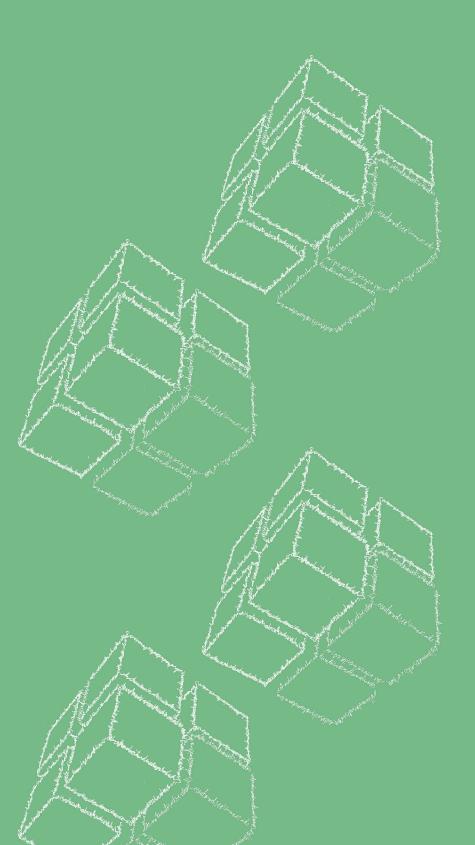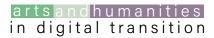arts and humanities
in digital transition

book of
abstracts

6th of July, 2023

KNOWLEDGE, BLACK BOXES AND ALGORITHMS

Moderation: Robert W. Clowes

Ana Marques Silva (Centro de Literatura Portuguesa, Universidade de Coimbra).

Overmediation: opacity, overfitting and scale in machine learning technologies. Online.

Abstract. When considering the nature of mediation, Bolter and Grusin have argued that the difference between the digital and previous media is that, through the manipulation of symbols, computational systems digitally encode and represent information. Remediation, or "the representation of one medium in another", is thus "a defining characteristic" (1999: 45) of digital media. From this perspective, contemporary computational techniques such as machine learning could be understood as just another form of remediation. Yet, machine learning systems are not simply tools, like a pencil or a typewriter, nor do they merely represent previous tools, like software does: they don't simply mediate, nor do they remediate. They overmediate. I propose the term 'overmediation' to refer to an increase of complexity in mediation processes: the prefix 'over' signals an augmentation, as in going beyond previous modalities of mediation. From pen to typewriter to word processor and to automated systems, there is an exponential increase in the gap between subject and medium. 'Over' also points to the sense of one thing over another, as in 'meta'. As a medium, machine learning is overloaded with meta-writing which translates into abysses of intricate, recursive computation. I also want to propose that three characteristics of machine learning systems, here understood as 'overmedia', demonstrate how overmediation differs from remediation: opacity, overfitting and scale.

Susana Aires Gomes (King's College London).

Beyond powerful black boxes: a techno-philosophical approach to algorithmic explainability.

Abstract. Commonly characterised as black boxes, AI algorithms are the object of intensive multidisciplinary scrutiny. In the humanities – just like in the technical field of Explainable AI (XAI) – the question of algorithmic opacity has become a major concern, with researchers problematising the social, political and ethical implications of this unintelligibility. Of particular interest are Deep Learning (DL) techniques, which comprise the opaquest models and have been leading breakthroughs in AI, thus increasingly making up our datafied existence. These techniques enable the bottom-up edification of algorithmic models through the processing of large amounts of data, resulting in the establishment of powerful non-linear relations between data points.
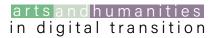
The pressing need to create trustworthy AI systems has contributed to the proliferation of technical XAI methods which, in the case of DL algorithms, tend to locate the potential for explainability essentially around the model, targeting data inputs and the model's outputs, with its inner functioning remaining fundamentally unattainable. More recently, humanities researchers have opened the potential for tackling this challenge through more expansive and creative approaches. In particular, Beatrice Fazi has called for more speculative modes of approaching algorithmic explainability, following what she considers the fundamental incommensurability between human and algorithmic thinking.

In this light, my paper puts forward a techno-philosophical explainability method, wherein the technical specificities of DL algorithms and what remains unattainable in their functioning are philosophically explored. To this end, I propose to pursue Fazi's speculative thinking by exploring algorithmic functioning through the lenses of Gilbert Simondon's individuation theory. Following Simondon's deconstructive approach to the technical, and mobilising individuation as a philosophically rich concept that enables an ontogenetic exploration of AI systems, I propose to account for the process of becoming of DL algorithms, capturing their generative capacities and problematising these models in relation to techno-human existence.

Valerija Vendramin (Educational Research Institute).

(Posthumanist) reflection on universal knowers and the nature of knowledge.

Abstract. Following the recent onto-epistemological and bio-technological developments (Ferrando, 2013), the starting point of this contribution is contemporary conceptualizations of the human. These conceptualizations are heavily influenced by the shift in the relationship between the cultures of the humanities and science (Braidoti, 2013). The two are getting close to using a common language. This clearly has epistemological implications and influences the hereto set boundaries between them.

I stand on a position of – in line with feminist posthumanities – that humanist hierarchical conceptualisations clearly show that all humans do not belong to the same category of humanity. This needs to be questioned very rigorously, together with human exceptionalism (i.e. the primacy of humans over nonhuman animals) as it affects the epistemic privileges.

I wish to pursue two lines of thought, both epistemological:

(1) the role of the subject: in allegedly pursuing objectivity in knowledge formation, the subject is deleted, which means also deleting the political. There are no means of making explicit the power structures inherent in the implied hierarchy of knowers (Adam, 1998; 2000). The question therefore is: how to access non-hegemonic perspectives on the notion of the human? These perspectives must therefore (a) include the human voices who had been silenced in the historical developments of the notion of "humanity"; and (b) enable the reflection on the implications for nonhuman others (e.g. the 'environment', 'animals', 'machines', 'God', etc.).

(2) the nature of knowledge: what does it mean to know something, how is knowledge generated today in the era of technological globalization etc., as parts of the modern technosocial universe present new ways of acquiring knowledge, and hereby redefine what knowledge is (Manovich, 2013).

(NEW) EPISTEMOLOGIES AND
(OLD) COSMOLOGIES

Moderation: Philipp Teuchmann

Mustapha El Moussaoui (Free University of Bolzano).

Navigating the cosmic blueprint in the Digital Age: a synergy of sacred geometry, architecture, and AI.

Abstract. Sacred geometry has been an essential aspect of numerous cultures throughout history and continues to be an influential component of architecture today. The integration of sacred geometry into architecture is believed to enhance the spiritual and symbolic significance of the built environment, creating spaces that are harmonious, balanced, and visually appealing. With the advancement of artificial intelligence (AI) and machine learning technologies, there is the potential to integrate sacred geometry principles with technology to create new futuristic sacred architecture.

This paper explores the principles of sacred geometry, its historical and cultural significance, and its applications in architecture. It then examines the potential for AI to be used to generate complex geometric patterns and structures based on sacred geometry principles to optimize building designs. By leveraging AI and machine learning technologies, architects and designers can create new forms of sacred architecture that are optimized for human well-being, aesthetic, and sustainable.

The paper also considers the potential benefits of this integration, such as the creation of buildings that enhance productivity, creativity, and overall well-being, and that are efficient and sustainable. The paper concludes that the integration of sacred geometry principles, architecture, and AI has the potential to create a new genre of futuristic sacred architecture that is optimized for the needs of individuals and communities, and that is visually striking and sustainable.

Finally, we highlight the potential for the integration of sacred geometry, architecture, and AI to create new forms of sacred architecture that enhance the spiritual and symbolic significance of the built environment while optimizing the needs of individuals and communities. The paper provides a basis for further research in this exciting and emerging field of architecture.

Nina Danilova (UCP Lisbon / University of Copenhagen).

When the future was definitely open: Rethinking protentions via Hannah Black's 'Tuesday or September or the End'.

Abstract. Stemming from the assumption that the contemporary global world can be defined as a society of déjà vu (Virno 2015 [1999]), in my paper, I propose to articulate the temporality of déjà vu via Bernard Stiegler's framework of thinking about technics as prosthesis—that is, as an exteriorization of thought that is in itself a precursor of a specific temporality. The notion of technics as prosthesis permits theorizing artworks as part and parcel of technologically-driven contemporaneity even when artists do not engage with technology as such. Furthermore, his concept of tertiary retentions or retentional artifacts permits establishing a relation between retentions (knowledge of the past), protentions (future-oriented activity), and temporal objects as transmitters of both, and seeing how artists attempt to reshape this relation.

Stiegler's ideas envisaged in Technics and Time 1 (1998 [1996]) are addressed through the analysis of Hannah Black's speculative novel/artist book Tuesday or September or the End (2021). The paper sets out to examine how temporality is sensed and negotiated in Hannah Black's work in order to locate an opening of a radically different co-involvement of humans and technics that allows thinking of new avenues and alternative futures in the times of a deep crisis of protentions.

Jessica Lombard (Chair ETH+ "Ethics, Technology and Humanités", ETHICS EA-7446, Catholic University of Lille).

Golems and cybernetics: how esoteric symbolisms foster our digital imaginaries. ONLINE.

Abstract. Preferably considered for a remote (online) participation, our paper discusses the function of the creator and the creature's images in the digital transition under-

going. It highlights the significance, for our new technological imaginaries, of being able to assume and even adapt the cultural significance of former symbols and signs.

To do so, we center our analysis on the symbolism of the Golem in our technological imaginaries. The notion of Golem runs through the issue of digital transition, from Gershom Scholem's famous speech at the inauguration of a powerful computer built by the Weizmann Institute, to the work of the mathematician Norbert Wiener entitled God & Golem Inc, On Some Points of Collision Between Cybernetics and Religion. In these works, the intertwining of artistic and esoteric schemes makes the figure of the Golem a transitional entity itself. This complexity manifests itself in the developments of cybernetics and AI, as the creation (poiesis) of the Golem follows the kabbalistic principles of the combination of Hebrew letters, just as computer science is the combination of numbers that constitute a binary system of representation. Therefore, just like the computer which Scholem considers as a new Golem, such a mystical figure is still able to embody both the human experience of creation, who projects spirituality and intellect into matter to transform, and a technical instrument, for which the human being bears responsibility. As such, this symbolic transition from clay to Golem significantly involves our societies as the producers of our undergoing digital transition.

Consequently, we will show how the image of the Golem aims at better questioning social, ecological and technological changes: what message is the human being able to give to his technological creations; what program, what function, what automatic or manual control of the machine could he expect to allow, integrate or omit?

SOCIAL MEDIA, SELF-REPRESENTATION AND CITIZENSHIP

Moderation: Jorge Martins Rosa

Antonio Oraldi (Centre of Philosophy, University of Lisbon).

Mediation, subjectivation, citizenization: reflections on cyber-physical citizenship.

Abstract. The growing expansion of digital networks into physical infrastructures calls for reflection on the political nature of digital technologies. As digital networks and devices increasingly access and shape both public and intimate life, how are we to understand the political subject within these socio-technical ecologies? With the development of cyber-physical environments – which blur the line between cybernetic, physical, and social – how is citizenship to be conceptualized? The concept of "cyber-physical citizenship" aims to capture the techno-po-

litical logics in connection with the recent transformations of digitality generally known as the "Internet of Things".
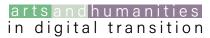
This talk presents the theoretical basis to conceptualize cyber-physical citizenship along two main lines. The first part deals with methodological categories to grasp digital transformations through the lenses of citizenship. Technical mediation theory argues that "smart" environments inaugurate a new type of human-technology relation ("immersion relation", Verbeek 2015, Aydin et. al. 2019). However, I contend that the political subject in cyber-physical ecologies is not merely an agent whose action is mediated. The political subject is co-constituted in technical networks that function as architectures of power; in other words, the subject is part of a process of a technical subjectivation (Dorrestijn, 2012). The potential ubiquity of cyber-physical digitality points to the constitution not only of subjects but of citizens, thus indicating a form of ongoing citizenization.

The second part focuses on aspects of citizenization in the cyber-physical context. Cyber-physical citizenship rests on a spatiality of generalized recordability and a temporal logic of distribution of rewards and punishments based on previous digitally recorded actions. These features indicate a performative model of citizenship, whose logic of rewards reproduces the entanglement between technology, subject, and ideology (Habermas, 1968; Althusseur, 1970). The presentation concludes by highlighting the pharmacological structure of technology (Stiegler, 2013) as a potential for alternative techno-political logics of the cyber-physical.

Apoorva Nanjangud (Radboud University Nijmegen, the Netherlands).

Platformization of 'the local' heritage: assessing the self-representations of Indian craftspeople on Instagram. Online.

Abstract. Digital Media has played a crucial role in the rejuvenation of various creative industries in India, including the previously traditionally run craft sector. With rampant digitalization and proliferation of the 5G spectrum data, there is a growth in the autonomy that the craftspeople leverage to build and own their narratives. This narrative storytelling visibly creates an authentic backdrop against which, artisanal goods are marketed. This growing platformization facilitates the artisanal communities to not only actively subscribe to their local identities in online spheres, but in the process also tend to appeal to non-local future customers for their traditional, handmade goods. By connecting traditional forms with digital futures, exploring digital platforms, has enabled artisan communities to juxtapose the archaic, traditional domain of handmaking with newer notions of sustainability. In the process, the artisan communities and craftspeople are able to show their vulnerabilities and authenticities by representing themselves in a specific manner. The main question guiding this research is: How do artisan communities in India utilize new media platforms to mediatize their local heritage? Furthermore, how do these narratives online, aid placemaking of those destinations? With the intention of combining tourism research with platform studies (Salet, 2021) I conduct

this research, by studying craftspeople's representations on online spaces such as Instagram. These questions reassess the meanings of culture in a digital age, and how platfromization has allowed for change in traditional ways of work. I employ a sample of 300 Instagram posts, including geotags, hashtags and captions to understand their self-representations through a thorough qualitative visual analysis.

Request for online presentation: Due to pregnancy related travel restrictions in July, I would highly appreciate if I can present and listen to other sessions online.

Mitul Joseph Koickakudy (Christ University).
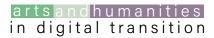
Understanding memetic offspring! Online.

Abstract. For Dawkins, the Meme served as a catalyst for cultural jumps in human evolution, much like a gene served to further biological evolution. Memes are the mediators of cultural evolution. Likewise, memes mutate with features of different genres to form new ones.

Milner in 2014 explains the different genres of memes, remixed and stable images. The remixed images are again segregated as Demotivationals, Annotated Stills, Macros, Quotes, Shops, and Text, while the stacked images are segregated as range comics and stacked stills. Stable images consist of Memes, Drawings, 'IRL' Photos, Graphs and Screenshots (Milner, 2012).

Milner speaks about hybridity. This character of memes pulls out from the established condition and is transformative in nature (Milner, 2012, p. 88). One such hybridity is verticals are a transition between single and stacked image. Verticals are developed from standalone images, or they can follow a macro template.

It is observed that there are more variations of memes that are formed which shows characteristics of two or more types of memes. The chance of coming together, through the crossing-over of previously existing sub-units is the usual way for a new genetic unit. The crossover of two parent strings produces offspring (new solutions) by swapping parts or genes of the chromosomes (Yang, Chien, & Ting, 2015). This new Meme formed out of parent memes can be named as a Memetic offspring. Considering memes as Modal a Ensemble, each mode acts as a chromosome. The newly formed offspring has modes (DNA) of the parent Meme (Gene).

Drawing on various literature on Memes, starting from the selfish gene to the latest literature on Memes, the paper tries to establish the concept of Memetic offspring with a set of memes collected during Kerala State Election.

DIGITAL INFRASTRUCTURES AND ENVIRONMENTAL MEDIA

Moderation: Madalena Miranda

Alberto Micali.

Digital environmentality, or the becoming environmental of control in times of automated media.

Abstract. The collapse of ecosystems pressured western societies to reconsider the consequences of anthropic agency. At national, European and international scales, institutions, enterprises, and climate movements placed at the centre of their programmes the impact of human actions on their surroundings, supporting a broader push to digitisation: the inevitability of a digital transition.

However, some strands of environmental media studies emphasised the false assumptions of digital neutrality – of the equity and impartiality of such a process of digitisation on many spheres of human activity – highlighting the material effects of extractivism (Cubitt; Parikka), energy consumption for the mining and storage of data (Brevini), as well as the flows of precarious labour that is needed to discern and maintain computational processes (Crawford) – shading, thus, light on digital materiality and the impossibility to transcend from it. Nevertheless, despite the hint of a movement beyond human agential capabilities that implies a post-anthropocentric viewpoint on digital media and recognises techno-mediated agency, an implicit biocentrism still echoes: a biocentric bias reinforcing the presuppositions that underpin the contemporary operationality of power via data intensive media.

In this paper, I argue that such an assumption – that digitisation impacts on the environment – is onto-epistemologically (as well as ethically) attuned to a biocentrism that reinforces – instead of challenging – the dominion over marginalised alterities (especially non-human, and more specifically non-biologically individuated ones), and strengthens the neo-liberal paradigm of control over the existent.

