POR-POL
NET

New forms of networking and the influence of internet phenomena on art in Portugal and Poland

ATW

Edited by:
Magda Górska
Aleksandra Stokowiec

● Patrícia Gouveia ● Martyna Kopeć ● Lorena Ramos ● Rafaela Nunes ● Alina Śmietana ● Ana Matilde Sousa ● Ana Pessoa ● Bruno Ministro ● Carolf/Joel Od/India Sadowska ● Franek Warzywa ● Kamila Walendykiewicz ● Kinga Dobosz ● Laura Peixoto ● Madalena Anjos ● Natalia Dopkoska ● Pedro Ferreira ● Pedro Tinoco ● Piotr Kopik ● Piotr Puldzian Płucienniczak ● Sebol Bejsbol/Julia Tymańska ● TheMontaże ● wr3ad1ng_d1g1t5/Agnieszka Bykowska/Tomasz Dalasiński

ATW

POR-POL NET

New forms of networking and the influence of internet phenomena on art in Portugal and Poland

Edited by:
Magda Górska
Aleksandra Stokowiec

Kraków 2025

Table of contents

01. CRITICAL ESSAYS

02. EXHIBITION CATALOGUE

Art and practice-based research in the post-internet era: the example of POR-POL NET project

Aleksandra Stokowiec

CEComp, University of Lisbon
https://orcid.org/0000-0001-9257-8544
DOI: https://doi.org/10.59862/F7k2B9xQ-01

The following publication results from the POR-POL NET project initiated at the end of 2022 as an attempt to present a critical overview of the most recent phenomena related to net art, software art, and electronic literature. Recognising that many of such works are a product of the intertwined realms of contemporary culture and technology, especially as regards experimentation with communication media used both as tools and objects of creative examination, the initiative intended to put artistic curiosity and academic inquisitiveness in dialogue. Its other objective was to confront the approaches of at least two different generations, along with two conflicting notions of the internet as, on the one hand, a vehicle of subversion while, on the other, an epitome of uniformity and globalisation. This last dichotomy – which essentially boils down to a variation on the theme of the tensions between the periphery and the centre, the grassroots and the formal – resulted in the idea of taking a closer look at the borders, edges and other liminal spaces as these areas where the arrival of major influences often coincides with the emergence of unique variations. Consequently, the project focused on Poland and Portugal as two extremes of the European continent and was developed in cooperation with both well-established institutions and some smaller, independent galleries. Within this setting, the perceived distance between East and West (be it geographical or symbolic) overlapped with the shared experience of marginality, which in turn carried a promise of retracing some original strategies for bridging gaps and making connections, while highlighting the points of convergence and radical difference.

At these crossroads of high and low culture, cutting-edge technologies and amateur inventions, sophisticated creations and improvised solutions, the specialised tools and terminology of either History of Art or Literary Studies soon proved ineffective. The variety of materials, techniques and conventions employed in the works gathered for the exhibition made it apparent that approaching a complex set of questions that they are posing – especially as regards the matter of how they play with and transform communication media, be it old or contemporary ones – required looking at the problem from a broader perspective. A natural direction was to employ the apparatus of Cultural Studies, with special emphasis put on the works dedicated to netnography and digital folklore (Trevor J. Blank, Lori Emerson, Robert Glenn Howard, Gabriele de Seta, Ashleigh Steele), comparative media studies (Johanna Drucker, Alexander R. Galloway, Terry Harpold, N. Katherine Hayles, Jessica Pressman) and computational creativity (Joseph Tabbi, Piotr Marecki, Nick Montfort, Rui M. Tavares).

In this particular context, special focus was placed on how older technologies get reappropriated and reworked in the internet era, and how pioneering solutions in programming and creative experimentation in the artistic fields overlap. This turn seemed all the more appropriate in the post-pandemic reality – a time of recovery after a period of intensified examination of the possible forms of adapting traditional cultural activities to digital means (from virtual tours through galleries to performances staged via video platforms) that coincided with a rediscovery of all kinds of traditional handicrafts (from baking and gardening to sewing, knitting and carpentry). This sudden revival of the do-it-yourself ethos was all the more curious as it relied on the culture of sharing and the establishment of collaborative networks – features characteristic of the early years of the World Wide Web. Although it can be argued that this utopian vision of the open web of contributions had once again proven to be short-lived, to us it became an important source of inspiration that called attention to networks as a locus of competing ideas around the nature of social interactions and media ecology.

Soon we realised that also the project itself could serve as a case study in networking and testing the limits of analogue and digital environments as contexts for making connections, exhibiting artworks and conducting academic research. The initial excitement of two doctoral students who found a niche where their academic competencies complemented one another, turned out to be contagious enough to result in 10 exhibitions organised in seven cities around Poland and Portugal, three accompanying events and a one-day, international colloquium. On this occasion, we collaborated with over 40 artists and scholars from both countries and established partnerships with 15 institutions. Given both the initial scale of the project and the limited resources available for executing it, these numbers can be seen as good indicators of the topic's major importance – be it in the artistic or academic context, alternative or official circuits.

Moreover, although having many predecessors,[1] POR-POL NET proved to be a fortuitous child of its own era: by mere coincidence, the project's first draft was delivered to scientific committees at the University of Lisbon and Nicolaus Copernicus University in Toruń by mid-November 2022 – just two weeks before the release of the Open AI's ChatGPT. While the hopes and fears associated with the new, potent tool were not addressed in the proposal directly, the aim of calling attention to the complex relationships between humans and technology (especially as regards the use of analogue and digital

1 Among them the 2015 P2P Exhibit curated by Piotr Marecki, Álvaro Seiça and Rui Torres, and the *http://sztuka.net 2.0* conference organised at the Adam Mickiewicz University in Poznań in 2019, to give but two examples.

media and the dynamics behind the creation of different kinds of networks) turned out to be disturbingly fitting. Similarly, even if only a few artworks presented throughout June 2023 made use of or referred to AI, the ongoing debate on its threats and potential was impossible to ignore, posing itself as yet another context through which the exhibition could be read. In this light, Ana Matilde Sousa's poster for BO gallery in Toruń could be seen as a representation of the machine's subconscious, Madalena Anjo's Warburgian collection of free associations gained a quality of an archive produced by a human-machine hybrid, and Piotr Kopik's The Chatter suddenly morphed from an innocent and somewhat dumb chatbot into a stubborn, self-centred interlocutor with an agenda of his own.

Since one of the important goals behind the project was to enhance the collaboration between artists and academics, the Contemporary Net Art Colloquium that took place at the Faculty of Arts and Humanities at the University of Lisbon on the June 23 2023,[2] was intended, on the one hand, as a critical extension to the exhibition and, on the other, an opportunity to put various methodologies in a comparative perspective. The three panels followed by a round table with the invited artists and curators were organised around different topics, from those related to materiality and embodiment (presentations by Prof. Ryszard Kluszczyński, Prof. Piotr Kopik, Ana Matilde Sousa and Bruno Ministro), through those centred on style and artistic techniques (Prof. Domenico Quaranta, Lorena Ramos and Rafaela Nunes), to the history of media and the challenges behind various systems for archiving net-based artworks (Prof. Pedro Alves da Veiga, Prof. Patrícia Gouveia and Piotr Puldzian Płucienniczak). In the closing conversation, Natalia Dopkowska, Pedro Ferreira and Diogo Marques shared their personal experience of getting inspired by and employing elements taken from the internet in their artistic projects, while Magda Górska, Piotr Mańczak and João Pedro Azul – all representing different initiatives, institutions and periodicals that rely on the idea of networking – addressed the challenges of exhibiting digital objects.

In this context, the following publication can be seen as a central node of a unique system that POR-POL NET had established: a literal midpoint, where many months of collective work come to fruition. By choosing a rather unusual format – which is neither a conventional exhibition catalogue nor a collection of conference proceedings – we intended to stress that this particular book does not mark the final stage of something

2 The full list of the speakers and the book of abstracts can be found at the POR-POL NET website: https://porpol.net/colloquium/ [accessed: 02.12.2023].

but, rather, offers a place where the end and the beginning may meet and inverse their roles to restart the whole process anew. This introduction, which merges the foundational story with some preliminary conclusions, heralds the perverse chronology used for the organisation of the whole work, in which contributions from the participants of the colloquium come first and the catalogue of artists and institutions engaged in a series of exhibitions and accompanying events comes last. With this structure, we hope to satisfy two goals: first, to offer an exhaustive case study, with all of the stages of the project carefully retraced and documented; second, to propose a body of texts and images that – used either separately or in their entirety – could contribute to the current scholarship on net art while also having the potential of inspiring future generations of researchers and curators.

This last aspect finds reflection also in the choice and character of the texts included in the book: since one of our objectives was to encourage truly interdisciplinary and practice-based research, we gave priority to essays that followed this principle. For this reason, the works included in the publication come mostly from academicians who are also active artists, and they oscillate between in-depth analyses of specific phenomena, auto-reflexive descriptions of certain projects and meditations on the experiences of engaging with new technologies or being part of art collectives. While such a multiplicity of voices, methodologies and perspectives may seem controversial in a work that, at the end of the day, has the pretence to be recognised as scientific, we believe that this plurality reflects well the very nature of the object of study: just as the internet has never been homogenous, so the investigation on it needs to remain open and make its own attempt at embracing the notion of wide-scale connectivity.

The opening essays of this publication by Patrícia Gouveia and Piotr Puldzian Płuc-ienniczak offer an insight into the hopes and limitations that characterised the early years of the net art movements in Portugal and Poland, respectively. Although radically different in style, both texts quite effectively demonstrate how the sheer curiosity and technological ingenuity that characterised the generation of software and electronic art enthusiasts have now transformed into the cynicism and the aesthetic mockery of the post-internet era. The authors reflect on the question of the accessibility of the new media, calling attention to the fact that the near-instant communication which now tends to be taken for granted, just a few decades ago was still more of a utopian dream. In the early 1990s, the ownership of a single, stationary computer was already a privilege – and even more so having it connected to the World Wide Web. For the

generation that accompanied the rapid technological progress, the visionary approach and experimentation seemed natural, resulting in creations that were not only formally original but often also socially engaged. At the same time, through the example of their own digital works, Gouveia and Płucienniczak make a strong claim on the necessity of self-archiving and retro-engineering as two strategies essential for ensuring the longevity of certain projects. Similarly to Marecki and Harpold,[3] they recognise the acceleration of technological progress and the obsolesce of particular programs and machines as a major issue in researching digital artworks and, while Gouveia enumerates various possible solutions to this problem, Płucienniczak spins a cautionary tale, demonstrating the extent of damage it has already caused in the context of Polish electronic literature.

The topic of obsolete media and works that got lost and found on the internet continues in Martyna Kopeć's essay, which focuses on the phenomenon of lostwave – a term used for songs, jingles and other musical snippets, whose author, title and year of production remain unknown, but when uploaded on video sharing platforms (such as YouTube or TikTok, gather communities of enthusiasts engaged in identifying them. These uncanny voices of the past pose questions not only on the nature of specific recording media and distribution channels, but also on the role that the internet plays in feeding contemporary retromania, be it through the rediscovery and the preservation of the artefacts coming from the marginalised cultures, the rapid exchange of information and the incentive for fabricating it. By referring to the notions of eeriness (Mark Fisher) and liminality (Arnold van Gennep, Victor Turner), Kopeć investigates the tension between the appeal of mystery that lostwave introduces and realisation of the search engine's limitations. Furthermore, she makes a strong point on the role that the circulation of these once-overlooked gems plays in the revival of the spirit of old internet forums and the emergence of communities of anonymous users who bond over a shared interest, while also demonstrating how this romanticisation of the past often influences contemporary music industry, be it by blurring the boundaries between the competencies of music producers and consumers, the emphasis put on the materiality of the recordings or the trend of using the effects and samples that imitate the quality of sound characteristic to previous decades.

The question of the interdependence (or, at the very least, the mutual influence) of the old and new media is central also to Bruno Ministro's text. In it, departing from

---

3 See: Piotr Marecki, Liternet: Literatura i Internet. Kraków: Czytelnia 2002; Terry Harpold, Ex-foliations. Minneapolis: The University of Minnesota Press 2009.

McLuhan's call to always approach new technologies by taking a closer look at the pre-ceding ones and identifying the impact they had on the current media environment, he compares the copy art from the 1980s and 1990s with the recent examples of electronic literature, performances and installations. The works of such artists as César Figueiredo, Jürgen O. Olbrich, António Aragão, Karl-Hermann Möller and Franz John are juxtaposed with those of Alinta Krauth, Jim Andrews, Eugenio Tisselli and Andreas Maria Jacobs. The analysis that Ministro proposes, centres on the notion of a glitch, traditionally un-derstood as a minor malfunction in the programming or working of a certain machine, and here applied to showcase limitations particular to different inscription technologies, from xerography to digital text processors. By bringing attention to the specific ways in which various mediums modify textual relations, the essay aligns both with Johanna Drucker's idea of material performativity[4] and N. Katherine Hayles' recent observations on postprint,[5] especially in the context of the interweaving of print and digital technolo-gies as essential to shaping our approaches towards language, writing and authorship.

The topic of machine error is further explored in Ana Matilde Sousa's contribution, in which the exploration of the aesthetics of glitch goes hand-in-hand with a reflection on the peculiar nature of the human-machine hybrids. By referring to the process of creating a series of works with an old-fashioned pen plotter, she offers a first-hand account of the challenges and surprises that may await anyone who decides to experiment with outdated technologies – especially when entrusting them with tasks that they were not designed to handle. In this particular case, the obsolete tool originally used for speeding up the process of signing documents is employed as a mechanical arm: a convenient and reliable craftsman whose work can be programmed and controlled by the artist or the network of other devices. Although the idea of leaving the actual production of a physical copy of an artwork to a machine may not seem particularly extravagant – and even less so when it comes to employing a tool created specifically to imitate traces of a human hand – in Sousa's experiment many things go wrong. From the amount of ink consumed, through the noise produced, to the constant supervision it required, the pen plotter presents itself as the opposite of an object ready-to-hand. Its subsequent failures and errors, however, inspire a reflection on the relationship that often occurs between the technology and its user: by acknowledging and assisting various shortcomings of

4 Johanna Drucker, "Performative Materiality and Theoretical Approaches to Interface", in: Digital Humanities Quar-terly, vol. 7 no. 1 (2013), http://www.digitalhumanities.org/dhq/vol/7/1/000143/000143.html [accessed: 02.12.2023].
5 N. Katherine Hayles, Postprint. New York: Columbia University Press 2021.

the tool, Sousa finds herself strangely attuned to it, soon able to identify the alarming sounds, predict the exact moment for changing the ink containers and see other patterns useful for diminishing the chances of any malfunction. By patiently learning these things, she begins to accept her own body as a part of a complex, hybrid network.

Since Sousa has a rich background in the creation of comics and zines, her essay abounds in reflections on popular culture and the materiality of different artistic mediums. As the series of works she created with the pen-plotter are essentially compilations of still images derived from GIFs, they inspire questions about the role that the internet plays in the emergence of new aesthetics, the significance of remixing and repurposing the widely available contents, and the qualitative difference between the flatness of a screen and that of a sheet of paper. Moreover, colourful and busy with superimposed shapes and figures, her works seem to play with the tension between the apparent movement and stillness, the flow and amassment. This last aspect is further explored in Lorena Ramos' text, in which she examines the history of GIFs and their potential as an artistic medium. Departing from the notion of a loop – which she associates not just with cyclical repetition but also the concept of mise-en-abyme – the author juxtaposes works of such artists as Jan van Eyck, Marcel Duchamp, M.C. Escher, Robert Morris, Bruce Nauman and Yayoi Kusama, focusing on how each of them, by employing different means, managed to achieve the effect of recurrence. This preliminary analysis serves as a backdrop for a more detailed review of contemporary examples, centred on animated images created in digital techniques. Although initially Ramos seems to be focused solely on aesthetic aspects of such experiments (the choice of technique, the features of a particular style, the strategies for manipulating the notion of space and time), often searching for the points of convergence between the so-called new and traditional media, she also calls attention to the place that GIFs occupy in the contemporary internet culture, not excluding its vernacular side.

The motif of recurrence and the importance of collectivity for the selection and circulation of contents is then picked up in the short text by Pedro Ferreira. As a visual artist interested in various phenomena related to digital culture, Ferreira offers an insight into the creative process behind the video and installation that in June 2023 were presented in Galeria UI in Gdańsk as a part of POR-POL NET project. Things I do When I am Bored – a compilation of snippets taken from hardly ever viewed YouTube videos, in which different users share the ennui they are experiencing – is as banal as unnerving. In it, the idea of the internet as the source of endless inspiration and the core of

interconnectivity, slowly crumbles, revealing the downside of the apparent abundance. The expressions of anxiety, fatigue and loneliness, which turn out to inhabit many of its channels, present themselves as the polar opposite of the promise of free, efficient access to information and enhanced opportunities for networking. While Ferreira is far from making any moral judgements, his contribution – especially when read in relation to Gouveia's and Płucienniczak's essays or Federico Campagna's observation on the age of Technic as one of metaphysical nihilism[6] – invites reflection on the social effects of the rapid popularisation of a complex tool whose inner workings are not only hard to grasp for a common user but often also programmed, structured and presented in an optimised way that is likely to dissuade the urge for experimentation.

