

Hybrid Labs Symposium
31 May 2018, 14.00–16.00

Living Things, Hybrid Reality

Otakeari 1X, room A2, 2nd Floor

Session chair: **Neha Sayed**

Olga Mink:

Elaborating on Labs: Reflections on the blurring boundaries between arts, science, technology and society

In this presentation the notion of the hybrid lab is explored through practice based methodologies, collaboration, social innovation, open innovation, open source models, artist residencies, and other (hybrid) tools or methods that may be unraveled in this debate/workshop/discussion. Additionally, I'd like to reflect on the future of labs based on the research conducted by Baltan in 2008, in which an international network was invited to explore the future of the lab. I am interested in discussing the future of the lab, speculating on the next 10 years for Baltan who is celebrating its 10th anniversary in 2018.

In a time where fundamental research is under increasing (financial) pressure and industrial research is steered by protocols, art is still an outstanding free domain. One of the challenges Baltan Laboratories addresses is how to stay independent and truthful, while simultaneously be open and alert for creative strategies and new business models? The Lab reflects on the question how to maintain values of autonomy in a highly market driven economy. By predefined and fundamentally driven themes, Baltan aims to launch activities that span multiple years. These activities can accommodate multiple shorter-term projects, but a theme or topic will run across them as a common thread. Based on the Open Innovation model, successfully ran by technology research centers such as imec (B), Holst Centre (NL), TNO and Solliance, we want to invite organizations to join forces and create leverage on each other's activities in an open minded setting and the context of a hybrid art Lab.

Baltan aims to launch themes and programs itself as a coordinator, but also aims to act as a harbor for other organizations to accommodate their own themes and programs that fit the philosophy of the lab. We believe that this collaboration model will enable the growth and proliferation of post disciplinary collaborations between the cultural sector and industry, government, educational institutes etc. on relevant topics where they now (too) often operate separated from each other.

Baltan initiates experimentation on the crossroads of art, design, science and technology, evoking inquisitive ideas and insights by bridging the gaps between disciplines. The lab functions as a collaborative mindset and network, connecting curious individuals and organisations. By placing art and design research at the core of its activities, Baltan explores the implications, promises and pitfalls of our technological society and translates these ideas into different outputs, including collaborations, events, workshops, storytelling, publications and expos, creating a space for reflection, (practice based) research and experimentation.

Keywords: labs, Baltan, Workshop

Karolina Żniewicz:

Art, Biology, STS. Examining the science from the art perspective

The main goal of my current activity is to describe the process of knowledge creation in biological laboratories from the art&science perspective. I am an artist conducting projects in biological laboratories.

The basis of my research are ethnography of laboratory and autoethnography analysis. The ethnography of laboratory is focused on the search for the similarities between processes of art creation and knowledge creation. The autoethnography will allow me to analyse the role of artists in laboratory Actor-Network (in the context of actor-network theory by Bruno Latour).

Part of my research is the analysis of changes in the process of knowledge production framed in existing researches (Latour, 1986; Knorr-Cetina, 1981, 1999; Sismondo 2011) and juxtaposition it with the observations made by me in a case to estimate the influence of art on results. Using the method of autoethnography will allow me to discover if realization of artistic projects in biological laboratories changes somehow the process of knowledge creation or not.

For me it is also important to describe epistemic culture (biological laboratories) with the emphasis on these elements (actors) which are important from the artist point of view (materiality/visuality of laboratory work, symbols and metaphors in knowledge production).

The theoretical basis for my work is Actor-Network Theory by Latour. I try to analyse multilevel relations taking place during realization of artistic projects in biological laboratories and roles of different actants.

Keywords: art&science, STS, biology, ethnography, autoethnography

AnneMarie Maes:

The Intelligent Beehive project

For most of the past decade I have been growing, hacking, digitizing, building, and thinking about beehives - particularly those in urban areas. Collaborating with a team of biologists, I am reconceptualizing what a beehive is and what it can be. The bio-art project The Intelligent Beehive monitors the behaviour of urban honeybee colonies as a source of inspiration for ongoing artistic research into issues of ecological, architectural and social sustainability in urban environments. Bees are bio-indicators. They reflect the health of their surrounding ecosystem as well as the cumulative effects of different pollutants. In many industrialized regions the colonies are threatened. Air pollution, the compromised state of their foraging fields, pesticides and parasites are among the main factors. To raise awareness about the disappearance of the honeybees, I imagined the concept of an Intelligent Beehive. It is a radically new beehive. Tailored to the needs of the bees (instead of those of the beekeeper), and augmented with supportive bacteria, it is intended to help the bees in their survival and pollinating tasks, and thus protect the biodiversity of the environment. My Intelligent Beehive has been a starting point for exploring possible futures through artistic research on materials science and biotechnology. Navigating between a blueprint and a proof of concept, the Intelligent Beehive artistically tackles a new challenging application domain where a collaboration between human and non-human actors is necessary to maintain the resilience of our ecological system.

Keywords: hybrid art, biology, ecology, biotechnology, materials science, future vision

Stephanie Rothenberg:

Trading Systems: Bio-Economic Fairy Tales in the Anthropocene

This paper provides an overview of the theory and realization of a hybrid art and science project titled "Trading Systems" that explores the intersections between social systems and non-human ecologies within our current anthropogenic, socio-political climate.

Using the notion of the anthropocene, our current epoch in which human impact has significantly altered the earth's geology and ecosystem, the project questions what it might look like if non-human forces could be put in the driver's seat. For example, what happens when models of non-human ecological systems are used to identify and rethink the dysfunctional systems, the "fairy tales," that are currently troubling our social welfare, economy, and governance?

The idea draws from biological market theory in which the behavior of animals and more recently microorganisms is analyzed through theories of the economic market. Current research by microbiologists are experimenting with ways to manipulate “market conditions” between microbes in order to create more sustainable food production and environmental remediation. Using an anthropomorphic approach, the microbiologists are reframing the microbial behavior in economic terms, examining the way they “exchange goods” or “allocate resources.”

The art project is comprised of a series of speculative visualizations embodying these “bio-market” ideas. Each visualization takes the form of a 2D diagram and correlating 3D model to create a whimsical “wetware” biological circuit reminiscent of kid’s science project. For instance, a simple supply and demand economic model that shows the relationship between labor, production and the market is remapped through the lens of plant-soil (mycelial) ecological “circuit”.

Keywords: citizen science, DIY culture, speculative design, economics, biological market theory, microbiology
