AESTHETICS OF DIGITAL IMAGES SYNTHESIS: GENEALOGIES, STYLES, PRACTICES

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Abstracts:

Aimo Lorenzo: *AI Generated Images: Postcards of Computational Meaning from the Latent Space*

Abstract:

Is it possible to consider AI generated images a new kind of networked (Dewdney et al., 2022) platformed (Mackenzie and Munster, 2019) digital images? Do they differ or are they similar? Text-to-image AI models algorithmically remediate (Bolter, 2023) all kinds of styles belonging specifically to other image-making media and generate the so-called metapictures (Mitchell, 1995). Comparing them to other kinds of digital images, those generated by Stable Diffusion may look similar, as they present the visual and stylistic features of techniques (photography, illustration, graphics etc.), which are then simulated by AI. Generating images from other images and captions in form of data, the process of algorithmic generation works in a way that aligns AI images' surface to the representational order we are used to – as previously noticed by Uricchio (2011), making the output human-readable and recognizable. However, it is precisely the modality of their generation that distinguishes AI generated images from other kinds of images. As Antonio Somaini explains (2023), an AI generated image is the output of a complex, layered, human-led process which involves organising, ordering, reducing, compressing pre-existing images in the shape of data. Both the way pre-existing digital images are organised into a dataset and the way meaning is later stored into the latent space of the AI model are marked by a specific logic, where the concept of *meaning* is crucial. Bahjor supports the idea that meaning contained in the latent space is <<dumb>> (2023), as it is not grounded being the result of multiple mediations governed by the semiotic assumption according to which verbal and visual signs converge unequivocally – assumption that Paglen and Crawford have critiqued highlighting its political problems (2021). Besides, the dynamics involved in the management of big numbers of images and their textual associations (taxonomy, indexing, rasterizing, vectorialization) are based on a logic of meaning measurement. This is witnessed by Pasquinelli and Joler's metaphor which compares machine learning to a nooscope, an(other colonial) instrument to "navigate the space of knowledge" (2021, p. 1263). The spatial and geographical sense of this metaphor is reflected into one of the first theorization of vectorial latent space (Osgood et al., 1957; Chartier et al., 2019) and is, in fact, a map of meaning calculated through Euclidean distance. As Parikka recently wrote: "The images that measure also measure measuring. Some measure the measuring subject, others measure the relations in that measuring" (2023). In this talk, I would like to discuss the concept of 'latent space', by reflecting on the features of AI images, focusing specifically on how the cartographic logic, which characterises the

construction of datasets and the structure of the latent space, impacts their representational surface and their being *digital images standing for something else.*

Lorenzo Aimo is a PhD student enrolled in the national doctoral program ILF (Image, Figure and Language), Visual Culture curriculum, managed by the University of Milan in collaboration with the University of Bologna, Italy. His research project concerns Artificial Intelligence as a device for image generation, and his interests lie in visual culture, specifically visual production practices through new technologies and image theory.

Birken Jacob: Pics or it didn't happen. Synthetic images and their economies

Abstract:
Since the 19th century, photography claimed a privileged spot in the production and reception of ‚evidence'. Recording an impression of material reality via a scientifically understood, replicable physical process qualified photography as being 'objective'; despite well-known possibilities for manipulating its contents and interpretation, photography effectively shaped the concept of 'evidence' itself for generations. Even in the age of digital mass communication, "pics or it didn't happen" remained a sarcastic or sensationalist request for photographic proof for virtually anything. As digital photography made recording, editing and distributing images trivial, this demand could – in theory – be met easily. From this perspective, digital image-making might have ushered in an era of ubiquitous photographic evidence, but in the second decade of the 21st century, the demand for images as an epistemic means seems to have dramatically shifted: With gaming consoles and PCs creating photo-realistic 3D graphics in near real time and Large Language Models churning out images synthesized from immense, dubiously sourced data sets, pictures much rather illustrate requests or concepts than record material reality. Photographic 'realism' is thus reduced to a style among other styles, while its claim to 'truth' now informs any kind of digital image-making: an image produced by 3D software or an LLM that 'looks like' a photo of a person or landscape does this in the same way as one that 'looks like' a charcoal drawing or oil painting. In my talk, I will discuss the current shift towards images on demand, and how this fits into a larger history of the culture industry under late capitalism: Both in regard to digital imaging's relation to the division of labor and automatization, and in regard to a new interest in images as goods satisfying individual, yet highly normative desires.

Jacob Birken is a researcher and writer and currently assistant professor at the department for North American History at Cologne University. His work usually addresses the intersections of history & representation – on the one hand, the genealogies and historical circumstances of specific media like video games or digital graphics; on the other hand, the function of media and material culture in shaping & creating historical moments or concepts of historicity. His most recent publications are the essay *Videospiele* on video gaming as visual culture (Wagenbach, 2022), and *Vom Pixelrealismus* on 3D graphics as a late capitalist mode of image-making (Schlaufen, 2023).

Cramer Florian: Gen-AI Crapularities and the Kaleidoscope Constraint

Abstract:

In my presentation, I argue that the development of generative systems from simple aleatorics via Markov chains to neural networks and LLMs has been one of increased self-similarity and thus aesthetic mainstreaming. From that perspective, its progress has been - if it is "progress" at all - quantitative rather than qualitative. This will likely result in a crapularity of low-cost, generative AI-derived content in popular creative industries products, which will form the basis of the future general-audience, cost-free audiovisual media stream consumption.

