe the logic behind them: strategy/metis, and fecundity/effectual reasoning.

Jussi Jylkkä

Metacognition as modeling of cognition: The signal problem and directions for enhancement

This paper develops a novel account of metacognition and examines how it can be enhanced, with AI-mediated enhancement considered as a proof of concept. Metacognition is commonly defined as “cognition of cognition”, our capacity to monitor and control our own cognitive processes. However, this definition trivializes the notion, since most cognitive processes are already self-regulatory. A more precise account is needed. If cognition is modeling, as predictive coding suggests, then metacognition is modeling of modeling. Most cognitive processes are transparent, like a lens through which we see the reality without noticing the lens itself. Metacognition begins when a process becomes opaque and visible to introspective attention: object process X is metacognitively accessible to meta process Y to the extent that X is opaque and can be modeled by Y, based on a signal from X to Y. This leads to what I call the signal problem: whereas sensory signals are rich and enable sophisticated world-models, metacognitive signals are typically weak and noisy. Improving metacognition therefore requires enhancing the signal from object- to meta-process. I distinguish between signals arising within the cognitive system, and those arising from interaction with an external cognitive agent. As a proof of concept, I consider AI as a metacognitive mirror: a system that models a user's cognitive processes in real time and provides feedback that supplies a richer external signal, making those processes more visible and improvable.

Sanna Lehtinen

Aesthetic Attention as a Metacognitive Factor in Human-AI Relations

In this talk, I present aesthetic attention as a key factor in how human–AI relations unfold. The claim is based on an insight that aesthetics plays an overall greater role than anticipated in interaction with AI in its current form. The aesthetic dimension in HCI has traditionally been recognized as relating to sensory qualities (e.g. colour, shape, form) and expressive character consisting of emotional or mood-like qualities that interfaces seem to convey or further embody. Aesthetic attention would thus need to be recognized as a relevant metacognitive factor in the context of AI, becoming central in how people react to e.g. tone and fluency in AI outputs. The aim is to show that beyond the traditional UX features with focus on design features and interaction affordances, perceptual qualities e.g. smoothness, pleasantness, and flow, enter the process of interaction in significant ways. This is how aesthetic attention can either amplify or hinder trust and empathy from the side of the human in human-AI relations. Aesthetic attention being termed here a specifically metacognitive factor refers to both how it guides attention to specific qualities of interaction with AI and how it is possible and even necessary to become conscious of how AI becomes perceived in the process. This has further implications to both the use and design of AI.

Joost Allebas

Against the Human Condition? Technology, Agonism, and the Future of Political Theory

Contemporary political theory has largely treated technology as external to the political: as an instrument to be governed, regulated, or deployed in the service of already established political principles. Whether in liberal normative theory or democratic theory, technology appears primarily at the level of policy rather than at the level of ontology, subjectivity, or the constitution of political order itself. This presentation argues that such a separation is no longer tenable.

The first part of my presentation revisits liberal political theory through the work of John Rawls. I argue that Rawls's conception of a "realistic utopia" depends upon historically situated assumptions about cognition, willpower, etc. that are presented as universal features of human nature. These assumptions function as implicit anthropological limits to political theorizing. However, once transhumanist horizons—cognitive enhancement, bioengineering, artificial augmentation, or other technological modifications of the human organism—are taken seriously, the stability of these limits begins to collapse. The question is no longer merely how ideas of justice (should) regulate technology, but whether technologies capable of transforming the human condition also transform the conceptual conditions under which theories of justice become intelligible. Transhumanism therefore destabilizes not simply liberal institutions, but the anthropological foundations of liberal political philosophy itself.

Having established the need for a recalibration of the relation between political theory and technological change, the second part of my presentation turns to Chantal Mouffe's more contemporary agonistic pluralism. I examine the relation between digital media, AI-driven communication systems, and democratic conflict. Mouffe's critique of post-politics appears increasingly persuasive in an environment structured by algorithmic visibility, platform polarization, memetic warfare, and the continuous production of antagonism across digital networks. Yet contemporary communication technologies do not merely intensify agonistic struggle; they reconfigure its very terrain. Algorithmic mediation, predictive systems, generative AI, and platform infrastructures increasingly shape political affects, construct hegemonic visibility, and reorganize the conditions of collective identification. Under such

conditions, political antagonism can no longer be understood as (just) a struggle among human actors within a shared symbolic space. The symbolic space itself becomes not only technologically mediated, but also technologically constituted.

By placing Rawls and Mouffe into confrontation with transhumanism and AI-mediated politics respectively, this presentation argues that political theory, in general, can no longer presuppose a stable figure of “the human” nor a technologically neutral conception of the political sphere. What emerges is the need for a political theory adequate to technological transformation: not a politics of technology, but a theory of the political after the collapse of humanist assumptions.

