Aesthetics of Machine Vision

Advanced technologies of visual automation are operative in a variety of contexts across society. This conference brings together scholars, researchers and artists who explore forms of "machine vision" from an aesthetic perspective. In examining the aesthetic-experiential aspects of machine vision—its artistic pre-histories, contemporary affectivities, bodily entanglements, materiality, as well as social and political contexts—the conference aims to engage critically, analytically as well as speculatively with machinic ways of seeing.

Keynotes

"Surface Sensing"
Jussi Parikka (Aarhus University)

"Open Imagination in AI Vision"
Luciana Parisi (Duke University)
Zoom Link: https://syddanskuni.zoom.us/j/65358038678

Guest artist screening

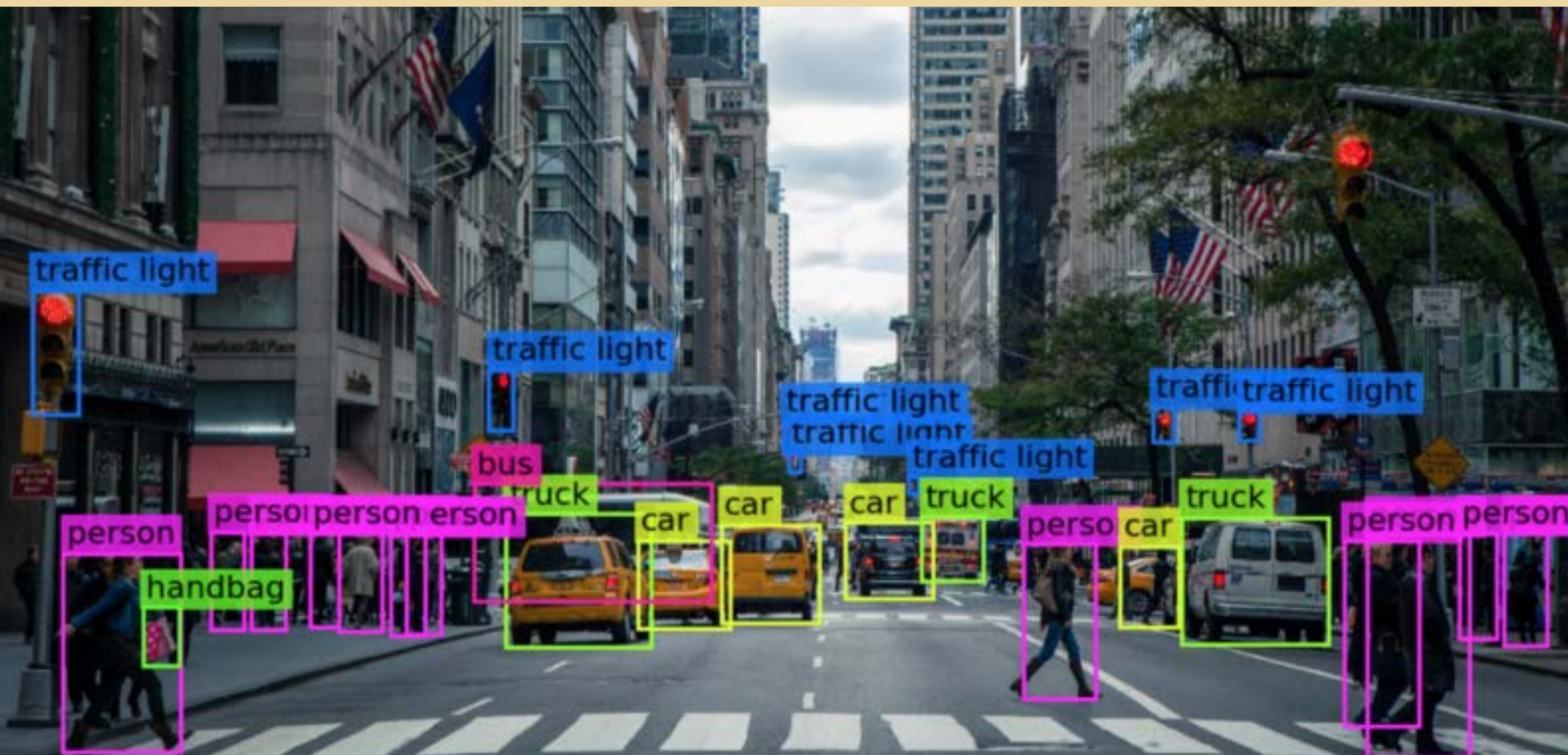**"Capturing the Light of a Year"**
Johann Lurf (Vienna, Austria)