The issue with generative systems, however, is more profound. Despite their differences in technical complexity, all methods of automatically generating images, texts and sounds ultimately result in the generation of content that isa glorified kaleidoscope. The texts, images, and sounds generated by these systems may initially be interesting, amusing, or even captivating. However, as time passes, a sense of ennui may set in. The advancement of computationally complex AI (or machine learning) methods over simpler aleatorics serves to further delay this point of ennui. One might argue that this ennui is neutralized aesthetically and epistemologically as soon as its delay exceeds a critical time span. However, this does not negate the observation of the kaleidoscopic limitations of generative systems. The structural limitation of generative systems is their inability to do anything other than endlessly remix data material that has been sampled once in a poetics of eternal return of the same, an algorithmic posthistoire of cultural production, and a structuralist prison of textual self-similarity.

In contrast to conventional intertextual poetries and recycling aesthetics, it remains a crucial issue that the respective remix processes do not develop further, but remain the same, within a fixed algorithm or trained system.

Florian Cramer, *1969, practice-oriented research professor at Willem de Kooning Academy & Piet Zwart Institute, Rotterdam University of Applied Sciences, The Netherlands. Recent publications: *Lumbung, Commons and Community Art*, co-authored with Simon Kentgens, Rotterdam: HumDrumPress, 2023, 136 pages (print and Open Access); *A Near-sighted Falling into Technology: Through the Looking Glass of Art Practice as Human Self-Experimentation, Accidents and Coincidence*, co-authored with Elaine W. Ho, in: Joke Brouwer & Sjoerd van Tuinen (eds.), Technological Accidents, Accidental Technologies, Rotterdam: V2_ Publishing, 2023, pp. 60-80.

Gucher Florian: Computational dreaming: The KI-Image between deep kitsch and creative augmentation.

Abstract:

In exploring the relationship between AI, kitsch and art, the starting point of my argument is that AI images in an artistic context both continue and counter traditions of modern movements such as surrealism and pop art. The exploration of kitsch and art begins with a preceding chapter that emphasizes the role of artistic autonomy in relation to kitsch. In this context, the principles of intentionality and premise-bound AI will be discussed (Dorothea Winter, Marcus Du Sautoy). The ways in which AI images tend to become banal and trivial when human autonomous efforts are ignored should be explored in detail. The first chapter focuses on the relationship between the statistical

rendering and the "betrayal of images" (Jacob Birken, Peter Volgger). While surrealism with its collages always had a reference to the outside world, this is missing in AI works. Building on this fact, the relationship between the signifier, the signified and reality is to be re-established under new conditions. The continuation and delimitation of surrealist tendencies will be analysed on the basis of concrete examples. In this context, collages by René Magritte and Max Ernst will be related to AI works by David Szauder or André Löser. What is meant by the term 'spacing' (Rosalind Krauss) and to what extent does it play a role in relation to AI images? To what extent do the so-called 'intact' images lack the 'aura of being torn apart'? The aim is to show, how AI images are capable of something 'genuinely new' (Lev Manovich), but always remain images made of images without any direct reference to reality.

Chapter two focuses on the use of kitsch as an aesthetic tactic. It should also be noted that AI art continues the tendencies of postmodernism, which incorporated kitsch into art as an artistic strategy in order to consciously distinguish itself from high art through popular aesthetics (Thomas Kulka). It was not least with Pop Art that kitsch entered art as a subject. Pop art therefore has a special relationship with AI aesthetics; in a way, it paved the way for it. While Pop Art trends could still resort to a valorisation of kitsch, for example in the form of Jeff Koons' balloon dogs covered in gold, such aesthetic strategies suddenly become banal due to the 'smooth surfaces' of AI-generated works. New ways of using kitsch as an aesthetic strategy, such as the re-contextualisation of kitsch motifs in unfamiliar terrain, will be presented. Chapter three finally examines the contextual competence of AI, discusses the prompt as an idea and concept and attempts to categorise the creative potential of AI. Concepts such as *Mimesis* and *imitatio*, creative hallucination and the understanding of AI as a dialogue partner are used in this context (Fabian Offert, Pau Waelder, Jan Lohmann Stephensen, Merzmensch). Furthermore, the idea of collaboration (Arthur I. Miller) and the concrete principle of post-anthropocentric creativity (Lohmann Stephensen) will be brought into the discourse on 'creative augmentation'. Based on this, an iconological interpretation of an AI work by Julian van Dieken will be presented in order to discuss an example of 'creative augmentation' between human and machine. An AI work referencing historical painting with a pop-cultural fast-food element was therefore chosen to demonstrate how AI can generate historical contextual knowledge derived from patterns in 'latent space'.

Florian Gucher, *1995, is an art critic and university assistant in the Department of Visual Culture at the University of Klagenfurt. He specialises in modern and contemporary art, political iconography and iconology of visual studies as well as socially relevant methods of art and culture.

Guillermet Aline: In-between code and image: Aesthetics of AI-painting

Abstract:
The relationship between machine and human creativity, which is at the centre of current discussions on AI-art, can arguably be traced to post-war cybernetics and the rise of computer art in the 1960s. In this early context, new creative practices imported from emerging information science unsettled existing aesthetic categories. Specifically, the importance of programming shifted the focus away from the visual results, leading to the question: is 'art' in the code, or in the image?

This question has recently gained renewed relevance in the context of AI-generated art. On the one hand, the authorship controversy triggered by the *Portrait of Edmond de Belamy*, created by using an existing open-source generative adversarial network (GAN), and subsequently sold for $400,000 at Christie's, indicates the prevalence of the aesthetic output over the valorisation of the original coding process. On the other hand, the works of contemporary digital artists who use AI to reflect critically on

the aesthetic applications of the new technology, point towards a new mode of algorithmic creativity that would go beyond formalist image appreciation.

