Shared Knowledge:

Workshop: Behind the Algorithmic Image

RIXC Centre for New Media Culture
Riga, Latvia / rixc.org

EMAP

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Introduction

RIXC Art Science Festival 2024 SYMBIOTIC SENSES

Led by **Dr. Rosemary Lee**
Guest Assistant Professor Faculty of Engineering
University of Porto (FEUP)

Respondent **Mg. art. Liga Velina (LV)**
Artist, researcher. Lecturer at Art Academy of Latvija,
RTU Liepaja, Latvian Academy of Culture

Rosemary Lee's presentation at RIXC Art and Science Festival 2024.

The workshop is divided into two parts: a presentation by **Dr. Rosemary Lee** and a participatory activity. The workshop and main presentation focus on her recently published book, *Algorithmic Image Art* (2024), based on Lee's PhD, a practice-led research project on machine learning and notions of the image (IT University of Copenhagen, Department of Digital Design).

> **«[Algorithm, Image, Art] seeks to develop a better understanding of historical threads that converge the use of algorithmic approaches on recent artistic practice.» (Lee,2024,34)**

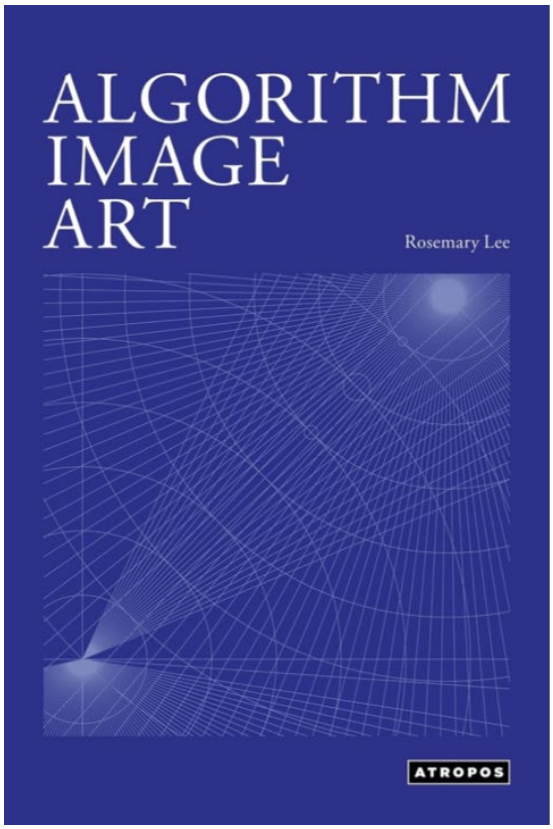
Opening Keynote speech by **Rosemary Lee** on Wednesday, October 23, 2024 16.00-17.30 focused on the concept of modern-day Algorithm and algorithmic Image making production examining how we conceive image production shaped by algorithms.

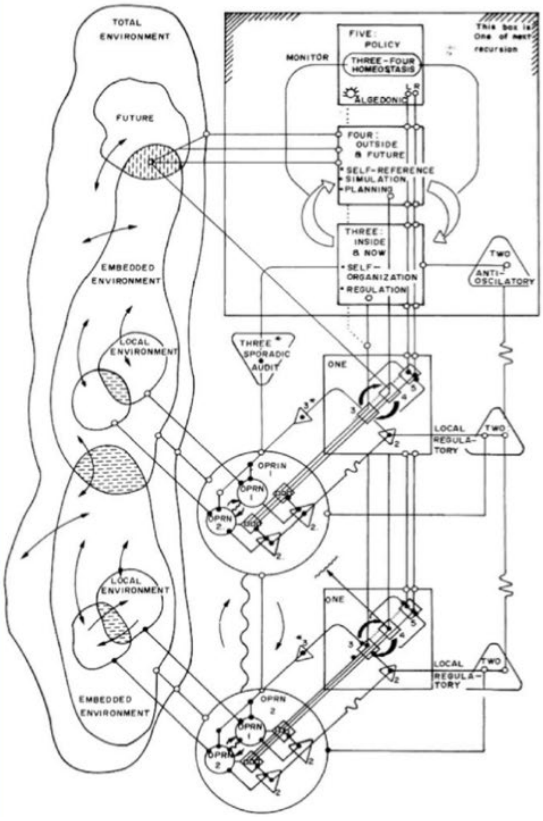
Workshop

Workshop Part 1. Introduction & Presentation

Workshop focus: The event explored the historical and conceptual dimensions of algorithmic image-making processes, emphasizing the influence of technology on visual culture.