This conference takes place at the University of Southern Denmark as part of the research cluster Drone Imaginaries and Communities which is sponsored by the Independent Research Fund Denmark. The event is headed by PI and professor Kathrin Maurer, who is also the leader of the co-sponsoring Center for Culture and Technology. Sponsors also include the Danish Institute for Advanced Study, DIAS. The conference is organized by Lila Lee-Morrison (University of Southern Denmark: lile@sdu.dk) and Dominique Routhier (University of Southern Denmark: dominique@sdu.dk) and affiliates Rikke Munck Petersen (Copenhagen University), Kristin Veel (Copenhagen University), Kassandra Wellendorf (Copenhagen University) and Hongxia Pu (Copenhagen University).

Conference ▼▼

September 15-16
SDU Odense
DIAS Auditorium

Registration Link: https://event.sdu.dk/machinevision

Registration deadline: September 8, 2022

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Aesthetics of Machine Vision
Conference Program
University of Southern Denmark, Odense
Dias Auditorium V24-501a-0
September 15-16, 2022

Day 1

9:30 – 10:00   Registration and coffee

10:00 – 10:30   Welcome / Introduction

10:30 – 11:30   Keynote: "Surface Sensing"
                    Jussi Parikka (Aarhus University, DK)

11:30 – 11:45   Break

11:45 – 13:15   Session 1 – Operations
                    Moderator: Kathrin Maurer

                    • "A Comedy of Errors: An aesthetic approach to the ideology of
                    accuracy in machine vision" Miguel Sicart (IT University of
                    Copenhagen, DK)

                    • "Tapping energies, retrieving digits: sensing ecologies of
                    airport security" Gökçe Önal (TU Delft Faculty of Architecture,
                    NL)

                    • "The unknown knowns of machine vision, or, how to explain
                    pictures to a self-driving car" Bernd Behr (Camberwell College
                    of Arts and Royal College of Art, UK)

13:15 – 14:15   Lunch

14:15 – 15:45   Session 2 – Landscape
                    Moderator: Lila Lee-Morrison

                    • "Seeing Like the State: UAV Oblique Photogrammetry, Smart
                    Village, and China's Countryside" Yi GU (University of Toronto
                    Scarborough, CA)

                    • "Feedlots Feedback" Mishka Henner (Independent artist, UK)

                    • "Multiplicitous Machines' Visions" Anna Munster (University
                    of New South Wales, AU)

15:45 – 16:15	Break / Snacks
	16:15 – 17:15 "Capturing the Light of One Year" – Screening + Artist Interview with Johann Lurf (Independent artist, AT) Interviewer: Rikke Munck Petersen
20:00	Dinner – No. 61, Kongensgade 61, Odense

Day 2

10:00 – 11:30	Session 3 – Abstractions Moderator: Dominique Routhier

• "Victory Boogie-Woogie (2014): Machine Vision, or the Reading of Abstraction" Svea Braeunert (University of Cincinnati/ University of Applied Sciences Potsdam, US/DE)

• "Drawing across lines of vision: an arts-based study of edge detection" Jamie Wallace (Aarhus University, DK)

• "Listening to Colours: the Cyborg Vision of Neil Harbisson" Kerstin Borchhardt (Catholic Private University Linz, AT)