The biocentrism underpinning the action, discourses, and philosophical premises of the recent 'environmental' turn – as well as the same oppositional dualism between the organism and its surrounding that defines such an 'environment' – is instrumentally deployed and employed within the contemporary power paradigm, increasing securitisation, governamentality and the biopolitical control of existential territories (Horl; Massumi; Lazzarato). By proliferating under different instances of digital transformation (from self-driving cars to voice assistants, from smarthoovers to chat bots), automated data intensive media amplify and ride such an onto-epistemological premise that implies life as biologically individuated, always taking the position of the organism and detrimentally reducing a possible 'external' to a formless and selective 'whole' from which to extract valuable data relations and patterns of organisation for their own self-maintenance.

Basak Ucar (TED University) and Derin Inan (TED University).

Data-driven urban representation: An operational challenge for resilient cities: an operational challenge for resilient cities.

Abstract. The physical and conceptual transformations that the cities have undergone in the last decades as a consequence of the environmental degradation, ecological destruction, and anthropogenic climate changes altered the urban conditions and their representations in a significant way and required the re-conceptualization of the city as a more complex, saturated, and open structure. Urban condition(s) of the contemporary city, where different agencies are associated through various spatial confrontations are redefined as an ecosystem with all its components; socioeconomic, biological, geographical, ecological, and experiential. Unfolding these redefined urban conditions demands a holistic lens in order to understand the extent associations and web of relations, which facilitate the consideration of both human and non-human agencies (Latour, 2005)*. Incorporating all vibrant agents in the definition of the urban conditions provides a multi-focal rendering of the associations and enables them to respond to the intricacy of the economic, political, and ecological relations of the 21st century.

The proposed paper will consider the data-driven system proposals as innovative design practices which hold the potential of defining an alternative approach to studying the resilience of the city. Within this framework, the paper will structure the discussion in reference to data-driven urban representations for the city of Beirut which are produced in an undergraduate architectural design studio. Aiming to provide adaptive, solitary, and resilient strategies for the particular urban conditions of Beirut (such as transportation, population, contamination, public grounds etc.) sets of data-driven representations were produced. The massive amount of data collected, studied, and represented at different scales exposed the city with its visible and invisible features and enabled alternative readings and representations of the city. Various data sets translated into different forms of mapping strategies are believed to unfold a series of discussions on the capacities of the city to reinvent itself constantly, correlate innovation at many scales; and therefore, bring out alternative frameworks for urban innovability.

*Latour, B. (2005), Reassembling the social: An introduction to actor network-theory, Oxford University Press, Oxford, UK.

Iris Long (Goldsmiths, University of London).

Port, Material Flow, Data Valleys. Online.

Abstract. This article is part of my on-going research project Temporal Stack, which explores how contemporary techno/science-infrastructures mediate our sense of time, offer alternative cognitive pathways and constitute sites for curatorial studies.

The article looks at an intermediate zone shaped by fundamental science and technology research, the operational processes of scalar networks, interventions

in local environments and societies, and narratives of time production. Through writing and practice, media scholars, urban planners, cultural geographers, scientists, and artists have attempted to understand our technological landscape via its fundamental layer: the physical and technical infrastructure of it - as a perspective or a set of cognitive tools. Techno-infrastructure is more concrete and material than abstract concepts or tech terms such as the "cloud", the "network", or "energy", but it is also less tangible and graspable due to its scalar, entangled, relational, and often geographically distant and interface-less nature. Techno-infrastructure is both monolithic and concealed, shared and secret, pivotal and mundane, making it epistemically fascinating and ghostly to many.

This article will depart from a series of curatorial site visits that I organised towards data centres, computer science schools where AI labourers are trained, radio telescopes and other "infra" sites of both the networked living conditions and the data driven paradigm of science. Artists, researchers, science fiction writers participated in the project also interlace perspectives from various disciplines, illustrating their respective methods, tracing discrepancies, and mapping inherent cognitive systems. The article will not only touch upon materialistic perspectives - as most critical infrastructure studies often do - but also offer a speculation that unpacks what has already been foreshadowed by our present, whereas the human and nonhuman narratives, the technological and geological, could flow into a sensorial postscript.

COMPUTATIONAL AESTHETICS:
SENSES, AFFECTS AND INFORMATION

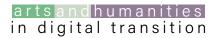## Moderation: Maria Teresa Cruz

Francesco Buscemi (Catholic University of Milan).

Virtual Reality between emotions and information.

Abstract. Following on from my article (Buscemi 2022) on the Virtual Reality film/installation Carne y Arena by the Mexican director Alejandro Iñárritu (2017), this paper interrogates the relationships between emotions and information in the new media, VR specifically.

In short, the film is composed of three parts, the first theatrical, the second based on VR and the third televisual. While the first and the third inform the audience about the issue of immigration from Mexico to the US, the VR one only stupefies and gives emotions to the public.

Theoretically, the paper starts from the traditional epistemological perspective stating that emotions are fundamental to know and asks whether or not this is still

valid with the new digital media, where emotions and stupor flood the mind and the senses of the members of the audience much more than in the past thanks to the technological innovations. In doing so, I would like to answer the following research question: how do moving and informing play their roles in Virtual Reality?

The paper applies rhetorical narratology analysis to the three parts of Inarritu's film to find out what kind of narrative experience the film/installation offers the participant.

The results show that in the film moving and informing are inversely proportional. In the most stupefying moments of the VR part, the user does not receive any piece of information and the filan sensation is that the active role of the user is an illusion, as they cannot choose to be informed. Paradoxically, there is a more active role in the two parts based on theatre and TV.

This research may also be of interest to VR scriptwriters, producers and directors. I'm a scriptwriter and in writing the short film REC Time, we decided to give the technology of green screen (a proto-version of VR) an informative role, while usually it is used to stupefy and transmit emotions.

Buscemi, Francesco (2022) The paradox of the virtual: Iñárritu's Carne y Arena between innovative spect-actor and traditional fruition. New Techno Humanities, vol. 2, Issue 1. Available at: https://www.sciencedirect.com/science/article/pii/S2664329422000188.

Ron Yakir (Hong Kong Baptist University).

The affect of imagination on pseudo embodiment of cognition in digital worlds.

Abstract. Bernard Stiegler, in his 2002 lecture Transcendental Imagination in a Thousand Points, quotes Adorno and Horkheimer, who fault cinema with paralyzing the imagination: "The more densely and completely its techniques duplicates empirical objects, the more easily it creates the illusion that the world outside is a seamless extension of the one which has been revealed in the cinema." (Dialectic of Enlightenment, 1947, 99). The power of Cinema to do that is the power of the imagination, where secondary retentions stem from. Secondary retentions and therefore imagination relay on memory. Cinema has the capacity to evoke the memory of an unlived or non-lived past, a prosthesis of consciousness. The memory of an unlived or non-lived past is a tertiary form of memory and is evoked in a particular kind of imagination. This ability of cinema to function as a tertiary memory, says Stiegler, can be equally applied to video games and virtual reality.

But the passive bodily experience of cinema is very different for the interactive experience of digital worlds. The sense or presence and agency in digital worlds creates a much greater expectation of an embodied experience. This was evident at Connect 2022, Meta corporation's annual developer's conference. Meta announced "The most requested feature on our roadmap": Avatars will have legs! While a step in the right direction, more anatomically complete avatars can only

have a limited impact on an embodied cognitive experience. Phantom Physicality, my current area of research, proposes a form of pseudo embodiment: evoking physical sensations without physical a trigger. The paper will explore the role of imagination in the experience of this kind of pseudo embodiment in digital worlds.

David Friedrich (PhD Student at the University of Western Australia (Conservatorium of Music).
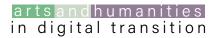
Beyond biology: the impact of neurotechnology on human sensory experience. Online.

Abstract. The human sensory apparatus has changed with neurotechnologies. One of the most common technologies of this kind is the hearing device cochlear implant (CI). It enables users to perceive an environment of signals beyond acoustics; an audible perception of electromagnetic fields that have only occurred in non-human organisms and machines. Nonetheless, most discourses about the CI focus either on implantation, and post-operative treatment, or criticise the media-political power of the microprocessor on the outside of the head, i.e., asking who determines the quality of hearing. Even if the sensation via sound waves is considered within the framework of perception, the phenomenon of sound itself is treated like an axiom without valuation. This leads to the assumption that the sense of hearing is only stimulated by acoustic events because hearing is distinguished from the other human senses based on sound waves. However, this stands in contrast to the actual sensation via the neurotechnology CI, which digitally organizes the stimulating electrodes in the inner ear. What is missing in the debate about hearing via CI is a critical investigation of the entangled relationship between our understanding of sound and the sense of hearing, which has been restructured due to the implanted technology. The presentation aims to discuss how the sense of hearing got restructured through the CI and how the neurotechnology is affected by a concept of hearing based on sound waves (acoustics). Based on a cross-disciplinary investigation, the exploration of this human-machine symbiosis is used as a case study to disclose the recursive relationship between the bionic body (sensation) and the abstract mind (perception). I will show why the sensation of hearing via CI affects not only the perception of sound but also how our understanding of sound recursively affects sensation.

EDUCATION AND DIGITAL MEDIA (I)

Moderation: Maria José Brites

Luciano Moreira (CETAPS, Faculdade de Letras da Universidade do Porto, Bruno Cardoso (CITTA, Faculdade de Engenharia da Universidade do Porto) and Carla

Morais (CIQUP – IMS, Faculdade de Ciências da Universidade do Porto).

Emergency remote education in the Covid Pandemic: reflection on the forced and sudden materialization of digital education.

Abstract. In 2019 a new infectious disease named COVID-19 emerged. Education went through a forced transition from face-to-face education to emergency remote education with limited time and resources. The meanings and impacts of this process on education and its stakeholders are not yet systematized and discussed. A critical digital humanities perspective is urgently needed. This study aims to fill in this gap by conducting a scoping review on 60 articles indexed on Scopus and/or Web of Science that addressed emergency remote education and analyse the results under the perspective of the digital humanities. The main findings, methodologies, and limitations of these studies were identified, organized, and systematized. Results indicate that emergency remote education was conducted by replicating face-to-face strategies, and digital affordances that could potentially be utilized to improve the overall experience were neglected. Despite claims of the opportunities that technologies offer for education, integrating it in a meaningful way is challenging: stakeholders attempted to reproduce the familiar, material educational world in digital media. We argue that many difficulties had their roots in common sense beliefs according to which education is in crisis and new generations are akin to technology. Our previous research has shown that such beliefs are mainly shared by teachers. At the same time, issues of digital equality and literacy continue to affect the education arena. The relevance of this research lies in systematizing new evidence that should feed discussion regarding the need to bring a humanist view to the digital sphere, a challenge that digital humanities can only meet if they overcome technological and social deterministic approaches.

Ohad Zehavi (Bezalel Academy of Arts and Design Jerusalem).

Reformatting humanities in the arts: studying theory with digital boards.

Abstract. Digital boards have proven to be very useful in art and design practices. In my paper I will argue and try to demonstrate that they can be applied in the humanities in ways that provide for a more intimate engagement with texts and a more collaborative form of knowledge production, making them a powerful pedagogical tool well-suited for a digital generation in a visual age.

In the first part of my paper I will present an introductory course in Visual Culture given at Bezalel Academy of Arts and Design that I have recently transformed (with collaborators) into an online multi-format course. I will present the various formats of the course and their methodology and focus mainly on the use of digital (Miro) boards that allow for an interactive and self-paced study of topics through words and images. I will pay special attention to a comprehensive Lexicon board grounding and framing the entire course and discuss its underlying pedagogical rationale and the apparent impact it has had on students' learning.

I will then show three more ways in which I use digital boards in other (in-per-

son) courses I teach at Bezalel and assert their academic merits. First, I will show how a digital board is used for my own presentations in class, creating an evolving archive of the course – thus serving a 'mnemonic' function – and allowing for a more responsive and performative lecture – serving a 'dynamic' function. I will then show two different examples for the boards' 'participatory' function: first, when a course's digital board is used in a collaborative fashion, inviting students to actively engage with texts and to share their knowledge with their peers; and finally, when students are given their individual boards on which they conduct and convey their own research independently under a common academic project.

Catarina Patrício (CICANT - Centre for Research in Applied Communication, Culture, and New Technologies).

On the mediality of ethnographic tools: from field notebook to digital Ethnography.

Abstract. Ethnography implicates the technicization of action, language and gesture. This means that to observe and to record information – from the descriptions crystallised in the field-notebooks of the seminal participant observers, to the later aggregation of photographic imagery, sound and film, and more recently with the relevance of algorithms triggered by digital ethnography – an ontogenetic inquiry places media at the core of the anthropological experience of fieldwork. Herein mediations, that is, the binding of experience and interpretation, and its ever evolving interrelation.

Moreover, through a fieldwork that aspires participant observation, ethnographers immerse themselves in the life of a particular techno-geographic-human reality.

In the light of these ontological implications, and aiming to clarify some of its performative effects, this communication proposes an archaeological excavation to the medial nature of both ethnographer and its ethnographic tools.

PHILOSOPHY OF TECHNOLOGY AND POST-HUMANIST FIGURATIONS

Moderation: Manuel Bogalheiro

Ana Carolina Fiúza (Universidade Nova de Lisboa / Institute of Communication).

Transmutations of the flesh and figurations of technological bodies.

Abstract. The human body occupies the centrality of current techno-scientific practices and discourses, emerging as the interface in which these are produced. It is, therefore, essential to think about the redefinitions of corporeality in the face

of new technologies — that is, technologically fabricated or mediated bodies. To this end, two figures of artificial bodies will be confronted with each other: the biotechnologically produced or modified body and the (non) body of cybernetics. First, we will address the technique that penetrates the human body: the passage from homo faber to faber homini. An example is the current intersection between life and computer sciences — an entanglement between genetic and computational codes. Contrary to post-human fantasies, it is not a disembodied experience, but the redefinition of biological materiality through technique. Differently, in the cybernetic ideal, technique becomes autonomous from the body, leading to its digitization. Here, the concept of uploading is paradigmatic. Parallels between human neural activity and artificial neural networks, in computational systems, would allow the transfer of the mind to more durable / machinic supports. If biotechnologies seek to improve the biological body to prolong life, pointing to the controversial human enhancement, the goal now is to avoid contingencies of the flesh to circumvent death, aspiring to technological immortality. Faced with these scenarios, it is necessary to understand to what extent the organic body, the flesh, determines an experience that can be called human. The communication will, therefore, carry out a speculation about such technical interventions in the body-as-flesh and the processes of subjectivation implicated, questioning to what extent the human can modify (and even eliminate) his body and remain the same — or remain human. It is also about elaborating, beyond speculative thinking, a theory of decision on the ethical, aesthetic and political relations between human, body and technique.
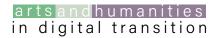
Neal Thomas (Wilfrid Laurier University).

The Peircean Pharmakon. Online.

Abstract. Stiegler approaches Heidegger's question of being in terms of the possibility of questioning itself, writing that "questioning would be questioned by the heteros that would constitute the hidden face of its autos as its pharmakon.". The paper takes up this idea up in the context of how we question through digital systems, to argue that if the pharmacological question is somehow transformed for the worse by them, then we must return to the work of C.S. Peirce to understand the tenets of their capacity to infinitize.

Peirce's methods of analysis and synthesis form something of a bedrock for the relational technicity of digital devices. Through formal strategies developed from out of his account of signs and reasoning, so-called knowledge and social graphs now underwrite the capacity of networked computers to reason automatically about people and things. Taken up as a semiotechnical justification for modeling both the exteriorization of thought into relational representation, and the interiorization of self into community, Peirce's approach to sense is by now profoundly generic.

But Peirce's ideas have not gone without scrutiny since their time, especially for assuming to enroll seemingly all of humanity into the endless production of "settled" signs. As a ground for subjectivation, Peirce's consensus approach favored

continuity, and so has less to say about the transformative unsettling of knowledge, which may existentially disturb and disrupt through irreconcilable dissensus.
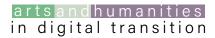
Paraphrasing James Williams on the limits of pragmatism, we may want to organize our truths not just so that they are subject to perpetual revision, but so that they can be called into question in a more fundamental way. This in mind, the paper considers the threat posed by disindividuation as elaborated by Stiegler, in light of what a post-Peircean pharmakon might entail, by relying on thinkers who critique, extend, and/or transform Peircean metaphysics.

Anna Luiza Coli (Federal University of Minas Gerais (UFMG)).

Where is the upcoming time gone? Posthumanism and the dispute for the future. Online.

Abstract. The world in which philosophy traditionally thought of existence in its human protagonism no longer corresponds to the so-called cybrid world as transformed by new technologies and by the digitalization of life. That "future sociology will explain human as a function of the cultural objects that program them" and that, in this scenario, "every Kulturkritik is to be anachronistic" (Flusser), seems to be nowadays more than an obvious statement. In face of this transformation, much has been thought about the role of culture and memory in the structuring of new network societies (Lévy, Haraway. etc.). If we cannot escape the striking diagnosis of an institutional failure of the cultural infrastructure in which we are being progressively detached from our past and our past cultural references (Reynolds, Lemos), which future can we create beyond this disruptive digital "now". Which kind of temporality can account for a future without counting on a past?

