



A.I. Aesthetics III 23.6.2023 hybrid event

23/06/2023

FCUL (Universidade de Lisboa) & online

11-18h

A.I. Aesthetics III Workshop org. Alexander Gerner, Renata Silva Souza, Vinicius de Aguiar

"And even if we did succeed in doing so, it would still remain true, that the machine would remain utterly devoid of original initiative and would only do the special kind of thing it had been calculated to do. This, however, is no defect in a machine; we do not want it to do its own business, but ours." C.S. Peirce *Logical Machines* (1887)

photo-credits: Alexander × DALL-E /Human & AI_Prompt: "a photorealistic diagrammatic AI avatar with synthetic faciality composed of faces monochrome background : Social AI with map lines without words, we are AI, aesthetic power lies in a human face and body (no words)"

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"What can be formalized, can be mechanized, and what can be mechanized can be automatized. Technics slumbers in theory. Automation is the complete relief of the human being. Calculating Machines are practicable non-re-computable anymore. Already in the sign, the machine resides" Hans Blumenberg (2019{1954})¹

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"The algorithm is the essence of the Algorithmic Revolution that we are witnesses of. And the essence of the Algorithmic Revolution is that all processes of society are transformed into computable form. The impact of this deep algorithmic turn-over of everything in culture we know and cherish, and love is still not really understood by the masses, not even by all the experts of various kinds who currently swim with the wave of digitization." Frieder Nake (2019)²

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"I tried to search for "memory board" but Dall-E brings up computer memory boards instead. The West African tradition of memory boards is tactile, oral and visual. It's a sculpture tradition in which someone who knows the encoded language can, through touch, be able to retell the history of the community for generations. You have to engage all the senses to truly perceive. You can feel as much as you can see and remember. "(Firelei Báez)³

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What consequences do diverse forms of A.I. aesthetics, social-ethical and political participation in algorithmic society entail today? What *praxeology of humanities* (Martus & Spoerhase 2023) must engage us concerning increasingly ubiquitous, intimate, affective calculations, computation and design by machine learning, and the cybernetic formalizations of human cultural techniques such as language, among others, for safeguarding our common futures?

In the early days of computer-generated art (Jones et al. 2023) from the 1950s onwards, artists such as Ben F. Laposky, Desmond Paul Henry, and Hiroshi Kawano used analog computers, oscilloscopes (e.g., Franke, Herbert W.: *Oscillograms*, 1956), and other electronic

¹ Blumenberg, H. (2019). *Automation{1954}* (pp.214-233), in: Alberto Fragio, Martina Philippi & Josefa Ros Velasco (eds.) *Metaphorologie, Anthropologie, Phänomenologie*. Neue Forschungen zum Nachlass Hans Blumenbergs. Alber: Freiburg.(translation from the German Original A.G.)

² Smith, G. W. (2019). An interview with Frieder Nake. *Arts*, 8(2), 69. <https://doi.org/10.3390/arts8020069>

³ Furman, A. (2022, July 11). *From "barbies scissoring" to "contorted emotion": The artists using AI*. The Guardian. <https://www.theguardian.com/technology/2022/jul/10/dall-e-artificial-intelligence-art>

devices to *manipulate electrical signals and create visual patterns on screens or paper*. Christopher Strachey— a friend of Alan Turing— automated randomness and determined a set of *combinatorial possibilities* in the automatization of writing a "Love Letters" program using his Manchester University Computer (M.U.C.) Ferranti Mark I stands at the forefront of computational art as automated writing in *electronic literature*. The works of computer art pioneers were influenced by *mathematics, geometry, physics, combinatorial writing, and music*, as well as by *abstract art movements* such as *constructivism* and *op art*. They were often experimental, exploratory, and *playful*, as the artists discovered *new possibilities and limitations of the machines and their co-creativity*.

As computer technology evolved, artists began to use algorithms and other mathematical rules to create art— often to the *detriment of the materiality* (Nake 2010:60) aspect of the work. Among other artists, Sol LeWitt, François Morellet, and Vera Molnár used algorithms to generate aesthetic forms or structures based on logic, and *randomness*, among other criteria. The *splatter diagram* (1963) was an image generated by a computer at the U.S. Government Ballistic Research Laboratories in Aberdeen, Maryland. It was a visual representation of light distortions produced by a camera lens created using a program written in ALGOL 60 and plotted by a Zuse Graphomat Z64. It won the first Computer Art Contest held by the trade journal *Computers and Automation* in 1963. Mainframe Computer art was influenced by various disciplines and fields, such as science, engineering, biology, psychology, and sociology, as well as by artistic movements, such as pop art and conceptual art, which reflected the social and cultural changes brought by the **computerization of society**. However, the value of the works was always debated, as early works were often seen as aesthetic design rather than art as it was frequently "*biased toward attracting the attention of our brain's most basic pattern-recognition skills*" (Barrow, 1995 cit.in: Taylor(2004:148) lacking artistic "*resonance*."

