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Panel 72. Ethics of Imagination in the Age of Technology

Convenor:

Somreeta Paul, University of California Santa Cruz

Keywords: imagination morality technology culture experience

Einstein once said that imagination is more important than knowledge; the latter is limited, whereas the former is boundless; it encircles the world. Imagination ferries us beyond the present into newer terrains of inventions, art, poetry, literature, technology, etc. But what does it mean to 'imagine' in the age of technology, considering we are no longer bound within the present and actual? What are the ethical implications associated with imagination in this world? How do we morally evaluate the imaginations we engage in? Historically, imagination has enjoyed an amoral status. Yet, recently, there has been a rising interest in the ethics of imagination, where, for example, it is largely accepted among varied cultures that fantasizing about torturing children is morally wrong. By virtue of technology, this debate has justifiably become more complicated. For example, ethical concerns in cyberspace, when a woman was sexually abused in a virtual reality game two years ago, or deepfakes, when a woman discovered her face had been digitally edited onto images of women in sexually explicit situations in 2023. Technology provides a platform to represent our imagination with no physical actions involved, hence lowering the stakes of moral evaluation. Hence, the question remains: How do we deal with this moral problem that has yet to be recognized as a problem? Above all, does technology benefit our flow of imagination or somehow restrict or malign it, and in what ways? What are our moral obligations to maneuver this new unknown territory before things get too out of hand?

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ID 504 - Socio-technical fictions in the AI future: an analysis of World as a cyberlibertarian transition infrastructure

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Keywords: socio-technical fictions, World, cyberlibertarianism, transition, imagination, AI

This presentation examines how World (formerly Worldcoin) mobilises socio-technical fictions to legitimise its bid for infrastructural dominance in an AI-driven future. We argue that World employs crypto-financial imaginaries and TESCREAList ideologies, constructing a speculative future that hinges on both utopian AGI promises and existential AI risks. These fictions do not merely describe potential futures; they actively shape technological and political possibilities, raising ethical concerns about how imagination is leveraged to prefigure governance, economy, and individual agency.

By analysing how World's narratives link political ideologies, discursive strategies, material infrastructures, and lived experiences, we interrogate the ethical dimensions of future-making: Who gets to imagine the future? How do these imaginaries foreclose alternative possibilities? What responsibilities arise when emerging visions function as performative instruments of power?

Methodologically, this research employs hermeneutic, discourse, and technopolitical analysis of public appearances, documents, and campaigns (2023–2024), including contributions from founders Sam Altman and Alex Blania, the Intelligence Age pamphlet, World's white paper, and related marketing strategies. Our findings highlight how socio-technical fictions operate as mediated and performative imaginations, translating speculative futures into material and institutional realities.

This study contributes to STS scholarship by foregrounding the ethics of imagination in socio-technical transitions, showing how worldbuilding practices not only articulate possible futures but also justify infrastructural interventions and consolidate power. By critically engaging with how futures are imagined, framed, and enacted, we shed light on the stakes of speculative governance in shaping AI-driven societies.

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ID 541 - Imagination as a new tool for epistemology in ethics of technology

Marco Pozzi, Politecnico di Torino

Keywords: computer science, knowledge, immagination, storytelling, memory

In the introductory Prospectus to the Encyclopédie, a "Système figuratif des connaissances humaines" is proposed to classify knowledge. The original subdivision is between Mémoire, Raison, Imagination, from which the three fundamental objects of human knowledge come out: history, from memory; philosophy and pure sciences, the fruit of reason; the fine arts, which arise from imagination.

Imagination" – one of the forty-three entries in the Encyclopédie written by Voltaire – "is the power that every sentient being experiences in himself to represent sensible things in his mind". In this sense, imagination becomes part of the cognitive process, because it allows us to build causality between elements and increase knowledge. What is built with imagination is a laboratory in which to experiment with possibilities, evaluate hypotheses, and reach new frontiers.

This free play of concepts also applies in the context of computer science, which especially in its post-war phase has also explored various expressive languages, from the image of Vannevar Bush's Memex to new words such as cybernetics by Norbert Wiener, to discover new connections between man and machine. Science fiction in literature, cinema, and comics also produces new suggestions and builds future scenarios.

As in the post-war period, even today imagination has an important role in identifying the fundamental variables with which to represent and study the ethical conflicts of the latest developments in computer science, included under the name of "Artificial Intelligence". Understanding current phenomena is also a fundamental condition for managing them, and in this process imagination also has its role, even if it is often relegated to the background compared to technical skills.