If the Being of the being that we ourselves, once identified with time in the Heideggerian milestone for the twentieth-century philosophy gained new structural dimensions in a context that clearly goes beyond the limits of the 'mere' (bloß) human, how is a new posthuman temporality to be understood? The present contribution intends to address a current temporality in which the future could be thought of not only from the "images we make to anticipate the past in a future we may not have" (Beiguelman, 2021) in face of the imminence of climate catastrophe, but from a reconsideration of the common (Hardt, Negri) that holds the possibility of reinventing existence and therefore future itself.

THE DIGITAL RESHAPING OF
THE PERFORMING ARTS

Moderation: Sílvia Pinto Coelho

Guillaume Sirois (Université de Montréal).

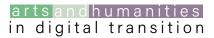### Not quite the same as it is on stage: reception of online performing arts.

Abstract. For many years, partitioners in the performing arts sector have presented themselves as resistance fighters vis-a-vis the digital transformation of the art world, arguing that the essence of their art lies in their physical presence on a stage. However, the COVID-19 pandemic, which led to the complete shutdown of performing arts venues for months, has forced them to reconsider how digital technology can be utilized in their sector. Hence, several theater, music, dance, and circus companies based in Montreal launched digital projects during the pandemic as an alternative to the performance that they were unable to show on stage. This paper specifically considers the reception of these digital experimentations. It is based on a series of twenty-two in-depth interviews with regular audience members. The paper aims to go beyond the initial reaction, which is almost always to claim that the digital show is "not quite the same", to more profoundly understand and nuance this common phrase. It argues that the widespread disappointment with online shows is related to two key points that are particularly valued in live performance. First, the mediation of the screen involved in any online show seems to cut off the audience from the intimate and authentic relation to performing artists that they strongly value in live performances. Second, online performances annihilate any possibility to "feel the energy of the room" as viewers watch in isolation, disconnected from not only the performers, but other audience members. These two elements emphasize the social dimension of any live performance that technology is still ill-equipped to reproduce. Such an observation helps us understand how appreciation varies depending on the technical and social practices deployed in these projects, but it also helps us imagine where the future of online performance lies.

Carla Fernandes (Universidade Nova de Lisboa - FCSH - ICNOVA).

Multimodal vídeo annotations as metadata for performing arts documentation.

Abstract. This talk will focus on the affordance of idiosyncratic video annotations to be understood as indispensable metadata when digitally documenting performing arts materials or visible intangible heritage in general.

Annotating and tagging directly over video in real-time have started (Cabral et al. 2011) to be mostly a personal practice used by those involved in the footage or analytical processes of video documentation for dance, but they have not yet been

perceived as complementary metadata by cultural heritage archivists.

Based on previous experience with the TKB project, we have continued to research on the multimodal annotation practices as part of the creative process in performing arts. The innovation at that time was to accept individual tagging as indexation cues and means of interaction amongst the artists who were self-curating their works, therefore generating dynamic and idiosyncratic "archives of processes". During TKB, several artists expressed the need for a handy digital tool to assist them in rehearsal periods where they could take notes (drawings with touch pen, text, marks, links and sound) on what was being filmed.

Under subsequent EU projects, we developed a friendly web-based tool to work as a video annotator in real-time, i.e., a digital notebook to replace paper notes.

"MotionNotes" is now freely available in the web and is being used by choreographers, ethnographers and educators in general. Most of the users report that their notes become inseparable of the video footage at the end of the documentation process, and suggest imaginative ways to embed those personal annotations in future presentations of their work, as well as to include them as an integral part of the metadata when the work is digitally archived.

We would like to discuss with the audience the future usability of idiosyncratic multimodal annotations as potential for new approaches to documenting, archiving and sharing intangible cultural heritage video content.

Raquel Madeira (ICNOVA - Institute of Communication / Faculty of Social Sciences and Humanities, Nova University of Lisbon) and Claudia Madeira (ICNOVA - NOVA Institute of Communication / Faculty of Social Sciences and Humanities, Nova University of Lisbon).
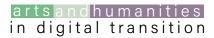
Re-choreographing closeness – isolation times and one-to-one performances.

Abstract. From intimacy to social interactions, human relations and the boundaries and notions which surround them are constantly being changed and reformulated. We have been forced to reflect on this aspect during the Covid-19 pandemic, which has installed a "state of exception" (Nancy, 2020), that emphasized the "process of inexorable chaotization of life" (Gil, 2018), which occurred on a global scale.

Whether in the private or public sphere, bodies have been re-positioned, forced to move through different rhythms, "to abandon frenetic and acceleration" (Berardi, 2020). Faced with the 'lockdown' measures that imposed pause and distance, we have been re-choreographed, from social dynamics to personal and intimate relationships.

How were digital platforms used during these times, and how their discursive and subversive potential were used in performing arts to explore closeness, intimacy and affection?

Starting from these questions, and considering that performing arts are rooted in

the corporeality, physicality, and in the spatial-temporal sharing of the spectacular event (Fisher-Lichte, 2019), involving engagement and proximity, this presentation focuses in one-to-one performances, that were developed during the social isolation times.

From the analysis of some examples of this singular performance format, one spectator's audience, this paper intends to highlight particular aspects about the use of digital platforms in performing arts, and their role in the debate concerning intimate interactions, simulation and performativity in the digital.

We intend to observe how the perspectives raised by these artists and these works contribute to problematizing the impact of digital technologies, and can operate in the discussion of new paths and insights into human relationships in the 'digital transition' era.
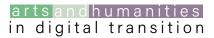
EDUCATION AND DIGITAL MEDIA (II)
Moderation: Cristina Ponte

Ana Kubrusly (Institute of Communication, Faculty of Social Sciences and Humanities, Nova University of Lisbon).

Youth and big data literacy: a scoping literature review.

Abstract. This paper aims to answer, through a scoping review, the following research question: What studies exist on big data literacy among children, adolescents, and young adults? To this end, a broad conception of big data is considered, understanding it as an economic, technological, and cultural phenomenon that impacts contemporary society in several dimensions (boyd & Crawford, 2012). Even though the importance of big data literacy is increasingly recognized within the scientific community (Sander, 2020), there seems to be no consensual definition of the concept. In that sense, big data literacy is generally defined, in this paper, as the necessary set of skills to understand and critically interact with big data and being able to identify and deal with its impacts. Furthermore, recent studies indicate that young people are largely unaware of the phenomenon of big data and its effects (Ponte et al., 2022; Dias et al., 2022; Pangrazio & Selwyn, 2018). This scenario seems to be particularly worrying, given that young people face specific concerns regarding the datafication of childhood and the impacts of intimate surveillance (Lupton & Williamson, 2017; Mascheroni, 2018). In this sense, this paper aims to situate the topic of young people's big data literacy within the currently available scientific literature. To this end, a scoping review was conducted using three databases – Scopus, Web of Science, and ERIC – in order to map out the volume and the extent of the evidence that exists regarding this subject. Available articles and chapters were selected according to pre-defined and uniform inclusion/exclusion criteria, to assess the relevance of the literature.

Valentina Vezzani (Universidade da Madeira, ID+).

Developing digital creativity abilities to design more sustainable and just futures. Learnings from the dc4dm educational model. Online.
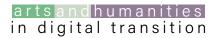
Abstract. The ever-changing digitally enabled world we live in requires preparing young creatives and entrepreneurs with more suitable abilities and set of skills to face the challenges of ongoing digital transformations. The Erasmus+ funded project DC4DM aims to implement a human-centred educational model to train Digital Maturity Enablers. This new type of professionals would be able to drive small and medium organisations towards their digital maturity: owning specific creative digital skills, they would be able to extract value from what the technological landscape offers and respond to the human needs through the principles of ethics and sustainability.

This paper aims to describe the DC4DM educational model and its application though three DM Learning Labs, intensive design-led workshops characterised by cross-functional and interdisciplinary teamwork, future thinking approach and tech-driven SMEs or Start-Ups participation. Finally, the paper reflects on the results and learnings from the three LLabs, focussing on how alternative futures – from utopian to dystopian – can be imagined and told, how these futures express an intention to go beyond the human needs and make of the digital transformations an opportunity to re-establish our relationship as human beings with nature.

Joana Fonseca (Universidade de Coimbra) and Carolina Martins (Universidade de Coimbra).

Outside the canon, within everyday life: on the didactic potential of marginal literary content.

Abstract. This communication focuses on the marginal literary production and reception in the context of didactic possibilities. Looking at the field of fanfiction and related media (such as memes and comics) as means whose forms of communication predate the emergence of the internet, we observe how they establish themselves online and how their possibilities for production, dissemination, remediation and communication are enhanced. Disseminated by a series of digital platforms, it is essential to note that user-generated content (UGC) brings new ways of reading, writing and, therefore, communicating for the common user, which the curricular context should use to work towards the enabling of digital literacy. The UGC takes place on these platforms with undeniable literary and cultural character, accessible online collections, and didactic potential within what will be the interests of the student and the possibilities of the teacher. Here, both fanfiction and comics represent a turning point between what begins as an activity of receiving, rewriting and disseminating totally analogue content, based on content printed on paper and distribution by traditional mail, to the multiplication of forms of art that occurs today, essentially online, in its sharing, reception, remediation and remixing. Because of its appeal to the freedom to tinker with others' content

and reshape it, it also instigates creative and critical thinking through means that make use of digital not because of technical complexity, but because of their communicative dynamics of generative and participatory capacity that can be useful for classroom purposes. Thus, this intervention aims to demonstrate the importance of this transformative journey of marginal reading and writing to provide the teacher with tools with relevant didactic potential.

PHILOSOPHY OF TECHNOLOGY AND POST-HUMANIST ORGANOLOGIES

Moderation: Catarina Patrício

Manuel Bogalheiro (ECATI - Universidade Lusófona / CICANT).

Organology as cyberneticization: the pan-media hypothesis.

Abstract. In two papers (2017, 2020) that were published shortly before his death (2020), Bernard Stiegler presented the concept of organology as a program that can be read as a synthesis of his thought regarding technics and individuation. In his own words, the organology project implies "an account of life when it is no longer just biological but technical, or when it involves not just organic matter but organized inorganic matter." (72:2020). The concept corroborates one of the premises of all of Stiegler's thought: all anthropogenesis is technogenesis, insofar as the living is constitutively inscribed in the non-living and individualizes itself, not as a being closed in on itself, but as a permeable one, which affects to the same extent that it is affected. The human becoming is thus that of exosomatic memory deposited in all kinds of supports (hypomnemata) which, via the organology project, are ontologically rehabilitated, thus refuting the possibility of a pure anamnesis, that is, an experience not artificially mediated.

Organology, as a project for the ontological rehabilitation of the technical and the non-living, reveals the primacy of artificiality, environment (milieu) and relation, in what will necessarily be an ecological conception that complexifies, according to Erich Hörl (122:2013), "all of the ecological preconceptions that bind ecology and nature together", to emphasize, above all, "the un- or non-natural configuration that has been established over more than half a century by the extensive cyberneticization and computerization of life". Stiegler's cosmotechnological theory of organology finds in cybernetics an empirical illustration and an objective materiality in sensory and intelligent environments, pervasive media and ubiquitous computing.

From this framework, we seek to identify the principles for a media theory in Stiegler in what we will formulate as the pan-media hypothesis, that is, an hypothesis that underlines, from an empirical point of view, the universal fusion of all media in the meta-medium of the digital and their entry into an environmental, pre-individual and affective condition (Hansen, 2014), as well as, from a theoretical point of view,

a discussion about the qualities that may constitute an expanded and elemental ontology of media (Horn, 2007; Peters, 2015).

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Maria Prieto (California Institute of Integral Studies).

Artificial Experiencing: Transitioning to Digital Organology.

Abstract. This paper addresses the digital transition of architectural practice through the lens of the organological tradition, as a co-production of life in human, other than human and more than human forms. The ongoing threat of ecological collapse, extinction and breathlessness has ignited multiple forms of reclaiming social justice and transformation across many ecosocial and cosmological crises, particularly in the field of architectural design practices. What is wrong with the spirit that governs architectural humanities? What must be done to heal the rifts of the current conditions of the planet? The embodied ecology of these responses, that is, the relational dimension of these new modes of thinking, are evidencing the mutual constitution of (post)human experience and the technological milieu in which it is situated. In this regard, artificial experiencing becomes an important category to cut through enduring forms of epistemic justice, and to reflect on the transformation of knowledge in the emerging digital cognitive ecologies from the contemporary sciences, arts and humanities. The concept of artificial experiencing also serves to gain a deeper understanding of the libidinal organization of cosmotechnical life. The paper aims to offer a detailed analysis of the organological and pharmacological operations interplayed by psychosomatic organs, technical organs and social organizations in the context of contemporary digital architectures for climate justice. The organological condition of these digital architectures is constituted by the co-evolution of its designs and its cosmotechnics (i.e., the organs of thinking or epistemologies and modes of cognition, in conjunction with the organs of experiencing, the body's physiological involvement in the design process). Disentangling the embodied participatory regime of the digital

interactions among physiological organs, technical organs and social organizations is central to know how artificial experiencing inserts action in the concrete design world and develops as an ecology of care, spirit and community itself.

Rahma Khazam (Institut ACTE, Sorbonne Paris 1).

Resistance and Proximity in Digital Times.

Abstract. The relation between human and machine is essentially a conflict between interdependence and encroachment on the one hand, and resistance and autonomy on the other. At one extreme are theorists who consider humans and technology as indissociable or emphasize the ongoing interplay between the two, such as Gilbert Simondon, Georges Canguilhem or Bernard Stiegler, for whom our aptitude for technical invention and the technical organs we create, are essential for human survival, in the same way as our biological organs. Likewise emphasizing the proximity of humans and technical systems, N. Katherine Hayles has shown that the human faculty of nonconscious cognition performs functions similar to those carried out by machines.

At the other extreme are philosophers who resist the encroachment of technology by affirming human autonomy: in Hegel in a Wired Brain, Slavoj Žižek argues that Neuralink's brain-computer interfaces pose a major threat to human autonomy inasmuch as our thoughts will be directly communicated to others as soon as we think them. The question, for Žižek, is whether isolation from technology is the only means of guaranteeing freedom, or whether it can still be exercised under conditions of immersion. Finally, combining both extremes, the "Deep Ecology in the Cognitive Capitalocene" programme suggests that we have already lost our autonomy and that the only way to escape technology's grip is for our brain, which has been reconfigured by capitalism, to undergo modifications that will allow it to think in less exploitative ways. In all these cases, human autonomy has lost out: technology either poses a serious threat to it or has already gained the upper hand. This paper will explore the to and fro between resistance and interdependence, autonomy and subjugation, in contemporary philosophies of technology and reflect on how and whether human autonomy might be saved.

MUSIC CULTURES AND DIGITAL PRACTICES

Moderation: João Marques Carrilho

François Mouillot (Hong Kong Baptist University).

Digital Platforms, negentropy and resilience in post-Covid Live Music Industries: the case of the Hong Kong independent music scene.

Abstract. This paper considers ways in which digital platforms display potential for "negentropy" (Stiegler 2018) in transforming both formal and informal labour in the production and distribution of live music in marginalized contexts. It takes the case of the Hong Kong independent live music sector to analyse two contrasted tendencies: First, the paper analyses ways in which some actors of the independent music scene have sought to use social media to increase the publicity of music activities that otherwise does not have access to mainstream channels of promotion. Second, the paper examines the use of private chats groups for the purpose of promotion and organization in other segments of the Hong Kong independent music scene. Due to social gathering restrictions related to Covid-19 preventing the official organization of live music events and/or distrust with the Hong Kong authorities, some independent music promoters have gradually replaced traditional 'public' promotion (postering, Facebook or Instagram feed announcements) by creating private group chats to provide promotional materials for live music events. In this instance, the use of social media by concert organizers, artists and audiences in – often affect-laden (building anticipation, reflecting on a past show, etc.) – private group chats confer an increasingly 'private', closed and even intimate character to independent live music activity in the city. In this double-move towards the increased publicity and privacy of independent music in Hong Kong, the paper argues that 'networked co-promotion', emerging as a practice of negentropic resilience over the course of difficulties faced by the Hong Kong live music industries in recent years, has given way to a complex and paradoxical alternative promotional ecosystem straddling both the codes and practices of the mainstream music industries, and the socialities and some of the ethos independent music-making.

Ana Magalhães (Centre for the Study of the Sociology and Aesthetics of Music (CESEM)).

The re-performance of music theatre works: chal- lenges in the digital transition from the archive to the stage.

Abstract. In this article I will discuss the documentation process carried out throughout my doctoral research, in which I tried to gather all possible materials concerning the music theatre work FE...DE...RI...CO... (1987) by Constança Capdeville, creating a more "complete" script. This script is based on the information left by Capdeville such as scores, texts, drawings, sketches with scenic indications, scripts containing the main lines and sound and light scripts, but also from the production of new knowledge through the performers who collaborated with her, and who provided new materials and information about the work. With these testimonies, I intended to document the various layers of information in order to systematize the work for archival purposes. Music theatre as a performative genre is a synthesis of a multimedia art form that involves technological resources (such as, for example, the magnetic tape medium), which is intended to be preserved through a digitization process in order to make any re-performance feasible. Music theatre works, due to their idiosyncratic and unconventional specificities, but also due to the dispersion of most sources, are difficult to document in an archival context. These sources, which include technological components such as recordings

(on magnetic tape), light and slides, inevitably undergo a digital transition process, bringing challenges to the archive and, consequently, to the performance itself. Preserving performance in archival contexts also raises terminological and epistemological questions in the field of digital humanities. In this article I will examine how the digital transition can imply and affect re-performances of this type, and what solutions have been found to recreate music theatre works from the archive to the stage. I will present as a case study the re-performance of the work FE…DE…RI…CO… by Constança Capdeville, which was recently presented at Teatro Aberto, in Lisbon.