11:30 – 11:45	Break
11:45 – 13:15	Session 4 – Ways of Seeing Moderator: Kassandra Wellendorf

• "Repurposing Ways of Seeing" Daniel Chávez Heras (King's College London, UK) & Nicolas Malevé (Center for the Study of the Networked Image / The Photographers' Gallery, UK)

• "Suspicious Behavior" Linda Kronman (University of Bergen, NO)

13:15 – 14:00	Lunch
14:00 – 15:00	Keynote: "Open Imagination in AI Vision" Luciana Parisi (Duke University, US) >>Zoom Session<< Screened at DIAS Center / SDU auditorium
15:00 – 15:15	Concluding remarks

Abstracts

Day 1

Keynote
"Surface Sensing" Jussi Parikka (Professor, Aarhus University)
This talk elaborates some themes from our work-in-progress, a book project *Vegetal Images* with Abelardo Gil-Fournier. *Vegetal Images* examines how the surface of the Earth has over the last two centuries become known and perceived as an environment of images; the question of "planetary scale" and "planetary sensing" has featured in a variety of institutional and disciplinary contexts from media to design as well as become a placeholder for, indeed, questions of scales and materials of sensing.
The understanding of the planet made up of surfaces of different types is linked to the material production and distribution of synthetic surfaces of a distinct kind: images. These can be formed on the visual light spectra or radiating outside it, or as circulating as paper maps and elaborate electronic signal systems and data platforms. The argument in our book and in this keynote builds on the history of observation of vegetal phenomena through the use of visual media, such as photography, (early) moving images as well as recently, digital technologies employing e.g. large datasets of remote sensing. The historical examples imply also a broader argument about ecological aesthetics and media theory: by focusing on the surface of the image in order to understand the growth and movements of the surface of the Earth, we demonstrate how this link is both historically grounded and fruitful as a speculative proposal about the aesthetic and scientific operations of images as they emerge in operations of sensing.
The talk will also feature some questions about artistic research methods by way of some of showcasing some of our joint work with Gil-Fournier concerning moving images and surface sensing.

Session 1: Operations

"A Comedy of Errors: An aesthetic approach to the ideology of accuracy in machine vision" Miguel Sicart (Associate Professor, IT University of Copenhagen)
What does it take for a computer to see the world around it? This question is the foundation of the field of Machine Vision, and it has inspired technological products such as self-driving cars and face-recognition scanners, as well as artworks that challenge the cultural, political, and social implications of mundane uses of this technology (Paglen 2019; Crawford and Paglen 2019). This article argues that the foundational question for machine vision is addressed by the development of a particular ideological interpretation of statistical frequency analysis that equates statistical accuracy with truth, and by extension with existence: what is statistically significant is what exists (Goldenfein 2019; Passi and Jackson 2017; Joque 2022). This ideology is supported by two premises: first, machine vision is an example of "enchanted determinism" (Campolo and Crawford 2020): computer vision is presented as being a magical technology that is always scientifically accurate. Second, machine vision is described in popular press and commercialized as a charismatic technology (Ames 2019; Weber 2009; Maley 2016). By defining Machine Vision within those frameworks, this article will argue that interactions with this technology become similar to rituals (Ames, Rosner, and Erickson 2015; Gaver et al. 2010; Pasquinelli 2019b) that consolidate the ideology of machine vision statistical techniques. Using play theory (Sicart 2014) and Douglas' definition of humor as anti-ritual (Douglas 1968) as the foundations of a critical technical practice engagement with machine vision (Agre 1997), we developed an app

called Probably Not that uses object recognition to tell users what the main object in a picture is not. As a result of this research through design approach (Zimmerman, Forlizzi, and Evenson 2007), Probably Not becomes a joke on the ideology of accuracy and its ritualistic practices. This joke very seriously proposes an aesthetics of error for machine vision to overcome the enchanted determinism ideology of machine vision (Pasquinelli 2019a).