In past decades, the necessity for learning how to navigate and manage new technologies in a creative way has been a widely-discussed topic – even if only within a few, highly specialised fields.

The juncture of remediation and data manipulation which lies at the heart of many computational works, happened to be particularly inspiring for media archaeology and literary theory, as it serves as a reminder of the value that the interplay between the material properties of a carrier and the structural organisation of the content have in the process of both meaning production and its transmission. Preoccupation with these matters, close to Bernard Stiegler's division on technics and technologies,[7] can be traced in books and articles by various contemporary scholars, from Jay David Bolter, Jussi Parikka and Siegfried Zielinski, to Serge Bouchardon, Yra van Dijk and Rui Torres, to name but a few. Given the response sparked by the release of the already mentioned ChatGPT, it can be stated that similar concerns have become all the more worthwhile nowadays, as we have officially entered the era of AI-based technologies that change our understanding of language, authorship and knowledge. The closing essay of this publication marks this moment by offering an example of the successful collaboration between the artist and AI.

In her contribution, Rafaela Nunes proposes a detailed description of all stages behind the creation of digital objects or – as she prefers to call them – artefact beings. In this case, the insistence on the label is not purely incidental as the forms she creates – even if stylistically resembling raw pieces of valuable stones or minerals – are interpretations of a very specific set of data which includes names of feelings and personality

6 See: Federico Campagna, Technic and Magic: The Reconstruction of Reality. London: Bloomsbury 2018.

7 See: Bernard Stiegler, Technics and Time, vol. 1, The Fault of Epimetheus. Stanford: Standford University Press 1998.

traits, umbrella terms used for defining political or philosophical inclinations, as well as references to colours and textures. Their combination is entirely random, being an effect of a prompt inserted into ChatGPT, later paired with a fragment of a pastel work or a painting made by Nunes and processed through Stable Diffusion, an AI-based image generator. The very idea of using that which could be considered the essence (or, maybe even more appropriately, the very nature) of a thing as a parameter, while simultaneously transferring images created by traditional means to the digital environment, presents an interesting twist to the usual attempts at translating the immeasurable onto the visual.

By constantly shifting between qualitative and quantitative values, the physical and the numeric, and the human and non-human input, Nunes brings into being objects whose inherent eeriness seems to originate in the difficulty of labelling them as unequivocally real or artificial. Suspended in between disciplines and realms, the models she creates become a perfect expression of modern hybridisation: the state of final collapse – or a lasting suspension – of traditional dichotomies. Supported by a careful overview of classic theories on intermedia (including works by Jean Baudrillard, Rosalind Krauss and Lech Manovich), and well-aligned with the latest scholarship on the creative uses of AI (here, especially the presentations at the subsequent editions of xCoAx[8] or the 2023 edition of the Absolutely Interdisciplinary Conference),[9] Nunes' contribution offers valuable closure to the reflections on the contemporary forms of networking explored within the POR-POL NET project – and an inspiring invitation to any future, practice-based research aimed at gaining a better understanding of the relationship between the artistic practice and the ways we engage with the new technologies.

8 The Conference on Computation, Communication, Aesthetics and X, https://xcoax.org/ [accessed: 04.12.2023].

9 Polly Denny and N. Katherine Hayles, "AI and Creativity", https://www.youtube.com/watch?v=r1YhXV-NrO4 [accessed: 04.12.2023]. Presentation at Absolutely Interdisciplinary Conference 2023.

Bibliography:

1. Denny, Polly and N. Katherine Hayles. "AI and Creativity". Presentation at Absolutely Interdisciplinary Conference 2023. https://www.youtube.com/watch?v=r1Y-hXV-NrO4 [accessed: 04.12.2023].

2. Drucker, Johanna. "Performative Materiality and Theoretical Approaches to Interface", in: Digital Humanities Quarterly, vol. 7 no. 1 (2013), http://www.digitalhumanities.org/dhq/vol/7/1/000143/000143.html [accessed: 02.12.2023].

3. Galloway, Alexander R. The Interface Effect. Cambridge: Polity Press 2012.

4. Harpold, Terry. Ex-foliations. Minneapolis: The University of Minnesota Press 2009.

5. Hayles, N. Katherine. Postprint. New York: Columbia University Press 2021.

6. Marecki, Piotr. Liternet: Literatura i Internet. Kraków: Czytelnia 2002.

7. Stiegler, Bernard. Technics and Time, vol. 1, The Fault of Epimetheus. Stanford: Standford University Press 1998.
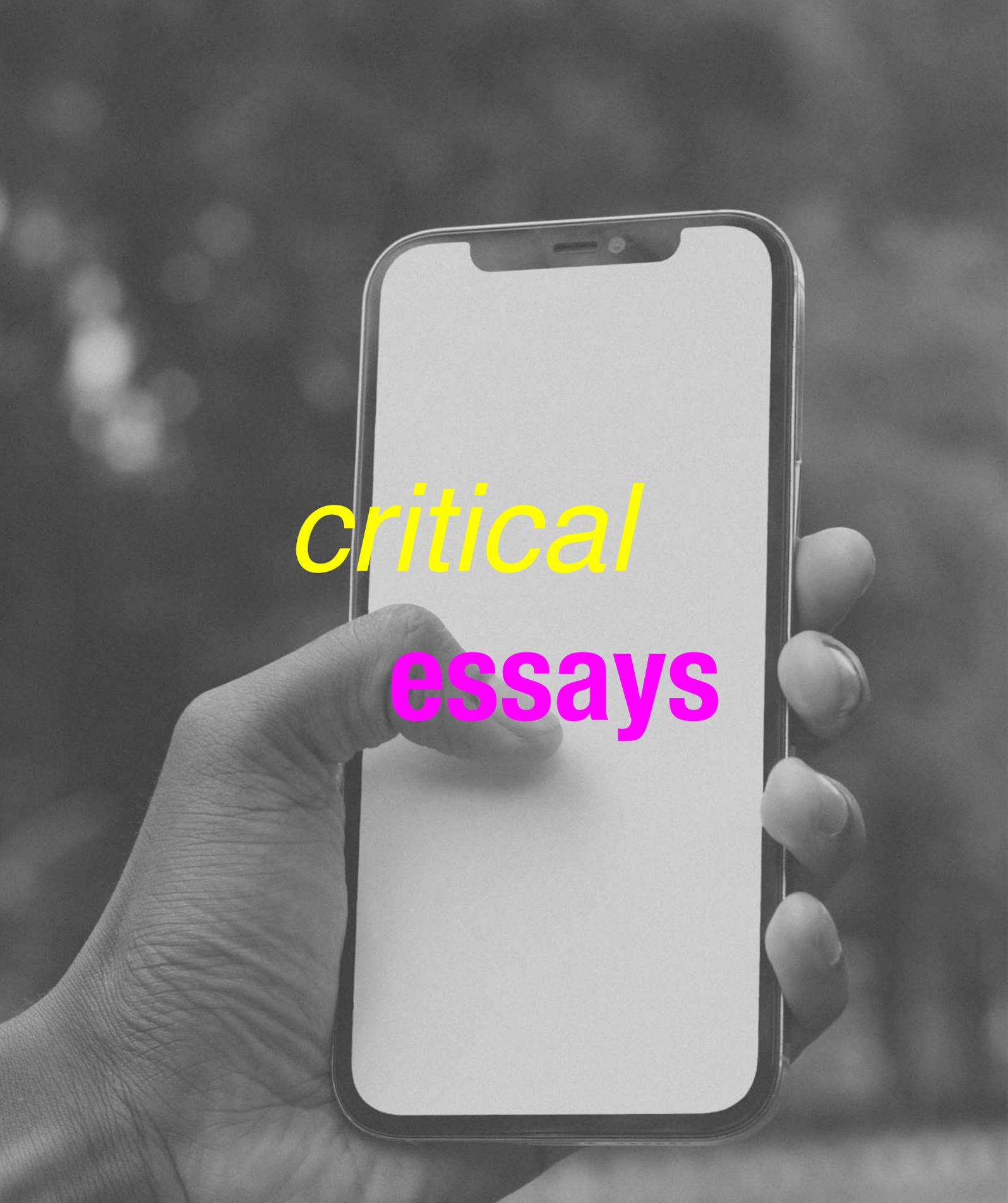
critical

essays
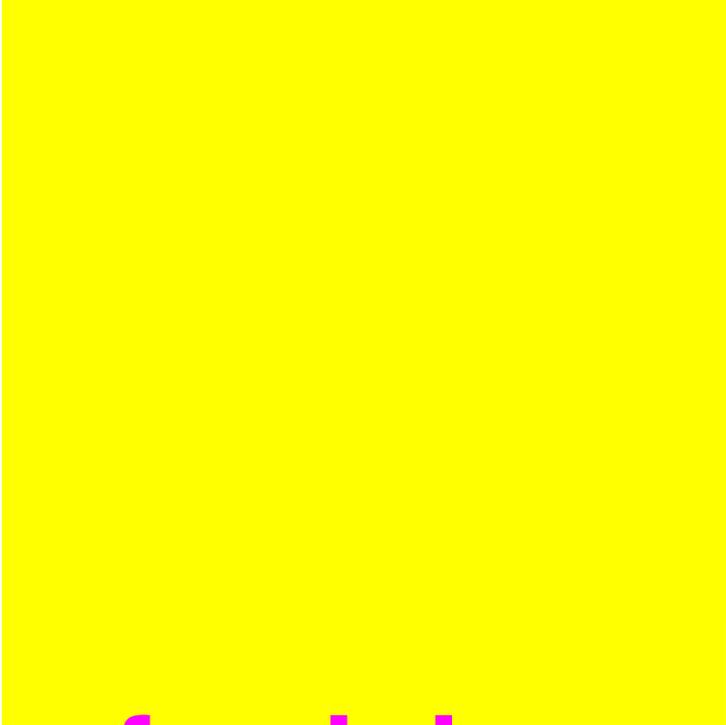
From cyber feminism to techno feminism, net.art and the spread of digital culture

Patrícia Gouveia

Faculty of Fine Arts, University of Lisbon
Interactive Technologies Institute (ITI / LARSyS)
https://orcid.org/0000-0002-4351-8999

Research methodologies and research line contextualisation

In the scope of the research line *Arts and Gaming, Convergent Feminism and Speculative Futures*, led and coordinated by myself at the Interactive Technologies Institute from the Laboratory of Robotics and Engineering Systems in Lisbon, our group from the Lisbon University Fine Arts Faculty is developing a practice that explores the fusion of various methodologies and research processes, including playful and artistic approaches that question gender power relations and the growing complexity of ongoing technological, ecological and sociocultural changes. The group is currently composed of 15 people: two scholars, three full-time researchers, and seven doctoral and three master students from different countries (Brazil, Finland, France, Germany, Portugal, Slovakia and Spain). The group participates in various international and artistic research projects around the globe. Our activity encompasses concepts and manifestos creation and production that critically investigate artistic processes in distributed and global computer digital networks that disseminate knowledge that often ignores and turns invisible women, minorities, disabled people and south-south (Alden, Morphet &Vieira 2010) artistic local practices, imposing global north narratives created above all by a concrete, extractivist and discouraging patriarchal apparatus (Gouveia 2024b).

The ongoing European research projects in which I now participate as a senior researcher address these problems, namely arts hybridity (*Communities and Artistic Participation in Hybrid Environment*, CAPHE, Marie Skłodowska-Curie Actions), digital citizenship (*Fostering Digital Civics Research and Innovation in Lisbon,* DCitizens) and gender step-backs in gaming and playful environments (eGamesLab consortium). In 2021, I was invited by the Portuguese National Science Foundation to participate as an *Expert Speaker from* Portugal at the Mutual Learning Workshop on Gender and Digitalization with a keynote titled: "*Interactive Multimedia Experiences in Higher Education: Gaming, Augmented and Virtual Reality, and Research*", for the European project Gender Action.[1] This talk was later published in an IGI Global book chapter (Gouveia, Lima & Unterholzner 2022) aiming to foster digital inclusive environments in higher education.

---

1 Retrieved December 7, 2024: https://h2020.genderaction.eu/exploratory-mutual-learning-workshop-on-gender-and-digitalization/

The previously quoted research group created the *XCare Collective* (2023–2025)[2] and the *Gender Art and Game Equity* (2020–2024)[3] projects to address complex subjects concerning women artists' integration in engineering and male-based settings. Between 2019 and 2023, I also co-created and co-curated the *Playmode* exhibition for the Museum of Art, Architecture and Technology (MAAT) in Lisbon and four major cities in Brazil (Brazilian Bank Cultural Centres, CCBB).[4] These two group projects and five exhibitions displayed artworks from various locations emphasising political and social problems concerning cyber practices since the 1990s. As I have consistently written during the last 20 years, as a practitioner with 30 years of experience in contemporary arts and digital settings, my cyber-feminist approach goes back to participation as a pioneer in the Portuguese artistic scene during the 1990s. I created analogue and digital installations that merged visual and digital arts since 1997.

In 2023 the research group edited the Journal of Science and Technology of the Arts special edition (Gouveia, Lima & Sá 2023), in which we published a chapter about "Convergent feminism, gaming, digital transition, and equity" for the book *Technofeminism: multi and transdisciplinary contemporary views of women in technology* (Gouveia & Lima 2023). This knowledge dissemination expressively demonstrates how artistic works and arts-based research methodologies challenge various frameworks for the creation, production and dissemination of works that take advantage of project and game-based research. We aim to inquire about contemporary culture mediated by technologies from an intersectional perspective (Gouveia 2024b). The work we have been doing over the last few years takes advantage of diffractive research methodologies in the arts (Sayal-Bennett 2018; Fox & Alldred 2023) exploring how material objects and processes can be understood through the effects created by their difference, namely disability studies and augmented human technologies (Gouveia & Lima 2024).

I recently published a journal paper (Gouveia 2024a) about the relevant practice of archiving and documenting my works from the 1990s for future generations' knowledge. All the works presented in this text are archived in the Digital Art Archive (ADA) database. The Soong Sisters artwork, here with further details, has been available on the

---

2 Retrieved December 7, 2024: from: http://xcarecollective.com.

3 Retrieved December 7, 2024: https://gage1.webflow.io/

4 Retrieved December 7, 2024: https://www.maat.pt/en/exhibition/playmode and here: https://www.tourvirtual360.com.br/ccbb-playmode/

Rizhome platform since 2001.[5] Other research works, connected with interactive fiction, hypertext and hypermedia are present in the Electronic Literature Knowledge Base[6] and published in my first book (2010). In that book, I showed my early research years, and the text is a compilation of published papers made after my doctoral thesis public defence in 2008. Afterwards, I developed this trend in transmedia studies published in book chapters and created transmedia and gaming courses and seminars for bachelor, master, doctoral and post-doctoral candidates at the Lisbon University Fine Arts Faculty.

In my research and group projects processes, the arts are considered through a feminist materialist perspective, grounded in Donna Haraway (2017), Rosi Braidotti (2022), Karen Barad (2014), Sandy Stone (2001) and Katherine Hayles (1999), among many other studies (Gouveia 2024b), showing a way of mapping how and where the effects created by difference can be understood. My practice also includes master's, doctoral and post-doctoral supervision. Defended post-doctoral and doctoral theses in the research group in the past couple of years tackled concepts such gender inclusive environments (Luciana Lima 2023), innovative practical-theoretical arts and gaming research methodologies that challenge neuroaesthetics (Anna Unterholzner 2023), net-art and gender equality with women in shelter houses (Teresa Veiga Furtado 2023), decolonial arts and games (Isabelle Arvers 2024) and hegemonic extractivist processes for imagery creation and dissemination (David Infant 2024), among other examples. Formally, this text uses autoethnography (Ellis, Adams & Bochner 2011) as an alternative methodology that uses writing as a tool useful for describing and interpreting personal experience in broader political and social contexts. Autoethnography, merged with auto theory as a feminist practice (Fournier 2022), takes advantage of intersectionality, meaning a contextual framework for examining how oppression systems intertwine and define opportunities in technological environments,[7] and gaming studies (Gouveia 2024b).

---

5 Retrieved December 7, 2024: https://classic.rhizome.org/portfolios/artwork/47645/

6 Retrieved December 7, 2024: https://elmcip.net/node/2146

7 Association for Women in Science (AWIS), "Intersectionality", *AWIS website,* https://awis.org/intersectionality/ (accessed 25.03.2023).

