13 JUNE 2025 11.30 - 13.30

Panel 83. Artistic, Speculative, and Embodied Explorations into Technologically Altered Experiences

Convenor:

Jurgis Peters, Tampere University

This panel critically examines how artificial intelligence (AI) and emerging technologies disrupt, mediate, and challenge human expression, identity, and autonomy across various domains, including contemporary art, performance, and human-computer interaction (HCI). By merging speculative design, embodied performance, and critical futures studies, the panel interrogates the societal implications of technologies such as generative AI, electrical muscle stimulation (EMS), and digitally induced altered states of consciousness (DIAL). This panel highlights the complex interplay between technology and human experience, questioning how we can ensure that these powerful tools contribute to a "good" technoscientific future.

Through a combination of presentations and a live performance the panel showcases research and artistic projects that utilize cutting-edge technology while critically examining its impact on humanity, agency, and the very notion of the "self." The panel aims to contribute to a cross-disciplinary discourse on the ethical, societal, and philosophical implications of AI, situated within broader discussions on technoscience critique, ethics of design, and posthumanism.

The first presentation explores the emerging field of digitally induced altered states of consciousness (DIAL), examining technologies like flickering light stimulation, VR simulations of psychedelic experiences, and lucid dreaming induction devices. It investigates both the potential benefits for mental health and the possible unintended consequences, including risks to autonomy and well-being, particularly with the development of more invasive brain-computer interfaces. The presentation will draw upon participatory futures study methods, design fiction, and art to anticipate the potential futures of DIAL.

The second presentation delves into the use of Generative AI (GenAI) to create interactive art installations that induce transformative experiences and altered states of consciousness. It introduces "The Looking Glass," a digital mirror powered by GenAI that dynamically alters the viewer's reflection in real-time. Grounded in psychological theories of self-transcendence, posthumanist ideas of technology-mediated transient identity, and transhumanist notions of extending human capacities, the project examines how AI can facilitate transformative states, such as awe, by modulating self-perception. It explores the potential of GenAI for artistic innovation and the creation of deeply personal experiences while also addressing the ethical challenges of using technology to manipulate human consciousness.

The third presentation examines the evolving relationship between the actor and technology, arguing for a shift towards a "technosymbiotic" embodiment in performance. It investigates how contemporary actors, working with digital technologies, can realise their creative affordances to achieve a symbiotic relationship with technology, leading to augmented performance capabilities. As a case study, the presentation will explore the use of electrical muscle stimulation (EMS) in challenging traditional and habitual notions of embodied control in acting. The presentation also considers the ethical implications of this technological integration, particularly in relation to the actor-researcher's psychophysical well-being and artistic development.

Complementing the presentations, a collaborative live performance will be presented by the authors. This piece will employ GenAI and EMS to create a dynamic interplay between human agency and technological influence, directly reflecting the central themes explored in the individual presentations.

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ID 956 – Societal Implications of Digitally Induced Altered States of Consciousness

Terho Ojell-Järventausta, Tampere University

Along with the waves of digitalisation and the renaissance of psychedelic research, digital technologies that can alter the states of consciousness have surfaced in society. Some examples of these technologies are flickering light stimulation, simulation of psychedelic experiences in virtual realities (VR), gadgets for induction of lucid dreams and body ownership illusions in VR similar to naturally occurring out-of-body experiences. Considering the current implementations and the fast-developing field of brain-computer interface, in the future, we might see increasingly more invasive implementations of digitally induced altered states of consciousness (DIAL). These technologies provide a wide array of potential benefits that are currently being studied, such as novel interventions for mental health. However, there is a high chance for the materialisation of unintended consequences and unwanted societal implications.

Therefore, the potential futures of DIAL must be studied through anticipatory research that utilises participatory futures study methods, design fiction, and art. The presentation will introduce the current scientific and artistic efforts to shed light on these potential societal implications of digitally induced altered states of consciousness.

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ID 957 – The Looking Glass: A Study in Generative AI, Self-Transcendence, and Artistic Innovation

Jurgis Peters, Tampere University

This presentation introduces "The Looking Glass," an interactive art installation that employs Generative AI (GenAI) to create real-time, personalized visual experiences aimed at inducing altered states of consciousness, particularly awe. The project centers on an AI-powered digital mirror that dynamically alters the viewer's reflection, drawing on psychological research on self-transcendence and philosophical concepts from transhumanism and posthumanism.

Specifically, the installation explores the posthumanist notion of a technology-mediated transient identity and the transhumanist idea of extending human capacities through technology, examining how AI can be used to facilitate ASC by modulating self-perception.

The presentation will detail the iterative design process of "The Looking Glass," including the technical and creative decisions involved in developing a GenAI system capable of generating meaningful, personalized visual content in real-time. It will also discuss the experimental framework used to assess the installation's effectiveness, including the collection of physiological and subjective data from participants in various settings. Key findings will be shared, highlighting the conditions and parameters that most effectively induce

technology-mediated awe, offering insights into the potential of AI in shaping self-image and facilitating transformative experiences. The project contributes to a broader understanding of how GenAI can be utilized for artistic innovation and raises important ethical considerations regarding the use of technology to influence human consciousness.

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ID 958 – Technosymbiotic Embodiment of the Actor

Samuel Kujala, Tampere University

Contemporary actor's art takes place in close relation to various digital technologies in different production settings, scenic configurations, and media. Often, the actor-technology interface can turn out rather

frictious, as the actor's possibilities for expression are subjected to restrictions and requirements of the technologies used. In this presentation, I will argue that by reconfiguring their embodied relation to the technologies present, the actor can turn an initially frictious relationship into a more symbiotic one, bringing forth technologically augmented embodied creativity. This implies a post-psychophysical framework for analysing the actor's technique and performance.

My research applies artistic research methodology and builds on an epistemology of embodied technique as knowledge, and thus, requires a cross-disciplinary negotiation between procedural research ethics and the ethics of artistic creation. This presentation looks into these ethical dynamics, where questions of exertion, discomfort, and even physical pain, are contrasted with the artistic drive and pleasures of the researcher-subject.