Eveline R. Sacramento, Andreia Duarte, Susana Sardo, Ana Flávia Miguel, (Institute of Ethnomusicology - Centre for Studies in Music and Dance, University of Aveiro, Portugal), Hélder, J. M. Caixinha (Digital Media and Interaction Centre, University of Aveiro, Portugal) and Cristina Cortês (Library, Documentary Information and Museology Services, University of Aveiro, Portugal)

Favouring the alliance be- tween Information Science and Computer Science: an Investigation in the field of Ethnomusicology.

This research is conducted on the scope of Digital Humanities, and it aims to reinforce the alliance between the areas of Information Science and Computer Science, applying it in into an ethnomusicological context. Ethnomusicology is defined as a branch of the human sciences focused on music in its social–cultural contexts, especially the ways in which people interact through shared musical experience and discourse about music. Some authors researched the integration of these areas, and some of them considered the ethnomusicologic field. Ethnomusicological researchers frequently work on multiple kinds of multimedia data such as photos, videos, music, and sound recordings, which have been growing in volume and complexity. The need to preserve, access, visualize, annotate, analyze, communicate, and disseminate such materials can be problematic, given their diverse formats, sources, and the increasing quantity of data and technologies involved in their production and study. So, in this environment, new dialogues are being established between computer and information scientists for the development of concepts and theories that can deal with the large amount of audiovisual data made available. However, despite the recent advances, the ethnomusicologic field is still missing uniform metadata, ontologies, and taxonomies, complicating data interoperability and mainly data reusability. This article discusses the recent advances obtained within the scope of the INET-md - the Institute of Ethnomusicology - Center for Studies in Music and Dance, in Portugal, and presents the remaining challenges. Semantics is undoubtedly the "key" to face such obstacles.

POST-CYBERNETIC SPACES AND SPECULATIVE FICTION

Moderation: Helena Barbas

Maile Costa Colbert (IFILNOVA - NOVA FCSH), Luís Costa (Binaural Nodar), Martín Baus, Hanna Kaszewska & Gardika Gigih.

Virtual and actual: time, place, sound and art in the Binaural Nodar Digital Archive.

Abstract. Virtual Rural, the online artist residency in the Binaural Nodar Digital Archive, asks:

Can an archive be a Place? Somewhere between the virtual and the actual, a place we can visit, listen, interpret, shape with our perception and art. Somewhere we can find connection, and be connected, be changed by an experience, and leave something in return.
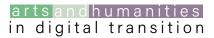
Can a context-specific artist residency in the rural mountains of the Viseu Dão Lafões region in Portugal, make an experimental and experiential shift from the Actual Place to the Virtual Place for a special residency within its Digital Archives; to make this virtual place sensible to the actual?

In 2022, the Binaural Nodar Digital Archive (https://www.archive.binauralmedia.org) became that destination for the first time. A place "outside" to access and discover virtually, while remaining in one's home. The residency is open to artists, students, researchers or educators to explore, discover and create, with support and guidance in language, location, themes, sounds, visuals, and other document searches, transcriptions and translations of oral histories, research and context of the actual Places represented virtually in the archive.

Resident artist Hanna Kaszewska asks…"what role do feelings play in documenting one's surroundings? Does a record hold a special meaning if it was made first and foremost for one particular person? An archive is supposed to be a place of remembrance. And yet now, more than ever, it is becoming a place of being present as well." Composer Gardika Gigih responds to the archive, sharing: "it felt like I was being invited to visit, take a trip to a rural area there through my aural sense and imagination (…) sounds also have their own way of speaking or telling stories. All of the sound recordings that I listened to invite me to feel Viseu Dão Lafões." Martín Baus, multimedia artist and researcher, engages with the archive "from a fictional-archeological approach, and through a speculative process. 'Towards an Archival Clariaudience' seeks to expand the sonic scopes of the archive."

Digital Archive Curator, artist, and researcher, Maile Colbert, will discuss and survey the concepts and themes for the residency with Binaural Nodar's Director, Luís Costa, share excerpts from the residential artists' outcomes, and survey their experience with Art in the Archive as a Place.

Residency Open Call and Outcomes page: https://www.binauralmedia.org/news/en/virtual-residencies

Katarzyna Ostalska (Lodz University, Poland).

Waterspace, literature canon and digital literature in the posthuman age.

Abstract. Water is the space where other-than-human beings and forms enter multi-layered interactions and material exchanges. Textually, water lures not only with a proverbial flow of signifiers but also but by the restructuring of the fluid relations between the literature of the past and today, words and the code, the shifting meaning(s) and endless permutations. The recombined and generative digital works analysed here are entangled in a dialogic debate with the literary canon of writers such as Joseph Conrad and William Shakespeare (J. R. Carpenter), Henry Melville and Emily Dickinson (Stephanie Strickland and Nick Montfort). Strickland and Montfort, the authors of "Sea and Spar Between" compare their poetry generator to an open-ended textual territory with a boundless scope of fish/ combinations. The authors inform that readers can move in this sea of words, in-between 225 trillion possible stanzas. "In a generative work, the reader starts a process that results in an unpredictable output that neither author nor reader can preview. A piece of code, like the genetic code, is let loose on a lot of variables" (Strickland, "Born Digital"). One needs to add that a code in "Sea and Spar Between" is revealed to the audience and it constitutes a crucial dimension of this digital waterspace. In "Once Upon the Tide" by J. R. Carpenter, one can hear the recombined echoes of William Shakespeare's The Tempest and Conrad's aquatic writing. While reading, it is possible to pause, adjust the pace, or "move to a new permutation of this sea-sorrow, to suffer a sea change into something rich and strange" (J.R. Carpenter, "Once Upon a Tide"). But the sense of control or comfort is only an illusion. The sea in which readers get immersed is not only "modern" water (Neimanis after Linton 155) of late capitalism but also the water of past conquests on far away deeps and lands, of altering relations to other-than-human beings.

Thomas Ballhausen (University Mozarteum Salzburg) and Elena Pey- tchinska (University of Applied Arts Vienna).

What the Probes Report: an exercise in »Operative Fiction« (lecture-performance).

Abstract. At the centre of our artistic exploration of space and language within a post-digital context, we place the dynamic interrelationship between the science of fiction and the fiction of sciences. Building on our previous work, in which we have gradually advanced the interweaving of drawing and literature, we present the relational, practice-oriented model of an Operative Fiction. This poetic concept is not only about the encounter with the supposedly unthinkable other and alien but about its active and necessary integration into one's process of thinking and creating: A key moment precisely because by means of writing and practising Operative Fiction, we enfold – together with our more-than-human partners – multispecies collectives and multimodal realities.

We understand our artistic practice as an entangled process of post-digital writing and spacing, simultaneously augmenting and enriching its operativeness through the figure of a malfunctioning space probe – the protagonist of our more-than-textual Science Fiction prose poem "What the Probes Report". The articulation of the figure's monologue embodies the machine's defect rather than an anthropomorphic effect. Based on the actual names of man-made space probes, we develop our explorative reflection on control, obedience and fallibility: Quite deliberately, we do not place human agency at the centre of the modular narrative but stage the homonymous machines as disrupted protagonists.

In, with, and through our lecture performance, we articulate and activate relations between text, space and time. Our practice is inextricably linked to our way of generating (and not: occupying) spaces through temporal as well as (more-than-)textual interventions. In negotiating spatial production, we draw upon contemporary time-based performance strategies: We engage textually, bodily and audio-visually with the agency of the given space, enfolding and mapping traces of deceleration and resonance.

MACHINIC DESIRES AND ALGORITHMS

Moderation: Daniel Cardoso

Francisco Nunes (Nova University in Lisbon).

Machinic desires: post-anthropocentric humanities in the age of AI.

Abstract. The last few years have witnessed a combination of existential anxiety and blind enthusiasm over AI generated content. In the humanities, while some worry about the waning of human 'intelligence', 'creativity', or 'autonomy', others argue that generative AI "extends structuralism beyond the human" (Rees, 2022) stressing the incidental nature of the speaker vis-à-vis the production of language, and thus further destabilizing the already analytically crippled humanist subject. Targeting specifically the heart of the humanist logos – the word and discourse – which occupies a central place in the long-standing exegetical tradition from which the humanities derive, the encroachment of this 'Digital Other', and the ideological underpinnings of its technoscientific apparatus (Franklin, 2021), call for an examination of our current human-machine entanglements. Instead of hiding behind the disintegrating curtain of the self-determined subject, this paper explores alternative becomings (Deleuze and Guattari, 1987) emerging from this digital ecology. Thus, following Braidotti's (2016) claim that "machinic autopoiesis means that the technological is a site of post-anthropocentric becoming" I argue for the need to reframe our encounters with "the alien subject of AI" (Parisi, 2019). Rather than retreating into servo-mechanical accounts of human-machine interaction, feeding either Promethean dreams of cybernetic control, or fantasies of total dematerialization and post-corporeal existence, this paper argues that these encounters can be reinscribed back, territorialized onto

a sensual domain that takes into account the different ways in which the affective intensities that traverse any mode of expression coalesce in the subject. To do so, I explore how an erotic mediation (Galloway, 2013), which emphasizes the material inscription of the affective, desiring forces of expression, can open up new avenues for the post-anthropocentric humanities in the age of AI.

Hannah Lammin (University of Greenwich).

Algorithmic desire in the technological unconscious: digital platforms as archives of tertiary memory.

Abstract. This paper takes Mark Leckey's Dream English Kid, 1964–1999 AD (2015), a video collage of "found memories" sourced from YouTube, as a point of departure to explore digital platforms as archives of "tertiary memories" (Stiegler, 2011)–– memories that are externalised and mediated through technics. It argues that such platforms function as a technological unconscious that mediates human experiences of remembering, and affects individuals' relations with their own pasts.

With reference to Jacques Derrida's "Archive Fever" (1995), which proposes a fundamental relation between the impulse to inscribe memories and the Freudian death drive, platforms are explored as apparatuses of desire. Yet, the nature of digital media, which lack a unique point of origin (arkh..), complicates Derrida's analysis. Stiegler's notion of "industrialised memory", which emerges with the technologies that enable mass (re)production and dissemination of media, helps to explain how technical memories order our consciousness by prioritising calculability in the selection of materials for remembrance, leading to "malaise". However, it does not account for the temporality of the ever-accumulating stream of content on digital platforms (Hansen, 2009).

Patricia Ticineto Clough's notion of "autoaffection" (2000) is introduced to provide a framework for theorising desire's role in the experience of mediated remembering, which is constantly becoming as users engage with networked platform environments. This framework returns us to the Freudian themes of Derrida's analysis, to outline the structures of algorithmic desire implicit in the archival architecture YouTube. I argue that the technological unconscious of the digitally-networked age entails an interplay between pleasure principle, reality principle and death drive which complicates the temporality of the tertiary memory apparatus and can yield affective experiences of remembrance that are affirmative, as in Leckey's artwork.

Hsien-hao Liao (National Taiwan University).

Canst Thou Desire too?: Coping with AI creativity.

Abstract. Given enough training in machine learning, AI can now create all kinds of art works from painting to poetry- and often in a style apparently more sophisticated than those by many human beings. But so far, AI has to be programed to begin and

stop working, a process that involves no genuine spontaneity. In other words, unlike the humans, it does not have the "urge" to create. On the other hand, human beings create precisely because he has this urge, which in psychoanalysis is alternately called desire. Both Freud and Lacan believe "having desire" is the fundamental truth of human beings. A double-edged sword, desire cuts the child off from his being but gives him a subjectivity, albeit one grounded in an emptiness or "want" at its core. It is this "want"/ desire that motivates all human actions, including the various kinds of creative activities such as art and literature. Can we expect that one day AI would emulate human beings also in terms of spontaneity? That is, can AI desire? Would it ever "want"? This paper investigates whether or not AI can possibly develop spontaneous urges to create and how human beings should cope with this possibility.

ARTS AND NEW MEDIA TECHNOLOGIES

Moderation: Adriana Sá

Marianna Charitonidou (Athens School of Fine Arts).

Artificial Intelligence and the role ultra-technologists in Immersive Media Art.

Abstract. The paper aims to explore how the use of extended reality technologies and interactive digital interfaces have affected the design of exhibition spaces. The current trends in immersive art are characterised by the tendency to prioritise augmented reality over virtual reality. The main objective of the paper is to shed light on how these technologies have influenced the ways in which immersive art installations are conceived and experienced. Particular emphasis is placed on the impact of interactive technologies on how visitors experience exhibition spaces. The paper intends to explore an ensemble of immersive art cases, paying special attention to the distinction between immersion and interactivity. Two concepts that are pivotal for understanding the transformations concerning the subjectivity of the exhibition visitor those of the "imagineer" and the "ultra-technologist", which are analysed in the article. The intention is to render explicit how extended reality technologies have contributed to the design of immersive experiences, significantly influencing the interrelations between the technical, aesthetic and institutional aspects concerning exhibition design and the methods of dissemination of art. At the centre of this paper is the role of extended reality technologies in designing immersive experiences in the case of art practices that place particular emphasis on participation, interaction, technology and digital media. Of great importance for understanding what is at stake in the case of the design of exhibition spaces that use augmented and virtual reality and interactive digital interfaces are the differences between real environment, augmented reality, pure mixed reality, augmented virtuality and virtual environment. A noteworthy case of immersive art centre that is analysed in this paper is "Mori Building Digital Art Museum: teamLab Borderless" in Odaiba district of Tokyo, which opened its doors in June 2018 and received approximately 2.2 million visitors in 2019. The size of the aforementioned

digital art museum, which hosts 50 artworks, is monumental: 10,000 square metres. Another example of immersive art exhibition that is noteworthy is Machine Memories: Space, which was inaugurated on March 19, 2021 at Pilevneli Gallery in Istanbul, Turkey. This exhibition included an ensemble of artworks of media artist Refik Anadol. In spring 2021, an immersive art experience centre opened its doors in Miami, Florida. Its name is Superblue and it contains 31,000 square feet (2787 square metres) of exhibition space. In its foundation, apart from Pace Gallery, Laurene Powell Jobs was also involved. The inauguration of Superblue was accompanied by the opening of an exhibition entitled "Every Wall is a Door". The paper places particular emphasis on the analysis of this exhibition. An important distinction that is examined in the paper is that between interactivity and immersion. Two aspects of interactive art on which the paper pays special attention are the following: firstly, the capacity of interactive art to enhance a reflexive experience vis-à-vis the immersion of technologies in our quotidian life; and secondly, the intention of interactive art to trigger interactions among the visitors to exhibition displays.

Yana Naidenov (Faculty of Social Sciences and Humanities, Nova University of Lisbon).

Quantum perspectives in contemporary art and New Media. Dismantling the canon with counter-chronologies.

Abstract. Quantum sciences and the development of technologies in this field are enabling new forms of production, artistic instrumentation and positioning. The emergence of quantum computing technologies offer potential for new practical and conceptual methodologies, and artists have been exploring both technological and analogue orientations within their practices, which may include quantum computing, algorithms, data visualisation, or superconducting materials; while other practices which do not present technology at their epicentre, are nevertheless informed by foundational aspects of quantum physics, and by notions of multidimensionality, non-linear temporalities, diaspora, and esotericism. "Counter-chronological" time-space perceptions as well as notions of entanglement and superposition corroborate with a conceptual dismantling of established art-historical narratives, uncovering alternatives to Western institutional and museological contexts. Artists from under-represented native-indigenous and ethnic minority groups appropriate and devise these tools, carving out an antithesis that fortifies their artistic positioning, enabling disruptive forms of discourse that distort timelines, and uncover narratives that had been invisible in classical or established institutional contexts. I will discuss the work of artists emerging in this nascent and somewhat speculative milieu in the Arts and New Media, alongside theoretical foundations that may accompany these developments, namely entanglement as a methodological tool in the wider debate on technology, posthumanism and decolonisation.

Vadim Keylin (Universität Hamburg).

Who raps? Lyric subjectivity and ethical responsibility in the case of FN Meka.

Abstract. In August 2022, the record company Capitol Records dropped one of its artists, the rapper FN Meka, on the accusations of racism following a tweet by the activist group Industry Blackout. The twist in this story comes, however, from the fact that FN Meka does not exist – at least, not as what in legal language is called "a natural person". He is a virtual character created and managed by the label Factory New whose songs are written by an AI trained on the corpus of existing rap lyrics.