Artistic statement

In this text, I analyse three interactive artworks developed by myself to promote awareness concerning the relevance of documenting and archiving interactive artworks for future generations. My goal is also to instigate critical thinking about hegemonic discourses concerning the arts that constantly erase women, minorities, disabled people and people from south and south-south locations promoting only global north mindsets and perspectives. My aim is also to instigate other ways of doing research that take advantage of convergent feminism (Braidotti 2022), arts and gaming research methodologies (Gouveia 2024b), game studies (Gouveia 2010) and ludic systems theories to promote inclusive environments in the arts and gaming. In this way, a perspective based on play and interactive digital fiction can inspire us to look at other ways of using digital technologies and gaming. A perspective that focuses on improving human capabilities and experiences, and fights against hegemonic narratives. Instead of promoting linear stories about older non-linear events or convenient truths about the past, I intend to open dialogues that promote diversity and inclusion, fighting orthodox ways of doing arts-based research.

Between Poets (2000), Jizo (2001) and Soong Sisters (2001)

Between 2000 and 2001, I created three web-based projects taking advantage of the technical features of a specific web browser and hypertext markup language (HTML). I used Adobe Photoshop for image creation, Macromedia (now Adobe) Dreamweaver web software for programming and Adobe Flash for animations.

The first web-based project, named *Between Poets* (2000), was created for the Go to Frisco exhibition, an online and site-specific show in San Francisco, to reflect a dialogue between Lisbon and the American city. This project was an invitation by Zé dos Bois Gallery[8] in Lisbon. The interchange between the two cities was part of the conceptual challenge and for that, I created and developed an interactive piece about an imagined dialogue between two poets: the Portuguese poet Herberto Helder and the American poet Lawrence Ferlinghetti. Highlighting poetical phrases and poems about cities and exploring World Wide Web aesthetics to use the internet as a creative source, I emphasised the dialogue between two languages, Portuguese and English. The viewer could

8   Please see: https://zedosbois.org/.

interact with several overlapping windows with sounds, flash animations and code errors transformed into poems. The idea was to create a playful system where all elements would result in a cacophonous artefact that bothered people by making them think about the excess of information that the aesthetics of a new communication medium such as the internet brought to the human experience.

Figure 1. Patricia Gouveia, *Between Poets*, 2000. Screenshot images.

The second web-based project, named *Jizo* (2001), was created for the digital magazine of art, culture and technology "Interact", and it was an invitation from the former Centre for Communication and Language Studies (CECL), now integrated at Lisbon New University (Universidade Nova de Lisboa) Centre for Research in Communication, Information and Digital Culture (CIC. Digital). For *Jizo*, I created an artificial dialogue between two writers and two texts, the Australian writer Robyn Davidson and her book *Desert Places* (2000 [1996]), and the French writer Yves Simon and his book *Le Voyageur Magnifique* (2000 [1987]). In this piece, I quoted the Portuguese translation of Davidson's book, which I translated into English, below, highlighting some phrases that I used to create animations:

All was silent behind the broken wall; outside, a few chickens were plucking in the manure heaps. Then there was A SOUND WHICH WAS SCREAMING TO ME. Children. AVALANCHES OF CHILDREN, who seemed thousands, who appeared through holes in the gravel as if attracted by a piper, each one of them with their little face, their destiny, beautiful, loved, unique and without a future. Because there is nothing for them anymore. There is not enough land, nor trees, nor animals, nor jobs; there is not enough money for their education, their medicines, not even the guarantee of a full stomach. However, they will produce the same number of children again – and these others, and these others – and the physical understanding of that mathematics, of the geometric progres-

sion of increasingly destitute lives, made my heart shrink with fear. I knew the statistics – I knew that the resources spent on ONE AMERICAN CHILD were enough to SUPPORT TWENTY-FIVE INDIAN CHILDREN. I hated the moralism that demanded that the Third World accept (and pay for) a version of environmental protection in which trees were more important than people. Whoever used electricity or drove a car had no right to tell peasants to stop felling trees. However, it was India's children who made the obvious clear – regardless of unfair disparities and the movements of capital in the world – WE ARE TOO MUCH. When I heard the cacophony of that stream of life pouring out of the most impoverished of villages, it was hard not to loathe the human species – the thoughtless multiplication. (...) Any distant suffering that I might still feel from NOT HAVING CHILDREN was mitigated by that sound, which now gradually receded, as the river of life returned to the village and we advanced.[9]

In the interactive pieces, I also quoted the Portuguese version of Simon's book that I now translate into English:

Is this child in a desert, in heaven, who owes nothing to men, neither to carbon nor to silicon, who owes nothing to light or night? Who is the one I think about and who only belongs to me, when after all his kingdom is the Universe, and his words cannot be repeated since they are true ideograms, formed not of representations, but of authentic mountains, of authentic trees, lacquered roofs, cloisters, birds with bone beaks and claws, the mouths of volcanoes, real oceans, real seas... Their ideograms look like postcards and say phrases from the universe. They cannot speak, they read, they decipher themselves with those satellite photographs where the cities are blue, the wheat fields are red, and the water is green. They are parts of the world because THE CHILD SPEAKS THE WORLD. She doesn't know the signs to shorten a space and when she designates the distance of the stars, the ideogram she deploys has the extension of the light years that separate them. When they want to talk about love, there is a man and a woman entwined, and when they talk about war, there are a thousand tanks that breathe fire, bombers and nuclear warheads that wait, hidden in their underground, for the signal that will make them launch into towards the sky... SHE OWES NOTHING TO MEN, nor to the sex that penetrates another sex to leave biology, amino acids and a genetic code...

THIS CHILD WITHOUT A PROGRAM IS MINE, just because I think of her, and she knows it... But it is from the flowers, from other men, from other dreams, from other eyes, SHE BELONGS TO THE NOVELS that speak of her. And he's only my son because he flies to me when I think of him...[10]

Starting from this conceptual framework, I developed a database named *Jizo* – after the Japanese god of children, pregnant women and travellers – to inquire about the

9   Robyn Davidson, *Lugares Desertos.* Lisboa: Editora Quetzal 2002 (1996), pp. 281–282.
10   Yves Simon, *O Viajante Magnifico.* Porto: Editora In-Libris 2000 (1987), p. 229.

role of women and children in society and to emphasise a cyberfeminism perspective, given that I consider that women have free will to decide for their lives and are not conditioned to choose maternity.

The website generates multiple overlapping windows and sounds. Screams of women and children are mixed with other disturbing recordings that make us think about motherhood and what options we should take for the world to be sustainable. The interaction mode asked participants to manipulate browser windows, and the artistic experience was generally based on participatory game design. For that purpose, an HTML editor was used to merge flash animations, images, sounds and text in random constructions. I used photographs taken by me in Brazil, Malaysia, Singapore and Spain. The online application presented a grid of soft colours that contrasted with the mixed sound environment.
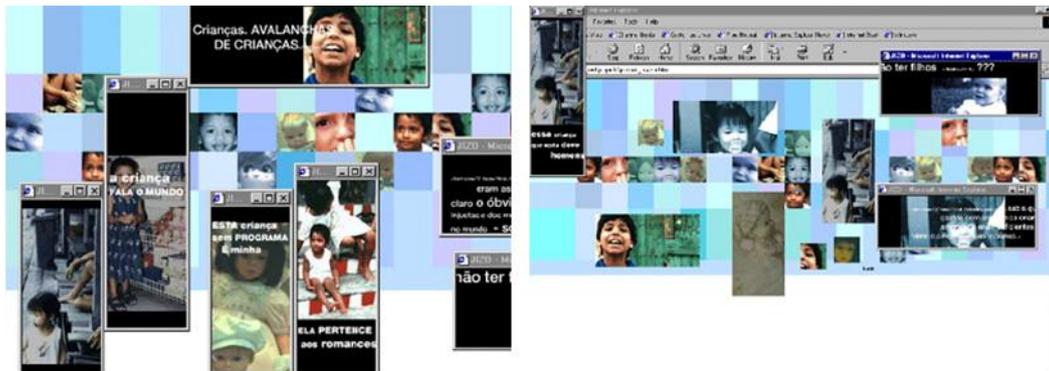
Figure 2. Patricia Gouveia, Jizo, 2001. Screenshot images.

The third web-based project, named *Soong Sisters* (2001), was created as part of an individual exhibition presented in the same year at Fábrica da Pólvora in Barcarena (Oeiras) in Portugal. The exhibition's title, reality>media>data>database, was inspired by Lev Manovich's text "Database as a symbolic form" (1998), later published in his book *The Language of New Media* (2001). This show presented a projection of three web-based projects (*Between Poets*, *Jizo* and *Soong Sisters*) and aimed to exhibit these projects in a more immersive way to involve participants in an interaction mode. The purpose of the show was also to generate awareness and knowledge of the World Wide Web and the internet as sources of artistic practices. At this historical moment, only a few people had access to these technologies, while artists from all over the globe were

starting to imagine how cyberspace and the other digital tools that came along with it could be integrated into their creative practices.
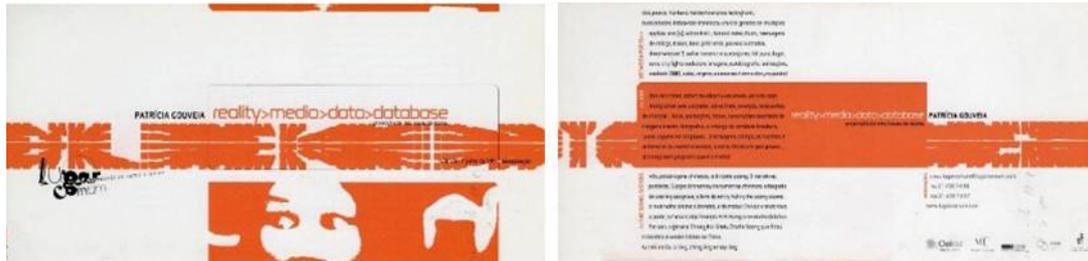
Figure 3. Patrícia Gouveia, reality>media>data>database. Exhibition invitation (front and back). Fábrica da Pólvora, Barcarena, Oeiras 2001.

The *Soong Sisters* project was about the life story of three Chinese women, Ai-ling, Ching-ling and May-ling. They were the daughters of Charlie Soong – a millionaire who made his fortune selling bibles in China. According to the Soong sisters' mythology, the youngest sister loved power (May-ling, beautiful spirit, married General Chiang Kai-Shek), the middle sister loved China (Ching-ling, happy mood, married the revolutionary Sun Yat-sen) and the eldest sister – money (Ai-ling, pleasant mood, married to finance minister H.H. Kung). One of the Soong sisters' brothers, T.V. Soong, was considered one of the richest men in the world during the 1940s and 1950s. The Soong Dynasty "reigned" for almost a century, controlling Chinese politics, economy and society, with connections in the Chinese underworld and the "gangs" that controlled it.

The head of the family left China at a very young age to go to the United States of America, where he studied and converted to Catholicism. Upon returning to China, he opened a publishing house, Sino-American Press (Hua-Mei Shu), and began to print bibles at low cost, which made them accessible to a greater number of people. Charlie Soong and Sun Yat-sen became friends and, in 1894, both began to conspire in Shanghai in favour of the revolution. Charlie Soong became one of the founding members of Dr. Sun Yat-sen's cult. After Dr. Sun Yat-sen's death in 1925, Soong's eldest daughter became one of the most hated women in China, while the middle daughter was considered a "widow of China".

I heard the story from a close friend when I was in Malaysia in 1999, and immediately started to research the three sisters' lives from such books as Emily Hahn's *The Soong*

Sisters (1943), Roby Eunson's *The Soong Sisters* (1975) and Sterling Seagrave's *The Soong Dynasty* (1996). In 2019, writer Jung Chang published an engaging book *Big Sister, Little Sister, Red Sister: Three Women at the Heart of Twentieth Century China* – a complete overview of the three sisters' relevance in challenging traditional female models in China and elsewhere.

After the individual exhibition at Fábrica da Pólvora, this digital work was further developed into a hypertextual game where the three sisters' life stories could be reconstructed by the user playfully. In 2002, the Spanish Museu Estremenho e Ibero-americano de Arte Contemporânea (MEIAC) bought it for their virtual gallery. Just as in the previous web-based projects I presented, the aim was to reflect on the role of women poetically and strangely, often by frustrating the viewer to stimulate critical and meaningful interactions. In 2005, the three projects were presented as part of the Online Portuguese NetArt 1997 exhibition curated by Sofia Oliveira and Luís Silva (Oliveira & Silva, 2005, online).
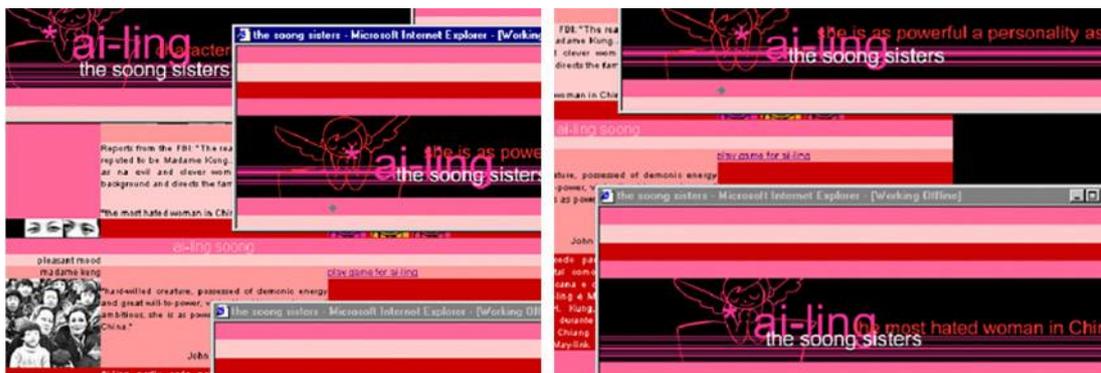
Figure 4. Patrícia Gouveia, *Soong Sisters*, 2001. Screenshot images.

In Rachel Greene's view, in the 1990s, net.art was not recognised as an art form by more conventional artistic institutions, namely contemporary art museums and galleries.[11] At that time, in Portugal, only a few people understood the potential of these resources as emancipatory tools for creative development and achieving a broader global audience. Since the 1960s, digital art – as well as some other artistic practices – has explored emotions, ideas, experiences or memories, and shown a will to communicate

11 Rachel Greene, *Inter-net art.* London: Thames & Hudson 2004, p. 18.

an artistic statement. And yet, nowadays, net.art still tends to be neglected in contemporary art environments. A recent resurgence of interest in such practices, however, can be a signal that things might change in future.

Many of the 20th-century art movements – such as, for example, Conceptual Arts, Fluxus creative practice, EAT (Experiments in Art and Technology), multimedia happenings, installations and performances, which take advantage of a multitude of technologies such as procedural rhetorics, satellite transmission, mail art, relational aesthetics, and generative and experimental programming, to name but a few – were net.art precursors. Such net.art artefacts as the artistic practices developed in the three previously presented web-based projects, *Between Poets*, *Jizo* and *Soong Sisters*, emphasise the idea, the concept and the creative process to the detriment of a finished, autonomous and unique work.[12] It is also relevant to highlight the interaction factor, as something that shapes not only the creative processes behind these works, but also, broadly speaking, the relation between art, research and technology. Moreover, these artefacts create new challenges to museum conservation due to the obsolescence of software and hardware, which makes such works harder to preserve for the collective memory.

Networks, hypertextual systems and non-linear narratives are parts of a creative exploratory process that takes us to procedural and moving arts for the internet. Alternative models of procedural experimentation, within the scope of web-based practices, are chosen to the detriment of other institutional possibilities such as a more prominent presence in museums and galleries. In this context, the reification or institutionalisation of art is also disregarded by net.art artists in favour of an aesthetic that privileges the process over the final product.

Due to the obsolescence of its means, tools, software, applications and plugins, the history of net.art is complex, as many of the works made between the last decade of the last century and the first of this decade are no longer available. Web pages, in which most of these works were hosted, are now unavailable or can only be accessed through living archives such as, for example, the Internet Archive and its Wayback Machine.[13] Videos and visual imagery can be useful to help contextualise these artefacts as well as documents with artistic statements that preserve the personal point of view about the creations for future generations. All such information – and the autoethnographic stories – are important knowledge sources for future curatorial and museological studies.

12   See: Fernando Dominguez Rubio, "The Unnatural Ecologies of Modern Art", keynote speech at *Computer legacies: Narrating histories of digital media in museums,* Loughborough University 2002.

13   For more information please see: https://archive.org/ (accessed 25.03.2023).

According to Ellis, Adams and Bochner, autoethnography challenges canonical ways of doing research and is an alternative investigative methodology that uses writing as a tool useful for describing and analysing personal experience, as well as for making visible a broader cultural context.[14] For that purpose, autoethnography uses relational ethics and co-constructed narratives to challenge research that represents others in a disembodied fashion intending to generate research as a political, ethical, just and socially conscious act.