"Tapping energies, retrieving digits: sensing ecologies of airport security" Gökçe Önal (PhD candidate at TU Delft Faculty of Architecture)
Border enforecement technologies are increasingly shaped by the security models of total situational and operational awareness—to which airports constantly adapt (Salter, 2008). As part of a grander campaign of regulating (inter)national mobilities, the aftermath of 9/11 saw the reinforcement of airports as infrastructures of hyper-surveillance, where homeland security strategies are continuosly reproduced in search of the "anomalous" and the "irregular." Following Amoore and Hall's concept of "digitised dissection" — the technologically-aided way of "knowing" any border-crossing body (2009) — I conduct a media-material examination of three sensing technologies that are typically deployed in airport screening: millimeter wave scanner (MWS), X-ray scanner and video surveillance (CCTV). Amsterdam Airport Schiphol is chosen as the reference for all discussions.
On the first move, by mapping the sensing assamblages of the three scanning systems, I show that screening technologies do not precisely "see" but rather breech, tap and reconfigure the radiated energies of moving bodies, their belongings and their spaces of transit. In this reading, subjects and ecologies are understood as remotely singled-out values of surface reflection patterns (MWS), electron densities (X-Ray), and spectral and mechanical signatures (CCTV). Respectively, three forms of machinic vision are defined following the physical interaction of the sensor with the target—seeing by emission (of scattered radio waves), seeing by altering (electron configurations), and seeing by accumulation (of electric charges). On the second move, the concept of metric individuation is invoked for discussing the operational reach of machine vision at airports—one that targets, taps, filters, manages and eliminates bodies in transit. Lastly, material-discursive relations are drawn between the atomic ecologies of sensing (namely the domain of waves, particles, electric currents and digits), the architectural proximities at which they operate, and the mobilities that are regulated in the process.

"The unknown knowns of machine vision, or, how to explain pictures to a self-driving car" Bernd Behr (Senior Lecturer, Camberwell College of Arts, University of the Arts London & Royal College of Art, London)
This paper proposes a media archaeology of autonomous vehicles developed during a fellowship at Bosch Research Campus near Stuttgart, Germany, excavating some of the 'situated knowledges' (Haraway) at work in one of Europe's foremost research centres on automated driving. As various departments at Bosch strive to technically overcome the safety implications of optical ambiguity in the world, the paper deploys the missing category in the Rumsfeldian taxonomy of uncertainty to propose art history as the 'unknown known' of machine vision. From the bounding boxes of now classical object detection to contemporary semantic segmentation, the paper probes the technical images used to train self-driving cars and traces some of the aesthetic prehistories that constitute the 'optical unconscious' (Benjamin) underlying their operative transparency within this corporate industrial milieu. This includes an analysis of the Daimler Cityscapes machine learning dataset comprising 25'000 semantically labelled photographs of urban street scenes throughout 50 European cities which is used by AI researchers at Bosch to preemptively test the capacity of machinic

perception to be deceived in so-called 'universal adversarial perturbations', a form of steganography that alters what the machine 'sees' while remaining invisible to the human eye. The paper concludes by presenting the results of a creative collaboration with the AI team to reinsert a reflexive piece of photographic history into this novel and uniquely machine-readable class of images, closing a loop that situates autonomous vehicles within a teleology of photography.

