**Expanded Algorithms: On a new algorithmic consciousness in art**

Abstract

The account of so-called ‘algorithmic art’ has primarily referred to the algorithm as a tool used for generating visual aesthetics (Verostko 1999, Edmonds 2018, Parker 2019). Rather, we wish to qualify how ‘algorithms’ as socio-technical assemblage (Kitchin) are saturating an expanded algorithmic consciousness in art practices in Scandinavia.

We suggest untying the concept of algorithm from its mostly scientific iterations and concepts in our account of it as a boundary object (Star and Griesemer 1989) and what that may tell us about what Alexander Galloway called ‘algorithmic culture’ (Galloway 2006). Descriptive of the age that we live in, denoting culture as marked by the omnipresence of algorithmic processes, Galloway’s model of thinking expands the algorithmic concept from its conceptualization in terms of technicality and mathematical function to being culturally and politically performative. In short, we are interested in everything non-algorithmic about the influence of algorithms on artistic practices and cultures in art.

We propose the concept of *expanded algorithms* as an epistemological tool to examine art’s entwinement with algorithmic culture as a framing and setting for art practices that create de novo re-imaginations in art and about art. The concept is inspired by Gene Youngblood’s concept of expanded cinema, with which he describes the functioning of the intermedia network of cinema and television as the nervous system of mankind. Expanded cinema did not refer to new forms of media but entailed a vision for an ‘expanded cinematic language’ to grasp a new consciousness emerging with (new) media art in 1970 (Youngblood 1970, 59). Our concept of *expanded algorithms* extends on Youngblood’s ideas as an epistemological tool to understand art as impeded with a new mode of consciousness with algorithmic culture based on the socio-technical assemblage.

We ask: What does art tell us about a new mode of consciousness in algorithmic culture, and how does this consciousness manifest in re-imaginations in and about art? By tracing an emerging ‘algorithmic language’ permeating current art practices in Scandinavia we seek to unpack the manifestations of algorithmic culture in art to draw the contours of what we propose as a new algorithmic (un)consciousness in art.

One example of this is *GAME Engine (Orange Bulletproof Kids)* by Søren Thilo Funder (2021), which takes the visitors into what appears to be a press conference announcing a new GAME engine. Surrounding the visitors and the screens from where the Game engine is launched are sculptural elements (or fragments) from the first-shooter game Counter Strike. The whole scene carries the semblance of something in-between dream and nightmare, between fiction and reality. Søren Thilo Funder portrays algorithms as cultural footprints, or as ‘ontological shifters’ (Kittler 2009): mediators of the non-algorithmic about algorithms. Behind the algorithms in GAME Engine is a dystopic, structurally dominating and seemingly dangerous world looms. Behind the medium as message, an expanded algorithmic perspective on the art reveals the re-imagination of ‘gamified’ cultural practices co-evolving with omnipresent algorithmic code, and the re-imagination about art as blending with new cultural realities becoming a part of its material and practiced consciousness.

References

Edmonds, Ernest. ”Algorithmic Art Machines.” In *Arts.* 7: 3, 15. January (2018).

Galloway, Alexander. *Gaming: essays on algorithmic culture*. Minneapolis: University of Minnesota Press, 2006.

Kitchin, Martin & Dodge, J. Code/Space. Software and Everyday Life. Cambridge Mass.: MIT Press, 2011

Kittler, Frederich. Towards an Ontology of Media. in: *Theory, Culture & Society* 2009 (SAGE, Los Angeles, London, New Delhi, and Singapore), Vol. 26(2–3): 23–31. DOI: 10.1177/0263276409103106

Parker, James R. *Algorithms as Artistic Tools*. Calgary: Durvile & UpRoute Books, 2019.

Star, Susan L., & Griesemer, J. R. Institutional Ecology, “Translations” and Boundary Objects: Amateurs and Professionals in Berkeley’s Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, *19*(3), 387–420. 1989. http://www.jstor.org/stable/285080

Youngblood, Gene. *Expanded Cinema.* New York: E. P. Dutton & Co., Inc., 1970.

Verostko, Roman ”Algorithmic Art: Composing the Score for Visual Art” (1999) [1994]. The website of Roman Verostko,<http://www.verostko.com/algorithm.html>, accessed 1. Jan 2023.