Another useful artistic research methodology may be intersectionality, "a contextual framework for examining how systems of oppression deeply intertwine and influence experiences and opportunities"[15] in technological environments. The experiences cannot be separated from the systems that shaped them, even though this is often how they are studied. For example, a black woman with a disability does not experience her arts or engineering workplace simply as a woman, black person or person with a disability, but rather through a unique interaction with all these systems. In this manner, intersectionality deepens the understanding and the ability to improve the lived experiences of marginalised groups in STE[A]M (an acronym for Science, Engineering, Technologies, Arts and Mathematics). Changes in the artistic practice that came with the rise of the internet as a mass medium[16] must be inquired with these research methodologies in mind for a proper understanding of the contextual framework of that specific, cultural and historical moment. Projects are actions, and action is also a research tool to speak about oppressive systems, be they social, political or artistic.

Nowadays, many projects created in the period presented above are still inaccessible to the public, despite a huge effort that has been made in recent years to keep their legacy for future generations. The creation of institutional databases that make the history of interactive media available should be noted, among them ADA – Archive of Digital Art (former Database of Virtual Art),[17] the File Festival Archive,[18] or even the creation of a space for a reflection on these topics within the framework of the Inter-

14   Carolyn Ellis, T.E. Adams, and A.P. Bochner, "Autoethnography: An Overview", Forum Qualitative Social Research, vol. 12, no. 1 / 2011. January 2011.

15   Association for Women in Science (AWIS), "Intersectionality", *AWIS website,* https://awis.org/intersectionality/ (accessed 25.03.2023).

16   See: Jay David Bolter, *The Digital Plenitude: The Decline of Elite Culture and the Rise of New Media*. Cambridge: MIT Press 2019.

17   Please see: https://digitalartarchive.at/nc/home.html (accessed 25.03.2023).

18   Please see: https://archive.file.org.br/ (accessed 25.03.2023).

national Symposium on Electronic Art (ISEA)[19] and the ISEA Symposium Archives.[20] The impossibility of viewing works that were removed from the internet and the web, or that are today inoperable, because many of them relied on hardware and software that is no longer available, suggests that, in the future, a whole retro-engineering process will have to be created to ensure access to a set of digital artefacts conceived within different historical periods.

These works took advantage of the new technological tools and were made available by the spread of computation and communication technologies throughout the 1980s. In this context, internet history intersects with computer science and the efforts of the telematic arts' pioneers, who combined techniques and services associated with telecommunications. As stated elsewhere,[21] the term telematic art began to be used by the English artist Roy Ascott in the early 1980s, but made an impact by 1990 when it appeared in the article "Is There Love in the Telematic Embrace?". The eponymous "telematic embrace" suggests that meaning is the consequence of the interaction between an observer and the system – a state of flux, an infinite change and transformation. Meaningful interactive experience depends on the participant's previous background and knowledge, and it only makes sense when the artefacts somehow resonate with them.

Emerging media, such as the internet and the web in the 1990s, took advantage of cybernetic systems and their feedback features (inputs and outputs), which enabled the integration of several people into one connected environment. In this sense, net. art is inseparable from the history of digital technologies and the spread of the digital market for artistic creation, production and mass consumption. Nowadays, the internet arts are an expanded field, a mass media environment[22] – an environment that is very different from that of the 1990s, and their historical context should be made evident to future generations. It is our responsibility to tell how fascinating it was to work with these technologies in the past, when networks were like new territories for exploration and how artists struggled to develop works in an emerging field.

19   Please see: https://www.isea-international.org/ (accessed 25.03.2023).

20   Please see: https://www.isea-archives.org/ (accessed 25.03.2023).

21   Patrícia Gouveia, "The Digital Playful River, a River Out of Eden. How the Internet shaped my Planetary Perception", in: *Challenges of the Technological Mind. Between Philosophy and Technology*, London: Palgrave Macmillan 2024.

22   Ceci Moss, *Expanded Internet Art: Twenty-First-Century Artistic Practice and the Informational Milieu*. London: Bloomsbury Publishing Academic 2009.

According to Teresa Furtado in her doctoral thesis in multimedia art, titled *Net art and Gender Equality: Cocreations with women in shelters* [*Net art e Igualdade de Género: Cocriação com mulheres de casas de abrigo*]:

> For Mike Tribe (USA, 1966) and Reena Jana, the term net.art, which associates the field of art with that of the internet, was created by the Slovenian artist Vuk Cosic (Yugoslavia, 1966) in 1997, the year in which Documenta X integrated works created specifically for the internet for the first time (Tribe & Jana, 2010 [2007], p. 88), with the term net.art being used by an internet user in an email sent to Vuk Cosic in 1995, in which, due to technical failures it was only possible to read the term net.art (Greene, 2004, p. 55). According to Gabriella Giannachi (2004, p. 19), citing Peter Weibel (Ukraine, 1944–2023) and Timothy Druckery (USA, –), the term was later used by Cosic in 1996, at a conference in Trieste, to define artistic practices that occurred both on the net and through it. During this research, the term net.art is used when referring to art made in the last century, the result of the communicational culture created on the internet by artists. We can also consider works done in the present millennium that draw on or are made and presented within internet cultures.[23]

As stated elsewhere,[24] with inspiration from Ana Mamede's work (2021), computer science became widespread in the late 1950s. Distant and distributed networks, based on data and message blocks, gave rise to the Advanced Research Projects Agency's (ARPA) project, of the US Department of Defense, which developed the ARPANET project. Commercial Internet Service Providers (ISPs) emerged in 1989 in the United States and Australia. ARPANET was deactivated in 1990 but left traces for the future. After the creation of a computer network, the internet, it was necessary to provide access to documents. Investigations carried out within the scope of the European Organization for Nuclear Research, the well-known CERN, in Switzerland, by the British computer scientist Tim Berners-Lee, between 1989–1990, resulted in the World Wide Web. Thus, hypertext documents were linked in a complex information system, accessible from any node of the distributed network. Since the mid-1990s, the internet has had a revolutionary impact on culture, commerce and technology, including the rise of near-instant communication via email.

Instant messaging and voice calls made using the internet protocol (VoIP), conversations or video chats and, finally, the World Wide Web with its discussion forums,

23 Teresa Furtado, *Net art e Igualdade de Género: Co-criação com mulheres de casas de abrigo*. PhD thesis, unpublished. Lisbon: Faculty of Fine Arts 2023, p. 37.

24 Patrícia Gouveia, "The Digital…", op.cit.

blogs, social networking services and online shopping sites, paved the way for a global world.[25] There is no precedent in human history for such dissemination of information and connectivity. Increasing amounts of data are transmitted at ever higher speeds over optic fibre networks. The takeover of the global internet communication landscape was historically rapid and continues to grow, driven by the ever-increasing amounts of online information, commerce, entertainment and social networking services. However, the global network future can be shaped by regional differences and reflecting on its accessibility is critical.

The digital artist and early pioneer of net.art and cyberfeminism Cornelia Sollfrank is, as Furtado states in her doctoral thesis, one of the most committed and active authors on the internet. In *The Truth about Cyberfeminism,* published in 1998, Sollfrank defends the plurality of the term and the contribution of such authors as Sadie Plant, Donna Haraway and the VNS Matrix collective, as well as many activists and artists who have appropriated the term in innovative ways. In another text, "Revisiting Cyberfeminism" from 2015, Sollfrank gives a perspective on how getting engaged in an artists' environment was pivotal to start working with such medium as the internet:

> Not every artist's generation is in the lucky position of witnessing the birth of a new technology that has the potential to revolutionize the world, its communication, economy, politics – and art. Young artists who, in the early 1990s, understood what was about to happen, had no other choice than to get involved, leaving behind the surfaces of their screens and sliding down the rabbit holes of their modem connections. Operating on the level of code and protocols, these individuals found themselves in a strange new territory, in which the reality and beauty of their artworks were largely imaginary. The prevalent atmosphere of departure attracted like-minded pioneers, and within a few years, an entire ecosystem of Internet art populated what sci-fi writers of the previous decade had termed, "cyberspace." It was the novelty of this habitat, its (apparent) ability to depart from the limitations of the physical world – including those of the body – that inspired female artists to develop new feminist utopias and to test new strategies based on digital networking. This first wave of Cyberfeminists posited an intrinsic affinity between women and digital networked media, and set out to challenge the patriarchy in complicity with technology.[26]

25 We can consider that there were previous precursors of the global world movement in colonial and capitalist economic strategies, but this is something out of the scope of this text. For more information about the concept of the global village please see, for example, McLuhan & Powers (1992) and Page (2002).

26 Cornelia Sollfrank, "Revisiting Cyberfeminism", *ART PAPERS,* May/June 2015, https://artwarez.org/uploads/media/Sollfrank-Revisiting_Cyberfeminism.pdf.

In the quoted text, Sollfrank also makes a scathing critique of a new generation of artists for the lack of political involvement and social engagement. According to the author, in comparison with the pioneers of internet art who were more driven by curiosity and technological ingenuity, a younger generation of artists who have been incorporated under the "post-internet" label, were rather driven by cynicism and postmodern strategies of irony and over-affirmation. In consequence:

> Instead, cultural phenomena spawned by the omnipresence of the Internet serve as content and material for what are otherwise formally rather traditional artworks, sculpture, installation, video, or performance. The art world, which has always been troubled by digital cultural techniques and their incompatibility with the requirements of the market, appears to appreciate this direction, and has responded enthusiastically.[27]

The German author also considers that women should fight the myth of the new technologies as "toys for boys". Since the 1990s, our work has been consistently and coherently about cyberfeminism and this word was used as a keyword in all the web-based projects presented in this text. More recently – precisely because of some very worrying setbacks – we cocreated, with Dr. Luciana Lima, researcher and psychologist, the project *game art and gender equity*[28] to stimulate women's participation in technological environments. According to Paulo Preciado, feminism that rejects technology as a sophisticated form of male domination over women's bodies ends up assimilating any form of technology to patriarchy, repeating and perpetuating the binary oppositions of nature and culture, feminine and masculine, animal and human, primitive and developed, among many others.[29] Our aim is to contribute to a convergent feminism[30] where women fight together for better living conditions. As Sollfrank argues:

> Cyberfeminism did leave a trace legacy: for the first time, it provided role models for women with a political and critical agenda to include technical competence as part of the strategy, thus contributing to real empowerment. Pursuing individual careers is not enough: as a term and as a collectivity, cyberfeminism can still bring women together, and inspire creative and critical work.[31]

27　*ibidem*.
28　Please see: https://www.gameartandgenderequity.com/ (accessed 25.03.2023).
29　See: Paulo Preciado, *Manifesto Contra-Sexual*. Lisbon: Orpheu Negro 2019.
30　Rosi Braidotti, *Posthuman Feminism*. Cambridge: Polity Press 2022.
31　Cornelia Sollfrank, *op.cit.*

Bibliography:

1. Bolter, Jay David. *The Digital Plenitude: The Decline of Elite Culture and the Rise of New Media*. Cambridge: MIT Press 2019.

2. Braidotti, Rosi. *Posthuman Feminism*. Cambridge: Polity Press 2022.

3. Chang, Jung. *As irmãs Soong, a mais velha, a mais nova e a vermelha, as três mulheres que marcaram a China do Século XX*. Lisboa: Quetzal Editora 2019.

4. Communities and Artistic Participation in Hybrid Environment (CAPHE) Project. (2023–2026). Marie Skłodowska-Curie Actions. HORIZON-MSCA-SE-2021 Horizon Europe Project number 101086391. Retrieved February 18, 2024, from https://www.caphe.space/about/faculdade-de-belas-artes-da-universidade-de-lisboa/

5. Davidson, Robyn. *Lugares Desertos.* Lisboa: Quetzal Editora 2006.

6. DCitizens Project. (2023–2025). Fostering Digital Civics Research and Innovation in Lisbon, European Union's Horizon Europe Framework Programme under grant agreement 101079116. Retrieved February 18, 2024, from https://dcitizens.eu/

7. Digital Art Archive (n. d.). Retrieved August 30, 2023, Retrieved February 18, 2024, https://digitalartarchive.at/nc/home.html

8. eGamesLab Consortium (2023–2025). Retrieved February 18, 2024, https://egameslab.pt/

9. Ellis, Carolyn, Tony E. Adams, and Arthur P. Bochner. "Autoethnography: An Overview. Forum Qualitative Social Research", in *Historical Social Research / Historische Sozialforschung*, vol. 36, no. 4 (138), 2011, pp. 273–90. *JSTOR,* http://www.jstor.org/stable/23032294 [accessed: 21.07.2022].

10. Eunison, Roby. *The Soong Sisters*. New York: Franklin Watts Inc 1975.

11. Fournier, Lauren*, Autotheory as Feminist Practice in Art, Writing and Criticism*, Cambridge: The MIT Press 2022.

12. Fox Nick J., and Alldred Pam, "Applied research, diffractive methodology, and the research-assemblage: challenges and opportunities." *Applied Research, Diffractive Methodology, and the Research-Assemblage: Challenges and Opportunities. Sociological Research Online, 28(1), pp. 93–109. https://doi.org/10.1177/13607804211029978*

13. Furtado, Teresa Veiga. *Net art e Igualdade de Género: Co-criação com mulheres de casas de abrigo.* Unpublished doctoral thesis. Universidade de Lisboa: 2023. https://repositorio.ul.pt/handle/10451/59890 [accessed: 07.07.2023].

14. Gouveia, Patrícia. Gouveia, *Design de jogos, experiência lúdica e feminismos especulativos,* Lisbon International Press, Grupo Atlantic Books, Lisbon and São Paulo, 2024b. ISBN: 978-989-37-8265-1.

15. Gouveia, Patrícia. "My Journey Through the 1980s and 1990s as an Art Student and Young Artist." Aalto University (Helsinki, Finland): *Research in Arts and Education, 2024*(1), pp. 244–256, 2024a. https://doi.org/10.54916/rae.142299 [accessed: 07.12.2024].

16. Gouveia, Patrícia. "The Digital Playful River, a River Out of Eden: How the Internet Shaped my Planetary Perception." In: Alexandre e Castro, Paulo (eds) *Challenges of the Technological Mind*. New Directions in Philosophy and Cognitive Science. Palgrave Macmillan, Cham, 2024c. https://doi.org/10.1007/978-3-031-55333-2_9 [accessed: 07.12.2024].

17. Gouveia, Patrícia. *Between Poets by Patrícia Gouveia*: [Digital Art Archive, 2023]: https://digitalartarchive.at/database/work/5060/ [accessed: 07.12.2024].

18. Gouveia, Patrícia. *The Soong Sisters by Patrícia Gouveia*: [Rhizome 2001]: http://classic.rhizome.org/portfolios/artwork/47645/ [Digital Art Archive, 2023]: https://digitalartarchive.at/database/work/5062/ [accessed: 07.12.2024].

19. Gouveia, Patrícia. *Jizo by Patrícia Gouveia* [Interact, 2001]: http://www.revistainteract.pt/memory/interact2/patricia/jizo_index.htm [Digital Art Archive, 2023]: https://digitalartarchive.at/database/work/5061/ [accessed: 07.12.2024].

20. Gouveia, Patrícia & Lima, Luciana. "*Blind Game*: An Interactive Installation About How We Can Exorcise Memories of a Visual Disability." *Augment Hum Res* 9, 5 (2024). https://doi.org/10.1007/s41133-024-00070-y [accessed: 07.12.2024].

21. Gouveia, Patrícia, Lima Luciana & Sá Cristina. "Arts and gaming, convergent feminism and speculative futures." *Journal of Science and Technology of the Arts*, *15*(2), pp. 9–17. https://doi.org/10.34632/jsta.2023.16022 [accessed: 07.12.2024].

22. Gouveia, Patrícia & Lima, Luciana. "Convergent feminism, gaming, digital transition, and equity" (chapter six). In: Frade, Renata, Vairinhos, Mario (eds) *Technofeminism: multi and transdisciplinary contemporary views of women in technology,* Digimedia collection, no.3, pp. 125–143, 2023.

23. Gouveia, Patrícia, Luciana Lima, and Anna Unterholzner. "Interactive Multimedia Experiences in Higher Education: Gaming, Augment and Virtual Reality, and Research." In *Handbook of Research on Acquiring 21st Century Literacy Skills Through Game-Based Learning,* edited by Carol-Ann Lane, pp. 180–193. Hershey, PA: IGI Global, 2022. https://doi.org/10.4018/978-1-7998-7271-9.ch010

24. Greene, Rachel. *Internet art.* London: Thames & Hudson 2004.

25. Hahn, Emily. *The Soong Sisters.* New York: Country Life Press 1945.

26. Haraway, Donna, *Staying with the trouble*. Duke University Press, Durham, 2017.

27. Heffington, Peggy O'Donnell. *Sem filhos, A Longa História de Não Ser Mãe* (Lisboa: Vogais com Todas as Letras and Penguin Randon House Group, 2024.