Session 2: Landscapes

"Seeing Like the State: UAV Oblique Photogrammetry, Smart Village, and China's Countryside" Yi GU (Associate Professor, University of Toronto Scarborough)
Oblique Photogrammetry uses photographs acquired from cameras (normally three or five) mounted on UAV (unmanned aerial vehicle) at a certain angle to extract 3D information, which could then be converted into 2D or 3D digital models. Although China started late, Oblique Photogrammetry received great attention there in the past decade. After the initial focus on urban surveying and construction projects, the recent wave of interest in Oblique Photogrammetry in China has focused on surveying the countryside especially villagers' homesteads. Since China launched its Digital Countryside initiative in 2019, the 3D models of rural China created with Oblique Photogrammetry technology are widely featured in Smart Village dashboards to anchor other streams of real-time data. These new displays bear striking similarities with the sandbox models in Mao's China, which were widely created and displayed to provide villagers and cadres an aerial view of the rural utopia promised by agricultural collectivization. This study unpacks the complicated state facilitation of the development of Oblique Photogrammetry. Just like the obsession with sandbox models occurred when rural villages went through the compulsory collectivization that eventually led to the disastrous People's Communes, the embrace of Oblique Photogrammetry happened amid a paradigmatic shift in the state policy on the countryside, which reversed its decades' neglect to direct control. As villagers are forced to have their homesteads "in circulation" in the name of "urban-rural coordinated development," Chinese villages are rapidly transformed into industrialized farms and amusement parts, which benefits both the investing corporations and the county-level governments at the cost of the villagers. Focusing on the rise of Oblique Photogrammetry in China's Smart Villages, this study examines how an episteme of vision anchored in aerial view has played a central role in the party-state's persuasion and coercion of villagers to give up their lands and yield to the intensified state control.

"Feedlots Feedback" Mishka Henner (Artist, UK)
I'm a visual artist working with machine vision for the last 12 years, researching various geo-political and cultural themes and observing the circulation of the resulting artworks across various social and cultural groups. In this presentation, I'd like to reflect on the production and consumption of my series Feedlots, produced in 2012 using the Google Earth satellite imaging platform. At the time, I'd identified the public availability of remote Earth imaging as a window of opportunity in which to create documentary works that were previously impossible to produce without the support of international organisations, corporations, or intelligence agencies. Suddenly, the aggregation of satellite imagery on free platforms such as Google Earth offered the possibility for private citizens to make their own observations remotely and create their own accounts of vast industrial and agricultural infrastructures. Feedlots offers visual representations of industrial cattle farms across the USA, produced using hundreds of screenshots of high-resolution captures of the landscape and digitally stitched together to produce large-scale prints of great detail. Unbeknownst to me at the time of production, the availability of the source imagery on Google Earth exploited a legal

loophole by circumventing State laws that prohibited the photographing of these sites. These laws, enacted as a result of pressure from beef industry lobbyists, helped maintain an idealised, mythical vision of cattle farming in the psyche of the American consumer. Yet Feedlots went viral after its publication, featuring in magazines, television broadcasts, and news outlets across the world, as well as being referenced in government campaigns, scientific and medical journals, academic textbooks, and in the farming press itself.

"Multiplicitous Machines' Visions" Anna Munster (Professor, University of New South Wales)

In Asunder (Tega Brain, Julian Oliver and Bengt Sjölén, 2019), an automated environmental 'manager' designs recommendations and simulates solutions for imaginary and real scenarios across crisis-hit regions of Earth. The largescale installation engenders speculative possibilities based on machine learning assessments of a specified region's satellite, climate, geological, biodiversity and topographical data. Mirroring platform design strategies that create automated digital twins of Earth – Microsoft's Planetary Computer, for example – the work calls out globalised platforms' automated answers to real planetary catastrophes of climate change, geopolitically-induced wars, environmental refugee emergencies and more. On the one hand, Asunder functions through the same machinic operativity as industrialised AI. Yet it upsets any tidy twin parallelism by testing out what happens when automated decision making tries to solve environmental collapse. Re-icing the Arctic is one recommendation, for example. On the other hand, Asunder amplifies the deficits of a unified, planetary machine vision by producing solutions impossible for humans to implement. As Asunder operates, it performs an onto-epistemological decoupling of the planet and AI from human life and goals; it asks: what would it mean to take different environmental agendas seriously using a speculative mode of machine envisioning?