As a concrete testimony to the extreme fertility of the solicitations to bring together the humanities and engineering, there are the nine books published since 2018 (Mimesis Editore), collecting the writings of over two hundred PhD students from the Politecnico di Torino starting from the courses of "Epistemology of the machine" and "Anthropology of technology" held by Prof. Vittorio Marchis: over a thousand pages of meta-scientific writings, in which each PhD student reworks the topics studied in the doctorate by pushing themselves to the edge of the discipline, contaminating themselves with other disciplines. From their own interests and imagination, PhD students can express themselves through the most diverse stylistic forms, ranging from the essay to the story, from the storyboard to the comic, from the board game to poetry.

It is an encyclopedia born over time within the Doctoral School of the Politecnico that can certainly provide a method for understanding the latest ethical developments in technology, where imagination becomes a new tool for epistemology.

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ID 649 - Lifting off, but on what grounds? The role of conceptual engineering in the legal and ethical governance of flying cars

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Keywords: philosophy of technology, ethics of technology, conceptual engineering, technology governance

Flying cars combine features of road vehicles and aircraft and blur the conceptual boundaries between road and air transportation (Swaminathan et al, 2022). Insomuch as they disrupt established conceptual categories, it is plausible to expect that flying cars will put pressure on existing governance frameworks

(Mofolasayo, 2020). For example, flying cars risk blurring jurisdictional boundaries, complicating liability regimes, and introducing novel risks and dilemmas that existing governance structures are ill-equipped to address, thus exposing critical governance gaps. More broadly, such challenges may manifest as the absence of specific governance frameworks or uncertainty regarding the applicability or effectiveness of existing frameworks.

In this paper, we argue that adequate technology governance requires robust conceptual grounding. To this end, we build on and bring together research at the intersection of GELSI (governance, ethical, legal, and social implications) approaches to technology governance (Forsberg, 2015; Ghioni et al, 2013), technology law (Crootof & Ard, 2021), as well as conceptual engineering in the philosophy of socially disruptive technologies (Löhr, 2022, 2023; Hopster & Löhr, 2023; Hopster et al, 2023; Marchiori & Scharp, 2024).

Specifically, we argue that conceptual engineering – i.e., normative conceptual work aimed at the refinement of conceptual categories – is foundational to addressing the governance challenges raised by flying cars. Indeed, governance outcomes are shaped by conceptual choices. In the paper, we illustrate how conceptual engineering can illuminate the ways in which different conceptualisations of flying cars can lead to vastly different governance frameworks, by taking different perspectives to the description of this technology and emphasising different features of this technology. For example, depending on how they are conceptualised – e.g., whether as modified automobiles, lightweight aircraft, or autonomous aerial systems – regulators may reach vastly different conclusions regarding the legal regimes that apply.

Furthermore, we propose that such insights can and should be generalised beyond the specific case of flying cars. Indeed, we argue that the governance of flying cars exemplifies a broader pattern in technology governance: when new socio-technical artefacts disrupt established conceptual categories, the governance of such technologies cannot safely bypass the deliberate and systematic assessment and refinement of such conceptual categories. Ultimately, this paper argues that conceptual engineering is not an auxiliary concern, but a foundational element of robust technology governance, and should provide the necessary groundwork for technology governance frameworks that are both legally sound and ethically robust.

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ID 657 - Philosophical Imagination and the Harms of AI Deepfake Pornography

Natalie Nenadic, University of Kentucky

Keywords: imagination, feminism, deepfake-pornography, Heidegger, Arendt

Einstein's recognition that the imagination is more important than knowledge conveys a fundamental understanding of philosophy. For it is philosophical imagination that ferries us into newer terrains beyond inherited knowledge. That is, it delivers some fundamentally new framework on an area, whatever the area, from science to art, precipitating that rare paradigm shift, as Einstein did in physics.

Canonical philosophers of technology contributed such philosophical-imaginative insights or new conceptual frameworks about modern technology. Heidegger identified its distinctive and inherent capacity to suppress our imagination in this philosophical sense. As such, Arendt showed, it also suppresses our sense of ethical responsibility.