In arguing for an inter-connectedness between early computer art and AI-art, I suggest that we can illuminate the contemporary in the light of the historical. This paper takes the historical backdrop of computer art as a starting point to investigate the new balance of creativity between code and visual output in a context redefined by machine learning, large image datasets, and black box AI. I will focus on examples of AI-based technologies used to generate digital images referred to as 'paintings' by their creators: text-to-image (David Salle); algorithm training on a pre-defined corpus (Jonas Lund; Anna Ridler); data mining and crowd sourcing (Agnieszka Kurant), to probe the aesthetic, social, and political potential of AI-art. While I am interested in studying the images corresponding to each technological application in the light of existing art historical and philosophical categories (creation, mimesis, variation, appropriation, combination, etc.), I will ultimately argue for an aesthetic value of 'AI painting' that exceeds the formal qualities of the visual output, to encompass the broader creative context of the work.

With this paper, I aim to speak to three of the research questions suggested in the call for papers: the aesthetic accentuations, patterns and styles that are created in the course of the AI generation of images; the various possible roles and functions that AI-based technologies take on in the creation of artworks, and finally, the challenges in evaluating AI-generated art in comparison to human creativity / the relationship between man and machine.

Aline Guillermet's research focuses on the impact of science and technology on artistic practices since the 1960s. She has published widely on computer and digital art including in *Representations, Media Theory* and *Art History*. Her book *Gerhard Richter and the Technological Condition of Painting* is forthcoming with Edinburgh University Press (August 2024).

Klink Charlotte: Generation Loss: Migrant Lives, Migrating Images in Times of Generative AI

Abstract
Generation loss is everywhere: in the devices and apps we use to circulate images, as well as in the experience of a human life. Generation loss is that which is concealed in the discourse on both migration and the circulating digital image. Humans are migrants, precisely not by nature, but by culture. So are the images we create—to share, to circulate, to migrate. Hito Steyerl coined the term "poor image" for this cultural practice, emphasizing its resistive, radical character in the face of capitalist logics of consumption. Simultaneously, these capitalist logics increase and amplify movements of migration, both in the physical and the digital realm of human experience.

With generative AI, this process has significantly intensified: not in quality, but in the sheer quantity of images flooding our perception. These AI images confront us—in a McLuhanian sense—with what "we already are": racist, sexist, lying, hallucinating – in short, with aspects of our own humanity. The generational loss this entails is addressed in research: When trained on AI generated data sets, AI generators become stuck in an autophagous loop of self-destruction. Original (i.e. human-made) data is required for the AI not to suffer the so called "Model Autophagy Disorder".(Alemohammad et al. 2023) The identification with the machine exemplified through such a quasi-diagnosis is very instructive for the relationship between humans and AI.

By means of some fundamental aesthetic considerations on technology and media theory, based on Freud, cybernetics and contemporary theories of technology in the humanities (e.g. Rockwell and

Sinclair; Gronlund; Gold and Klein), and by examining current examples of critical AI art and research, the lecture examines the relationship between technological tool and artistic practice. What does this fundamental relation mean for our humanity, for our subjectivity and perception of the world? What effect does this ever-increasing generative migration of images have on us? How does the loss of generational knowledge, both in the digital realm and in the migrational movement of humans relate to, or influence one another? Through examining critical AI art (e.g. Mary Flannigan's "Grace AI", Caroline Sinder's "Feminist Data Set" or Birgitte Aga and Coral Manton's "Women Reclaiming AI"), and other forms of digital art dealing with migration, trauma and generational loss (e.g. Yael Bartana's "Tashlikh (Cast Off)", Pierre Hughe's "Camata", Keren Cytter's "Fashions"), the paper addresses the relationship between art, technology and social practices in order to show possibilities for an aesthetic approach to AI images.

Charlotte Klink is an artist and researcher at the University of Bern. She completed her PhD as a Minerva Fellow of the Max Planck Society. Her dissertation *Electric Seeing. Positions in Contemporary Video Art* deals with the media dominance of the video image in contemporary artistic and social practice. Her habilitation project "automated drawing" examines AI image generators and their effects on the art field and the public.

Krejs Bernadette: Exploring the Home Through Image-based AI Tools

Abstract:
This proposal explores the Home through Artificial Intelligence-based image generators - like DALL·E, Midjourney, or Stable Diffusion. Is AI helpful to explore other imageries and to what extent, or does it still reproduce dominant forms of representation of the home found on platforms like Instagram, where the home is displayed in endless repetitions of perfectly aestheticized staged images? Can we transform, change and relearn housing knowledge through AI images?

With the launch of Midjourney in 2022 anybody with an internet connection could create detailed images on whatever topic in a matter of seconds, from futuristic worlds to the pope in an oversized coat. These models learn visual aspects like shadow play, shapes, and representation of patterns and objects by training data sets. AI models are typically viewed as closed systems, beginning with a data set and ending with predictions. But as we exist in a digital landscape filled with human biases— navigating these image generators requires careful reflection. So, do we end up reinforcing stereotypical images with Western-centric monoculture under a false guise of democratization? The platform/tool is not a neutral medium; it comes with histories, biases, intentions, and goals. Even if they stand for transparency, openness, and progress.

This proposal investigates our anthropocentric view that everything (including creativity) is grounded in human beings. A design process could also be a tentacular collaboration between people, programs, algorithms, groups and images. This research is not looking for cliché images of a paternalistic, technopositive, and colonial utopian future images, nor is it interested in endless feedback loops of look-alike images of the work of deceased architects.

