

AI and Visual Heritage

Open seminar arranged by the research programme DIGARV

13.00	Welcome and introduction by Anna Näslund and Pelle Snickars, DIGARV-coordinators
13.15-14.00	Reading Computers Watching Images, James E. Dobson, Assistant Professor of English and Creative Writing Dartmouth College
14.00-14.45	New Models for Cultural Heritage, Amanda Wasielewski, Associate Senior Lecturer of Digital Humanities <i>Uppsala University</i>
14.45-15.15	Coffee
15.15-16.00	Machine Visual Culture, Fabian Offert, Assistant Professor for the History and Theory of the Digital Humanities at the University of California, Santa Barbara
16.00-16.30	Concluding discussion

Time and place: Tuesday 11 June, 13.00-16.30 Stockholm City Museum, Ryssgården, **Registration**: Free admission. Registration is required to emmy.bergman@stockholm.se

About the talks and the speakers

Reading Computers Watching Images

While machine learning was initially developed for vision-related tasks, many recent successes with text-based models, for example in the Generative AI space, have shifted critical attention toward the decoding of learning as primarily a language task. The advent of multimodal models and Transformer-based computer vision models introduces new complexities for interpreters of machine learning at the intersection of these visual and semantic spaces. In this talk, I'll examine the new ontologies of computer vision and prospects for reading these models as they apply their transforms to image data.

James E. Dobson is Assistant Professor of English and Creative Writing and the Director of the Institute for Writing and Rhetoric at Dartmouth College. He is the author of Critical Digital Humanities: The Search for a Methodology (University of Illinois Press, 2019) and the Birth of Computer Vision (University of Minnesota, 2023), among other books. He conducts research on critical approaches for the study of machine learning and other computational methods, especially as used in humanistic disciplines.

New Models for Cultural Heritage

Text-to-image creation tools like DALL-E invite everyone to try their hand at creating Algenerated images. Such systems are of pressing interest to humanists interested in how such tools shape culture and cultural practice. The basis for these tools is the so-called foundation model, which underpins the majority of today's generative AI technologies. The massive datasets used to train these models provide a map or a picture of culture that is as of yet little understood. This talk gives an overview of how foundation models map culture and form a representation of cultural memory.

Amanda Wasielewski is Associate Senior Lecturer of Digital Humanities at Uppsala University and Docent of Art History. Her recent research focuses on the use of artificial intelligence techniques to study and create art, with a particular focus on the theoretical implications of Algenerated images. Wasielewski is the author of three monographs including *Computational Formalism: Art History and Machine Learning* (MIT Press, 2023).

Machine Visual Culture

Computer vision models are trained on huge scrapes of internet culture, extracting and fossilizing many parts of the Western visual canon. A "machine visual culture" thus invisibly determines the space of visual possibilities in all aspects of digital life. My talk will argue that understanding the conceptual logic of this machine visual culture is not only one of the most powerful ways of probing the ideology of artificial intelligence, it also allows us to rethink the notion of visual culture itself.

Fabian Offert is Assistant Professor for the History and Theory of the Digital Humanities at the University of California, Santa Barbara, and principal investigator of the international research project "AI Forensics", funded by the Volkswagen Foundation. His research and teaching focuses on the visual digital humanities, with a special interest in the epistemology and aesthetics of computer vision and machine learning. His current book project investigates "Machine Visual Culture" in the age of foundation models.

Anna Näslund is professor of Art History at Stockholm University and DIGARV coordinator **Pelle Snickars** is professor of Digital Culture at Lund University and DIGARV coordinator

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