Frieder Nake, who in 1971 manifests that there should be no such thing as computer art, states that the mainstream commercial image has gone digital as there are "*virtually no images anymore that would not at least be touched to some minor degree by computer software. The image has generally become the digital image*." Nake's work also reflected the impact of the information age on society and aesthetics. His program was one of the first attempts to create digital art with a computer, and it paved the way for later developments in computer graphics, net art, virtual reality, and augmented reality. The program selected signs from a repertoire depending on "the last chosen sign" and simulated a "short memory." Nake's work highlighted the impact of the information age on society and aesthetics, such as in his writing on "Ästhetik der Informationsverarbeitung," where he planned to offer to program making an "aesthetic description before the aesthetic reality is possible." (Nake cit. in Dreher 2015)

In the field of music and electronics, algorithmic art of "Sisters with Transistors" (2021) have still to be explored in the history of art and technology, e.g. how this history changes with *A.I. spawning of Holly Herndon (Holly+)*, among other methods.

The AI-human co-creative exhibit *Faceless Portraits Transcending Time* exhibition (2019: ALCAN developed by A.I. artist Ahmed Elgammal) is a display that introduces philosophy of art challenges for our *conventional notion of portraiture* by featuring AI-generated artworks that create abstract and surreal images devoid of facial features and recognizable identities. This approach pushes the boundaries of what defines a portrait by using A.I. aesthetics, raising questions about our perceptual habits, normatisation, categorization, and self-understanding. The exhibition relies on algorithms that combine historical paintings with contemporary styles and themes, thereby questioning the concept of *originality* and *creativity*.

The rise of A.I. technologies has paved the way for new horizons in design and society. The AI-powered generative design function has the potential to revolutionize problem-solving by optimizing multi-criteria design solutions in contrast to errors, misconceptions, and mismatches by promising *promptless "sparks"* (Bubeck et al 2023) of A.G.I. beyond language (NLP, LLM's in *mathematics, coding, vision, medicine, law, psychology*. A.I.'s style transfer and neural aesthetics capabilities can create new visual expressions that transcend human cognition and

cultural limitations, allowing for the envisioning of contemporary social and societal futures. As we continue integrating A.I. into our daily lives, recommendation systems and personalization have already become a part of our routine. These functions suggest what we should see, read, listen to, and make economic transactions based on our (personalized) preferences and behavior. However, the genuine concern lies in algorithmic social bias, which can introduce unfairness and discrimination in design outcomes based on the data and methods used to train the models and the intentions of application. Moreover, A.I. can challenge human values and morals in social design decisions.

Democratic Participation and Aesthetics: Aesthetics of Disagreement or Cultures of Bridging?

Does AI-generated art serve the interests of tech conglomerates that exploit users' data and labor by using A.I. as a marketing, influencer, and manipulation tool or a surveillance device that collects personal information and preferences? The launch of DALL-E by OpenAI marks the popularization of M.L., in which natural language can be easily transformed into visually appealing images. Through AI-generated images, we can witness the transformation of human languages into statistical probabilities and renderings by A.I. and the expansion of what we consider aesthetically pleasing beyond reality. Are A.I. aesthetics and A.I. art a way to "capture" the public as a strategy of "onboarding tool for Tech Conglomerates" (Hito Steyerl, March 10, 2023) diminishing the *reality index* in which *mean/demeaning images* (Steyerl 2023) feed on latent spaces of exchange value, use value and commodity (cf. Adorno), critically assessed as based on a wrong idea of intelligence that could be designated dependently its perspective, "uncreative intelligence" (Mersch), "Artificial idiocy" (Zizek), "dumb meaning" (Bajohr 2022), or a **satisficing** (Hubert Simon) "cliché-generator": Are the new A.I. tools actually living up to their metaphors such as machine "hallucinations" or "dreams" (DeepDream) or even "windows into alternate realities in the latent space" (Emad Mostaque, Twitter, 7/3/2023)? Is A.I. art a mercantilist technophile aesthetic dumpster of a *digital homo silicius* turned into *homo mercantilus detritus*, of technologist-capitalist hallucinations of pretensions of world-saving as by all included green solutions (Klein 2023, May 8) that envision A.I.'s to change everything? Do A.I. generations enhance *aesthetic indeterminacy* by enabling social scaffolding, diagrammatic reasoning, abduction, human Learning, and development, and contribute substantially to the UNESCO 2030 development goals? From a historical perspective, A.I. aesthetics has historical roots and precedents in the evolution and transformation of human aesthetics across time and space related to computer art and algorithms. The study of computational aesthetics in computer science and A.I. examines how machines can assess aesthetics or display creativity. This field does not require artificial consciousness but instead relies on algorithms and models that can imitate human aesthetic judgments or generate aesthetic outputs that might be valuable. The potential of A.I. systems to address some of the most pressing global challenges and aspirations in various domains, such as climate change, social justice, interspecies communication, democracy, freedom of the press, investigative journalism, inequality, health care, education, and culture or its harmful interference should be debated in its contribution of A.I. aesthetics. A.I. utopias envision a future where machine learning agential systems are not only tools engaged for efficiency, convenience, substitution of work or programmed profit or as explorations of the *uncanny of latent space*, of uncanny crowd mirrors (Mario Klingeman) or of stigmatizing horrifying images, besides other issues such as *hypersexualization* (e.g., Lensa Avatars). Still, AI systems might be proposed as a means for promoting the common good, public interest, the commons, fostering green transition, and even human values that underlie our diverse societies and ecosystems.