The term "Drawing Otherwise" is therefore introduced as a critical, activist, embodied practice. It's not just about visualizing a different idea of what a home might look like; it's about developing another architecture through the act of drawing with AI tools. This research is interested in images that are in the process of being made, instead of being statically fixed; images that do not displace lived realities

or outsource certain topics such as reproductive labour, power structures or conflict; images that tell other stories of living by embracing glitches, cracks and contradictions in dominant visual narratives.
Is it possible to "hack" the logic of biased data sets? What could a queer AI achieve, based on a feminist understanding of knowledge, always particular, ambiguous, and incomplete? AI is often used for efficiency, but this proposal wants to explore the charm of the unplanned, surprising combinations of the known and the unknown, the things/spaces/homes we cannot see yet. Digital media is a powerful, playful, and unrestrained way to imagine and create scenarios for alternative futures of living together.

Bernadette Krejs (PHD) is an architect and researcher based at TU Wien, her work moves in a transdisciplinary field between architecture, housing and visual culture. She is author of "Instagram Wohnen" (2024) and "VIENNA: The end of housing (as a typology)" (2023). She is founding member of the queer feminist collective Claiming*Spaces as well as co-founder of the activist research practice "Place of Un/Learning".

Martin Katharina D.: Tilling the Ground: On the Creation of AI-Generated Images.

Abstract:
This paper explains the creative process of digital image production as a human/non-human interaction that resembles soil cultivation. One hypothesis is that digital technology has established itself as ground in the Kantian sense, as the earthly foundation on which we stand and from which we develop all our knowledge and skills. So, what is the nature of this ground, what is its surface like? Does it resemble a paved road with a fixed infrastructure or the cultivated soil from which something grows? Tim Ingold's concept of the anti-stratigraphic cultivation of surfaces gives a good starting point here. (Ingold 2022: 184-6) When writing with ink, something is deposited in the depths of the surface. This inscription cannot be wiped off, it penetrates the surface and changes the material. However, the ground may permit the inscription but produces almost nothing itself. When working in the field, on the other hand, the surface of the soil is broken open in order to deposit seeds so that something may grow. The ground is cultivated, it becomes a productive surface and resembles an interface with at least two access points. It should not be forgotten, that with the process of depositing and harvesting, the soil is permanently changed.
My assumption is that interfaces for digital image production are more than a paved surface with permanently installed infrastructures, but rather resemble a 'deep surface'. (Spuybroek 2016: 58) The digital programmes have to be cultivated, so that something new may emerge. And yes, here too the ground itself is changed through production. This is also where the users' agency and responsibility lie. The assumption of a technical, political, and social inevitability is only a myth, because there are of course actors. (Weizenbaum 1976: 241) To elicit growth from the image and text generating programmes, you have to till the ground. It will be necessary to engage in new forms of inscribing in the sense of soil cultivation. One example is writing prompts. Here we should bear in mind that the requests are deposits that change the ground from which one tries to derive new forms. Therefore the 'prosumers', which are caught in the middle of the creative production, should avoid monoculture, as this stands in the way of future, not yet actualised, diversity.

Katharina D. Martin (Dr. phil.) is Visiting Fellow at Erasmus University Rotterdam. She was Associated Member at the Cluster of Excellence *Image Knowledge Gestaltung* at Humboldt University Berlin and taught image theory at ArtEZ University of the Arts Arnhem. Relevant publications: *Technik als Problem*

des Ausdrucks. Über die naturphilosophischen Implikationen technikphilosophischer Theorien (transcript 2023), Ein Streifzug durch die Abstraktionsebenen digitaler Formen (Trópos 15/1, 2023).

Masoudi Anoushirvan: Bastard poor images and the perfectionism of digital-realism

Abstract:
From Netflix series and National Geographic documentary films, to the filtered images of Instagram and Ticktock we are facing the domination of a digital-realism, as the technology is preparing a perfectionist approach toward the representation of reality. The high-resolution, 4k or 8k clean, colour-corrected images worked or 'manipulated' by AI or other technologies emphasize on the 'realistic' character of the digital media. The new technologies have changed at the same time the perspectives of seeing phenomena in digital world, as the micro-cameras could be very close to the objects, or the colours could look very aesthetical. The digital-media understanding the 'images' as 'numerical data', which could be more times manipulated, changed or high-scaled. The very basic of digital media is remixing of a data in an interactive way between the data and the user(s). (Manovich, 2004). These technology-based possibilities are changing and affecting our perceptions toward the realism, as technological perfectionism in representation is becoming central to forming an aesthetic of reality in digital-media. But at the same time the bastard poor images (Steyerl, 2009) are occupying in an opposite direction the digital media platform. Those poor moving images are low-quality, amateur and their resolution is very low. The audio-visual glitches, noises and errors are parts of those moving images and could be seen or understood by viewers as the signs of 'realism', as they refer to an amateur 'recording', instead of professional production. There is almost no information about these videos: where are they coming from, who did record them or who has upload it in the internet world, but they are everywhere, from 'funny cats' video' or 'big fails of the year' to the amateur pornographic videos, or blurry shaky moving images of demonstrations.
Important is to consider that those videos are recording and circulating by the 'ordinary citizens' and not big companies, which could be seen as the everyday tactics of suppressed people against the strategies of institutions linked to the power and capital. (De Certeau, 1980)
Could this amateurism and the aesthetic of noises and errors in digital media - as an alternative to the new perfectionist technological approach of audio-visual companies, challenge or affect our perception of reality and realism in the digital world?

Anoushirvan Masoudi is a film and theatre director, curator, and media-scholar from Iran, living and working in Berlin, Germany. Since 2021 he is a PhD candidate at the Friedrich- Alexander University of Erlangen in media studies. His research fields are representation of sexuality, aesthetic, post-media, and Iranian underground digital media.