In this paper, I propose that a making multiplicitous of machine seeing through such artful techniques, deploys what Gilbert Simondon has called an allagmatic knowing. Simondon emphasises how one might come to know (technical) systems via their dynamic operations. An allagmatic arts of machine vision enacts machine learning's operative-structuring from which it also diverges via analogical mechanisms of differential repetition. Looking at artful work by Brain, Anna Ridler and Philipp Schmitt among others, I will suggest that machine vision becomes multiplicitous by unlearning its predictive sociotechnicality through analogy. Instead, a thinking-feeling of AI seeing as always more-than (one) vision emerges.

<u>Artist Screening</u>

"Capturing the Light of One Year" Johann Lurf (Artist, Austria)

The presentation will focus on the specific qualities of long–time exposure photography and the perception of time-lapse moving images. After introducing the concept of the film, a comparison of digital and analogue methods of recording images over the span of seconds to hours will be made, highlighting their different possibilities and drawbacks:

-general comparison between video and film recording
- digital image sensors and calibration
- longer exposures and black frame correction against image noise
- image stacking
- analogue long–time exposure considering the Schwarzschild effect

The difference of night and daytime will be discussed and a reference to the possibilities of humans visual perception will be made. Film and image examples will be shown to illustrate the characteristics of the two different media and a conclusion will be drawn based on the research. Next, the filters, the choice of the lens, the film format as well as the concept of

supersampling will be explained. Planning the camera, researching and sourcing the individual hardware and electronic elements is discussed, followed by a description of the process of building the camera itself. The control software is explained together with the concept of measuring the light.

Examples of test exposures will be shown and the difficulties as well as insights from this process shared. Location search and its requirements are presented. The camera station is outlined. How the power line is being supported by an uninterruptible power supply. The station can be accessed remotely and observed through the internet. It communicates alarms and maintains a moderate climate to prevent overheating. Sensors are recording weather data like temperature, humidity and pressure. The power plant is monitoring the water level in the reservoir. This data will be used to synthesise a soundtrack supporting the image as well as emphasising the passing of time in the film. The process of developing the negatives and data into sound, scanning and exhibiting the film is in a concluding remark discussed out from the state of the current difficulties and successes of the work in progress.

Day 2

Session 3: Abstractions

"Victory Boogie-Woogie (2014): Machine Vision, or the Reading of Abstraction"
Svea Braeunert (Visiting Associate Professor, University of Cincinnati/ University of Applied Sciences Potsdam)
During the 2014 Nuclear Security Summit in Den Haag, US President Barack Obama paid a visit to the Kunstmuseum where he was photographed in front of Piet Mondrian's Victory Boogie Woogie (1944). While Mondrian's painting stands for the autonomy and purity of abstraction, the double-portrait by contrast hints at implication. Considering that the use of drones proliferated under the presidency of Obama and that drone strikes became a preferred foreign strategy option then, the photograph evokes three kinds of abstraction: the abstraction of art, war, and machine vision. The aesthetic likeness between abstraction and machine vision was seen by Mondrian himself already who ascertained that his color field paintings would best be perceived by a post-human beholder. The idea was picked up by Hito Steyerl who, in her essay Medya: Autonomy of Images (2016), not only suggests Mondrian's modernism as a tutorial for understanding machine vision, but whose work with the Mondrian image also gives a clue as to what a framing of machine vision through abstraction might entail. For Steyerl does not reprint the front-facing, pictorial side of Mondrian's Composition with Yellow, Blue and Red (1937-42), but displays a square of numbers and letters supposedly containing the source code informing the digital scan of the image. Steyerl's approach is paradigmatic for a strand in contemporary art dealing with the remote sensing technologies of drones and satellites. These artworks revert to the idiom of modernist abstraction, redefining it as a politically charged form that is indexically grounded in the real world. Displaying the metadata of the image (in titles, captions, or in place of the image), they defy the Greenbergian notion of the 'single glance' and opt instead for a combination of reading and seeing. In my talk, I aim to develop a textual-pictorial approach that takes the contemporary framings of Mondrian's paintings as a cue to approach the aesthetics of machine vision through these shifts and appropriations in abstraction.