Ethics, Large Language Models, Aesthetics, and Society: Alignment of A.I. and Social and Humanities Values

What are large language models' (LLMs) social and political implications? Can LLMs self-improve? How can LLMs manipulate, deceive, or influence people's opinions and behaviors?

What ethical guidelines and regulations are required to develop and use LLMs? How can LLMs be aligned with human values and norms? How can the challenges to authorship, authenticity, and meaning posed by LLMs be addressed? How can democratic and responsible innovation be promoted in the field of LLMs? *Societal aesthetics* are the principles and criteria that guide the evaluation and appreciation of art and design in a given society or culture. Societal aesthetics can be influenced by various factors, such as historical context, social norms, ethical values, and personal preferences, which vary across different cultural and social domains, such as graphic design, urban planning, or landscape painting, or goes into performative political and media fields such as theater, gaming, platforms such as Holly+. A.I. aesthetics can be seen as a source of computational, algorithmic innovation and inspiration for art and society, but do we generate *copies without originals*, by "tactical entanglements" (Zeilinger 2021)? Should we approach these issues by a *hacking aesthetics* additionally to questioning its legal basis and lawful ownership and property rights debates, such as by strengthening digital rights management and algorithmic copyright enforcement in legal IP-related litigating AI Art controversies? Engaging with A.I. and exploring its implications for human values in societies and cultures can challenge our assumptions and expectations about A.I. and invite us to question our identity and agency concerning it, such as in Jacke Elwes *Experiential A.I.* work of the A.I. and drag performance relation among others. How should educators, universities, and political and democratic institutions continue to explore the potential of AI-powered assistants in the field of philosophy, culture, urbanism, and society while remaining mindful of A.I.'s limitations and potential implications, such as the life-world *substitution relations problem* of cultural techniques as posed by the *philosophy of the digital* (Grammelsberger 2023) of "vanishing" Machine-human difference (HMD) of foundational human categories such as thinking (vs. calculating), feeling and sensory awareness (vs. automatized sensing), Speaking and Dialogue (vs. simulation and mimicking by linguistic calculations and machine hallucinations (Del Campo & Leach 2022), Learning (vs. the art of mathematics), autonomous acting (vs. programmed actant systems), work vs. generation on past work, to render non-self-evident again digital, M.L./A.I.- transitions and sensibilities: "How can we train an algorithm, specifically some type of neural network, to understand and replicate the inherent sensibility of an architect?" (Del Campo 2023:159). Can we? Should we, and what is meant by sensibility? **From Style transfer to A.I. remakes/remixes to societal vision transfer?** Styles can be copied, replicated, and re-stylized. A.I. pastiches (or collage tools) be produced by remixes via stochastic and other formal-computational methods in the Midjourney-data-fiction prompting era in which social media fill up with examples of A.I. remakes "in the style mix of" (x{filmmaker Wes Anderson+n}) of other film classics such as StarWars, Lord of the Rings among others. Language Artists as language models trained "to remix at will, to embody and enact the *will-to remix*" (Amerika 2022: This might be only part of a bigger business model behind the showcasing AI-co-created Trailers. This business model is not necessarily to show off A.I. as a *digital substitute* for the function, method, or style of (original) scriptwriters, filmmakers, editors or postproduction and animation specialists, or other human workers but to promote A.I. tools or services to cut costs for audio-visual, algorithmic and immersive media (e.g., algorithmic recommender-based media such as Netflix) and (film-) production companies. The argument presented by Gaby Hinsliff (2023) regarding the impact of A.I. on creative and cognitive jobs has significant implications for the film industry, particularly in terms of storytelling and the role of human screenwriters: *What influence does the combination of seriality and generativity have on contemporary aesthetics and its cultural industries and means of production* (cf. Benjamin Author as producer) e.g. in the context of the writers' room, depending on the showrunner's vision and the audience's expectations. For instance, AI-generated scripts Style Transfer, based on backpropagation, as mechanisms of action are methods or techniques that can transfer the style of one image to another while preserving the latter's content. How does style transfer reflect or challenge the viewers' or users' aesthetic preferences and expectations? How does style transfer raise ethical and social issues, such as authorship as "credit-blame asymmetry" (Porsdam Mann et al., 2023) and its