28. Infante, David, *Fotografia e resistência: desvendar narrativas invisíveis*. Unpublished doctoral thesis. Universidade de Lisboa: 2024.

29. Lima, Luciana, *Pensar o género a partir dos jogos digitais: uma análise sobre as assimetrias de género na indústria portuguesa de jogos digitais*. Editora Books Are Not Dead, Porto, 2023.

30. Manovich, Lev. "Database as a symbolic form", http://manovich.net/content/04-projects/022-database-as-a-symbolic-form/19_article_1998.pdf [accessed: 05.04.2023].

31. Manovich, Lev. *The Language of New Media*. Cambridge: The MIT Press 2001.

32. McLuhan, Marshall. & Powers, Bruce. *The Global Village*, Oxford University Press, 1992.

33. Moss, Ceci. *Expanded Internet Art: Twenty-First-Century Artistic Practice and the Informational Milieu*. London: Bloomsbury Publishing Academic 2019.

34. Oliveira, Sofia, Luis Silva. "Online, NetArt Portuguesa 1997 | 2004", https://www.cada1.net/netart/luis.html [accessed: 04.04.2023].

35. Page, Martin. The *First Global Village. How Portugal Changed the World*, Editorial Notícias, Lisboa, 2002.

36. Pereira, José Manuel de Almeida. *Estética de Ações Coletivas na Internet Art: Crowdsoursing e o Despertar de Públicos Criativos*. Doctoral Thesis. Universidade de Lisboa: https://repositorio.ulisboa.pt/handle/10451/39621 [accessed: 07.07.2023].

37. Preciado, Paul B. *Manifesto Contra-Sexual.* Lisbon: Orpheu Negro 2019.

38. Rubio, Fernando Domínguez. "The Unnatural Ecologies of Modern Art". Keynote speech at online symposium *Computer legacies: Narrating histories of digital media in museums.* Loughborough University: 2021.

39. Sayal-Bennett Amba. "Diffractive analysis: embodied encounters in contemporary artistic video practice," in Tate Papers no. 29, 2019 https://www.tate.org.uk/research/tate-papers/29/diffractive-analysis [accessed: 07.12.2024].

40. Seagrave, Sterling. *The Soong Dynasty*. London: Corgi Edition 1996.

41. Simon, Yves. *O Viajante Magnifico*. Porto: Editora In-Libris 2000.

42. Sollfrank, Cornelia. "Revisiting Cyberfeminism", *Art Press,* May/June 2015. https://artwarez.org/uploads/media/Sollfrank-Revisiting_Cyberfeminism.pdf [accessed: 05.04.2023].

43. Stone, Allucquère Rosanne, *The War of Desire and Technology at the Close of the Mechanical Age,* Cambridge: MIT Press 2001.

44. Unterholzner, Anna. *Gaming, art, and emotions: the challenges of neuroaesthetics.* Unpublished doctoral thesis. Universidade de Lisboa, 2023. https://repositorio.ulisboa.pt/handle/10451/59653 [accessed: 07.12.2024].

45. Wiener, Norbert. *Cybernetics: or control and communication in the animal and the machine,* Cambridge: The MIT Press 2000.

46. Ascott, Roy. "Is There Love in the Telematic Embrace?", in: *Art Journal* Vol. 49, No. 3, Computers and Art: Issues of Content (Autumn, 1990), pp. 241–247 [accessed: 21.07.2022].

47. Association for Women in Science. https://doi.org/10.2307/777114 [accessed: 21.07.2022].

48. Mamede Ana Bezelga. *Lugares polifónicos. A interação de vozes em arte telemática por meio de uma aplicação móvel para smartphone*. Doctoral thesis. University of Évora: 2021, https://www.rdpc.uevora.pt/handle/10174/30557 [accessed: 07.07.2023].

49. Bolter, Jay David. The Digital Plenitude: The Decline of Elite Culture and the Rise of New Media. Cambridge: MIT Press 2019.

50. Braidotti, Rosi. *Posthuman Feminism*. Cambridge: Polity Press 2022.

51. Chang, Jung. *As irmãs Soong, a mais velha, a mais nova e a vermelha, as três mulheres que marcaram a China do Século XX*. Lisboa: Quetzal Editora 2019.

52. Davidson, Robyn. *Lugares Desertos.* Lisboa: Quetzal Editora 2006.

53. Ellis, Carolyn, Tony E. Adams and Arthur P. Bochner. "Autoethnography: An Overview. Forum Qualitative Social Research", in: *Historical Social Research / Historische Sozialforschung*, vol. 36, no. 4 (138), 2011, pp. 273–90. *JSTOR*, http://www.jstor.org/stable/23032294 [accessed: 21.07.2022].

54. Eunison, Roby. *The Soong Sisters*. New York: Franklin Watts Inc. 1975.

55. Furtado, Teresa Veiga. *Net art e Igualdade de Género: Co-criação com mulheres de casas de abrigo.* Doctoral thesis. University of Lisbon: 2023. https://repositorio.ul.pt/handle/10451/59890 [accessed: 07.07.2023].

56. Gouveia, Patrícia. "The Digital Playful River, a River Out of Eden, How the internet shaped my planetary perception", in: *Challenges of the Technological Mind, Between Philosophy and Technology*. London: Palgrave Macmillan 2024.

57. Gouveia, Patrícia. *The Soong Sisters by Patrícia Gouveia* [Rhizome]*,* http://classic.rhizome.org/portfolios/artwork/47645/ [accessed: 21.07.2022].

58. Gouveia, Patrícia. *Jizo by Patrícia Gouveia* [Interact]*,* http://www.revistainteract.pt/memory/interact2/patricia/jizo_index.htm [accessed: 21.07.2022].

59. Greene, Rachel. *Internet art.* London: Thames & Hudson 2004.

60. Hahn, Emily. *The Soong Sisters.* New York: Country Life Press 1945.

61. Manovich, Lev. "Database as a symbolic form", http://manovich.net/content/04-projects/022-database-as-a-symbolic-form/19_article_1998.pdf [accessed: 05.04.2023].

62. Manovich, Lev. *The Language of New Media*. Cambridge: The MIT Press 2001.

63. Moss, Ceci. *Expanded Internet Art: Twenty-First-Century Artistic Practice and the Informational Milieu.* London: Bloomsbury Publishing Academic 2019.

64. Oliveira, Sofia, Luis Silva. "Online, NetArt Portuguesa 1997 | 2004", https://www.cada1.net/netart/luis.html [accessed: 04.04.2023]

65. Pereira, José Manuel de Almeida. *Estética de Ações Coletivas na Internet Art: Crowdsoursing e o Despertar de Públicos Criativos*. Doctoral Thesis. University of Lisbon: 2019. https://repositorio.ul.pt/bitstream/10451/39621/2/ULFBA_TES_1238.pdf [accessed: 07.07.2023].

66. Preciado, Paul B. *Manifesto Contra-Sexual.* Lisbon: Orpheu Negro 2019.

67. Rubio, Fernando Domínguez. "The Unnatural Ecologies of Modern Art". Keynote speech at online symposium *Computer legacies: Narrating histories of digital media in museums.* Loughborough University 2021.

68. Seagrave, Sterling. *The Soong Dynasty*. London: Corgi Edition 1996.

69. Simon, Yves. *O Viajante Magnifico*. Porto: Editora In-Libris 2000.

70. Sollfrank, Cornelia. "Revisiting Cyberfeminism", *Art Press,* May/June 2015. https://artwarez.org/uploads/media/Sollfrank-Revisiting_Cyberfeminism.pdf [accessed: 05.04.2023].

71. Wiener, Norbert. *Cybernetics: or control and communication in the animal and the machine,* Cambridge: The MIT Press 2000.
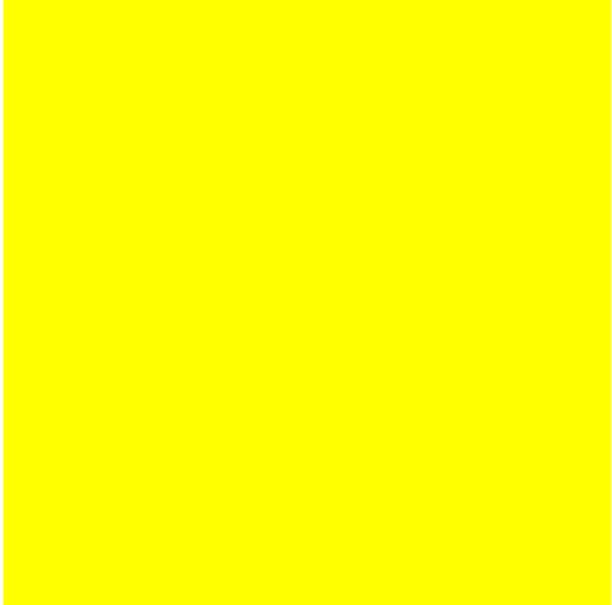
Remnants of the future. Artefacts of polish cybernetic poetry as seen today

Piotr Puldzian Płucienniczak

Academy of Fine Arts in Warsaw
https://orcid.org/0000-0003-4814-695X
DOI: https://doi.org/10.59862/F7k2B9xQ-03

Cybernetic poetry (or cyberpoetry) was a short-lived and interesting excess of Polish digital literature in the 2010s. While the movement involved only a few people, it has already been a subject of scientific investigation, including articles, PhD theses and references in schoolbooks. For the artists related to it, software served as a medium to transcend the borders of literature and venture into visual arts and interactive media. They took up a position between two distinct art worlds, each founded on a different set of rules. This gave them the courage and inspiration to envision an entirely new model for the circulation of artworks. Why use stale, printed books when you can express yourself with colourful, interactive forms? What use is the idea of the original, copyrighted or limited print runs when everyone can copy and disseminate files online? Why should anyone cling to those obsolete tools? Cyberpoets claimed that the future is now and that the arts have to fully embrace the economy of sharing.

Figure 1. Perfokarta. Screenshot of the website.

To Leszek Onak, the programming was the realisation of the poetry's ideal: a language that creates worlds, not merely describes them. So, cyberpoetry was the next step in the evolution of the poetic medium – one that was expected to surpass its static ancestors and exploit new possibilities offered by computers and networks. Sounds cool, doesn't it? Yet it was cyberpoetry that went extinct, not the printing presses or the poetry readings organised in cafeterias.

In this paper, I offer a short tour through the works of cyberpoets and the sites they used for online gatherings. We will see what was left of their bold creativity, whether we can still make sense of the artefacts left by this mysterious tribe and what can we learn from them, if anything.

Perfokarta, the eternal machine

Perfokarta,[1] initiated by untiring Roman Bromboszcz, was the first step towards the new art. Back in 2005, in a different era, a group of five artists (the already mentioned Roman Bromboszcz, along with Marek Florek, Szczepan Kopyt, Tomasz Misiak and Łukasz Podgórni) signed the Manifesto of Cybernetic Poetry. Afterwards, the list of artists involved in the project expanded to 16. And yet, in practice, Perfokarta was never an art collective in which everyone acted together but, rather, a "container for personnel", as the website describes it. Moreover, Roman Bromboszcz was the only one to decide who should be in that container and who should not.

In a display of its timelessness, Perfokarta's site maintained its appeal of a classic web design: there is a current date at the top of the screen, a visitor counter at its bottom, showing over 120,000 visits (I am sure bots were included), and an indicator of the last update (February 2022). Subpages can be selected through combo boxes, which is a practice specific to this website.

Roman Bromboszcz still curates the site. Every time I visit the site, small things change place, and bits of text are added or removed. He is the lone custodian of this haunted archive, the only one with a key. As we'll see later, the question of having a key – being in control of the online content – turns out to be a very important factor in the history of cyberpoetry.

---

1 Perfokarta, https://perfokarta.net/ (accessed: 10.09.2023).

The First Manifesto of Cybernetic Poetry

The original Manifesto of Cybernetic Poetry was a moving object coded in ActionScript – the content of the manifesto exploded in the viewer's face with the noise of a starting engine. It was difficult to read and comprehend, yes, but that was part of the plan.

If you manage to find the manifesto within Perfokarta's exotic user interface, you will find not the original multimedia, but a static document. This is a scan of the original manifesto that was printed in 2006 in one of the Polish literary magazines and then uploaded as a PDF. The reason for this is simple: the original was created in Shockwave Flash (SWF) using ActionScript, a technology discontinued in 2019. SWF was a widely popular format for distributing multimedia online throughout the 2000s and 2010s but was superseded by HTML5. In consequence, the plugin (Shockwave Player) was removed from browsers as a security risk.

Although there are open-source reconstructions of Flash technology that accurately reproduce the original content, it requires the user to purposely find the plugin and install it. Roman Bromboszcz sensibly predicted that most people would not do it and provided an effortless alternative. The original audiovisual impact of the manifesto was sacrificed in the name of accessibility. In this context, it is worth mentioning that even the first version of the Perfokarta site was written in Flash and then remade into HTML.

The lessons of Roman Bromboszcz

The idea to provide a scan instead of the original is just one of Roman Bromboszcz's efforts to preserve cyberpoetry. As an artist, he created both offline and online works: traditional, written poetry and one that was more experimental; he played live music and performed on stage. His interactive works are the ones I consider most representative of his artistic vision – works that were, of course, created in ActionScript and compiled into Shockwave Flash files.

Roman found an artful way to preserve his works beyond obsolete technology. He recorded himself interacting with Flash applications and uploaded these clips to YouTube. This way, the audience can experience his works the way he imagined them. While it is no longer an interactive experience, it is at least a way to engage with cybernetic poetry. I find it endearing and clever.
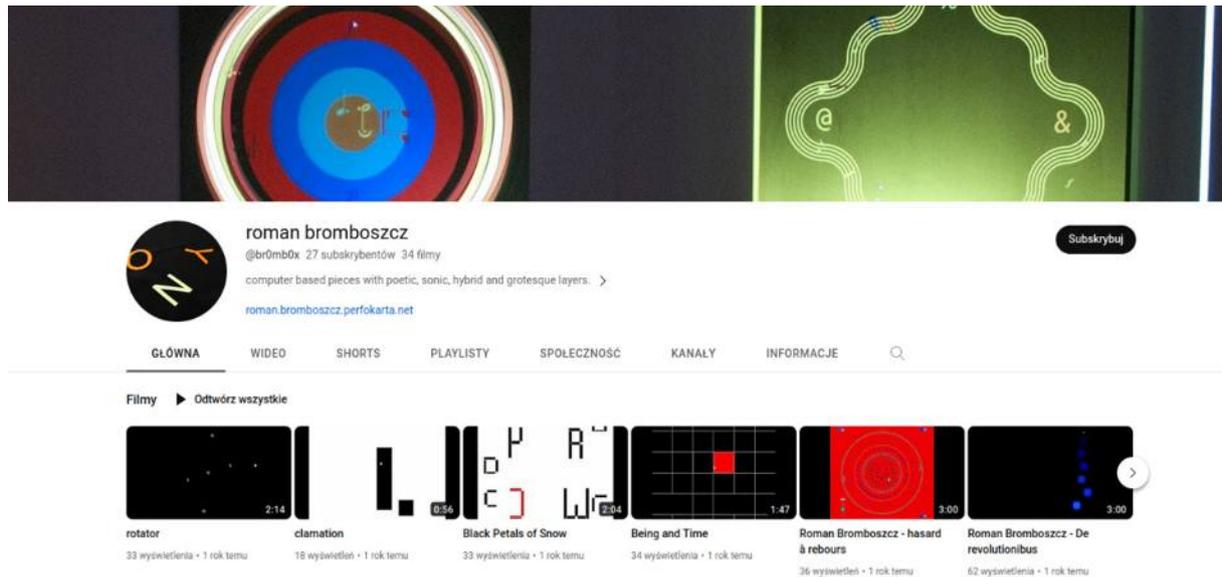
Figure 2. Works of Roman Bromboszcz. Screenshot from the artist's YouTube channel.

The spirit of Rozdzielczość Chleba

In late 2011, Leszek Onak and Łukasz Podgórni launched an art collective and publishing house Rozdzielczość Chleba (Bread's Resolution). The group soon grew with new members such as Julia Girulska, Kinga Raab, Wojtek Stępień, Arek Wierzba, Aga Zgud and myself.

Rozdzielczość Chleba began with a manifesto written by Onak and Podgórni that was then signed by other members of the group. The text offered a vision in which the traditional monopolies on content delivery got crushed and everything was free to circulate. The group published its books online, not expecting any remuneration. Freedom from money was see as freedom from the capitalist economy and its constraining pursuit of material success.

The manifesto was embedded on the website with a proprietary plugin provided by Issuu – a website used to host scans of online magazines. Issuu was popular before in-browser PDF plugins were widely adopted and, until then, was the only place to present content of such files. Since changes to Issuu's policy on embeds, the file is unavailable to read on the Rozdzielczość Chleba's website. Fortunately, the text itself is impossible to find in other places.