Whereas the recent discourse on AI authorship has largely focused on the questions of creativity and the role of the human artist, the case of FN Meka puts the spotlight on another aspect of this debate, raising the issue of ethical and legal responsibility for AI-produced songs. Pertinently, at the centre of this controversy lies the contested question "Who speaks?" that has been haunting lyric theory since Hegel's times, as digital creativity puts a novel spin on it. Industry Blackout's argument was that FN Meka's persona amounted to digital blackface: by virtue of the AI rapper being virtual and not having actual experience of living as a Black person, his texts could only be a disrespectful imitation, or even a caricature of Black experience. For their part, Factory New deflected this argument by pointing that the songs were voiced by a Black performer, whose embodiment of the lyrics counterbalanced their AI-generate origin. In my paper, I will discuss the complicated networks of subjectivities and identities – digital and embodied, natural and corporate – behind FN Meka and his lyrics and the ethical conundrums of digital creativity that his case highlights.
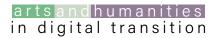
INFORMATION DESIGN AND ACTIVISM

Moderation: Marisa Silva Torres

Karoline Truchon (Université du Québec en Outaouais (UQO)).

Solu- tions Journalism as a Teaching Method to Critically Popularize Complex Issues. The case of "AI".

Abstract. "AI" has become a trendy if not requisite buzz word to sound contemporary and up to date. We all encounter "AI this…", "AI that…". on a daily basis. Yet, experts disagree on its definition and exact impact even if all share a common understanding that "AI" needs to be regulated. But what about common people, and in the case of this paper, students in communication studies who use social media every day but don't have a clue about the reliance of these media on artificial intelligence and its inherent issues? How do we get these students to critically think about and explain such complex issues pertaining to and stemming from the intersection of the digitalization of life and artificial intelligences? This paper will explain how I use solutions journalism to teach undergraduate students how to understand, popularize and disseminate their new understanding about an issue of their choosing that combines digital aspects and IA. More precisely, I will 1) elaborate on the 4-step teaching model and 2) share how some students, in their own words, have experienced solutions journalism as

a tool to critically engage with themselves and the people around them as social agents in various ways that will be examined in this paper.

Cátia Valente. (Faculty of Fine Arts, University of Lisbon, Master in Communication Design).

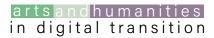## Between Information and Design – A Look at Information Design Practices in Portuguese Online Journalism.

Abstract. The proliferation of an endless volume of data conveyed through the Internet has been assuming an active and omnipresent role in the reform of a heterogeneity of public sectors. Therefore, the field of information design emerges as an imperative area for decoding information into simple, clear, and concise visual representations, so that reading can be easily perceived by a wide range of people. This accessible delivery of information is a value shared by journalism that, based on the mastery of big data, has culminated in a new specialization: data journalism. This study aims to focus on the convergence of these two fields of activity and analyze the current practices of information design in Portuguese online journalism. It seeks to investigate and address pertinent issues for understanding the transcendent connection between designer, journalist, and reader, as well as to situate the stage of maturity of data journalism and 'infodesign' in the national panorama and also to measure the receptiveness, literacy, and map the behavior of the Portuguese regarding the visualization of information in online newspapers. The theoretical framework of the project branches out into four fundamental chapters. The first chapter focuses on the genesis of journalism and the paradigm shift to the digital era. This segment also seeks to investigate data journalism practiced in Portugal today. The second chapter is dedicated to information design, which is subdivided into the following themes: principles of visualization and representation, literacy, and fallacies of data. The third chapter is concerned with the component of interactivity and usability conferred by new media. As a final point, the fourth chapter proposes to explore a case study, which focuses on 16 brands producing news content.

Felipe Lima (NOVA FCSH - Faculty of Social Sciences and Humanities, Nova University of Lisbon).

Reflections on Brazilian Artivism: Intersubjective Resistances in the Face of Conservative, Reactionary, and Far-Right Movements.

Abstract. In contemporary social mobilizations, crowds are formed through connections on the streets and networks. The Arab Spring, sparked by Mohamed Bouazizi's gesture in Tunisia, led to uprisings in Europe, North America, and Latin America through occupations of networks, squares, parks, streets, and institutions — as in the prominent cases of Geração à Rasca (Portugal), 15-M (Spain), Ocuppy Wall Street (USA). In Brazil, the Jornadas de Junho movement marked the beginning of new collectivities and forms of action that would displace the institutional politics, leading to the impeachment of Dilma Rousseff and the election of Jair Bolsonaro.

This communication examines the processes that triggered this wave of uprisings and follows the paths that linked global mobilizations, the rise of conservative, reactionary, and far-right

political power and the formation of a heterogeneous body of resistance in Brazil.

Focusing on the artivism of three social mobilizations that established resistance in the Brazilian spheres of action: Acts for Marielle, #EleNão movement, and Movement 15M, the communication draws on the works of Claire Bishop, Peter Weibel, Nicholas Mirzoeff, Grant H. Kester, and Gregory Sholette to highlight the emergence of new forms of collectivism and community art production that aim to engage with networks and social life as a form of production and means of expression.
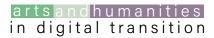
Ultimately, through a critical analysis of power relations, aesthetics, and politics, the communication examines the sign "Rua-Marielle-Franco" as an artivism-device-of-resistance whose manipulation strategically confronts constituted power relations. It is argued that its operation promotes dissent in different territories around the globe through the intersubjective processes that it triggers on the streets and networks.

By examining the processes that led to the wave of uprisings and the artivism of recent social mobilizations in Brazil, this communication seeks to offer insights into the potential of art and networks in shaping social change.

Carolina Fernández-Castrillo (Universidad Carlos III de Madrid (TE- CMERIN) & Università Ca' Foscari Venezia (VeDPH).

Media Artivism against Climate Disinformation. Online.

Abstract. In the Post-digital Age, the new dynamics of collective knowledge and co-creation grow to give visibility to unknown realities, never covered by mass media. From Info Arts to Investigatory Art, along the second half of the twentieth century there has been a long number of artistic proposals aimed to expand Investigative Journalism to create public awareness and instigate action against unfair realities. In the third decade of the twenty first century, we introduce the term Media Artivism to centralize all media artistic practices with an activist scope. Together with a contribution of theoretical innovation, from the field of Media Archaeology, we explore a selection of case studies based on the use of new media and the Internet as instruments of social consciousness and protest. There will be paid special attention to the role of data visualization, AI, immersive installations and interactive projects focused on Eco-literacy purposes to fight against obstructionist practices and disinformation dynamics related to Climate Change.

7th of July, 2023

CULTURAL AND CREATIVE PRACTICES IN THE DIGITAL ECONOMY

Moderation: Dora Santos Silva

Caterina Foa (ISCTE-University Institute of Lisbon; OPAC-CIES-University Institute of Lisbon).
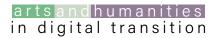
Platformization of cultural production and crowdfunding. Co-creation dynamics and the multiple roles of digital platforms shaping the Portuguese cultural crowdfunding ecosystem.

Abstract. The dynamics of platformisation of society and cultural production (Van Dijck, 2020; Nieborg et al., 2019; Serazio et al., 2019) cross the disruption of creative value chains, the growing contingency of cultural products and the emergence of new professionals and roles.

The reformulation of cultural products' meaning, and its disappearance (Bilton, 2017) relate to agents' structure and power negotiation forces, and their options for building collaborative, competitive or coopetitive relations (Gandini e Graham, 2017), to create, produce, fund, and disseminate works of art.

GAFAM and global production and promotional industries lay on for profit data-driven processes, distribution operation and interactions "algorithmically turned" (Nieborg e Poell, 2018; Napoli, 2014), influencing digital marketing strategies of smaller agents.

The study characterizes the Portuguese cultural crowdfunding ecosystem, composed by agents featured by roles, strategies, and experiences (Lehner e Harrer, 2019; Quero and Ventura, 2019), discussing the influence of platformization and social media dominance on collaborative processes.

The qualitative-quantitative analysis model illustrates the variety of agents and online practices of collaboration and intermediation, accompanying the entire process of campaigning.

Creators are primary drivers of value creation and platform's partners, having different degrees of organizational independence, types of collaborative support and creative behaviors.

Data about assiduity platform's usage reveals improvement on campaigns' performance indicators and interviewed artists illustrate the strategies' implementation and value creation dynamics.

The triangulation of results supports the construction of a framework centered on five dynamics of co-creation of value in cultural crowdfunding.

Digital communication is the transversal pillar that allows:

1) the aggregation of economic capital for artists and platform;

2) the dynamization of platform community and the mechanisms of reciprocity among its members (creators, backers and potential cultural audiences);

3) the interaction and dissemination online flows, supporting the data-driven infrastructure and human creative, social and financial exchanges;

4) the reformulation of the meaning of the cultural product.

Conclusions shows how platform plays an unprecedented multiplicity of roles along the intermediation cycle, directly influencing the campaigns' launches and funding, the value creation dynamics, product relevance and the ecosystem composition.

Erik Bordeleau (Nova University of Lisbon).

Derivative art worlding: HitoSteyerl and Web3 technologies.

Abstract. Some observers of the Web3 world, including Hito Steyerl in a prescient article published in the early days of the crypto craze entitled "If You Don't Have Bread, Eat Art!" (E-Flux, 2016), have suggested that the art world could be conceived of as a prototype for cosmo-financial renewal, foregrounding the role of art as a (living) currency. The art world is indeed a place where a plurality of partly incommensurable creative practices following different rules and protocols engage in complex and mostly opaque processes of qualitative evaluations and mutual recognition, overshadowed by the unfathomable "art market." What types of plural futures can be called into being through a reprogramming of our social and financial protocols for interaction? Could the emerging field of web3-based cryptoeconomics facilitate the emergence of new worlding and leveraging practices, that is, cooperative and implicated ways of world-making by which different species, technologies and forms of knowledge generate their own loci of intensive commingling?

In this presentation, I would like to revisit how Hito Steyerl herself offers different (and at times satirical) answers to these questions, both through direct artisitic experimentations and on a more discursive level. Her most significant engagement with blockchain technology arguably consists of an experiment with NFT ownership that led to a digital occupation of Bonn's Bundeskunsthalle. But it also includes a film installation entitled Animal Spirits (2022) which playfully intertwines a John Maynard Keynes digitally possessed by some animal spirits, an anti-civ shepherd from the Pyrenees struggling with real wolves, and Cheesecoin, a mysterious (and ironic) blockchain project leveraging cheese's powerful "Internet of stink." And finally, on a more discursive level, and perhaps coming full circle with her initial speculative characterization of the art world as an alternative set of (crypto)currencies, Steyerl published, in the collective volume Radical Friends: Decentralized Autonomous Organizations and the Arts (2022), a severe critique of what she calls Blockchain orientalism, that is, an antisocial and somehow exoticizing emphasis on smaller network communities of co-owners and their preferred local filter bubbles, coming at the expense of the very idea of public space.
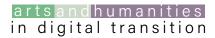
Luis Moreno (Nova University of Lisbon).

New media art on the financialized machine. On AI, generative art and the automation of creative work on Web3.

Abstract. The impact of new technologies has fed the debate around the possibilities of machines as creative automatized workers. The use of the computers and software since the 60s and 70s finally bloomed in the democratization of the access to digital technologies in the mid 90s of the XXth century and the beginning of the millennium. These discussions have been revitalized in the last years due to the exponential development of AI and generative art. Cultural production is now, more than ever, controlled by the algorithms that, on one hand, allows the visibility (or the hiding) of the artworks; and, on the other, are now able of producing new creative forms without the intervention of human hands.

Artists are nowadays, not only suffering the precariousness of surviving the hard competition environment of the creative industries field. They are currently facing the growing pressure of being replaced by machines in a new and largely automatized art ecosystem.

This proposal tries to tackle the situation of new media artists in the new Web3 context. The NFTs and blockchain technologies allow to close the loop of producing, distributing, selling and validating artworks in a completely digital context. Web3 is not improving the working and preservation conditions of artists and artworks. They are being used as gasoline for a machine that doesn't seem to care about sustainability beyond its own motion.

Are we crossing the boundary in a transition to a new way of judgement and evaluation of the digital artworks and the work of digital artists just as ephemeral, temporary useful and profitable? Are we finally entering a new art ecosystem where

artists are as replaceable as images? Are we getting in a new accelerated, automatized and financialized art system where artworks can be rapidly produced, consumed and wasted?

ART, MACHINE AND CO-CREATION

Moderation: Aida Estela Castro

Marina Hassapopoulou (New York University).

Artist as Machine/ Machine as Artist: Co-creation as intervention.

Abstract. While there is much focus on AI from a Science and Technology perspective, the contributions of AI to the Arts and Humanities have not yet been fully explored. The AI artists included in my presentation (Toni Dove, Paul Vanouse, Lynn Hershman Leeson, and others) provide a strong historical context for embodied, gendered, economic, racial, and socially-engaged AI practice, as a counterpoint to the often problematically disembodied, post-racialised and universalised notions of AI. The interactive, performative, and ephemeral aspects of creative AI media practices –along with the fact that they are often difficult to access, archive, emulate and/or remediate– have resulted in a significant deficit in historical and critical attention. Although these works can be considered relatively recent, most of the technology they use (including hardware, software, and prosthetics) has already been eclipsed by newer technologies. Thus, these works not only run the risk of becoming technologically obsolete, but also becoming historically forgotten due to their general inaccessibility. For this reason, my presentation includes an analytical overview of the preservation and access resources I have created (including ExpressiveAI.net) alongside my research, to more widely disseminate these pioneering expressive AI experiments that make important contributions (and complications) to the study and pre-history of AI. Artistic interventions to polarized debates on "real vs. fake" in the context of machine learning and generative AI pave the way out of extreme binaries of good/evil, and function as more productive ethical templates and forms of civic engagement. I would like to critically revisit some pioneering experiments in interactive art, and discuss their contributions to overall discussions of AI and posthumanism. Lastly, I would like to focus on some cultural projects that provide templates for productively co-creating with machines on both an institutional and creative basis, such as the EYE Filmmuseum's AI JanBot.

Alice Sanches (Faculty of Social Sciences and Humanities, Nova University of Lisbon) and José Candeias (Faculty of Social Sciences and Humanities, Nova University of Lisbon).

Notes on distributed creation.

Abstract. A brief overview of the current state of the process of creating digital objects reveals that Lev Manovich's diagnosis from 20 years ago – that "new media objects [..] are assembled from ready-made parts" – appears to still be accurate. Illustration, photograph and texture libraries proliferate, often standardized, uniform, "pleasant"; design systems, templates and reusable blocks are ubiquitous; industry-standard software dictates expected features and habitual operations, and thus influences outcomes. And yet another agent, artificial intelligence, has come into the scene with new strength through uncanny quality image generation from text prompts.

Katherine Hayles proposed the concept of distributed cognition which has amongst its fundamental tenets the idea that the way humans exist in the world is a technical way. Human activity is technical, and technical objects "say" something about the context of culture, activity and ways of making which they take part in. It seems necessary, then, to consider creation in its distributed form.

The complicated relationship between art and technics paved the ground for a conception of the artist as a genius, a singular human with the gift of a particular sensibility that allows them to create, whose process of art-making approaches the spiritual more than the technical. Marcel Duchamp, with the striking dada gesture of proposing an industrial object as an object of creation – an artwork -, presented the creative act as a collaborative endeavour that involves the artist, a process of transubstantiation that originates the work, and the spectator. The act of creation is taken away from the sole work of the genius and released into the world as a co-creation.

It is with these notions of distribution and creation in mind that we propose the concept of distributed creation as a resource to analyse current practices of digital production, from image libraries and open-source software, to objects that make use of the operations of popular software as their main building blocks, to AI-generated videogame assets, in which automation, modularity, contribution, composition, configuration, repurposing and recombination are fundamental activities.

Michele Varini (Università Cattolica del Sacro Cuore di Milano).

The king is naked. New paradigms of co-production and co-consumption within the digital fashion.

Abstract. New paradigms of consumption and production made possible by digital technologies have been affecting the fashion industry for years, accelerating further as a result of, and in response to, the pandemic situation. Within this complex current, one phenomenon has recently begun to manifest itself and grow: various fashion brands have experimented with forays into the world of gaming, a subculture peculiar for its imagery, rules, languages. An interesting phenomenon of several platforms, given the possibility of personalizing avatars, is the production, by users, of personalized "outfits". There are profiles where these digital "dresses" are re-shared, re-mediated, especially on Instagram.

Another signal of this "cross-fertilization" can be found in the fashion shows hosted in digital enviroments: various maisons have created digital garments, usable and purchasable directly on the platform.

Both users and brands develop skills and practices by reworking the tools of the game platform, but even more, brands themselves remediate their own productions, in a circle of imagery creation that becomes a coproduction. The paradigms of consumption, production and the creativity itself behind fashion objects seem to be moving out of the traditionally followed trajectories. One of the objectives of the present study is to explore this new reality: how is this new phenomenon shaping imaginaries and stereotypes in the fashion field, breaking traditional top-down dynamics? What role do skills and creativity play in the reproduction/creation of fashion objects with these digital tools?

To address a field such as this, which moves between on and offline making even these distinctions obsolete and hermeneutically insignificant, a mexed methods approach was methodologically opted for, combining a netnographic investigation with a visual ethnography. The present work aims to reconstruct a visual imaginary of this co-production and consumption of fashion in a media context, a hypothetical "metaverse," laying the groundwork for new methodological ideas.
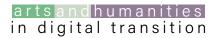
DIGITAL HUMANITIES: VALUES AND BIASES

Moderation: Isabel Lousada

Selenia Anastasi (Università degli Studi di Genova; Language Technology Group, Hamburg University).