Mersmann Birgit: In the Wake of Metacreativity: Dream(e)scapes in AI-generated art

Abstract:

The design of dream machines, such as Gysin's *Dreamachine* or Tinguely's *Méta-matics*, looks back on a long tradition in the arts, reflecting the genuine interest of artists in partially or completely delegating processes of imagination and creativity to the productive power of the machine. With self-learning AI systems, in particular the breakthrough of GANs and diffusion models in the field of generative imaging, the artistic creation topos of dreaming and hallucinating machines has reached a new technological level that radically shifts the conventional relationship between cognition and intuition, consciousness and matter. Artificial neural networks, which form the basis of artificial intelligence, are modeled on the structures of the human nervous system; accordingly, AI systems are said to have dream-like processing structures (cf. Pagel/Kirshtein 207), even if these are fundamentally different from the irrationality and non-logic of human dreaming due to their algorithmic rationality and predictability. *DeepDream* was the first AI application to allow the machine to generate pictorial dream worlds and to place this creation process under artistic observation. The positioning of artificial intelligence in the discourse on creative machines is attracting increased attention in the research discourse on generative AI. The dreaming or hallucinating machine has become a central theme and topos in works of AI-generated or AI-reflective contemporary art.

The lecture deals with the machine-created dream(e)scapes of AI-generated visual worlds based on four works, including Refik Anadol's installation series *Machine Hallucinations* (2016-ongoing), Jake Elwe's video *A Machine Dreams. Latent Space* (2017 and 2021), HyungJun Park's exhibition *ARTIFICIAL CONSCIOUSNESS. Exposing the Invisible: Data, Rendering and Code* (Art Laboratory Berlin, 2023) and the performance *Perpetual Dreaming Machine* by Cecilie Waagner Falkenstrøm in collaboration with the collective Artifical Mind (2021). Under discussion is the synthetically generated dream-image aesthetic in the works mentioned, which metamorphoses genealogically between artistic abstraction and surrealism, as well as their multimedia forms of presentation and fluid contexts of reception. The concept of metacreativity (Navas 2023) is employed to reposition the artistic discourse on the relation between human and machine creativity against the backdrop of generative AI.

Birgit Mersmann is Professor of Contemporary Art and Digital Image Cultures at the University of Bonn, Germany. Her interdisciplinary research covers modern and contemporary Western and East Asian art, global art history, migratory aesthetics, museum and exhibition studies, image and media theory, visual cultures and visual translation, interrelations between script and image, history and theory of photography. Recent book publications include: *Image Controversies. Contemporary Iconoclasm in Art, Media, and Cultural Heritage* (ed. with Christiane Kruse and Arnold Bartetzky; Berlin/Boston 2024); *Okzidentalismen. Projektionen und Reflexionen des Westens in Kunst, Kultur und Ästhetik* (ed. with Hauke Ohls, Bielefeld 2022.*Über die Grenzen des Bildes. Kulturelle Differenz und transkulturelle Dynamik im globalen Feld der Kunst* (Bielefeld 2021); *Bildagenten. Historische und zeitgenössische Bildpraxen in globalen Kulturen* (ed. with Christiane Kruse; Paderborn 2021); *Handbook of Art and Global Migration. Theories, Practices, and Challenges* (ed. with Burcu Dogramaci; Berlin/Boston 2019).

Merzmensch: "It's a New Day: Entering new age of human-machine creative collaboration"

Abstract:

Earlier Generative artists and New Tendencies movement marked since 1960ies the beginning of a profound shift in creative practices, where algorithms, systems, and machines became essential partners in the artistic process. These movements challenged traditional views of creativity, expanding the boundaries of what can be considered art. By incorporating computational processes, artists began to create works that are not solely defined by human intuition but are the result of interaction between human inputs and machine outputs.

We observe in the recent years how creativity transforms into a collaborative effort where human artists provide frameworks, prompts, data, while machines execute, explore, and generate new patterns, forms, and concepts. The role of the artist evolves from a creator to a curator and collaborator who guides complex systems to produce innovative outcomes - and yet the artist remains creator as well. This collaborative nature opens up possibilities for new forms of expression that might otherwise be inaccessible or unimaginable through purely human effort.

This convergence of human and machine collaboration is particularly evident in the shift from anthropocentric views of creativity towards a more distributed, collective approach. Machines contribute to the creative process by uncovering relationships, forms and aesthetics that go beyond human imagination - and perception. The outcome is a new type of creativity, which blends the precision of algorithms with the unpredictability of human input, generating artworks that feel fresh, innovative, and challenging.

As we embrace this collaborative relationship, we enter a new cultural epoch, characterized by the fluid exchange between human and machine intelligence. This epoch moves us beyond the limits of individual human creativity, encouraging a postanthropocentric view where creativity is shared between different forms of intelligence, redefining what it means to be an artist in the modern world. In my keynote I will shortly describe the last 60 years of Generative art till recent days and emphasize the beginning of new era.

Vladimir Alexeev, also known as Merzmensch, is a cultural scientist, publicist, and artist who engages both theoretically and practically with the historical avant-garde and the creative collaboration between humans and machines. Since 2017 he writes about AI and its creative possibilities in his blog *Merzazine*. His essays were printed in Harper's Magazine, FAZ, EIKON. In 2023, he published *KI-KUNST* (Wagenbach Verlag, Series "Digitale Bildkulturen"), exploring the history and present of generative art and creative AI, while addressing the controversies, challenges, and broader implications of these technologies. For the Teatro dell'Opera di Roma, he illustrated the second issue of *CALIBANO*—dedicated to posthumanism—on the occasion of the autumn 2023 production of Arrigo Boito's*Mefistofele*.