transparency issues, originality or only "metric-induced" emergence, metric approaches to aesthetic qualities and *negative AI aesthetic judgment bias*? Debates about A.I. art often center around questions of authorship, originality, and creativity. Some argue that AI-generated art is not genuinely creative. In contrast, others argue that it expands the definition of what can be considered art and offers new possibilities for co-creation and complex authorship relation with automatization of writing, composing, improvising, inventing, image-making, envisioning and living in a digital-AI/ML algorithmic-generative AI-spirit "un-babel-ing" (Williams 2023, May 23; unbabel.com) age. **Governance of A.I. through democratic processes**, including citizen assemblies and generative CI, can provide legitimate, high-quality, and democratic decisions at different scales, including globally, where necessary. Mau's (2019) argument in "The Metric Society" focuses on the need to be cautious about quantification and the importance of including diverse perspectives and evaluation methods. The interconnectedness of different concepts and how they relate to the creation and measurement of value in modern society should also be debated in fields that overlap A.I. aesthetics and society. However, we also should raise questions about the potential consequences of valuing specific metrics and A.I. generations over others and the impact this may have on individuals and groups. To what social and cultural values do we allocate our attention? Can we use bridging systems to change ranking systems to "bridging-based ranking to bring the benefits of offline bridging into spaces which are already governed by algorithms" (Ovadya & Thorburn, 2023) for deliberate technologies? **Power-seeking behavior, governance and A.I. influence(r)s** To answer what are some possible strategies for managing the potential sources and outcomes of friction and power conflicts, including automated power-seeking capacities of LLMs in global A.I. markets and the AI race on dominating diverse networked AI *platform graphs*, we need to conceptually map the visions and power-seeking strategy of companies and institutions or countries using A.I. and their platforms with aesthetic means and their inherent ambivalences, possible calls for de-networking, and the invention of Deep fake and its forensics, detection, and defense platform based on artificial intelligence and blockchain. When A.I. learns synthesizing reality, A.I. might be to the digital-stochastic and virtual what humans are to the symbolic world; everything human beings do, runs on language, friendships, relationships, religion, communication, how will ai and ai aesthetics program, prompt and affect sensibility, intimacy, ethical and political commons, and relationships? Can looking for human values-A.I. alignment be achieved by funded A.I. alignment between Living Labs and contemporary institutions, and can we decide on these values? What role does A.I. aesthetics play in architecture, urban planning, green, digital transition, and questions of the digital-sensible divide? How can we think of recommender and data-driven metric systems differently for the common good and for fostering public and democratic values? And what role does aesthetics play in this all? *Alexander Gerner, Lisbon, 24/05/2023*

We invite you for a 3rd collaborative workshop on AI aesthetics from diverse fields and praxis for active participation (not mere listeners but we invite interested in a growing research network on A.I. aesthetics and Philosophy of Technology) to this hybrid workshop in Lisbon, Portugal. We offer the possibility of a peer-reviewed publication of selected papers. See information about our call for papers below. Inquiries and inscription with a title and a short abstract (300-500 words) and up to 5 keywords (Deadline: **15/6/2023**) max 15 participants to: **amgerner@fc.ul.pt**

Participants are invited to contribute to a Special Issue on "A.I. Aesthetics" Semeiosis, U.S.P., Brazil

(by ~~May 20, 2023~~) new **deadline: 15/06/2023** <https://semeiosis.com.br/special-issue>



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