

Hybrid Practices in Art and Science 2

Otakaari 1X, room A1, 1st Floor

Session chair: **Ningfeng Zsang**

Tomi Dufva, Timothy Smith and Kasper Mäki-Reinikka:

Critical Post-Digital and Posthumanist Art Education: Agency, Ethics and Aesthetics of Student Engagement with Creative Coding Interventions

This paper explores agency through digital technologies from the perspective of contemporary art education. Through their interactivity with humans and within their own networks, digital technologies have become ubiquitous in its influence in contemporary culture. Digital technologies have created conditions for computers or machines to see not only as humans do (e.g. face recognition), but more importantly, how advancements in programming have enabled machines to develop their own practices of seeing, which in turn affects the ways humans see in the world.

The popularization of machine learning has introduced a new level of abstraction and agency into the entanglement of digital technologies in contemporary culture. This paper examines how critical postdigital and posthumanist art education can contextualize and augment the comprehension of digital technologies for young students. It is shaped by a case study on Aalto University's transdisciplinary initiative "Does the Suomi-100 Satellite Think Finland is Beautiful?" in which a student-built satellite orbits over Finland to gather scientific information and images.

This pedagogical project utilizes the Aalto University satellite initiative to bring local adolescent and teenage students together through hybrid art/science/technology workshops, incorporating creative coding as interventions with machine learning algorithms. This opens pathways for students to interact with and make visible such critical postdigital and posthumanist modes of thinking, seeing, and doing. As such, this paper addresses how these workshops create new lines of inquiry and reflection engaging agencies that affect and are affected by digital technology, as well as vital ethical questions of image and media literacy.

Keywords: art education, postdigital, critical posthumanism, agency, creative coding, machine learning

Pia Tikka and Mauri Kaipainen:

Triadic epistemology of narrative experience

We consider the *narrative experience* as a triangular system of relations between narrative *structure*, narrative *perspective*, and *physiological manifestations* associated with both. The proposal builds on the fundamentally pragmatist idea that no two of these elements are enough to explain each other, but a third is always required to explicate the interpretative angle.

Phenomenological accounts altogether reject the idea of objective descriptions of experience. At the same time, a holistic understanding must assume that a narrative is shared on some level, an assumption narratology must make, and that even individual experiences are also embodied, as is evident to neuroscientists observing brain activity evoked by narrative experience. It cannot be that these accounts are incompatible forever. Using these elements, we discuss a *triadic epistemology*, a mutually complementary knowledge construction system combining phenomenological, narratological and physiological angles in order to generate integrated knowledge about how different people experience particular narratives.

Our approach assumes a holistic, or even deeper, an *enactive* perspective to experiencing, that is, assuming systemic engagement in the embodied, social, and situational environmental processes. Consequently, we propose understanding narrative content needs to be analyzed not only based on subjective reports of the experiencer, but they also need to be related to neurophysiological manifestations of the experience. Or, describing the associated neural activity during the viewing of a film is not enough to relate it to subjective reports of the viewers, but the observations also need to be interpreted to conventions of storytelling. A selection of cases are described to clarify the proposed triadic method.

Keywords: neurophenomenology, narrative experience, narrative perspective, enactive theory of mind, epistemology