"Drawing across lines of vision: an arts-based study of edge detection" Jamie Wallace (Associate professor, Aarhus University)
Fundamental to machine vision is the detection and capture of visual events to which can be attributed values and meanings. This too is the purpose of drawing. As a form of becoming,

drawing relies less upon computational techniques than upon human perception and the material logic of hand and materials. Crucial to drawing and machine vision is the interpretation and making of lines. Computational vision relies upon algorithmic techniques of 'edge detection' and image 'segmentation' to 'draw' lines by variously inspecting changes in pixel values. Viewed from the perspective of mark-making and cultural traditions of drawing practice, the edges, and boundaries of machine vision tend to appear troublesome, uncertain, fragmented, lacking orientation and human intervention. They seem to call for a different mode of seeing able to straddle scientific knowledge and the act of drawing that can present the lines of machine vision as active in their own right. This echoes Kandinsky who exclaimed "in a picture when a line no longer describes a thing but functions as a thing itself, its inner sound is not muffled by other considerations. Its inner power is fully released" (Kandinsky 1912). In this proposal I wish to present an investigation through drawing of the phenomenology of machine vision lines. My intention is to explore relationships and correspondences between the lines of my own drawing practice and visual line features that result from processes of 'edge detection' and 'image segmentation'. My aim is not to present machine vision as a reductive posthuman synthesis of vision from calculation that marginalises the practice of drawing. It is rather to find a means of paying attention through drawing to new continuities of aesthetic value able to reconfigure the machine vision line and its associated imagined spaces.

"Listening to Colours: the Cyborg Vision of Neil Harbisson" Kerstin Borchhardt (Assistant professor, Catholic Private University Linz)
In 2004, color-blind born artist Neil Harbisson (*1984) had a high-tech antenna called "Eyeborg" or "Cyborg-Antenna" implanted in his head. This technological body modification "translates" light waves into sound waves making him "hear" colours even in terms of infrared und ultraviolet, which are usually not perceivable by humans. The self-appointed "world's first cyborg" understands this new ability, which he has presented in numerous international performances including music, light shows, paintings, augmented reality, and lectures, less as a compensation than an expansion of his vision as well as an expansion of the human condition itself in terms of a transformation from a human into a transspecies being. From Harbisson's point of view, his transspecies status marks a special interface between his human body and experimental technology resulting in a cyborg vision, which not only transcends the boundaries between human and machine but also between human and non-human species such as insects perceiving colours such as ultraviolet and having antennas as well. The proposed paper intends to introduce and analyse Harbisson's cyborg vision and artistic work critically against the backdrop of the cyborg as an emancipatory and boundary breaking political concept as it is presented in post- and transhumanist scholarship from Donna J. Haraway's Cyborg Manifesto (Haraway, A Cyborgs Manifesto, 1995) to Max More's and Natascha Vita-More's transhumanist theories (More / Vita-More (ed.), Transhumanist Reader, 2013). The focus will be laid on the question, how a technologically modified vision may constitute a new post- or transhuman status in terms of a transspecies being and which political, social and ethical consequences may arise from such an altered, more than human status.

Session 4: Ways of Seeing

"Repurposing Ways of Seeing" Daniel Chávez Heras (Lecturer, King's College London) & Nicolas Malevé (artist/postdoc, CSNI, The Photographers' Gallery)
The proposal is for a panel to present a speculation on a contemporary remake of John Berger's television series Ways of Seeing (1972). It builds on CSNI's ongoing collaborative