Algorithms have become pervasive and seemingly ubiquitous in our daily lives, yet their impact is not always visually or conceptually apparent to society when engaging with algorithmic media. To better understand what it means to live in a visual culture shaped by algorithms, Lee highlights the importance of examining the history and context behind algorithmic image-making. By focusing on historical narratives of technology in her research practice, Lee investigates significant historical events and technological advancements that have profoundly influenced the conceptual and technological shifts shaping our current cultural paradigm.



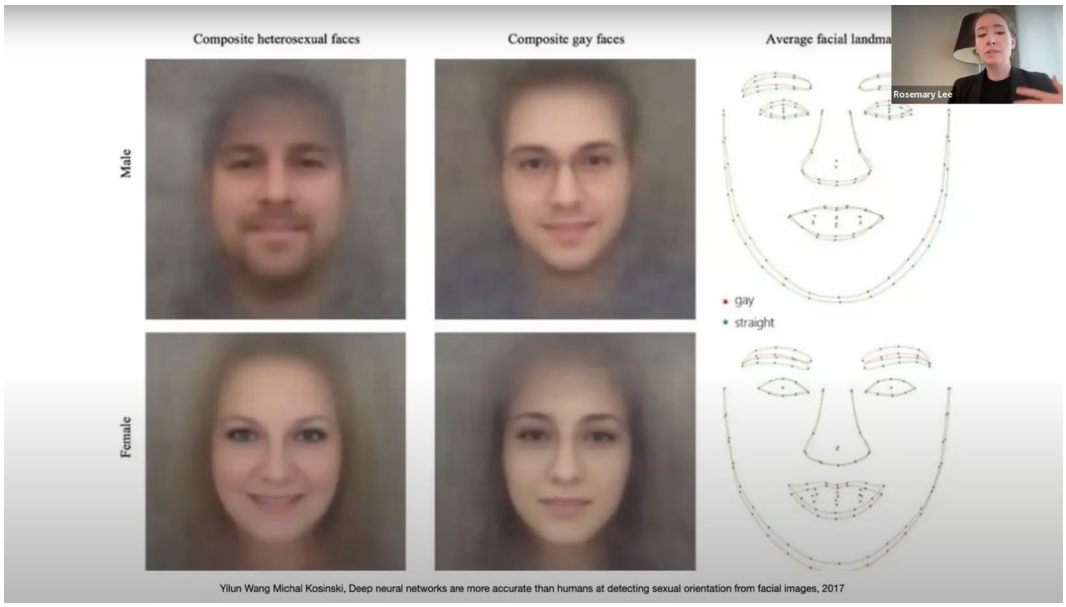


Lee R. (2024) Algorithmic Image Art. New York, Atropos Press: 2024

Rosemary Lee in her presentation describes layers of meaning and understanding that affect not only how we perceive the process but also how we think when interpreting visual images, both historically and in the present day.

The importance of understanding the geometric structuring of visual compositions and the transcription of visual data is emphasized, with references to early examples such as cluttered data in visuals (*Ptolemy's Geographia*, translated by Jacobus Angelus, c. 1406) and Leonardo da Vinci's *Vitruvian Man* (c. 1490). Instructional approaches derived from these examples, alongside the development of perspective, extend to Sol LeWitt's art practice—a systematic method where the artist, as a human agent, mimics the precision and consistency of a machine.

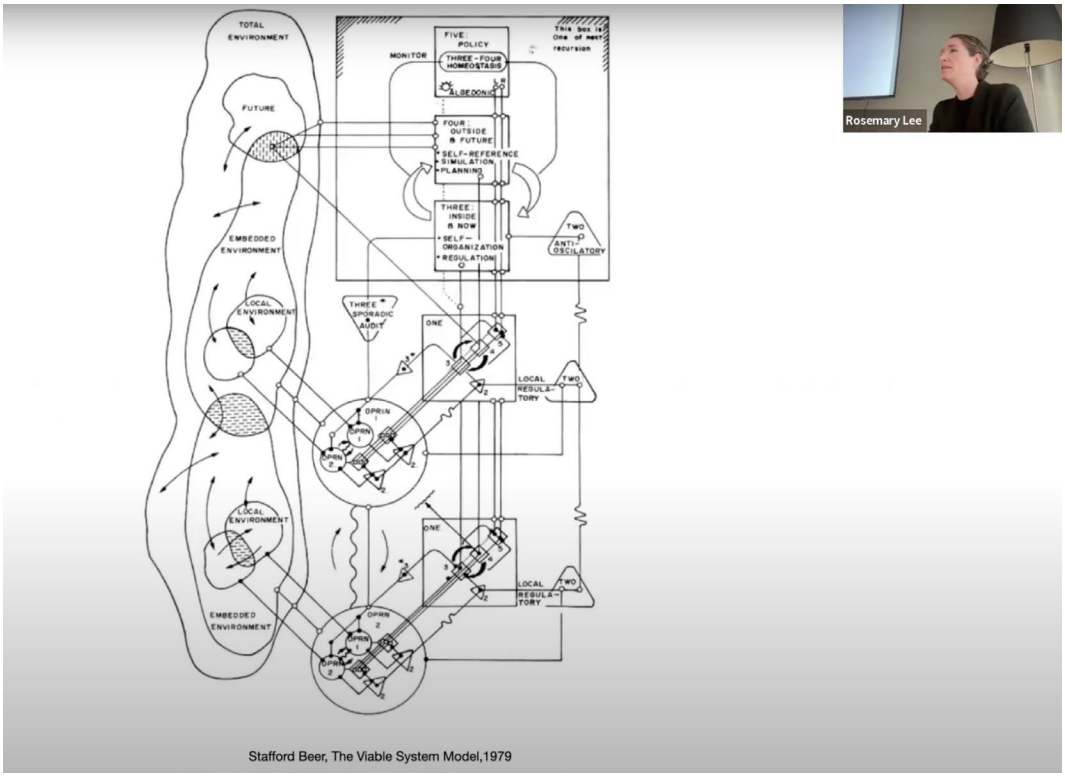
Examining how our understanding of processes shapes our perception and influences how we interpret outputs is crucial. Historically, society has sought to categorize subjects and objects by organizing data into specific classifications, but this often results in biases and imperfections. Rosemary Lee, in her presentation, referenced case studies to illustrate this: for instance, early mugshots by Alphonse Bertillon in the 19th century and a 2017 experiment by Yilun Wang and Michail Kulinski, where researchers attempted to detect sexual orientation from facial images. (Lee, 2024)