Mark Theunissen

Maintenance as Politics of Technology

How is Maintenance a political concept to be reckoned with? This presentation aims to be a discussion starter on how to do political philosophy of technology through or with maintenance. The upshot is that the lens of maintenance offers both descriptive and normative insight for political philosophy and philosophy of technology.

Starting with some conceptual ground-clearing, I draw a couple of analogies between political forms of life and forms of maintenance related to various types of technology. Opening up to discussion, I'll question how, or how not, a maintenance perspective goes beyond some of the existing literature on the politics and technology.

Jason Branford

Rethinking moral technologies: On moral habits, friction, and responsiveness

The predominant thinking concerning moral technologies—which are intended to improve moral behaviour—is flawed. I will suggest that they routinely misdiagnose the nature of moral life, on the one hand, as well as overlook a vital aspect for redressing moral failure, on the other. I argue that rethinking moral technologies requires taking seriously (i) the extent to which moral life is largely “easy” in that it is habitual, (ii) that moral ends are inherently contestable and ought to remain open to revision which renders moral friction productive, (iii) that moral failures are not merely individual but also structural, and—most importantly—(iv) that the goal ought to be the improvement of moral life broadly rather than only redressing particular moral missteps and so there is a need to contend with the deep challenge of moral responsiveness in pluralistic settings.

Olya Kudina

To be added

Melis Bas

Diverted Critical Energies and Conspiracism: An Arendtian Analysis

In this talk, I examine how contemporary media infrastructures reconfigure legitimate critical energies into conspiratorial thought. I argue that the “womanosphere,” a women-centered, far-right-adjacent media ecology, absorbs and redirects dissenting

impulses toward conspiratorial closure rather than emancipatory critique (Leidig, 2023; Shearing, 2025). Through an analysis of the womanosphere influencer ecosystem, I demonstrate how individuals' curiosity, skepticism, and investigative drives are diverted into closed ideological loops that feed on grievance while eroding judgment. In response to this crisis of critique, I draw on Hannah Arendt to offer a re-grounding of judgment in factuality and plurality and to distinguish living skepticism from weaponized cynicism. I extend Arendt's framework with insights from technopolitical mediation to illustrate how womanosphere media ecology reshape our shared "space of appearance" (Arendt, 1958).

Women's wellness and "natural living" communities often begin as genuine grassroots inquiries, where paternalistic institutions are questioned and women exchange experiences of motherhood and self-care. The problem arises when such skepticism toward institutions is captured and redirected into conspiratorial thought. "Natural" motherhood, anti-pharma distrust, and postpartum vulnerability become entwined with COVID-era fertility panic, demographic anxiety, and ethnonationalist tropes; hormonal contraception is rebranded as a civilizational scam; thinness and hyper-domesticity are moralized through "what I eat in a day" reels. (Silman, 2025). I seek to highlight that within the womanosphere, what appears as spontaneous radicalization is, in practice, an industrialized capture of critical energies that are transformed into weaponized cynicism through lifestyle genres and parasocial trust, intensified by platform mediation.

Following Arendt, I argue that the purpose of womanosphere propaganda is not primarily persuasion but the binding of identity, attention, and interpretation to the extent that counter-facts provoke irritation instead of inspiring reflection (Mudde, 2019). I situate the appeal of this conspiracism at the intersection of three Arendtian dislocations: (a) social dislocation, where loneliness coincides with superfluousness and status loss; (b) epistemic dislocation, where world-alienation accompanies the collapse of common sense; and (c) political dislocation, where lying becomes the operative technique for constructing counterfeit worlds in which anything is permissible (Arendt, 1951, 1958, 1967). As a remedy to these dislocations, I present Arendt's conception of judgment as the foundation for a judgment-centric approach to platform governance that treats intimacy and care as forms of political infrastructure. I argue that critique is best reclaimed not by intensifying narrative conflict but by reconstructing the spaces and interfaces through which we appear to one another, enabling healthy skepticism to flourish without collapsing into cynical disbelief.

References

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Alexandra Karakas

How to measure precision and accuracy?

The talk examines the notion of malfunction in scientific instruments, focusing on the epistemic challenges posed by faulty technology. I address the concepts of precision and accuracy as criteria for evaluating scientific instruments, showing how these notions intersect with, and sometimes obscure, the detection of malfunction. I will focus on the connections between malfunction, precision, and accuracy, highlighting the epistemic complications in their relationship. A case study of eudiometers, an 18th-century instrument developed to measure air quality, illustrates how theoretical assumptions, experimental practices, and shifting scientific frameworks further complicate judgments about precision, accuracy, and proper function. By examining how these devices could be mechanically precise yet epistemically misleading, I point out the complexity of malfunction and the broader philosophical issues it raises for evaluating technical artefacts.

Steffen Steinert

To be added