Feminist digital humanities and the semantic web. towards an integrated research agenda.

Abstract. This contribution is dedicated to the theoretical and methodological reflection on the knowledge modeling practices that underlie the broader Semantic Web project (Tim Berners-Lee 2001). The aim is twofold: on the one hand, to frame crucial issues in the epistemological debate around classification practices and data collection criteria (Forsythe 1993; Bath 2011). On the other hand, to propose a definition for new research directions that are a direct consequence of these considerations: the raising of Feminist Digital Humanities (Losh and Wernimont 2019; D'Ignazio and Klein 2020). Starting from this definition, this contribution seeks to propose a coherent research agenda for the future development of projects related to the construction of structured and open semantic archives (LOD) and digital tools for memory preservation and museum storytelling (Giannini and Bower 2019; Marini and D'Agostino 2022).

The first part of the intervention focuses on a thematic survey across the most recent literature on feminist approaches to Digital Humanities, framing their growth

path and rapid diffusion from the early 90s to the present day. Emphasis is given to some exemplary study cases and ongoing projects of relevance to the discipline.

The second part is dedicated to addressing some open methodological questions behind the feminist approach to Digital Humanities, and limitations due to its fragmented nature, which can represent the first obstacle to overcome in the establishment of a situated approach to the Semantic Web. Finally, it seeks to understand how such obstacles can be an effective tool for rethinking the archive and its objects when they become part of a digital ecosystem. Through this embryonic contribution, my aim is to stimulate a rich debate on the limits and potentialities of the use of gender as a category of knowledge and its role in the development of so-called political technologies.

Oleski Miranda Navarro (Emory & Henry College) and Sabrina Durling-Jones (Emory & Henry College).

Visualizing gender: AI interpretations of latin american literary tropes.

Abstract. Machine learning models for text-to-image generation are increasingly being used across disciplines to help visualize data and datasets in impactful and novel ways. Approaching human-computer creative collaboration from the perspective of an advanced Latin American literature course exploring perceptions of gender, this article describes how visual sequences derived from text-to-image processes using the Stable Diffusion model can be utilized to understand how AI perceives literary expressions. This case study examines how literary expressions chosen by students are interpreted by a machine learning model and analyzes how the AI visualizations compare with the students' own visual interpretations of the same texts.

This article proposes using human computer creative collaboration as a tool in the learning process to understand the different ways language is subject to interpretation. Following a standardized approach to generating images and animations using text-to-image visualization, this article also discusses the intricacies and challenges of using human language to generate AI imagery. Issues of bias are also discussed regarding the tendency of AI to reproduce rather than eliminate bias due to data scraping processes. The importance of experimentation with machine learning models to identify how they can be utilized to counter the oppressive nature of AI bias is stressed and examples are given.

Luciano Moreira (CETAPS, Faculdade de Letras da Universidade do Porto), Liam Benison (University of Verona), Jaqueline Pierazzo (CETAPS, Faculdade de Letras da Universidade do Porto), Tânia Cerqueira (Faculdade de Letras da Universidade do Porto), Alice Gonçalves (Faculdade de Letras da Universidade do Porto), Joana Caetano (Faculdade de Letras da Universidade do Porto) and Isabel Relvas (Investigadora independente).

The making of a sustainable digital humanities lab: A values-oriented approach.

Abstract. Spiro's insightful 2012 reflection on the values for the digital humanities remains critical nowadays to understand the field and its communities. Not meant to be static, the values proposed ten years ago ask for continuous, critical, and contextualized reflection. When creating a digital humanities lab, one cannot duplicate Spiro's values. They refer to the field as a whole whereas each lab needs to find its specific identity. In this communication, we reflect on the participatory process of defining common values for a recent digital laboratory. We aim to deepen the discussion around the identity of the workgroup and how values can help guide strategic and practical decisions about everyday functioning. We determined the values in two roundtable discussions that ranked individual choices and addressed ethical dilemmas, moving to collective problematization. We defined five main categories: Openness, Diversity, Collaboration, Experimentation, and Sustainability, and used them to state our mission. We will share examples of how these values guide the group's strategic and everyday decisions. This grassroots process allowed us to identify values closely related to those of Spiro, with the exception of collegiality and connectedness. Our key finding is that the group identified with sustainability, behind which we emphasize the importance of digital preservation, minimal computing, and resources. Sustainability does not refer exclusively to ecology but also to culture. A digital humanities approach to sustainability will be sensitive to dilemmas about what should be preserved and how. Significantly, this experience shows the richness of critically reviewing Spiro's proposal from each group's circumstances and challenges. We believe this approach will enable us to build an experiential cognitive ecology to fulfill our scholarly and civic missions in a culturally sustainable manner. Consistent with a values-oriented approach, a group's foundational values should be periodically reviewed and their contribution to decision-making assessed.
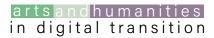
VISUALIZATIONS, INTERFACES
AND EMBODIMENTS OF COGNITION

Moderation: Alexander Gerner

Philipp Teuchmann (ICNOVA - Instituto de Comunicação, NOVA FCSH).

Is it possible to talk about an ontology of the image? Some notes on operativity and infrastructures.

Abstract. Newfound attention is being paid to the notion of the image in the context of media theory, semiotics, and visual culture. The issue at hand is the crisis of the image caused by contemporary technology. The main symptom of this crisis is the growing inadequacy of the category of representation – which for centuries has served as the

concept that governed images – to characterise the cyberneticisation, computerisation and algorithmisation of the image. As a result, various authors have proposed new designations – e.g., «image-instruments» (Manovich, 2001a), «poor images» (Steyerl, 2009), «neuro-image» (Pisters, 2012), «softimage» (Hoelzl & Marie, 2015), «discorrelated images» (Denson, 2020).
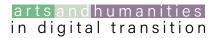
Our focus will be on the concept of operativity. Understood as a «technological imperative» (Mersh, 2016:31), the aforementioned concept will primarily serve as a springboard to question the ontology of the image in times of its digital transition. It will be advocated that just as it is increasingly difficult to speak of an ontology of media (Kittler, 2009) – since the digital entails a post-medium condition (e.g., Manovich, 2001b) –, the ontology of the image materialises itself on infrastructures – it is therefore more appropriate to speak about ontic operations, operative ontologies (e.g., Engell & Siegert, 2017).

We will dwell on three examples: 1) the concept of operativity in the sense of Harun Farocki, i.e., his archaeology and cinematography of operative Bilder; 2) issues of visibility and invisibility in data visualisation practices; 3) the nomos of computer vision. Through these examples, we aim to address the fragmentation of what previously could be perceived as a unified ontology of the image. In its place, we see the emergence of a multiplicity and plurality of operations.

Dennis Del Favero (iCinema Research Centre @ The University of New South Wales), Susanne Thurow (iCinema Research Centre @ The University of New South Wales), Alethea Blackler (Design Lab @ Queensland University of Technology) and Ali Asadipour (Computer Science Research Centre @ Royal College of Art (London)).

Terrestrial Aesthetics. Transforming the understanding of and engagement with extreme events. Online.

Abstract. The climate emergency presents a deep ecological, anthropological and cosmological crisis, demanding an urgent re-conceptualisation of the frameworks in which we conceive the world and our place in it. Bruno Latour's concept of the 'terrestrial' (2018) invites us to decentre the human toward an ecological mode of thinking that recognises the agency of earth systems and their dynamic interaction with human life worlds. Around the globe, extreme weather events are increasingly demonstrating this agency into a palpable devastating force in response to human-driven global warming. Advances in technology have greatly supported the scientific exploration of occurrences such as wildfires and flash floods (e.g. via sensors, mathematical and graphical modelling). However, current state-of-the-art technological systems as yet fail to support the transformation of such data into embodied understanding. Yet, the latter is required to enable effective preparedness by researchers, frontline personnel and communities – in technical as well as cultural terms. We argue that this is due to an aesthetics that prevents conceiving the human, terrestrial and technological as co-constituents of an integrated sphere, in which each determines and transforms the other through dynamic and open-ended transaction. The creative arts and humanities hold the key to reformu-

lating the aesthetic relationships that underpin current scientific practice.

An interdisciplinary team comprised of researchers from The University of New South Wales' iCinema Centre (Sydney), Queensland University of Technology's Design Lab (Brisbane) and Royal College of Arts' Computer Science Research Centre (London) will discuss how innovations in full-body immersive creative visualisation, intuitive interface design and intelligent human-machine interaction may be leveraged to transform the aesthetics underpinning extreme event exploration, understanding and preparation. We do so by investigating how creative digital systems may be deployed as a 'remediating pharmakon' (Stiegler 2011) that deliver visceral experiences that can prime users to a deeper recognition and capability to engage the symbiotic processes that bind and determine our planetary life.

Andrés Pachón (University of Coimbra).

Epistemic Interfaces of Visualization and Interpretation. Knowledge co-composition with Artificial Vision. Online.

Abstract. This communication departs from an experimental and interdisciplinary project marked by the interaction between Anthropology, Artificial Intelligence (AI) and Contemporary Art. It is intended to deepen the intersection between artistic strategies and ethnographic fieldwork in the realization of an AI anthropology, marked by theories about the human-machine interaction (Suchman) and the agency co-composition (Gell; Latour; Sanchez-Criado) in our digital cognitive ecology. Will be presented the possibilities that these hybrid methods can offer in the production of epistemic artefacts of visualization and interpretation —as it is the case of the interfaces developed in this investigation, not only by informing the anthropological study, but by incorporating in its design the ethnographic and anthropological knowledge produced during collaborative fieldwork, and thus speculate with possible alternative futures for responsible AI.

Through a collaboration developed with an engineer specialized in deep learning —one of the most investigated, developed and implemented AI techniques today, two experimental interfaces were created, allowing us to 'see through the eyes' of an AI. Instead of visualizing pre-existing and immutable information, created by dataset categorization and AI algorithmic processes, these interfaces allow visualizing and interacting with the 'learning processes' of an AI, namely with the relationships established by an 'artificial vision' —AI for recognition, classification and generation of images, during the process of 'learning to see', and thus creating new articulations beyond the imaginaries propagated by 'pre-designed' files and image datasets.

Catarina Braga (i2ADS / FBAUP) e Aida Estela Castro (ICNOVA / NOVA FCSH and i2ADS / FBAUP):

"Post-Post-Nature: the Green Screen as the Sixth Biome".

Abstract. Post-post-nature is a new term proposed in the master's thesis "Post-Post-Nature — The Technological Mediation between Humans, Plants, and Plant Images" (2022, FBAUP) so as to characterize a new kind of nature: the digital nature of plant images. In a double sense of the word "-post" — the first coming from post-naturalism, a scientific theory that explains how plants and other organisms have changed to a post-natural state through their cultivation, and the second from the post-photographic condition of digital and online photographs proposed by Joan Fontcuberta — plant images survive in between screens producing their own digital roots in our technological devices.

After the five major biomes of the planet, the green screen is proposed as the new biome for the digital ecosystem of mediated plants and nature. The idea of presenting the green screen as a sixth biome was first introduced in the last chapter of the mentioned thesis (2022), but was not developed in-depth. From a theoretical-practical approach to the research, the artistic practice presented will evidence how these matters are materialised in the artworks, with video and installations.

This digital ecosystem is also understood as a container that stages and performs (Boris Groys) plant images stories, as a place for thinking about the mutability of such plant images as "media-bodies", considering that the bodies that are formed in these crossings "(de)monstrate" and open reflection to the practices of imaginaries. "Media-bodies" show their own specific experiences, politics and languages: they are their own medium appearance.

To close we'll present briefly some articulations with the current research project: "(de) MONSTRAS: imaginaries, corporalities and amphibious materialities (ICNOVA, 2023)".

THE CINEMATIC AND THE DIGITAL

Moderation: Pedro Florêncio

Jennifer O'Meara (Trinity College Dublin).

From Cinematic Realism to Extended Reality: understanding digital hyperreality through the lens of film history.

Abstract. Contemporary societies have reached a technological dependence approaching philosopher Jean Baudrillard's (1981) concept of hyperreality, where versions of reality accessed via simulation and replication become indistinguishable from the reality in which humans exist. Hyperreality relates particularly well to the rapid deployment of extended reality (XR) technologies like virtual reality (VR) and augmented reality (AR), as well as the increased use of machine learning to produce synthetic "deepfake" recordings. This paper will outline how lessons from film history and the discipline of screen studies can guide a more humanistic development of XR and deceptive technologies at this stage in our (post)digital world.

Because, since early cinema, filmmakers and theorists have been preoccupied with conventions of realism and its reliance on both analogue technologies (camera and film strip) and creative choices. These conventions include the "actualités" documentaries associated with the Lumière brothers in the late 19th century and the development of the cinéma verité style of "truthful" documentaries in the mid-20th century. For André Bazin (1960), cinematic realism resulted from a combination of technology – the workings of the camera and film strip – and aesthetics, including formal choices like shot-length and deep-focus cinematography. Bazin and others emphasized the ontology of the photographic image: how the camera's mechanical recording process allows for the reproduction of an antecedent reality. Yet production processes and special effects have rendered filmic realism as something of an impossible or undesirable aim for many creators.

Using a media-archaeological approach, my paper aims to demonstrate the value of screen studies to our understanding of extended and deceptive technologies. In particular, I will compare analogue filtration effects from classical Hollywood (such as the application of Vaseline, nylon stockings and other fabrics to the camera lens to create a "Gaussian Girl" and other effects) to trends for deceptive AR beauty filters.

Eirini Nikopoulou (Royal Holloway University of London).

Developing A critique of a data-intensive canonisation of the cinematic Image and the figuration of The Spectator.

Abstract. The cinematic image emerges on networked screens as a complex aesthetic object, shaped by specific personalisation parameters that form a post-digital "canonisation" process. Curated and exhibited algorithmically, it operates as a digital object (Hui, 2016) which is constantly making associations with various types of data about the spectator, her inferred preferences and context as well as her conceptualisation of the cinematic image itself. The latter's constant state of becoming (Deleuze, 1989/2021; ibid 1985/2020) appears to be intertwined with a data-fied re-materialisation of its immaterial matter, in the context of a continuous feedback loop of engagement for spectators. In this sense, the cinematic image appears as a fluid and marketisable object (Wasson, 2007), which eludes identification, yet its figuration is closely bound to data capitalism (Srnicek, 2017) and dedicated cinema-related affective knowledge bases on which machine learning processes operate. What the cinematic image is and what it ceases to be in the process of becoming, has been conceptualised as the set of aesthetic and meaning-making connections which spectators are encouraged to make between its immaterial matter and the affective potential it represents (Deleuze, 1985/2020; Ranciére, 2006). The conceptualisation and aesthetic effect of the cinematic image appearing on network screens, however, is rather expressed through a pre-defined framework designed by machine learning processes which are drawing on affective knowledge bases about cinema and assumed figurations of the spectator. In other words, the cinematic image becomes within a canonical framework of aesthetics which is established by personalisation parameters and machine learn-

ing operations, and it is influenced by data about the spectator who is also figured through the same framework and in relation to the cinematic image. The image appears as a self-evident assemblage of material relations and sets of dynamics (Braidotti, 2019) which are constantly being shaped or optimised. How these dynamics come to be formed and produce aesthetic effects based on a pre-defined figuration of the cinematic image, the spectator and their potential to be engaging in a constant feedback loop which feeds cognitive capitalism (Boutang, 2011), however, remains largely unknown. In my paper I will draw on film theory and philosophy of film in an attempt to develop a critique of the aforementioned canonisation process, based on my research on the networked screen of ubiquitous platforms such as YouTube and Netflix.

Madalena Miranda (Institute of Communication, Faculty of Social Sciences and Humanities, Nova University of Lisbon).

"Deep Fakes, Deep Faces - notes on AI, documentary, ethics and portrait".

Abstract. David France's "Welcome to Chechnya" (2020) has been considered a game changer in documentary production. Hence it protects his characters not with masks or special effects but instead with volunteer lgbtqa+ activists' faces, who lend their visages to protect the pursued individuals that came out to denounce the repressive state and the torture they suffered. As Giorgio Agamben defines the face "is at once the irreparable being-exposed of humans and the very opening in which they hide and stay hidden". How can documentary films reflect on ethics and methodologies after the synthetic reconfiguration of faces singularity? This presentation works upon the process of deep fake uses in this documentary, along with a reading and some questions from Agamben's text "The Face" (Means without Ends, 2000) and the face as a humanist value.

DIGITAL HUMANITIES IN HISTORICAL SCIENCES
Moderation: Joana Paulino

Teresa Kamencek (University of Vienna, Department of Art History), Velitchko Filipov (TU Wien), Victor Schetinger (TU Wien), Silvia Mi- ksch (TU Wien) and Raphael Rosenberg (University of Vienna, Department of Art History).

Visual Analytics of Network Centrality: A new paradigm for Art History.