Philipsen Lotte: 'Natural image processing': Aesthetic ideologies of text-to-image AI

Abstract:

The talk critically investigates underlying aesthetic ideologies governing the idea of 'natural images' at work in popular text-to-image prompting tools like Midjourney, DALL-E (ChatGPT) and Stable Diffusion. In the development of new AI models, there has been an extreme focus on 'natural language processing', because a computer – unless it learns how to understand and write 'natural language' –

would happily produce text that makes no sense to humans (by randomly combining words) or reads 'too artificial'. In comparison, images have received much less attention even though text-to-image generation has become very popular. Images are simply considered to be natural in themselves.

While multimodal AI models have received relevant critique for reducing complex visual phenomena to simple, biased, concepts, and for their opaque training processes, the talk aims to supplement this critique by focusing on the models' image theoretical implications. Linkages between images/visuals with words/phrases have a long history in art and aesthetics, and the aesthetic ideologies underlying the thinking of 'natural images' has been the object of critical study in theory of visual semiotics, iconography, and iconology. The talk demonstrates and discusses how, even at a time when *technically* text and image are transformed to similar datapoints in the latent space of diffusion models, it is *aesthetically* highly relevant to dive into key concepts of poststructuralist image theory – especially the work done by Norman Bryson and W.J.T. Mitchell – to investigate the implicit 'natural image processing' at work in contemporary practices of generative AI image.

Lotte Philipsen is associate professor in Art History at Aarhus University, director of AIIM – Centre for Aesthetics of AI Images; PI of the research project 'New Visions: Image cultures in the era of AI' (2023-26); co-editor of *The Aesthetics of Scientific Data Representation* (Routhledge, 2018); and author of "Deep Art History: Inferences between Google Arts & Culture and Art Museums" (forthcomming in *Critical Digital Art History*).

Purgar Krešimir: Reality, Realism, Proxy-Real. On Images and (Digital) Worldmaking

Abstract:
In the lecture we will seek to explain why the transition from the pictorial to the post-pictorial condition is perceived almost like a natural, although long-lasting, process of development from one biological species to another. A presumption will be offered that this is so because traditional images were never a substitute for something outside them, as the concepts of mimesis, imitation or resemblance may suggest, but that images have always functioned as *proxies*, in other words, as intermediary on behalf of somebody or of something. In the presentation it will be argued that the concept of image is far from resolved because in human cultural history images were primarily understood either in relation to the concept of physical reality or in relation to processes of subtraction/abstraction from physical reality. This dichotomy is best explained if we compare the interest of a discipline of art history in what and how a picture represents with an interest for the cognitive processes that make a representation possible in the first place, demonstrated most sharply by analytical image theory. The stronghold for this insight is that various kinds of depictions in Western culture have always tried to express the same general categories pertaining to all human beings – movement, emotion, space, time, memory, imagination – regardless of the epoch, medium, style or actual technological advancements. It will be suggested that the contemporary (digital) worldmaking, therefore, stems from the underlying ambivalence: on the one hand, there is a continuous process of naturalization of pictorial proxies that regulate our perception, and so acting from the inside, and on the other is the technology that intervenes in the very making of proxies thus acting from the outside. Finally, the question will be asked: are new, digitally created proxies really so different from traditional, mateiral ones?

Krešimir Purgar is a visual studies scholar. He gave invited talks at the universities of Palermo, Cagliari, Genoa, Tirana, Prague, Mostar, Graz, Enna, Prishtina, Tübingen, and Krakow and gave conference

lectures in Manchester, Skopje, Dartmouth College, at the University of Western Ontario, and at the University of Chicago. He is a board member of the Doctoral program in Visual Culture at the University of Palermo and professor at the Academy of Arts and Culture in Osijek. His most recent books in English and Italian include the following titles: *Studiare le immagini. Teorie, concetti, metodi* (ed. with Luca Vargiu), Carocci, 2023; *The Palgrave Handbook of Image Studies* (ed.), Palgrave Macmillan, 2021; *The Iconology of Abstraction. Non-figurative Images and the Modern World* (ed.), Routledge, 2020; *Iconologia e cultura visuale. W.J.T. Mitchell, storia e metodo dei visual studies,* Carocci, 2019; *Pictorial Appearing. Image Theory After Representation,* Transcript, 2019, and *W.J.T. Mitchell's Image Theory. Living Pictures* (ed.), Routledge, 2017.

Rozenberg Sebastian: Formatting and Mediating Similarity – Determination and Indetermination in Synthetic Images.

Abstract:
When the appearance of synthetic images generated through multimodal models or popular text2image models is even considered, it is in terms of style and or kitsch, or as a provocation towards photographic indexicality. Parallel to critiques of artificial imagination. I want to place a critique of the appearance of the artificial. Consequently, in this talk I pay attention to the phenomenal appearance of AI generated digital image, to speak to the way in which the experience of their appearance can constitute the appearance. This entails a media phenomenology for aesthetics. The many considerations in media philosophy of the digital and discrete as closed off from human experience, or of digital media as occurring on a pre-phenomenal level, makes it only more pressing to *look* for the presence of the computational and/or digital in the appearance. Taking everyday and ubiquitous AI generated images as examples, I trouble the question of the aisthetic appearance of digital image synthesis - as determination or indetermination, as formatting or mediation.

Layers of abstraction and discretization, rigidly determined by rules and measure, are the conditions of possibility for the appearance of synthetic images. In what sense is the hard determination and application of rules visible in the appearance? This is an objective process of mediation and determination then, but perception and experience is never objective, and the experience of an image appearance is never fully determined. This is a process and tension of determination and indeterminacy, that covers both the generation *and* the phenomenal appearance of the image output - the analog indeterminacy of the image vs the discrete determination of the generative process that produces the image. The adjustable rules for different text2image models are determinations of measurements and constraints, they are formatting rules.