Figure 3. Leszek Onak and Łukasz Podgórni, Manifest Rozdzielczości Chleba, 2011.Screenshot from the Issuu website.

The collective disbanded in 2018 after personal disagreements. The site still resides on my personal server, and I also pay the yearly domain fee of around 20 euros. In time, the unattended Wordpress installation will break or be hacked. Some of internal links are already broken. Nevertheless, the site and most of its content are accessible.

Łukasz Podgórni's elusive persona

It is difficult to say what Łukasz Podgórni's main artistic domain was. He wrote poetry, recorded music, ran a music label and a publishing house, and created interactive works, sculptures and digital graphics. His original homepage was hosted on a free service that is no longer available. After that, he moved to blogspot, then to Tumblr and

Instagram. In 2014, he experimented with a short-lived Ello, then used Facebook fan pages to perform different personas.

Fortunately, there is an authoritative source on this elusive artist – a recording of Podgórni explaining ideas behind his works during a conference or a meeting held in 2015 in Katowice titled Hipertekstowo. While the author himself moves swiftly between media, an institution pins him – at least for a moment – and provides us, digital archaeologists, with an insight into his thoughts.

Figure 4. Łukasz Podgórni. Screenshot from a YouTube video.

Leszek Onak's page not found

Leszek Onak was a figure crucial to the cyberpoetry movement and a broader online community focused on literature. A talented artist and a creative organiser, he invented liternet.org – a poetry-centred social media portal that became a focal point for discussions in the mid-2010s, until its demise after a lost battle with trolls.

Personal problems forced Onak to delete his homepage and cut ties with colleagues from the cyberpoetic movement. His website, ominously named http404 – codename for "page not found" error – is currently unavailable. It seems that Leszek deleted or renamed the index.html file, which provided the browser with an entryway to the content. The fine print reads: "Error 404 – Everything makes sense but you. Come to your senses."

If you know the direct links, it is possible to access Onak's works, as they still reside on the server. However, an attempt at accessing one of his most beautiful works, *Kręgosłup czasu* (*A spine of time*), ends with an offer to download a SWF file. What is one supposed to do with that?

Techsty, a theoretical strongpoint

Techsty magazine focuses on literature and new media is still going strong, albeit the frequency of new issues decreased significantly. The chief editor, Mariusz Pisarski, has run the magazine since 2003 and still occasionally updates the website, ordering new artworks from cyberpoets or their rare successors.
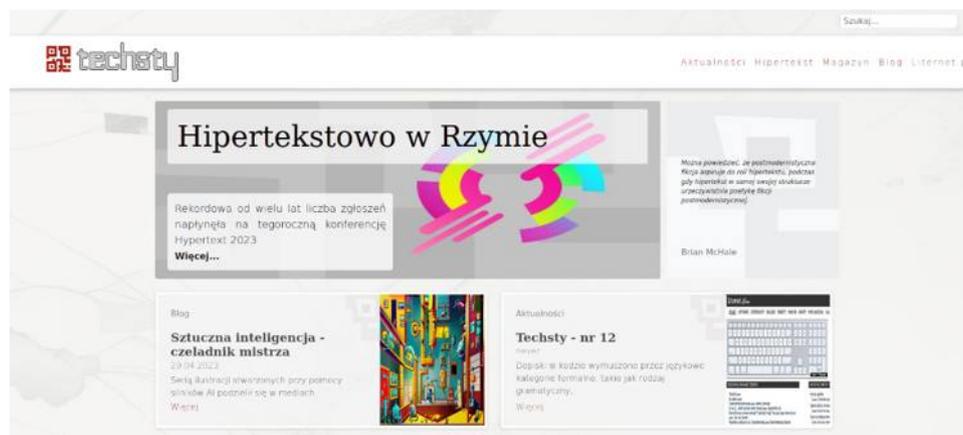
Figure 5. Techsty. Screenshot from the Teschsty's homepage.

One interesting feature of this website is that it does not use any content management system (such as Wordpress). This means that every issue is a distinct webpage preserved with a particular layout and design decisions characteristic to its time. It seems that there is no database that would unify the resources. Some links are dead, while others work only if clicked within a particular context (e.g., you cannot go from issues 1–8 to 9 and beyond). This makes *Techsty* not only an archive of theoretical discussions on cyberpoetry but also an archive of web design and ideas about how the net should work. Pisarski created most of it himself – as he is not only a researcher and archivist, but also an artist.

[Error : Błąd]

[404] File Not Found : Plik nie istnieje

The requested URL /wydawnictwo/katalog-ksiazek/3041 was not found on this server.

Podany w zapytaniu URL /wydawnictwo/katalog-ksiazek/3041 nie został odnaleziony na tym serwerze.

webmaster@ha.art.pl

Powered by APACHE

Powered by linux

data:Monday, 02-Oct-2023 19:39:41 CEST, ostatnia modyfikacja: Friday, 06-Aug-2021 15:40:57 CEST

Friday, 06-Aug-2021 15:40:57 CEST

Figure 6. Piotr Puldzian Płucienniczak and Mateusz Simon, *Złe Słowa*, 2013. Screenshot from the Liternet's website.

Liternet, our final stop

After Leszek Onak decided to close his social media platform, Liternet, the indispensable Pisarski took over the domain and used it to create the Archive of Polish Digital Literature. Almost 40 works from different authors from 1999 until the late 2010s are now included in the archive. Unfortunately, most works are hosted on external servers that are out of Mariusz's power.

The screen above shows my own work titled *Złe słowa* (*Angry words*) created together with Mateusz Simon in 2013. It was hosted on a server of its publisher, Korporacja Ha!art, which since then has changed its directory structure. The file is, in fact, available on the server if you change the domain to: "archiwum.ha.art.pl". Of course, the artwork was compiled in ActionScript, so it does not work on modern browsers. From the perspective of a casual viewer, the file might be as well irreversibly deleted.

The end and what's left?

Cyberpoets promised us a revolution, but they were not prepared for one. There are still traces of their activity left online if you know where to look. Some of the contents are archived on The Wayback Machine; there are also a few open-source plugins to play Flash files.

If there is a lesson to take from the story of the cybernetic poetry movement in Poland, it is a story of the importance of open standards, including open protocols; the importance of archives, hardware and infrastructure. Perhaps you cannot prevent imagining the future world using tools at hand, be it ActionScript and the bare HTML files of the late 2000s or the corporate social media of the 2010s. Radical imagination requires a true revolution – one that would go beyond what is readily available and provide entirely new modes of creation and distribution; ones that rely on sustainable community engagement rather than on corporate goodwill. But whether such communities exist – that's another story.

How can you launch a revolution using proprietary coding tools and virtual hosting? Well, at least we tried, and I think it was worth a shot.

Bibliography:

1. Perfokarta. https://perfokarta.net/ [accessed: September 10, 2023].
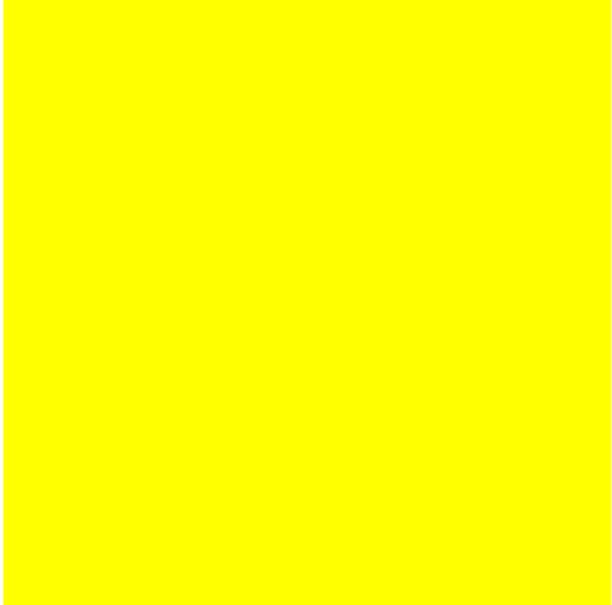
Lostwave: forgotten music in the digital era

Martyna Kopeć

Nicolaus Copernicus University in Toruń
https://orcid.org/0009-0000-2463-7514
DOI: https://doi.org/10.59862/F7k2B9xQ-04

With ubiquitous access to the internet comes a notion that it is possible to find anything easily at any time, especially among younger generations who have grown up with computers and smartphones. For this reason, an encounter with a piece of media on which no information can be found may arouse a particular fascination and the need for cognitive closure. On the web, we can observe a niche, but large, community engaged in searching – and researching – the material whose origins cannot be easily identified. Lost media refers to any recorded content that is unavailable to the general public or which became forgotten, typically because its original support got damaged or became obsolete. This happens primarily due to the degradation of carriers that results from the lack of effort in preservation, "wiping" old tapes to save storage space and money, or because of the lack of any additional forms of archiving – a common scenario, especially for early television broadcasts and live performances. Lost media encompasses a wide range of examples, dating from the early silent films of the 1920s to electronic data and tools released on the internet, such as online Flash browser games or some YouTube videos.

One of the most significant branches of lost media is lostwave, which focuses on music of unknown origin, for which Reddit and Discord are the main locations for information exchange and community gathering. The general Reddit subgroup is r/Lostwave, described as "a community dedicated to collecting and putting a spotlight on great music that has gone unnoticed, lost popularity or even lacks identity".[1] Other subgroups are dedicated to particular lostwave songs. The most popular and sought-after are recordings known as *The Most Mysterious Song on the Internet* (TMS), and *Everyone Knows That* (EKT), both of which were recently identified.[2]

Many examples of lostwave involve a transition from physical media to the digital realm, a practice that aligns with the post-digital concept. Florian Cramer states that post-digital "describes a perspective on digital information technology which no longer focuses on technical innovation or improvement" and "eradicates the distinction between

---

1 "r/Lostwave", *Reddit*, https://www.reddit.com/r/Lostwave/ [accessed 24.03.2024].

2 These subreddits serve as the central hubs for gathering and exchanging information, where users actively report their findings and theories. TheMysteriousSong subreddit even has its own spreadsheet where they meticulously organise possible and dead leads, enhancing the community's collaborative efforts in solving the mystery: https://www.docs.google.com/spreadsheets/d/1GePlaroCOz_jYHlR5Gcr4DfdGjUq-12C967ZBln0Rns/edit#gid=0 [accessed 24.03.2024].

'old' and 'new' media, in theory as well as in practice".[3] Post-digital does not mean digital technologies and digital media no longer play a role today. The opposite is the case: deep and sustained implementation of digitisation is necessary for the post-digital state. Cultural and artistic practices can only be meaningfully called "post-digital" when they do not merely revive older media technologies but functionally repurpose them in relation to digital media technologies.[4] In the case of lostwave, the physical media are digitised, shared and archived online. Lostwave communities actively use digital tools, such as Reddit, Discord and other online platforms, to search for, analyse and disseminate these lost songs. Thus, lostwave operates in the post-digital realm by relying on digitisation while maintaining its roots in physical media.

In this article, the phenomena of lostwave and its community are analysed to explore possible intersections between the aesthetic of eeriness conceptualised by Mark Fisher and the anthropological frameworks of liminal proposed by Arnold van Gennep and Victor Turner. This study seeks to uncover the broader significance of lost media music within a contemporary digital culture by examining participatory engagement and collective intelligence within the lostwave communities and the liminal nature of the lost media artefacts.

As it turns out, TMS was recorded on a cassette tape during a radio broadcast in West Germany in the 1980s. This recording was then integrated into a mixtape alongside other radio captures featuring songs by such prominent bands of the time as The Cure, Simple Minds and Depeche Mode. A digitised version of the song first appeared in 2007; however, it was not until 2019 that it gained attention within the lostwave community. This interest ultimately led to the formation of a dedicated Reddit subgroup, r/TheMysteriousSong. After 17 years of searching, the song was identified as *Subways of Your Mind* by the German band Fex, released in 1983 as a demo tape. EKT, in turn, is a short, 17-second snippet uploaded in 2021 on WatZatSong – a music identification and social networking website – by user Carl92. He claimed that he found the recording among other old files in a DVD backup, which suggests it appeared there as the result of experiments with capturing audio. He did not provide more information about the audio's origins, but due to the characteristic sound of the pop music of the era, it was believed to have been recorded in the 1980s. Initial identification attempts proved

3 Florian Cramer, "What Is 'Post-digital'?" in Postdigital Aesthetics: Art, Computation and Design, David M. Berry and Michael Dieter (eds.), New York: Palgrave Macmillan 2015, p. 20.

4 *ibidem*, p. 21.

unsuccessful, and the discussion soon moved to the Reddit subgroup r/Lostwave, which then gained its own subreddit. After three years of searching, it was revealed that the source of a short fragment was the 1986 pornographic film *Angels of Passion*, and the authors, Christopher Saint Booth and Philip Adrian Booth, were contacted immediately.

The pursuit of lost media exemplifies Henry Jenkins' concept of convergence culture, where boundaries between producers and consumers blur, fostering participatory engagement and collective intelligence. Jenkins views this concept primarily as a circulation of content across various media platforms driven by active user participation.[5] Convergence involves corporate initiatives, such as media companies seeking to extend their reach, and consumer dynamics, such as users navigating various media technologies to control content flow and engage in collaborative creation.[6] Jenkins illustrates one facet of convergence culture through the lens of collective intelligence – a concept he borrows from Pierre Lévy. He examines this phenomenon within the context of the reality show *Survivor*, where online fans collaboratively pieced together information about future episodes. The filmmakers filmed and edited the entire season in advance but created enough suspense and surprise to give the audience an impression of watching real-time events. Following each episode, fans of the show would search for signs to unravel forthcoming events. For instance, they would look for clues by investigating episodes frame by frame, travelling across the world to see the shooting locations, or even taking satellite pictures.[7]

These activities mirror lostwave community investigations of unknown songs, where users actively participate in the distribution of content. When investigating TMS or EKT, users tried to analyse the lyrics, melody and style of the music, as well as to identify the singer's accent, transcribe the song into a music sheet, cross-reference it with other compositions or even get in touch with individuals who could provide clues. From an in-depth analysis of a very short fragment of EKT, users were able to recognise that the drum machine used in the song was probably Linn Electronics LinnDrum and that the synthesiser responsible for the melody was a Yamaha DX7. They also established that the recording might have been captured from an NTSC TV based on the analysis of

5 Henry Jenkins, *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press 2006, p. 3.

6 *ibidem*, p. 18.

7 *ibidem*, p. 25.

the background frequencies.[8] The motivations for searching expressed by community participants included: making sure that the creators would be acknowledged for their work,[9] the mysterious nature of the track and the challenge of uncovering its origins,[10] and the appeal that stems from the contrast between the difficulty in locating the song and the apparent ease of accessing information online.[11]

The prevalence of digital archives and online repositories often leads people to assume that most information is digitised and readily accessible online. This creates the expectation that, with the right tools and resources, even the most obscure or niche cultural artefacts should be searchable. Members of the lostwave community act as amateur media conservators who collect, archive and disseminate unidentified music. According to Rinehart and Ippolito, there are four strategies for rescuing the disappearing cultures: storage, emulation, migration and reinterpretation.[12] While storage is a rather common and conventional preservation method, it is prone to obsolescence, regardless of whether the work is analogue or digital. Therefore, it is important to rely also on alternative strategies that offer more adaptable approaches to safeguarding cultural heritage in the digital age.[13] One of them is emulation – the replication of the functionality of one computer system on another, allowing software or hardware designed for the original system to run on the emulated system. Yet, it should be stressed that even if they can function as a method for preservation, emulators can also become lost media. A good example is LadyNES, a pioneering NES emulator developed by Alex Krasivsky in 1996, which laid the groundwork for modern emulation by introducing the ".nes" format. After years of obscurity, a copy was rediscovered via an archived ISO file in 2023.

8 Carrie O'Grady, "Everyone Knows That: can you identify the lost 80s hit baffling the internet?", *The Guardian*, 28.02.2024, https://www.theguardian.com/music/2024/feb/28/everyone-knows-that-can-you-identify-the-lost-80s--hit-baffling-the-internet [accessed 23.03.2024].

9 See: David Browne, "The Unsolved Case of the Most Mysterious Song on the Internet", *Rolling Stone*, 24.09.2019, https://www.rollingstone.com/music/music-features/most-mysterious-song-on-the-internet-885106/ [accessed 23.03.2024].

10 See: Carrie O'Grady, *op.cit.*; David Browne, *op.cit.*

11 See: Carrie O'Grady, *op.cit.*; Laura Holliday, "Everyone Knows That: how the internet became obsessed with lostwave", *Dazed*, 27.02.2024, https://www.dazeddigital.com/music/article/62053/1/lostwave-youtube-everyone--knows-that-reddit-lost-songs-like-the-wind [accessed: 23.03.2024].