Abstract. The enhancement of research in Digital Art History (DAH) through methods of Visual Analytics (VA) has been proceeding for about a decade. In this paper, we present the translation of the Database of Modern Exhibitions (DoME) into a graph database to enable innovative possibilities. DoME covers as comprehensively as possible exhibitions of Modern Art in Europe with printed catalogues for

the years between 1905 and 1915. Unique in its size and precision, DoME is ideally suited for network analysis, aiming to contribute functional facilitation for visualizing the relational thinking fundamental to art history. These new computational technologies offer novel opportunities for analyzing such data, most importantly through network metrics (i.e., centralities) that describe the influence and importance of entities such as artists, exhibitions, and organizing bodies. Calculations and implementation of network centralities have never been used in art historical research until now. Based on much larger and more systematic data pools and by using such methods, we can challenge the traditional canon of avant-garde art, its actors, places, and movements. Our results shed new light on lesser-known characters and may reveal new narratives about the development of the modernist movement that were not visible with former methods. This approach enables art historians to perform exploratory and quantitative analysis contributing to their domain in a novel way, showing how innovative interdisciplinary collaboration between VA and DAH could generate new paradigms for art historical research.

Andrea Kocsis (Assistant Professor in History and Data Science at Northeastern University London).
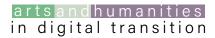
Uncertainty in digital history.

Abstract. This paper introduces a model to understand uncertainty in digital history. The model seeks to reduce the noise without losing multivocality in historical data. Digital humanities tend to lean towards a neo-positivist direction approaching research problems from their quantifiable side. However, even if digital, history is unpredictable, and dealing with it is embedded in the historian's practice.

History also acknowledges its limits in interpreting sources. The discipline has reflected its interpretative approach several times in its course, starting from the question of narration (Hyden White 1980 or Natalie Zeamon Davis 1990) to multivocal interpretation of the sources (Jean-Claude Schmitt 2010). These approaches tend to agree that the interpretation provided by historians - despite making the most effort to stay true to the sources and their context - is a chosen narrative from the many.

When digital methods come into the picture, the researcher has the urge to leave the inherent uncertainty of the discipline behind, which can lead to finishing on less probable results which are further from being true to the source. The aim is to find a balance between what MacEachren called precision and accuracy (1992) or what Earl Babbie named reliability and validity (1975). Both taxonomies differentiate between those two qualities of research, which decide if the study runs methodologically correctly and/or reflects reality. Digital methods and automation tend to create an imbalance between precision (reliability) and accuracy (validity) at the latter's expense.

I propose to discover this critical equilibrium of working with historical data with the help of the case study of the Operation War Diary project.

Nicola Baird. (London South Bank University).

The university and the digital: a digital image and object-oriented experiment - the case of The Sarah Rose Collection at London South Bank University.

Abstract. This paper addresses the aims, method, description, and analysis of a digital image and object-oriented experiment carried out virtually as well as within the Sarah Rose Collection storeroom at London South Bank University, London. Designed as a way to be able to address the problem of how to discuss and to demonstrate the agency of the objects made by David Bomberg (1890-1957), the experiment examined the nature of the interactions between people and paintings and their digital others, or rather, the relationships between selected humans and non-humans, analysing each person's responses in order to assess the individual nature of the aesthetic experience, the works' and their digital counterparts' affective capabilities and the difference within and without the objects, enabling a greater appreciation of the different dimensions of the lives of such works, and thus the redefinition of the object for art history as a non-human with agency visible only within a network of relations.

In setting up a dichotomy between image (specifically digital image files distributed via email) and object, the experiment assesses the work of representation in relation to the realm of the post-digital and the circulation of the networked image, providing the opportunity to consider how the digital is penetrating aesthetic, affective and political experience. Essentially performative, the experiment allowed the three selected objects and their digital counterparts to speak through the chosen (six) participants. In so doing the experiment explored how knowledge is made, exposing day to day research, i.e. art history in the making, to be a careful, tentative, orderly mass of matter of fact, material, emotional and affective observations and fledgling intertextual, subjective, imaginative and transmedial explanations inextricably linked to the process and practice of looking, meaning that 'realities...are enacted', or rather, performed into being (Law and Singleton, 2005, p. 334). In making visible art objects' inherent multiplicity, the experiment performed and provided evidence for the need to de-centre the art object, as a result of which its fundamental unknowability is realised and its cryptic potential unlocked.

DIGITAL CURATING: MUSEOLOGY AND CULTURAL HERITAGE

Moderation: Helena Barranha

Felix Koberstein (ZKM | Center for Art and Media Karlsruhe) and Lívia Nolasco-Rózsás (ZKM | Center for Art and Media Karlsruhe).

Beyond Matter – Curating, presenting and mediating art within the virtual condition. Online.

Abstract. Following the paradigm shift in curatorial and museological discourses enhanced by the material turn, especially in connection with the digitalization of curatorial and artistic fields of action, the presentation introduces a current line of research at the ZKM | Center for Art and Media Karlsruhe, which is carried out within the framework of the practice-based research project Beyond Matter. The project examines the role of information technology and experiments with its museum applications, specifically extended reality and artificial intelligence applications in order to investigate the relationship between digital and physical exhibition spaces. This relation defines the virtual condition - a term, coined by Lívia Nolasco-Rózsás, that also relates to the definition of approaches to materiality in the visual arts, based on new materialist concepts of matter, such as Hypermateriality (Bernard Stiegler), Neomateriality (Christiane Paul), or Transmatter (Karen Barad).

In order to elaborate on the virtual condition the project probes the ways in which physical and digital spaces are interdependent and seeks to inhabit computer-generated space as an assembly, a platform for exchange and for the contemplation and mediation of art. Beyond Matter, among other ventures, examines the possibility of exhibition revival through experiential methods of digital modelling based on the case study of Iconoclash (2002). The Iconoclash model represents a novel approach to the exploration of exhibition histories. It doesn't aim at creating a digital twin of the past landmark exhibition, but elaborates on a malleable algorithmic space, constantly reshuffled by an artificial intelligence algorithm that reacts to the visitor's movement. This online exhibition is a model not a copy of the past physical show: its computer-generated relational space and the way it incorporates proxies of physical artworks projects possible algorithmic ways of curation, and mediation of art.

Ana David Mendes (CICANT - Centre for Research in Applied Communication, Culture, and New Technologies, Universidade Lusófona, PT) and Susana S. Martins (Art History Department and Art History Institute / IN2PAST, Faculty of Social Sciences and Humanities, Nova University of Lisbon).

Historically lost, digitally found? Cosmorama's fragmented histories as virtual heritage.

Abstract. If the notion of loss is almost inseparable from the practice of history, the question of loss becomes even more pressing when we think about art and cultural heritage. While material objects are essential to museums and memory institutions, how can we study and understand past visual practices when physical images, presentation forms, and material traces no longer exist? This paper examines an extinct and forgotten media art form — the 19th-century Cosmorama exhibitions— to question how digital curation and digital humanities tools may or may not contribute to revitalising such history.

Cosmorama shows emerged in Europe in the 1820s and 1830s as attractive venues for experiencing modern pictures. Partly educational, partly recreational, Cos-

moramas were installed in trendy exhibition rooms in city centres, displaying well-lit paintings of different parts of the world to be admired through optical lenses set into a wall. Despite their success, little material evidence exists to reconstruct today the history of this early visual medium: we have lost track of most paintings and the immersive perception mode this lens-based picture observation activated.

Resorting to historical documentation, media archaeology and experimental research, this work examines how digital re-enactments of cosmoramas can reconfigure our knowledge of them. More concretely, it explores the way visualization and virtual reality simulations (informed by analogue prototypes) can help recreate the sensory experience of cosmoramas and preserve a collective perceptual heritage — not just intangible, but naturally born virtual.
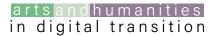
Finally, is the digital re-enactment of cosmoramas sufficient to create meaningful experiences which, according to Vygotsky, are necessary for consolidating future memories? Can this digital retrieval of a forgotten practice be understood as a form of heritage-making, or is it just a way to remember heritage? These are some of the research questions our digital approach to cosmoramas aims to address and discuss.

Thiara Grizilli, Ana Avelar, Ana Roman e Renata Reis.

Artemídiamuseu: Notes about the creation process of the first collection of digital arts in a Brazilian public museum.

Abstract. (Art, media, museum) is a project to create the first collection of digital arts for a Brazilian public museum. Developed by the Academia de Curadoria study group, composed of researchers based in different regions of Brazil and Portugal, linked to the University of Brasília and CNPq and with support from the Research Support Foundation (FAP DF) and in partnership with the National Museum of the Republic - Federal District, Brazil.

Created in 2020, the study group on contemporary curatorial practices directed its research towards the production of art and technology and digital arts and the relationships between this production and the means of curating also in the digital world. After the period of interruption in the operation of exhibition spaces generated by sanitary measures to control the coronavirus pandemic, digital platforms became part of the projects of museums and institutions that had not yet navigated this area, generating countless experiences and denoting the difficulties found in different contexts. For this reason, by proposing a public collection of digital arts in Brazil, we explore the field of curatorship, museology and mediation in the context of the post-digital Global South. The present text presents the first phase of the project, which featured two online exhibitions and six works in different languages donated to the collection, and the perspectives for the continuity of the constitution of the collection in the year 2023.

PLATFORMS, DIGITAL IDENTITIES AND COMMUNITIES

Moderation: Ana Viseu

Yik-Po Lai (The Education University of Hong Kong) and Hin Tat Cheung (Asia University).

Digital Platform for Collecting Online Language Data (DOLD): Conducting language experiments and surveys online.

Abstract. This paper will introduce a web-based application for conducting language experiments and surveys online – DOLD, which was newly developed by the Centre for Research on Linguistics and Language Studies, The Education University of Hong Kong, with the help of the JavaScript framework jsPsych (de Leeuw 2015). With this tool, researchers can conveniently collect data from speakers of different languages around the world.

Compatible with various types of stimulus materials (text, image, audio, video, and HTML content) and response data (text, audio, screen button, and keyboard, with reaction time), with a simple and flexible structure for researchers to design their own data-collection task package, DOLD can meet the research needs of different linguistic subfields, especially phonetics, clinical linguistics, language acquisition, psycholinguistics, dialectology, and language documentation.

After a task package is set up in DOLD, no or minimal manual intervention from the researcher is required during the process of data collection. Participants can go through the process by themselves, at any time without making an appointment. Setting up an experiment or survey in DOLD and letting DOLD run it with participants without much manual intervention can be not only a convenient approach, but also a beneficial practice, which helps standardize the experiment or survey process. Sharing an experiment set up in DOLD with other researchers also allows easy and exact replication.

Reaching with ease a large number of speakers of different languages around the world, with standardized experiment or survey processes ensuring comparability between data collected from different places, researchers with DOLD are especially well equipped for large-scale cross-linguistic projects, which usually produce influential output. Before we have DOLD, such research projects were only possible for well-resourced senior researchers.

de Leeuw, J. R. (2015). jsPsych: A JavaScript library for creating behavioral experiments in a web browser. Behavior Research Methods, 47(1), 1-12. doi:10.3758/s13428-014-0458-y.

Afonso Dias Ramos (Art History Institute, Faculty of Social Sciences and Humanities, Nova University of Lisbon (NOVA FCSH / IN2PAST)).

If your fingers know: reframing restitution in a digital age.

Abstract. With the recent upsurge of interest in restitution, reparation and repatriation around the world, there has been a renewed critical engagement with media archaeologies in the digital age, exploring the particular affordances that they bring, and the problems that they pose, to such debates. In the last years, a slew of radical projects devoted to "digital restitution" – a term originally used to describe making historic photographs and audio recordings available to source communities – has made this issue infinitely more complex and nuanced, increasingly involving artists, theorists and activists in the experimental use of mobile scanners, 3D printing, VR, data mining, NFTs and several other automated processes, to challenge ideas of public access to cultural heritage and the epistemological foundations of the arts and humanities, fueling an unprecedented techno-political debate on the digital futures. Thus, this paper considers some of the most radical and contested digital restitution projects over the last few years – from the high-quality scans of the Nefertiti bust and subsequent release of data into the public domain, to the contested ultra-precise robot-made replicas of the Parthenon Marbles, or the non-fungible tokens for looted African artworks as the Benin Bronzes – so as to discuss the constitutive role of digital technology in both culture, society and politics. If contemporary technologies, as Jacques Derrida and Bernard Stiegler have claimed, facilitate "restitution as 'living present' of what is dead", this talk attempts to, on the one hand, contextualize the recent digital restitution projects, and, on the other hand, spotlight and discuss some of the aesthetic and theoretical limitations of such models.

Renée Ridgway (Aarhus University).

Ecological 'matters of care'? Capturing mental therapy chatbot 'intra-actions' through screenshotting.

Abstract. With the transition to the 'conversational web', chatbots employing artificial intelligence (AI) enabled software deliver responses to queries and are integrated into the invisible data infrastructures of IoT (Internet of Things). Antecedents include Weizenbaum's psychotherapy programme ELIZA (1964-66) and these 'artificial companions' (Hepp 2019) are often anthropomorphised and valued as being equal to that of humans (Dillon 2020). However, they are modelled on the figure of a domestic servant (Schiller and McMahon 2019) and reproduce master/slave computer programming vocabularies (Phan 2019). With an uptake of usage during the Covid pandemic, AI chatbots are increasingly providing (mental) health care as therapy, yet how can these 'conversations' be captured and what kinds of media ecologies are taking place?

In order to understand their sociotechnical effects (Latour 1991), an artistic 'critical (auto) ethnography of the self' collects and analyses human inputs and AI outputs

of two therapy chatbots. Wysa is an 'AI coach', also employing Bangalore-based 'mental health professionals trained to listen.' Woebot is 'your mental health ally', combining cognitive behavioural therapy and 'sophisticated AI to help users monitor their mental health.' By documenting dialogical exchanges through screenshots, their conversational 'artificial intimacies' and empathetic limitations (Turkle 2015) are made visible. Screenshotting offers an alternative 'way of (machinic) seeing' (Berger 1972; Cox 2017), whilst exposing not only the 'gaze of the algorithm' (Noble 2018) but some of the chatbots socio-political workings and 'careless' data repercussions. As query/response 'intra-actions' (Barad 2007), these AI bots operate transactionally and are shaped by (and trained on) users' answers. Embodying feminist 'situated knowledge' to enter 'power-sensitive conversations', screenshotting offers a 'partial perspective' (Haraway 1988) on data interactions within posthuman technics of mediation (Hayles 1999, Stiegler 1998). This presentation visually reveals entangled and reconfigured socio‑technical assemblages as distributed agencies––ecological 'matters of care' (Puig de la Bellacasa 2017).

MAPPING LITERARY AND LEARNING HETEROTOPIES IN THE DIGITAL AGE
Moderation: Rute Costa

Maria de Fatima Lambert (INED. School of Education/ Polytechnic University of Porto).

BIO-MAPS: a Literary Cartoteca: Georeferenced writing identities.

Abstract. The Erasmus + Project "BIO-MAPS – Cartoteca Literaria" [Literary Chart] embraces three countries in European geography: Portugal, Spain and Hungary. The project began during the pandemic period, with the main objective of producing contents for a geographic platform, to be used for Spanish language teaching through the presentation of the chosen authors (writers/poets) by researchers from the countries involved. As a researcher in Aesthetics, Art and Literature, the choice included the 20th century Modernism authors: Fernando Pessoa & Heteronymous (Ricardo Reis, Alberto Caeiro, Álvaro de Campos and Bernardo Soares); Almada Negreiros (poet, writer and painter). Other criteria: authors with literary and visual arts creations such José Régio, Salette Tavares and Ana Hatherly. Plurality in poetic and aesthetic achievements nourished each digital BIO-MAP, shaped in identitary author's expression, promoting connections between images and writings. The biggest challenge was the geo-viso-verb digital design to feed a digital platform previously designed/used by geographers. But aesthetically and scientifically qualifying to be accessed by young secondary school students, not excluding access by researchers. This paper presents the guidelines for the bio-story-writing of the authors. Each author played a leading role in Portuguese literary and aesthetic heritage, and also in the international panorama. Aesthetic options were problematize when considering the georeferenced visual planning,

having privileged both the effective biographical maps of each author (displacements, trips) as well as the manifest drifts in their literary and visual production. Namely, the "journeys never made" by Bernardo Soares and Pessoa, Ana Hatherly's "maps of memory and imagination", as for Almada Negreiros or José Régio' recurrent travels. Each BIO-MAP is a bio-georeferenced author' story, in sociocultural and chronological context. It turns digitally visible the privileged heritage coordinates to be used by the partner secondary institutions of the three research units of the three universities - UNED-Madrid/Spain; Polytechnic University of Porto/Portugal and University d'Elte-Budapest/Hungary.
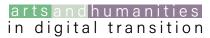
Aditi Kuila (The English and Foreign Languages University, Regional Campus, Shillong) and Mousumi Guha Banerjee (The English and Foreign Languages University, Regional Campus, Shillong).

A new condition in writing: 'Alt-Lit Writers' role in the production of 3G E-Lit.