As synthesis in multimodal models is both discrete (computational) and unifying (generating a statistical average), an aisthetic experience and appearance of the synthesis of generated images would be both analog (unified) and digital (discrete). If determination formats the technical media output, indeterminacy formats the experience of the appearance. How can this be seen in the image?

Sebastian Rozenberg is a PhD Candidate at the Department of Culture and Society, Linköping University. He has a background in Art History and Film studies and holds an MA in Aesthetics as well as an MS in Information Science. His research interests include media theory, aesthetics, philosophy of technology, phenomenology and synthetic media.

Sartori Beatrice: Virtual Afterlives: AI, Avatars, and Digital Reincarnation in Lu Yang Artistic Practice

Abstract:

Since the late 1990s, Posthuman studies and new-materialisms in philosophy have sought to move beyond human-centered dualist ontologies, analyzing how dichotomies like nature/culture, mind/body, and human/nonhuman are historically and culturally constructed. In the 2000s, media studies witnessed a significant shift with the advent of Post-Internet theory, which emphasizes the inseparability of online and offline realms. This theory advocates for a synthetic understanding of technology and society, media and bodies, understanding physicality and information as inherently interconnected.

The lecture will focus on Chinese artist Lu Yang's practice of "digital reincarnation," which simultaneously replicates, desubstantializes, metamorphoses, and reconfigures the artist's body through various digital modeling technologies such as motion capture, artificial intelligence, 3D facial scanning, and CGI animation. The lecture aims to discuss the *Dokusho Dokushi (DOKU)* project, or the artist's virtual avatar, through which he is repeatedly reborn as a non-binary, androgynous identity. From 2020 to the present, the artist has created six avatars representing the six realms of Samsara, the karmic wheel that symbolizes the eternal cycle of birth, death, and reincarnation. Through analysis of the avatars created by Lu Yang
- acknowledging the influence of Buddhist cosmology - the lecture aims to explore how the artist's practice contributes to exploring the process of embodiment, performativity, and construction of the self in virtual worlds.

The lecture aims at analyzing how the generative potential of artificial intelligence employed by Lu Yang to realize his own reincarnations is situated within a broader process of technologies and artistic practices that shape our encounters with death and the digital afterlife. The artist will therefore be brought into relationship with emerging artists and technologies featuring topics such as AI-generated avatars, thanabots and the impact of new media on traditional notions of mourning and memory.

Beatrice Sartori is a PhD student in Arts, History and Society at the University of Bologna with a research on virtual bodies, avatar and proxy identities at the intersections between Post-Internet and Posthuman contemporary artistic practices.

Schmutzer Manfred E.A.: WHAT HAPPENED?

Abstract

When J. Weizenbaum was working on his ELIZA programme at MIT in the early 1960s, which simulated a conversation between a psychotherapist and his patient, the few experts who knew about it smiled, and not entirely without reason. The electronic psychotherapist's evasive strategies when rather surprising queries came from the human patient were skilful, but for the potential 'real- world' quite unsatisfactory. A little later, the philosopher H. Dreyfus wrote a book in Berkeley with the telling title 'What Computers can't do'. It looked as if the world had been saved. The various attempts to simulate real events, which were in vogue at the time, were presented as 'gimmicks' with the Heideggerian argument that computers had no experience of their own, that they did not know what 'sitting, walking, feeling' really meant or could not understand the ambiguities of living languages. Dreyfus was well aware of Terry Winograd's considerable success with his 'SHRDLU' programme - the two worked

together at Berkeley and Stanford. And both were aware that such programmes do not simulate the real world, but create 'artificial' worlds.

Programmers, however, who endeavoured to create half-real and half-artificial worlds in the form of 'animated films', moved along a 'dialectical' path of the 'in-between'. For example, they studied human movements and gestures in great detail using a 'Wiener filter' (named after Norbert Wiener) and transferred these to the movements of artificial figures, such as Donald Duck etc. They used this approach to create a mixture of real and artificial worlds. With this approach, they created a mixed world that became 'readable' or 'understandable'

At the same time, for example, computer graphics were being created that undoubtedly had a strong mechanistic bias and that few artists felt challenged by. They were, as H. Zemanek - Austria's first computer scientist who built the 'Mailüfterl' - called them in relation to 'computer music', boring replicas. However, the graphics lost their boringness with 'fractal geometry', which created unexpected, aesthetically pleasing images. Again, a barrier was broken. It is true that these graphics created images that were predictable in principle, but the structures are so complex that no one is likely to predict them, at least not without the support of an 'electron brain'.

In the meantime, however, we are familiar with computer-generated films that no longer have to rely on artificial figures, such as drawn flying dinosaurs etc., but instead depict humans or human-like creatures in fantastic environments. And Chat-GDP is just as light years away from Weizenbaum's ELIZA. So what has happened? Computers got bigger and much faster, so they can easily mine huge databases that far exceed the memory capacity of 'normal' humans. I realise this is not new news. But where does the excitement that has been fuelled by Chat-GDP or computer-generated artworks come from?

"The 'advancement of artificial intelligence calls into question the last claims of human dignity. Art was one of the last reserves to which many could retreat and see themselves as superior to artificial intelligence. With the use of ChatGPT, this refuge is finally in danger." says L. Hirn. Is that the case?

According to Parmenides, being includes, because it demands and determines, the perception of being. This has already changed with Plato. With him, the beingness of existence is already determined as $\varepsilon\iota\delta o\varsigma$ (appearance, sight). According to Heidegger, this was the prerequisite for the world becoming an image. As a result, the existing now comes to stand as (an) object and receives the seal of being, for example by mapping the universe (Helene Courtois).