project Ways of Machine Seeing (and contributions to a special issue of the journal AI & Society in 2021*). If the TV series were to be remade today, what arguments would hold, what would need revision, and what forms might new episodes take? We are interested in the series as research object in itself as well as to analytical use to inform a better understanding how we see the world, not least through the limited worldview of datasets. Aside from the example of ImageNet, we are interested in the use of datasets in visual digital humanities research that reflect the kinds of art historical imagery Berger drew upon for his examples to expose underlying ideologies. The digital humanities has tended to use digital tools as instruments that make it possible to create new knowledge from existing art collections, but the contribution of the critical humanities is less well defined. What do the use of these tools allow us to learn from Berger's work and to see embedded in the tools themselves? (Similarly, GANs demonstrate their ability to mimic human creativity, based on impressionist, expressionist or abstract paintings, again reflected in Berger's examples.) It seems useful then to apply the thematic structure of the series -- related to reproducibility, colonialism, the male gaze, gender and property relations -- but to question to what extent these require revision to embrace current discussions around AI and social justice as well as the invisuality of computational capitalism. Attentive to the relational operations of algorithms and datasets, we are interested in raising public understanding of how forms of power and privilege continue to be reproduced and naturalised through ways of seeing, identifying what these worldviews are, and more importantly how they can be transformed.

"Suspicious Behavior" Linda Kronman, (artist /researcher, University of Bergen and Kairus Art+Research)
Suspicious Behavior (Kairus 2020) is a fictional annotation tutorial inviting readers to critically examine machine learning datasets assembled to detect anomality in surveillance footage. Engaging with the artwork, the reader, in the role of an annotator trainee is completing Human Intelligence Tasks (HIT's) in labelling videos for suspicious behaviour. Platforms like Amazon Mechanical Turk give little or no information about the requesters beyond the task description.(Gray and Siddharth 2019) Like the real-world annotator, the reader is left to speculate in what context their work might be implemented. YouTube montages embedded in the tutorial only provides clues in which ways the task is situated along pipelines of AI powered video surveillance. This artwork builds upon artistic methods for scrutinizing image datasets (Buolamwini and Gebru 2018; Crawford and Paglen 2019; Harvey and LaPlace 2021; Pipkin 2020), adding the perspective of on-demand workers to expand insight into classification practices. The tutorial, although fictive, provides insight into the hidden work of crowdsourced labour and how annotators engage in decision making in a set environment. Research has mainly focused on how bias gets embedded into datasets through the individual subjective worker. (Miceli, Schuessler, and Yang 2020) Suspicious Behavior on the contrary exemplifies ways in which interpretation is imposed on annotators and thus into datasets. Although, annotators attach meaning to images by labelling them, their interpretations are facilitated by the annotation interface and top-down controlled by their clients. Thus, we will use examples from Suspicious Behavior to engage in a discuss of how data curators enforce interpretation on annotators through instructions and interface design. The examples make it clear that annotators have limited agency in classifying images, thus, the whole annotation apparatus needs to be scrutinized to understand automated perception through operations on images.

Keynote
"Open Imagination in AI vision" Luciana Parisi (Professor, Duke University)

As Open-AI has launched DALL-E (DALL-E 1 and now 2), concepts in natural language are directly transformed in images. It is said that AI generated images do not only show us how AI understands the human word, but importantly stretch the creative imagination and the aesthetic potential of vision. Here, algorithmic creativity returns to open the question of what counts as vision in the aftermath of computational thinking. The relation between algorithmic performance and aesthetics however needs to be further explored. One must ask: how can algorithms meet the creative dimension of aesthetic production without simply intensifying the recursive trends of cognitive capital? And to what extent it is possible to argue for a machine aesthetics that escapes the modern cosmogony of Man (Wynter 2002), the colonial and patriarchal epistemologies granting the authority of modern epistemology? This paper is an invitation to challenge the Promethean biomythosis (Wynter) of modern epistemology that we can find in the promise of DALL-E to extend creativity - from the promise of giving ill children the generate their best memories to use AI to continue the work of a deceased young artist (https://openai.com/blog/dall-e-2-extending-creativity/). It is the paradox of modern cosmogony, where recursive algorithms, as the prototype of the slave-machine, continue to sustain the freedom of homo bioeconomicus (Wynter), haunt machine vision and AI aesthetics. This paper will attempt to overturn this paradox and bring forward an alien hypothesis for AI imagination.