Heidegger distinguishes modern technology from premodern technology and tools in its ubiquitous, imperceptible, and unprecedented capacity to alienate human beings from life, in other words, delivering us to a human condition in which we are "no longer bound by the present and actual." This alienation is the source of modern technology's uniquely powerful suppression of philosophical imagination. For modern technology has an extraordinary power to impose upon life a singular way of seeing it that blots out other ways of seeing and interacting with life. Maintaining this connection with life is, Heidegger recognizes, that source that triggers our philosophical imagination, which may shake us from and give perspective on this singular understanding in which we become enveloped and trapped and may prompt us to consider other ways; this consideration may pertain to how we choose to live our life or may take the shape of contribut-

ing to a paradigm shift in an area of inquiry that is a philosophical moment within it (Heidegger, 2008, 1962, 1927). In its unprecedented capacity to severely arrest our imagination in this philosophical sense, modern technology poses a distinctive threat to our freedom (Heidegger, 1977, 1954).

I explicate Heidegger's identification of modern technology's unique power to interfere with our philosophical imagination by alienating us from life. I then present Arendt's elaboration of the ethical implications of this condition as one that interferes with moral consideration of the harms that issue from such a singular, technologically-mediated way of framing and treating human beings, what she refers to as "thoughtlessness" (Arendt, 2005, 1963). I bring their insights to the ethical challenge posed by the surge of AI deepfake pornography whose targets are 99% female (Kristof, 2024; Kraft, 2024) and join these insights with feminism's philosophically imaginative paradigm shift concerning mainstream technologically-mediated pornography that overwhelmingly frames and treats females as targets of all manner of sexualised denigration (MacKinnon & Dworkin, 1998). Bringing these powerful, on-point philosophical resources to reflection on AI deepfake pornography helps us connect with and philosophically consider its lived harms. These harms significantly overlap with those of mainstream pornography that thus uses actual females in its production. This encounter fosters the philosophical imagination to contribute original understanding of deepfakes' harms besides those they share with mainstream pornography: its targets experiencing breakdown of a sense of self, trauma, terror, and suicidal ideation and attempts; and its consumers seeing females as less-than-human and affecting such actual treatment of them.

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ID 780 - Sustainable technologies, sustainable futures? Biomimicry, solarpunk, and the elite capture of imagination

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Keywords: imagination, technology, elite capture, solarpunk, biomimicry

As Ruha Benjamin says in Imagination: A Manifesto "whether we turn to children playing in the sand or tech billionaires offering us solutions while they build underground bunkers to survive the climate emergency, it matters whose imaginations get to materialize as our shared future" (Benjamin 2024, 119). Responding to Benjamin's call for fostering a more just and open approach to imagination, this paper examines the ethical implications of sustainable technological future imaginaries by focusing on the risk of elite capture of imagination as a threat to more inclusive imaginative practices (Taiwo 2022). Technology design approaches aimed at ecological sustainability, such as biomimicry (design inspired by nature), owe their popularity in part to the ambiguous multiplicity of sustainable future imaginaries they suggest, from ecomodernism to degrowth approaches (Gerola et al. 2023). Science fiction has offered a venue to explore and reflect on possible futures in ways that engage our imagination and stimulate technological innovation. The ambiguity of the technologies that populate different sustainable future imaginaries has generated, in turn, the possibility of misinterpretation and appropriation of these imaginaries. We take solarpunk as an illustrative case in point. Solarpunk is a contemporary art and activism movement that envisions hopeful futures of ecological living powered by renewable energies and sustainable technologies. We show that, as a subversive imaginary, solarpunk may be affected by processes of elite capture that could stifle its radical potential, particularly in relation to its visual identity, by analyzing two emblematic cases of solarpunk-inspired commercials produced by technology companies. We argue that imagination can be understood as a collective capability that supports forms of resistance and resilience. This framing enables us to examine the consequence of the existence of power asymmetries, which may distort the potential of imagination to be a source of transformative change. Our contribution shows that even well-intentioned or apparently innocuous uses of forms of imagination and imaginaries can have reactionary political consequences that normalize and neutralize narratives in support of radical change. Analyzing the risk of capture of sustainable future imaginaries such as solarpunk is relevant for the study of the multiple narratives, visual, literary, and academic, that are at play in public debates on the sustainability transition and climate change mitigation and adaptation, and their political consequences. We conclude by reflecting on the role that

'good' technoscientific practices can play in fostering more inclusive sustainable futures. What kinds of knowledge and design practices in biomimicry and sustainable design can support the imagination of diverse ecological futures? How can solarpunk and other imaginaries help re-envision more socially and ecologically just technoscientific practices in biomimicry?

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