Abstract. Social media platforms provide new possibilities for producing and disseminating innovative, creative works and for dramatically changing ways of engagement with those works that arise at the intersection of the literary field and digital culture. With the emergence of this new media technology, a trailblazing literary movement, termed "Alt Lit" or "Alternative Literature", came into circulation in the US around 2010. It marks the writings of young authors who circulate and publish their writings on the internet and social media. They force us to rethink what we call "literature." The unique qualities that characterize this movement "Alt" are the Alt-Lit writers' embracing of social media platforms for online self-publication and authorial self-promotion, their conscious contempt for grammatical correctness, their challenge to the established idea of "literary" as originality, their deliberate experimentation with literary forms, their attempt to rescue literature from the hierarchical and tightly patrolled world of print, as well as their dismissal of conventional notions of original authorship. Hence, the present study will evaluate the literary and cultural value of Alt-Lit writings as 3G Electronic Literature since these literary artifacts have mostly been ignored by the electronic literature community itself, not to speak of conventional practitioners of the field. This work will also explore how Alt-Lit writers respond directly to the changes in the concept of literature and the role of the author that digital technologies have brought about in the modern literary landscape. For this study, a qualitative investigation of the poetics of Third Generation E-Lit and the writings of Alt-Lit writers, with special reference to Steve Roggenbuck and Tao Lin, has been considered and analyzed.

Jennifer Lauren (City of New York University and the Media Discourse Centre (UK).

Emerging digital learning communities: lessons for education and global development.

Abstract. The global development and education sectors are still in conversation with itself on how the 'digital transformation' can be effectively utilized to better reach and serve non-traditional, at-risk and underserved populations. There is growing global acknowledgement that the delivery of education and learning will encompass a digital component. Yet the processes of how to meaningful design, implement and adapt digital learning in complex contexts is cross-sector territory that demands greater collaboration, knowledge exchange and clear guidelines. This presentation will cite localized examples in the digital transformation and global learning nexus, and draw forth steps on generating a robust framework and way of working that better engages at-risk learners and those who work with them in fragile and under-resourced settings.

CRITIQUE OF DIGITAL AESTHETICS

Moderation: José Gomes Pinto

Filomena Serra (Instituto de História Contemporânea, NOVA/FCSH).

O novo "Homo Ludens". As artes contemporâneas na "sociedade da transparência".

Abstract. Time capsules, multimedia video, sound and kinetic installations as well as interactive sculptures were some of the works I had the opportunity to appreciate at the Venice Biennale 2022. Curated by Cecilia Alemani, the biennale was entitled The Milk of Dreams, a name inspired by a book of short stories writen by the surrealist painter and writer Leonora Carrington. The work refers to a magical world where life is reinvented thanks to the imagination.

Simultaneously, in Florence Palazzo Strozzi, the exhibition Let's Get Digital questioned the new frontiers between real and digital, where the public was invited to travel through installations and multimedia experiences, created by artists investigating the world of crypto-art, based on so-called NFT (Non Fungible Token). One of these works was a "video wall" by Turkish artist Refil Anadol, entitled Machine Hallucinations - Renaissance Dreams (2022).

Working a dataset of thousands of Renaissance paintings, the artist displayed a multi-sensory experience created by artificial intelligence algorithms generating visions of reality-defying colours and shapes. The dematerialisation of the work appeared thus at its most radical effect at the junction between art, technology and history. At the same time, it was visible the existence of a new art market where the internationalisation of artists is dependent on large technological companies that bet on the security of investments because in this market circulates a lot of money.

Walter Benjamin, in 1936, drew attention to the cult value of art and wondered about the loss of the aura of the artistic work "in the age of technical reproducibility". Confronted with what is already called the "transparency society" (Han, 2014;

Brin, 1998) - where the world is structured on interactivity and miniaturisation, as well as the expansion of non-things and information - the "display value" replaces the cultual value. Society becomes a realm of information that presents itself as freedom (Han, 2022, 10).

Several questions arise: where is the value of the human being if the electronic means produce an increasing massified human being? Or, again, in a world controlled by algorithms, that becomes increasingly incomprehensible and spectral, where we communicate and interact with infomata exchanging information, what is the place of the body and of memory? How do art and artists position themselves in this society where books and art become "non-things"? As the philosopher Byung-Chul Han asks, will not the artists and the man of the future (the Homo Ludens) be without hands in seeking only experience and pleasure? (Flusser quoted by Han, 2022, 13, 15, 19)

This paper proposes to reflect on the new challenges that artists (curators and even museologists) face with the new directions of digital arts in the contemporary world, in which digitalisation advances inexorably and a new lexicon of themes, still strange, such as blockchain, NFT, cryptocurrencies and metaverse, emerge creating new paradigms.

Keywords: digital arts; contemporary art; transparency society; blockchain; NFT; homo-ludens.

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 https://www.wired.com/1996/12/fftransparent/

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Han, Byung-Chul. 2022. Infocracia. A digitalização e a crise da democracia. Relógio d'Água.

Han, Byung-Chul. 2022. Não-coisas. Transformações no mundo em que vivemos. Relógio d'Água.

João Pedro Amorim (Universidade Católica Portuguesa, Research Center for Science and Technology of the Arts).

Images of art under the digital spell.

Abstract. Our coming into existence is defined by a spiritual territory ("envolvência" [involvement]) that fabricates a physical and mental space. This territory that surrounds our self and that defines our relationship with the world is made of the relations established between the unconscious of our body and the environment. According to José Gil (2018) this involvement, that is fundamental for our encounter with the real, can "open possibilities of life" or it can "imprison us" (p. 320). The

latter case can be caused by a "perversion", a "fold" that leads to the "affirmation of the self" (p. 322).

The digital appears as the epitome of the society of the spectacle (Debord, 1967/2006), a further development of technologies employed to mediate our experience of the real and to introduce us into the libidinal economy (Stiegler, 2018). Like a spell casted onto our involvement, the digital distorts our relation to the real. As larger domains of our intimate life are absorbed by the digital (Crary, 2018), our existence is increasingly integrated into a hegemonic system of images that conditions our thought to fulfil a productive role.

This paper will discuss how the effect of digital spell on our involvement challenges and blocks the aesthetic experience. In that sense it will be discussed how intimacy with oneself has diminished, how the constant state of alert denies the possibility for contemplation (Han, 2014), how our experience of the world becomes increasingly mediated and how such mediation, driven by a set of conditional systems and principles, largely forms a "smog of ignorance" (Sardar, 2020) that imperils knowledge production. The paper concludes that while the aesthetic experience is not impossible, it has become increasingly more difficult to circumvent the numbing character of images in the libidinal economy.
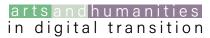
Gyung Jin Shin (Hong Kong Baptist University).

The Paradox of Digital Participation in Postdigital Participatory Art. Online.

Abstract. Over the past three decades in contemporary art, the co-authored and collaborative tendency of post-studio practices has been re-examined as it has diversified under the umbrella concept of participatory art. Artists working in this genre have recently embraced network-based participation through online crowd-sourcing and social networking in a postdigital environment characterized by a blurring of the boundaries between online and offline. The purpose of this study is to analyse such "postdigital participatory art" critically with respect to the role of contemporary technology in conditioning the participatory aspects of art.

Today, the internet's early promise of autonomous and active participation is being forgotten as the logic of cognitive capitalism and consumer culture takes over networks. The architecture of participation, initially designed to encourage constructive action, now serves to maximise the online giants' profits through the conversion of the participants' time, tastes, and consciousness into labour. The increasing reliance on algorithms further limits the space for autonomous engagement such that digital participation is becoming a kind of labour without employment. The focus here, accordingly, is on revealing through examples the paradox of digital participation under such circumstances and using it as a lens through which to evaluate postdigital participatory art.

This discussion includes such pressing issues in postdigital participatory art as the parameters of democracy in network-based collaboration, the distribution of authority power and hierarchies among the participants, and the ownership of

co-authored artwork accessed through online platforms. The multifaceted analysis draws on the philosophy of technology, Critical Theory, contemporary art criticism, digital art, and social science research and extends to digital participation and digital labour in general. This study is intended to lay the groundwork for a broader assessment of experimental forms of digital art by demonstrating the potential of critical discussion of contemporary digitality to diversify or dismantle the concept of participation.

ELECTRONIC LITERATURE:
NEW POETIC CHALLENGES
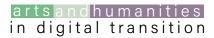
Moderation: Maria Augusta Babo

Diogo Marques (Instituto de Literatura Comparada Margarida Losa + CODA - Centre for Digital Culture and Innovation (FLUP)).

From Biopoetry to Digital Fungi: bio-inspired computing in ecosystemic literature.

Abstract. From Eduardo Kac's first biopoems in the 1980s to nowadays, there is a wide range of practices in which biotechnology intermingles with arts, causing the roles of scientists and artists practically indistinguishable.

Consisting of Cesar Baio and Lucy HG Solomon, Cesar & Lois artist collective merges social, technological, and biological systems, often through microbiological mappings and bio-AI architectures. Taking advantage of bio-inspired computing to explore the hybridism between the logic inherent in microbiological organisms and environments, human knowledge, and AIs, in their installation "The Bhiobrid Logic of Degenerative Cultures" (2019; from the Degenerative Cultures series), the artists placed a plasmodial slime mold, Physarum polycephalum, over a book on the human impulse to control nature, in order to feed an AI. As the acellular slime mold grew over the text, consequently erasing the book's initial layer like a palimpsest, an algorithm was able to read the new text-organism and of tweeting what it read. An important detail in this entire process is what Cesar & Lois called Digital Fungi, since with each new installation, always in different places around the world (including the holding of workshops with local communities), from Belo Horizonte to Porto and Singapore, AI was directed to find online texts relating to human interventions in the field of climate change in the geographic regions where the exhibitions took place, to later compile and consume these same texts.

Drawing from Cesar & Lois's synthesis of nature and culture, this paper makes use of their antidisciplinary work in order to discuss the possibility of a new model of knowledge, namely one that is able to replace traditional centralized conceptions of AI for a bottom-up collective/connective ecosystem. Perhaps one that needs to destroy the nature of a text so that it can give place to a truly ecosystemic language.

Nathalia Silveira Rech (Institute of Communication, Faculty of Social Sciences and Humanities, Nova University of Lisbon).

Biopoetry: thinking about the live writing.

Abstract. This work aims to investigate the biopoetry through the proposals of Vilém Flusser. To do so, this article will present the genetic biopoem "The Xenotext" (Christian Bök, 2015-), which will be analyzed by Flusser's notion of poetry and writing. Bök's work navigates between distinct areas, like language studies, writing, technology, biology, and other fields. For Flusser, the advance of apparatus and new codes should liberate the alphabetic language, embracing other forms of language games, and in this context, the poet "is not the author anymore but an exchanger (Flusser, 2010). In his vision the "poetics forces will be concentrated probably in new non-verbals codes, partially but unimaginable (2010, p. 119). Therefore, this text is constructed from the restlessness, or not, brought by these works that are showing new ways of writing, based on what Flusser declared, with the desire to understand more what biopoetry is.
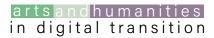
Emanuel Santos (Universidade Federal do Mato Grosso (UFMT) / Universidade de Coimbra (UC)).

The use of Tarot as a combinatorial mechanism: from analog to digital (and back again).

Abstract. Although printed and digital texts are intertwined by code in the present day (Hayles, 2009), literature produced in electronic media employs elements that largely hinder, its transposition to print. However, there are references in its development to preceding analog devices that have been transposed (sometimes transgressed) into electronic media, as well as the use of various electronic devices for literary purposes (Hayles, 2009).

In digital arts and post-media aesthetics, analog elements continue to inspire uses that transcend their original applicability and fields of operation. This work proposes a reflection on the mechanics and ritual associated with the Tarot deck, a game established with 78 individually significant cards that are fully combinable with one another, as a combinatorial tool. This interpretation, based on its materiality – the shuffling and arrangement of the cards as a mechanism for obtaining meaning – can be applied to the electronic scenario, allowing new perspectives on combinatorics.

We will observe, in the course of this work, examples such as Juego de Cartas, by Max Aub (AUB, 2014 [1964]), a work transposed to digital in 2019 (https://culturaunam.mx/catedramaxaub/juegodecartas/).

ARCHAEOLOGIES OF DIGITAL ART

Moderation: Victor Flores

Francesco Gariboldi (IULM University, Milan).

"Technologies of enchantment" at the 2022 Venice Biennale: a critical perspective on post-human and early digital arts.

Abstract. Post-human condition was at the core of the last Venice Biennale. The relationships between bodies and technologies, metamorphoses, and our connection with the Earth were some of the guiding questions for this edition which, also, for the first time in the history of the Biennale, included a majority of women and gender non-conforming artists.

Starting from a brief overview on these general features and related theories (Braidotti, 2019; Federici, 2018; Haraway, 2003), the paper focuses on the "Technologies of Enchantment" capsule, a presentation of 1960s artworks conceived by the curator Cecilia Alemani as a show within the show. This capsule gathers the works of six Italian female artists – Dadamaino, Marina Apollonio, Lucia Di Luciano, Laura Grisi, Grazia Varisco, and Nanda Vigo – whose works aligned with that of the New Tendency Movement. By choosing to revivify these works, Alemani has highlighted their transtemporal aspect and re-enacted their revolutionary potential in our current context rather than in their historical dimension.
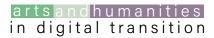
Therefore, the paper aims to thoroughly discuss this re-enactment by proposing a comparison between the New Tendency utopias and our current urgencies in "the hyperindustrial epoch" (Stiegler, 2004). In this comparison, the artworks of these six female artists could be considered as relevant case studies: they are subversive technologies of the body and of consciousness, radically different from the ones which «aim today at the hegemonic control and shaping of individual and collective modes of existence at every stage on life's way» (Ars Industrialis, 2005).

Thus, the paper highlights that the artworks of these female artists – as bizarre combinations of handcrafted products and industrial goods – seem not only to anticipate the utopianism of "craftivism" (Bratich, 2011), but also to re-envision the world through technology in order to achieve a necessary "re-enchantment of the world" (Federici, 2018; Stiegler, 2014).

Bruno Ministro (Institute for Comparative Literature - University of Porto).

Intramedia Transits: Signal Processing, Data Compression, and the noise channels in between.

Abstract. We all know for a fact that different kinds of changes take place when the contents of a given medium are converted into a different medium. However, one could ask, what happens when some of these contents are processed and

translated back into the very same medium? And what if this process is iteratively repeated over and over again? To answer these questions, I am interested in discussing something other than transpositions among different media regimes (Transmedia) or the mix of two or more media systems (Intermedia). Instead, I will focus on what I provocatively call Intramedia, meaning the transit of content from one medium to the same kind of medium again.

In my paper, I will briefly examine procedural media-based art works that expressively rely on this intramedia transit. These works—listed below—come from the new media arts of the 1960s-1970s and contemporary post-digital arts (post-2009, in the works selected). Each work revolves around a procedural concept and practice, allowing for discussing what occurs when the medium is self-reflexively pushed beyond its perceived characteristics and affordances.

With this, I suggest leaving digital media outside the equation and looking at proto-digital and post-digital artistic forms instead. I will briefly describe the transition processes that shape these works so that we can read them against digital theories of signal processing, data compression, and transmission. To this end, I will rely on media theory insights from Claude Shannon, Friedrich Kittler, Vilém Flusser, and Lev Manovich. Thus, these art works will serve as extreme examples to ask what we can learn about digital transition by looking at the media transits that occurred before and after digitality became the groundwork of our society.

WORKS

- Nam June Paik, Zen for Film (1962)

- Timm Ulrichs, Die Photokopie der Photokopie der Photokopie (1967)

- Ian Burn, Xerox Book # 1 (1968)

- Alvin Lucier, I Am Sitting in a Room (1969)

- Christine Kozlov, Information: No Theory (1970)

- Joana Moll, All About Zapping (2009)

- Xavier Antin, Just in Time, or A Short History of Production (2010)

- Patrick Liddell, I Am Sitting in a Video Room (2010)

- Martin Wecke, C.O.P.Y. (2013)

- Morgane Bartoli, DANGER. Digitization Kills the Image - OP003 (2017)

Natasha Chuk (School of Visual Arts).

The new composite, cameraless, statistical, post-photographic, synthetic image.

Abstract. This paper focuses on digital aesthetics and the ontology of AI-generat-

ed images to challenge preconceived notions of photography as a defined entity. Though AI-generated images appear to diverge from having the indexical status of their predecessors, making them unphotographic, this paper shows how they build on and combine already existing photographic sensibilities toward the generation of a new kind of photo image—becoming a new composite, cameraless, statistical, post-photographic, synthetic image—not less but more photographic than analog photography. Using a media studies, digital aesthetics, photography studies, and art history approach, I trace the lineage of AI image synthesis from its photographic roots to examine the evolving ontology of photographs and, invoking the truth claim of photography (Gunning, 2008), demonstrate the conceptual breadth and flexibility of indexicality in a new context. I organize this argument by first offering a description of the innerworkings of AI image generation, then briefly weave through art history to show how AI image synthesis draws on numerous existing technologies, artistic movements, and creative approaches: the influence of early 20th century avant-garde artists, such as Dadaists, Surrealists, Futurists, and Constructivists, and their work employing automatism, poetry, collage, photomontage, readymades, and cameraless photography; the rise of personal computing and the subsequent artistic use of artificially intelligent computer programs, image morphing technology, and the combination of machine learning intelligence and natural language processing; and more recent image synthesis applications, such as the ubiquitous use of computational photography in smartphones. I conclude with a discussion of how indexicality, the physical relationship between a photograph and subject, is a feeble theory from the start, but if we were to apply its loose and flexible parameters, we could show how indexicality is retained in AI-generated photographs, which yield an expanded, circuitous, yet logical trajectory between subject and synthesized image.

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