The images that AI, a thoughtless machine, presents to us create an image of a world, but this world is the world of an 'electron brain' - meaningless! But, as M. Heidegger says in his essay on technology with reference to Hölderlin: 'where the danger is greatest, the saving is also near'. The saving may lie in the fact that 'image-creating' art no longer offers a refuge for human dignity, but that we learn once again to hear and 'listen' to what can be experienced, heard and explained in human togetherness. Then the refuge becomes political and 'l'homme machine' once again becomes a 'zoon politicon'.

Manfred E.A. Schmutzer, (Univ. Prof. em., Dipl.Ing. Dr phil.)After studying at the Vienna University of Technology, postgraduate studies at the IHS, Vienna (scholarship from the Ford Foundation, Political Science), then Brit. Council research scholarship at the Univ. of Essex, extended to Ph.D. scholarship, then assistant at the Institute of Sociology ('Old' Univ. of Vienna), then own institute (IFZ) for science studies: editor of the monthly magazine 'technik kontrovers'. Subsequently set up the Institute for Technology and Society at the TU Vienna. Habil. In: Sociology of technology.
Publications, among others: „Ingenium und Individuum", (Springer Verlag), „Die Geburt der Wissenschaften" (Velbrück), „Die Wiedergeburt der Wissenschaften im Islam" (transcript Verlag) , „um-Wege zur un-Wahrheit" (transcript), „Eudoxias Traum" (ein phil.kritischer und utopischer Roman) Jüngste Publ. „Dichtung und Wahrheit" (https://velbrueck- magazin.de/2023/08/10/dichtung-und-

wahrheit/x/y_0gK8 Velbrück Magazin, „Wissenschaft denkt nicht" https://velbrueck-magazin.de/2024/02/11/wissenschaft-denkt- nicht/x/y_0gK8), „Die Religion der Gottlosen" (forthcoming)

Schober Anna: I-figures in concrete scenes: Patterns of audience addressing and their realisation in the visual arts

Abstract:

Images that are generated by machine learning tools are synthesised from the image archives that the programs can access. The generated images are therefore close to the 'previous' ones. These images are thus more ‚statistical renderings' (Steyerl) than representations of actually existing objects. They no longer refer to factuality or truth, but to probability. These images are strongly geared towards recognition; they 'reflect' the reactions of an audience in their appearance and seem to be calculated to develop a certain 'appeal', which has to do with the fact that they are designed to be shared on social media and to make an instant emotional connection likely. In the paper, I am interested in a certain pattern of addressing the audience, which consists of using image personnel who appear in the form of the 'all-seeing' frontal figure or the frontal portrait, as a back figure or as a small group portrait of 2-3 people, in order to attract the viewer's gaze. In most cases, we are dealing with one or more figures that are clearly visible in the foreground, leading the eye into the centre and background of the picture, in which a certain 'scene' is concretised.

These patterns become very graspable when diffusion models of AI programmes that generate images, such as *dalle-e*, *midjourney* or *stable diffusion*, are used. This is because the generation of images and the perception of images, i.e. the activity of creating art and viewing it, are intertwined in these programmes. These AI-generated image media therefore also reveal the structures and patterns of our visual culture and their prevailing traditions, including stereotypes, prejudices and biases. In this paper, I ask the following questions in relation to these patterns of audience-address:

- Which historical image traditions can be identified in relation to these patterns?
- How do they manifest themselves in connection with AI-generated images?
- What makes these image patterns attractive for contemporary acts of visual communication?
- How do artists such as Charlie Engman and artistic cultural mediators such as Jana Kerima Stolzer & Lex Rütten adopt these patterns using wit and humour?

Anna Schober is Professor of Visual Culture at the University of Klagenfurt. Her research interests are: Political iconology, the relationship between image and the public sphere, film and cinema movements since the 1960s, figurations of equality and difference, visual media as agents of popularisation and populism, and methodological issues in cultural and visual studies. Her publications include: Ironie, Montage, Verfremdung. Ästhetische Taktiken und die politische Gestalt der Demokratie (Wilhelm Fink Verlag 2009); The Cinema Makers. Public life and the exhibition of difference in south-eastern and central Europe since the 1960s (Intellect Books 2013); Popularisation and Populism in the Visual Arts: Attraction Images (Routledge, Arts and Visual Culture Series, 2019). For more information see: http://www.annaschober.com/ and https://www.aau.at/team/schober-de-graaf-anna/

Somaini Antonio: „Latent spaces. A Key Concept for Visual Culture Theory in the Age of AI"

Abstract:
One of the most striking features of the current impact of AI technologies on images and visual cultures is the fact that these technologies are profoundly reorganizing the relations between images and words. The recent wave of text-to-image and text-to-video models, in particular, is leading us towards a new cultural landscape in which what is *visible* depends more and more from what is *sayable*. With prompts, which operate like search queries exploring the latent spaces produced by the various Generative AI models, language becomes a new medium for image production, in a completely unprecedented way. Prompts act as a new kind of "speech acts" and as a new form of "remediation" which activates features of previous visual media by using the terms that have been historically associated with them.
The talk will also analyze how this profound reorganization of the relations between images and words is tackled by contemporary artists such as Erik Bullot, Grégory Chatonsky, and others.

Antonio Somaini is Professor of Film, Media, and Visual Culture Theory at the Université Sorbonne Nouvelle in Paris, and a Senior Member of the Institut Universitaire de France. He is currently Visiting Professor at Harvard University in the Department of Art, Film, and Visual Studies. Among his main publications, the book *Culture visuelle. Images, regards, médias, dispositifs* (with Andrea Pinotti, Les Presses du Réel, 2022) and the article "Algorithmic Images. Artificial Intelligence and Visual Culture" (*Grey Room*, 93, Fall 1993). He is the chief curator of an exhibition on AI and contemporary art that will open at the Jeu de Paume museum in Paris in April 2025.