12 Richard Rinehart and Jon Ippolito. *Re-collection: art, new media, and social memory*. Cambridge: The MIT Press 2014, pp. 8–10.

13 *ibidem.*

Another option is migration, which involves updating the medium by transferring its contents to another support, as happens in the case of digitalising snippets of songs from old CDs or cassettes. This method is common among the online communities interested in lost media and it plays a crucial role in establishing and sustaining them on the basis of sharing and trading rare (or hard-to-find) pieces of media. In the context of lostwave, the most interesting method of preservation proposed by Rinehart and Ippolito may be a reinterpretation, as it goes way beyond the usual archival efforts. This facet encompasses a spectrum of fan activities, including covers, remixes, remasterings or mashups. Enthusiasts often engage in reinterpretation to reconstruct the context surrounding obscure music by making collective attempts at deciphering muffled song lyrics from lo-fi audio. Sound restoration is also a common practice where audio software is used to enhance the quality of the song and transfer it from the physical support. This process serves the dual purpose of enabling thorough analysis and restoring a song to its authentic rendition. Certain lostwave tracks are paired with visual components to form their representation and commodification. For instance, a pink Nextplay boombox from 2006, which emerged as a visual symbol for "Everyone Knows That", was actively sought after by fans online, eventually circulating on the internet as the "EKT boombox".

Both TMS and EKT embody the essence of 80s music, with TMS reminiscent of exemplary new wave sounds, and EKT – those of typical pop songs of the period. The disconnection between a familiar musical style and the mystery surrounding the recording's origins creates a fascination with its ontological status. Many members of the community refer to lostwave as "eerie" or "uncanny".[14] The unidentified status of the songs and snippets seems to evoke a sense of discomfort when paired with uncertainty about the artist's identity and whereabouts: "I find it uncanny to listen to a song that no one knows the creator of. It's like the song just appeared out of thin air. There's no connection to the artist which gives me a very unsettling feeling. It feels like I should be connecting with someone but it's just a void," "I find it eerie and weird because if you think about, that singer probably had a family, relatives he was just a normal person who possibly had some short fame and now, all his songs are lost."[15] It also represents the fear of fading into obscurity: "Someone, somewhere, poured their heart and soul into that song, and they got nothing for it. It almost became completely forgotten and lost to

---

14 All user statements come from Reddit (specifically from the subreddits r/everyoneknowsthat, r/themysterioussong, and r/lostwave), accessed on 30.04.2024. In all quotes, I keep the original spelling.

15 *ibidem.*

time forever... saved only by a low-quality 30-second clip. And it makes you realize that for every well-known song, there were probably thousands, if not millions, that suffered the same fate, only they were not saved by this low-quality clip. They, like all of us will be eventually, were completely lost to time."[16]

Some listeners describe the experience as akin to hearing something forbidden or catching a glimpse of a parallel dimension: "I think many people feel this way. I certainly do. It's like these are songs we were never meant to hear, they weren't written and recorded for us. It's a really weird feeling," "It's like if EKT came from another dimension where it was this massive 80s hit. It somehow crossed over from its timeline, but only barely to where we only received it as a low-quality snippet. Listening to EKT makes me think of memories that never happened."[17] In this sense, lostwave is often likened to liminal spaces, particularly their uncanny and solitary qualities: "I'm the same. When I listen to lost wave songs, I imagine that I'm somewhere in an abandoned shopping center where I'm alone, the atmosphere is like in the backrooms, and somewhere someone turns on this song. Although sometimes it's sad to hear somewhere a very cool energetic song, but only a 30 second fragment," "The first one I heard was 'everyone knows that' and it creeped me out. It sounded like every 80s song in a nutshell, yet it's like it had a purpose. You get a visual idea, but it is just like uncanny. Like you're in a liminal space where there used to be so much energy and life."[18]

Users are also expressing a collective fascination and unease with lostwave music, finding it haunting: "So glad i'm not the only one who feels this way! There's something so eerie about lostwave. I don't know how else to describe it but when I first heard EKT, it felt frightening. Oddly like seeing the 'you will die in 7 days' video from *The Ring*, or something along those lines. It was haunting. I know that's a dramatic example, but it's the only similar vibe I can think of. Thankfully doing a deep dive into EKT and lostwave was very grounding lmao. So fuckin' creepy to begin with, though," "I think it's due to how degraded the song is and the way it sounds like the ending credits for... something."[19] Some express displeasure with the songs, implying that the only intriguing aspect is the mystery surrounding them: "Just my personal opinion. It's not 'terrible' but for me it's below 'allright'. The music is technically good, but there's something unplesant in this

16 *ibidem.*
17 *ibidem.*
18 *ibidem.*
19 *ibidem.*

song that's hard to describe. If not a mystery surrounding it I wouldn't listen it again. I can see why despite being catchy it have never became a hit," "Maybe an unpopular opinion but most if not all songs are Meh and have the vibe of like mid album filler songs."[20]

As it can be seen on the examples presented above, the eeriness of lostwave results not solely from the music itself but also from the context in which it was encountered. Mark Fisher described an important distinction between the Freudian *unheimlich* (un-canny) and his notions of the weird and the eerie. These phenomena are often evoked by cultural mediums, despite not being literary genres; they are emotional responses or affects.[21] Although these concepts seem analogous, as they share a preoccupation with the strange, they diverge in their focus. The weird indicates an intrusion of something alien or otherworldly into the familiar, causing a disruption that is difficult to understand, which is often associated with Lovecraftian themes.[22] The uncanny is about "the strange within the familiar, the strangely familiar, the familiar as strange – about the way in which the domestic world does not coincide with itself".[23] Unlike the eerie, which looks to the outside, the uncanny operates within that, which is considered well-known and domes-ticated. Eeriness is based on a failure of absence ("there is something present where there should be nothing") or a failure of presence ("there is nothing present where there should be something").[24] The sense of eeriness forces us to ask questions about the nature of what lies beyond. The sense of eeriness vanishes once we have the answers.[25] The peculiar quality of lostwave comes from the fact that it simultaneously represents a "failure of presence" and a "failure of absence": it encompasses an unexpected pres-ence when a piece of media that should exist (because there are records or memories of it) is nowhere to be found.

Similarly, when a piece of media that should have disappeared or become obscure somehow persists in the collective memory and discussions of the lostwave community, it creates a feeling of something forbidden, as expressed in the previously cited user's quote ("It's like these are songs we were never meant to hear, they weren't written and recorded for us."). Once embedded in the cultural semiotic systems of their time, lost

20 *ibidem.*
21 Mark Fisher, *The Weird and The Eerie*. London: Repeater Books 2016, p. 9.
22 *ibidem*, p. 16.
23 *ibidem*, p. 10.
24 *ibidem*, p. 61.
25 *ibidem*, p. 62.

songs have become "eerie traces" of the past that is no longer accessible. They are metaphorical ruins discovered in the digital landscape that can be heard but are never fully contextualised. This parallels Fisher's analogy to ancient ruins like Stonehenge or Easter Island: tangible but incomprehensible remains of long-gone civilisations. Notably, the eeriness of lostwave immediately disappears when a song gets attributed to a specific author based on credible evidence – there can be no eeriness without the mystery. Fisher emphasises, however, that not all mysteries cause eerie feelings.[26] The perception of difference is crucial to eerie mysteries – an awareness that an explanation can involve forms of understanding that go beyond ordinary encounters. Lostwave enigmas represent uncharted territories with no paths that could lead to solving the mystery. Moreover, there is no certainty that a given song is not a hoax. This underscores another intriguing aspect of the community: its reliance on trust, with members taking the subject seriously while constantly exposing internet "trolls".

The core question of eerie lies in the issue of agency. When there is a failure of absence, the question is whether there is an active agent behind this, observing us without our knowledge. If failure of presence occurs, the focus immediately shifts to understanding the nature of the involved agent.[27] That is also true of the lostwave community's pursuit of lost media, as the questions that arise from the perspective of failure of absence include: Who were the original creators of these songs? What caused their disappearance, and why? Adapting the lens of failure of presence, we can also ask: How did these songs end up circulating anonymously on the internet? How did these songs end up as lostwave? As long as the recordings remain "lost", they occupy a peculiar epistemological space of what is familiar yet unknown.

The term "liminal" stems from the Latin word *limen*, which means "a threshold", and was coined by ethnographer Arnold van Gennep in the context of rites in small societies. There, rites of passage served as a framework in the pivotal periods of individuals' lives, often linked to changing the status within a group. Van Gennep describes the liminal rite as a transitional state – a midpoint between ritual or ceremonial passages. It comes after the preliminary rite, which marks a separation from the previous identity and precedes the post-liminal rite – a re-incorporation into society with a new identity.[28] The liminal

---

26 *ibidem.*

27 *ibidem*, p. 63.

28 Arnold van Gennep, The Rites of Passage, trans. Monika B. Vizedom and Gabrielle L. Caffee. London: Routledge 1960, p. 62.

phase marks a period of existential transformation: "To cross the threshold is to unite oneself in a new world."[29] Following van Gennep's work, Victor Turner developed the concept of liminality even further. To him, it referred not only to a condition of someone passing from one stage of a ritual to another, but also the condition of someone – or something – suspended or trapped in between two sets of role expectations, which may lead to ambiguity. As he writes: "Liminal entities are neither here nor there; they are betwixt and between the positions assigned and arrayed by law, custom, convention, and ceremonial. As such, their ambiguous and indeterminate attributes are expressed by a wide variety of symbols in the many societies that ritualise social and cultural transitions. Thus, liminality is frequently likened to death, to being in the womb, to invisibility, to darkness, to bisexuality, to the wilderness, and to an eclipse of the sun or moon."[30]

When we apply this concept to lost media or lostwave, we can describe these pieces of media as existing in a liminal state, as defined above. They are in transition from their original, unknown context to a new, yet-to-be-determined one. In this sense, lostwave represents a form of cultural liminality, as it exists in a state of ambiguity, caught between its unknown past and its newfound presence on the internet. Although it left the original context of a physical medium on which it was found but has not yet fully transitioned to being identified and placed within a specific time or geographical location, as well as being attributed to an author, it remains in a liminal state. Moreover, the experience of the listeners or the online communities that engage with it can also be seen as liminal, resembling a rite of passage that leads from the initial discovery to eventual recognition and closure if the song's origins can be traced.

An example of a lostwave recording that transitioned from liminal to post-liminal status is the demo EP *D>E>A>T>H>M>E>T>A>L* by the British band Panchiko. In 2016, a user on the 4chan website posted a photo of a CD cover on a music board, claiming they had found it in a charity shop, and asked for help identifying the artist. Eventually, some tracks were shared, revealing heavy distortion caused by the disc's deterioration. Sceptics dismissed the band as a hoax, suggesting the post might be a publicity stunt. Nevertheless, the unknown band garnered significant interest, leading fans to engage in research. After four years of collective efforts, they contacted one of the band's members, learning that the CD was a demo EP sent to several record companies. Due to the lack of interest, however, the group disbanded. Taking advantage of the keen interest of

29 *ibidem*, p. 20.
30 Victor Turner, *The Ritual Process: Structure and Anti-structure.* New York: Cornell University Press 1977, p. 95.

searchers, Panchiko remastered their EP and released it through Bandcamp, expanding it into a full-length album. Then, they collaborated on reuniting the band, releasing the previously unheard tracks composed between 1997 and 2001. They also made new original songs, which were launched on streaming platforms and in various physical formats, such as cassettes and vinyl. After a year of their discovery by the lostwave community, they made their first live show and, soon after that, went on a tour.

Panchiko's trajectory can be seen as a process of passing through what Turner defines as a "limbo of statuslessness".[31] Their music was disconnected from its original context and yet had not been fully incorporated into a new one. On the one hand, it was an artefact from the past – a physical medium that somehow ended up in a charity shop. On the other, it was a mystery to be solved by the online community – a puzzle that sparked interest. The preliminal rite was marked by the moment when Panchiko created their demo EP and sent it to several record companies, which was a clear attempt at separating from their previous identity as a garage band and transforming into a recognised entity within the music industry. The four years between Panchiko's reappearance as an obscure recording and their identification by the online community represented a liminal period when they went through a process of recontextualisation. The post-liminal stage was achieved when they re-entered the music industry, this time with a new identity and recognition, which were solidified by the decision to remaster their EP.

Often, works labelled as lostwave have no distinct cultural status and mainly consist of unreleased songs, demo tracks or unfinished and abandoned projects. Nevertheless, none of this matters in the modern digital culture, as all kinds of information seem to be archived indefinitely. However, contact with lost or forgotten media often reveals the fragility of preservation and the selective nature of cultural memory. In this regard, it is curious to note that, rather than being just a collection of unidentified music, by now, lostwave has become a genre of its own, with a large community dedicated to rediscovering unique stories and bringing back human agency to what is merely a drop in the ocean of the internet's content. Among other things, lostwave challenges the conventional notion of digital omnipresence and analysis of its eerie and liminal nature provides a framework that helps to understand the nature of this phenomenon, while illustrating how different lost media are from conventional mysteries and why they attract so many people, dedicated to networking, exchanging observations and sharing their knowledge with the common aim to uncover the history of lost-and-found tracks.

31 *ibidem*, p. 97.

Bibliography:

1. Browne, David. "The Unsolved Case of the Most Mysterious Song on the Internet", in: *Rolling Stone*, 24.09.2019. https://www.rollingstone.com/music/music-features/most-mysterious-song-on-the-internet-885106/ [accessed: 01.03.2024].

2. Cramer, Florian. "What Is 'Post-digital'?", in: *Postdigital Aesthetics: Art, Computation and Design*, David M. Berry and Michael Dieter (eds.). New York: Palgrave Macmillan 2015.

3. Fisher, Mark. *The Weird and The Eerie*. London: Repeater Books 2016.

4. Holliday, Laura. "Everyone Knows That: how the internet became obsessed with lostwave", in: *Dazed*, 27.02.2024. https://www.dazeddigital.com/music/article/62053/1/lostwave-youtube-everyone-knows-that-reddit-lost-songs-like-the-wind [accessed: 01.03.2024].

5. Jenkins, Henry. Convergence Culture: Where Old and New Media Collide. New York: New York University Press 2006.

6. O'Grady, Carrie. "Everyone Knows That: can you identify the lost 80s hit baffling the internet?", in: *The Guardian*, 28.02.2024. https://www.theguardian.com/music/2024/feb/28/everyone-knows-that-can-you-identify-the-lost-80s-hit-baffling-the-internet [accessed: 02.03.2024].

7. Rinehart, Richard, and Jon Ippolito. *Re-collection: art, new media, and social memory*. Cambridge: The MIT Press 2014.

8. Turner, Victor. *The Ritual Process: Structure and Anti-structure*. New York: Cornell University Press 1977.

9. Van Gennep, Arnold. *The Rites of Passage*. London: Routledge, 1960.
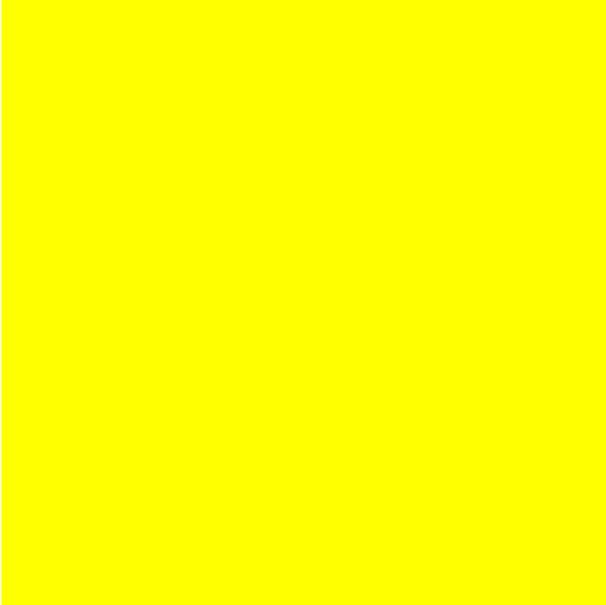
Flaws in the flow: xerox, digital media and glitch

Bruno Ministro

Institute for Comparative Literature
University of Porto
https://orcid.org/0000-0002-7147-3468
DOI: https://doi.org/10.59862/F7k2B9xQ-05

The aesthetics of glitch have long shaped the intersections of media, art and literature, revealing the creative potential embedded in errors and malfunctions. My essay investigates glitch aesthetics through a comparative media lens, focusing on the experimental practices of copy art and electronic literature. By exploring how a selection of works harnesses technological breakdowns and information excess to produce new modes of expression, I argue that glitches transcend medium-specific boundaries, functioning as a cross-media category that destabilises traditional expectations of functionality and meaning-making. Through my analysis, I aim to uncover how glitch procedures not only subvert the tools of their creation but also interrogate broader cultural and technological paradigms.