Rosemary Lee's presentation at RIXC Art and Science Festival 2024. 2017 experiment by Yilun Wang and Michail Kulinski, where researchers attempted to detect sexual orientation from facial images. (Lee, 2024)

The concept of latency and challenges it presents are also significant, particularly in how visuality is transcoded between different forms. Latency enables a state of existence in nonvisual formats, opening a new discursive space and prompting contemporary ways of thinking and perceiving.

Workshop part 2.
Conceptualizing algorithms in practice



Rosemary Lee's presentation at RIXC Art and Science Festival 2024.

The second part of the workshop offers a holistic approach to understanding algorithmic processes through a self-examining drawing exercise. This participatory activity aims to conceptualize how algorithmic image-making processes can be relevant to participants as practitioners and how they can reimagine their practices in a more cybernetic sense by diagramming their relationships with algorithms. Stafford Beer's example, "The Viable System Model" (1979), provides an approach for creating an algorithmic map inspired by biology, ecology, and cybernetics, viewing systems as open-ended entities.

Main questions:

- How do algorithms inform your work?
- How can we conceptualize our practices in algorithmic systems?
- What is a mechanism of analysis? What is an input? What is the output?
- What processes or steps are involved?
- What is the mechanism behind it?
- What kind of rules or constraints are there?

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Results

The results highlight a diversity of perspectives and backgrounds among the participants, reflecting their unique approaches to algorithmic processes. The drawings produced during the workshop were highly individualized, often self-centered, and tailored to their specific areas of expertise and creative fields. Some outcomes leaned toward technical analysis, while others, adopted a more philosophical perspective, delving into the conceptual layers of the art-making process and its relationship to human creativity.

The workshop demonstrated the potential of algorithmic approaches as a holistic and self-explanatory method for understanding creative workflows. This method encouraged participants to reflect deeply on the mechanisms behind their processes, from input to output, and the dynamic interplay between human and non-human agents.

Many participants acknowledged that the workshop helped them identify potential obstacles and refine their workflows for future projects, including theses and art experiments. By visualizing their practices in a cybernetic and system-oriented manner, they gained a clearer understanding of the complexities and interconnections within their creative endeavors. This reflective approach not only revealed technical and philosophical insights but also fostered a deeper appreciation for the iterative and relational nature of art and technology integration.

Resources

Symbiotic Sense(s): 7th Open Fields Conference. RIXC Art Science Festival 2024, Riga, Latvia / online. >>> link

RIXC Art Science Festival 2024

Rosemary's Lee's Webpage

Lee R. (2024) *Algorithmic Image Art*. New York, Atropos Press: 2024

Respondent's Liga's Velina's (artist, researcher) webpage

European Media Art Platform

The European Media Art Platform (EMAP), initiated by werkleitz and co- funded by Creative Europe since 2018, is a consortium of leading European media art organisations specialised in Digital and Media Art, Bio Art and Robotic Art.

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In the section “Shared Knowledge” EMAP publishes results from internal conferences and workshops to share them with other cultural organisations and artists. The aim is to exchange and gain knowledge within the sector of media art.

Do you want to share knowledge?
Contact us: pr@emare.eu