Long before the emergence of digital media, xerox was regarded as a revolutionary medium that introduced profound technical and social changes in document reproduction and circulation. Promising ease, speed and affordability, the photocopier was idealised as a tool with transformative potential, though it ultimately fell short of expectations that would only be realised with the advent of the personal computer years later.

It is striking to note that, for instance, Marshall McLuhan considered this new process of copying revolutionary: "Xerography is electricity invading the world of typography, and it means a total revolution in this old sphere."[1] As Kate Eichhorn's research at the McLuhan Collection reveals, the prominent media scholar was deeply interested in how photocopies were impacting authors and readers, thereby transforming the structure of textual relations in a broad sense.[2] For McLuhan and others, as Eichhorn notes, the promises of this then-new technology served as an anticipation of technologies that would emerge further down the road:

> Xerography in the mid-twentieth century carried the **promise of all the advancements that would transform communication technologies** in the late twentieth century. It promised consumers the opportunity to reproduce texts and images quickly and inexpensively in a portable format, to make enlarged copies of data stored in compressed formats, and eventually to transmit texts and images across vast distances in a matter of minutes. Beyond revolutionizing printing by enabling one to photocopy anything on a wide range of surfaces in myriad contexts, then, xerography **anticipated the mobile, high-speed, real-time forms of communication** that would be taken for granted by the end of the century.[3] (my emphasis)

1   Marshall McLuhan, Jovanovich to Marshall McLuhan, July 2, 1969, Marshall McLuhan Collection, National Archives of Canada, Ottawa, Canada. [Reproduced in Kate Eichhorn, *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/Cambridge, Massachusetts: The MIT Press 2016.]

2   Kate Eichhorn, *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/Cambridge, Massachusetts: The MIT Press 2016, p. 39.

3   Kate Eichhorn, *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/Cambridge, Massachusetts: The MIT Press 2016, p. 18.

Curiously, in McLuhan's case, his point of reference was not any of the new technologies he famously anticipated. Instead, when writing about copiers, they were compared to the book form. In fact, the media theorist approached this new technology much like Perseus gazing at Medusa through a mirror. As McLuhan argued elsewhere, the best way to understand a new technology is not by looking at it directly but by observing it indirectly:

> I invite you to consider that perhaps the best way of estimating the impact of any new environmental technology is to notice what happens to the older technologies. (...) You have to perceive the consequences of the new environment on the old environment before you know what the new environment is.

I will follow McLuhan's invitation. In this essay, I conduct a comparative analysis of works created using photocopiers (copy art) and computers (electronic literature). While this approach might seem incompatible due to their distinct media affordances and the temporal separation of their contexts, my goal is not to adhere to a linear timeline or to focus on which came first, nor to explore whether there are influences or direct connections between them.[4] Instead, my aim is to create a space for critically understanding modes of inscription, mediation and meaning production through comparative media research. In doing so, I am guided by Michael Goddard's assertion that "both media inventions and creative social practices are nonlinear and (…) key developments often take place at the edges, far from the dominant paradigms of the mass media in any given era."[5]

In copy art, the expressive use of the copier expands textual media codes through intermedial interplay between inscriptional materials, creative processes and the resulting artefacts. These works often exhibit what has become known as glitch aesthetics, a concept popularised in new media arts and particularly in net art. For this analysis, in the following sections of my essay I examine glitch techniques as employed by international

---

4 A historical timeline might be useful for operative purposes, but it remains inherently artificial, nonetheless. On one hand, Christopher Strachey's *Love Letters* (1952) and Theo Lutz's *Stochastische Texte* (1959) – two seminal computer-generated literary works – were created using mainframe computers before photocopiers became accessible in the 1960s. On the other hand, the copy art works examined in this essay were produced either long after that period or concurrently with later developments in electronic literature. For an account of early works of electronic literature, see: Loss Pequeño Glazier, *Digital Poetics: The Making of E-Poetries*. Tuscaloosa: University of Alabama Press 2002; Chris Funkhouser, *Prehistoric Digital Poetry: An Archaeology of Forms, 1959–1995*. Tuscaloosa: University of Alabama Press 2007; Manuel Portela, *Scripting Reading Motions: The Codex and the Computer as Self-Reflexive Machines*. Cambridge: The MIT Press 2013.

5 Michael Goddard, *Guerrilla Networks: An Anarchaeology of 1970s Radical Media Ecologies*. Amsterdam: Amsterdam University Press 2018, p. 11.

artists working in the realms of copy art and electronic literature. Drawing on various theoretical contributions, I argue that glitch constitutes a cross-media category in its own right. As such, these diverse artistic practices cannot be fully understood through the lens of media-specificity unless the affordances of each medium are subjected to radical comparison.

Copy art and glitch

During the 1960s, as photocopiers gradually became common in offices and businesses, artists swiftly appropriated these machines to produce artworks. These artistic practices – known as copy art, electrography or xerography – were developed by visual artists, graphic designers and visual poets from the 1960s through the 1990s. For these creators, the copier's ultimate goal was replication rather than creation, and its "built-in restrictions (…) [were] part of their attraction and challenge."[6] By often engaging with the relationship between word and image, copy art broadens the reflection on the visuality of text and the topology of the printed page.

Copy art works utilise a variety of strategies and techniques tied to technological reproduction processes. In most instances, reproduction also becomes re-production. For example, when artists appropriate materials from mass culture, they do not simply duplicate the appropriated images and texts, instead transforming them into entirely new objects.

6   Kate Eichhorn, *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/ Cambridge, Massachusetts: The MIT Press 2016, p. 46.

Figure 1. *ROTE BETE* (one-spread example)

This is exemplified in several of César Figueiredo's works, such as *ROTE BETE (Trip in Supermarket)*,[7] created with Jürgen O. Olbrich in December 1992 by placing consumer products directly from the supermarket onto the glass of the copier machine. In this work, the artists employed various strategies, including amplification and reduction, superposition, deformation and repetition. The successive photocopies obscure the original product packages and labels, making them unrecognisable at first glance – they are not perfect copies because they are not intended to be. Instead, they emphasise excess and flaws.

7   César Figueiredo and Jürgen O. Olbrich, *ROTE BETE (Trip in Supermarket)*. S.L. [Porto]: self-published, 1993. https://po-ex.net/taxonomia/materialidades/planograficas/jurgen-o-olbrich-cesar-figueiredo-rote-bete/
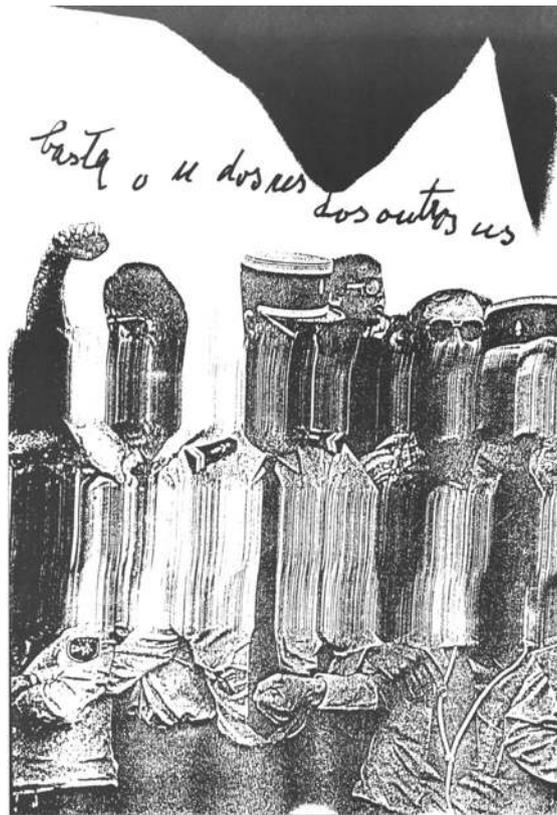
Figure 2. *Electrografia 2* (one-page example)

The 80 pages of *Electrografia* 2[8] (1990) by António Aragão are derived from only four photographs, each transformed through manipulation during the photocopying process. For instance, the image of a demonstration depicted in Figure 2 exhibits a glitched appearance caused by the motion of the paper on the copier's glass during copying. Adding to this effect, Aragão deliberately exploited the textured granularity characteristic of photocopies and incorporated verbal fragments written in cursive. These sentences merge with the images, embedding the aesthetic distortion of discourse through non-sense.[9] The words do not contribute to explaining the images, and the images are not

8   António Aragão, *Electrografia 1 (o elogio da loura de Ergasmo nu Atlânticu)*. Lisboa: Vala Comum, 1990. https://po-ex.net/taxonomia/materialidades/planograficas/antonio-aragao-electrografia-1/

9   The Portuguese sentence "basta o u dos us dos outros us" can be roughly translated as something like "we need only the u of us of the other us" or "enough with the th of the thes of other thes," which are two extremely bad translations that make no sense at all (still, that is the point I am trying to make here).

illustrations of the words. Yet, when combined, they both act as glitches in equal parts. This interplay results in the implosion of meaning, creating a process of recursive destruction that reinvents established rhetorical discourses.

In copy art, appropriation can be understood as operating on two interconnected levels: the creative process involves the appropriation of both the machine and the document. In this context, as demonstrated in the previous examples, the copies produced by artists consistently retain traces of the original documents, aligning with what cultural historian Hillel Schwartz referred to as "vanishing twins."[10] These works ultimately result in hybrid artefacts that foster a dialogue between past and new meanings.

Additionally, it is important to recognise that in copy art, the copier itself is appropriated for purposes beyond mere document reproduction. This act constitutes a situationist-like *détournement*, involving the defunctionalisation and subsequent refunctionalisation of the machine. As McKenzie Wark explains:

> *Détournement* attacks a kind of fetishism, where the products of collective human labor in the cultural realm can become a mere individual's property. (...) *Détournement* restores to the fragment the status of being a recognizable part of the process of the collective production of meaning in the present, through its recombination into a new meaningful ensemble.[11]

This "new meaningful ensemble" in copy art must be understood within its specific context. What is at stake is not only the creative appropriation of documents and machines but also an active subversion of the visual and textual materials that permeate our world. Copy art challenges these materials in their entirety while simultaneously subverting an instrument originally designed by the techno-industrial complex to enhance productivity in business and administration.

In this context, glitch is not employed solely for aesthetic purposes; it provides insight into the political economy of images and image-making technologies. As extensively discussed in glitch art scholarship,[12] glitches are not merely system bugs – they are

10   Hillel Schwartz, *The Culture of Copy: Striking Likenesses, Unreasonable Facsimiles*, 2nd ed. New York: Zone Books 2014.

11   McKenzie Wark, *The Beach Beneath the Street: The Everyday Life and Glorious Times of the Situationist International*. London / New York: Verso 2011, p. 40.

12   Iman Moradi et al., *Glitch: Designing Imperfection*. New York: Mark Batty Publisher 2009; Rosa Menkman, *The Glitch Moment(Um)*. Amsterdam: Institute of Network Cultures 2011; Mark Nunes, (ed.), *Error: Glitch, Noise, and Jam in New Media Cultures*. New York/London: Continuum 2011; Peter Krapp, *Noise Channels: Glitch and*

socially engaged gestures imbued with symbolic connotations. I propose that copy art works can be interpreted within this theoretical framework. These works often embrace unexpected errors and malfunctions during their creation, with the resulting effects frequently surprising the artists themselves. Ultimately, it is always up to the artists to decide whether to accept or reject the unforeseen outcomes.

If we connect the notion of glitch to Johanna Drucker's concept of "performative materiality", we can assert that copy art works are composed of performative gestures. These gestures involve both the artist and the machine: the artist's gestures are mediated by the machine, and the machine's gestures are mediated by the artist. In this framework, Drucker's "performative materiality" signifies not only that a work is created through dynamic, performative gestures that manipulate materials but also that these gestures become encoded within the material itself. Consequently, the artist's gestures are revealed anew in the very act of viewing the final work on paper. An object's characteristics stem from its medium's affordances, yet they are only fully realised when activated by the reader or interpreter. As Drucker explains: "Performative approaches are modeled on a probabilistic premise that suggests an object is produced as an effect of a dynamic relation between provocation of the object's characteristics and an interpretative process."[13]

In a similar vein, and returning to glitches, Tomáš Jirsa argues that "formal disturbances are grounded in the affective operations that rewrite form."[14] As Jirsa further notes, there is a "two-way movement of affects (…) in their performative mediality produced by and within texts, images, and sounds."[15] Within this framework, "as the performative force of affects needs to be thought relationally, the aesthetic forms and cultural objects should be considered intermedially."[16] This perspective suggests that glitches, through their intermedial and affective dynamics, challenge traditional boundaries and, thus, invite new interpretations of form and meaning.

In digital culture, glitch strategies typically involve distortion, misalignment and techniques like databending and datamoshing. These digital glitch practices highlight a

Error in Digital Culture. Minneapolis: Minnesota University Press 2011; Carolyn L. Kane, *High-Tech Trash: Glitch, Noise, and Aesthetic Failure*. Oakland, California: University of California Press 2019.

13 Johanna Drucker, "Performative Materiality and Theoretical Approaches to Interface", *Digital Humanities Quarterly* 7, no. 1 (2013): para. 4, http://www.digitalhumanities.org/dhq/vol/7/1/000143/000143.html

14 Tomáš Jirsa, *Disformations: Affects, Media, Literature*. New York: Bloomsbury Academic 2021, p. 10.

15 *ibidem,* p. 15.

16 *ibidem.*

fundamental fact: digital files are all composed of text. Since digital formats are code-based, they are inherently text-based. A digital image, sound or video file is ultimately a text. In contrast, xerox manipulations focus on processing images, meaning that a photocopied text is merely an image of text. This rationale can even extend to copied objects or "situations" (see Figures 3 and 4). Thinking about copy art *intermedially* in this way requires further clarification to emphasise that the medium's self-reflexivity does not necessarily equate to media-specificity.

Following this trajectory, it is essential to recognise that copy art is not limited to print-based works. Many artists have creatively expanded the use of photocopies, producing works across diverse media, including video, sound and performance. A few brief examples help illustrate this more clearly.

Figures 3 and 4. *Photo Copy Rock'n'Roll*

Figure 5. *Xerophonie*

Figures 6 and 7. *Die Kopierte Galerie*. Photos: Jürgen Schwarz

Back in 1984, Jürgen O. Olbrich loved to dance with copy machines. *Photo Copy Rock'n'Roll*[17] is both a performance and an object: the artist performed live atop a copier, photocopying his feet as he danced. The result is a reproduced object that is inseparably linked to the process that created it.

In 1985, Karl-Hermann Möller, fascinated by the sound and visual impact of copy machines, created *Xerophonie*.[18] This artwork consists of a booklet, a VHS tape and an audio cassette. The booklet contains photocopies, while the VHS tape documents the act of photocopying these contents and the audio cassette captures the sounds.

Two years later, in 1987, Franz John created *Die Kopierte Galerie / The Copied Gallery*.[19] The work exhibited in Galerie Paranorm was a 1:1 scale reproduction of the empty gallery itself. The artist photocopied every element of the space – walls, windows, doors – using a portable thermographic copier. He then meticulously glued the copies onto the exact locations they represented. This project took four weeks to complete, and the artist described it as both an installation and a performance.

These three examples demonstrate how some artists employed the copier to create works that transcend the illusion of mere copying, embodying a purposeful glitch in itself. Copy art is not limited to the printed sheet that comes out of the copier's tray; instead, the copier can be understood as a medium in its own right. In this context, it functions not only as a tool for reproduction but also as a distinct creative medium. Artist Sonia Landy Sheridan contributed to this perspective by describing copiers as "generative systems."[20] For Sheridan, the copy machine operates as an integrated system for producing generative content. This concept clearly links the copier to historical generative forms of art and literature and, more recently, to generative artificial intelligence. In this context, copy art fosters intersections between the human agent and the machine, emphasising the entanglement between the creative process and the resulting artefact. The result is often a glitch of both the human and the machine.

17   Jürgen O. Olbrich, *Photo Copy Rock'n'Roll*. Kassel 1984.

18   Karl-Hermann Möller, *Xerophonie. Ein Stück für Bild- und Ton-Reproduktionsmaschinen*. Kassel: KHM, 1985–1990. https://makroscope.eu/xerophonie/

19   Franz John, *Die Kopierte Galerie / The Copied Gallery*. Berlin: Galerie Paranorm, 1987. https://f-john.de/en/projects/a-gallery-exhibits-itself/

20   Sonia Landy Sheridan, "Generative Systems versus Copy Art: A Clarification of Terms and Ideas", *Leonardo* 16, no. 2 (1983), pp. 103–108.

Electronic literature and glitch

Glitch aesthetics is often linked to techniques such as misalignment, datamoshing, circuit-bending and other methods of aestheticising failure. Glitch art usually takes the form of images, videos, sounds or computer-based works. For example, consider the technique of rewriting or deleting small portions of an image's source code, or the process of creating distortion by opening a text file with a sound editor or a video file with image-editing software, and so on and so forth.

Although copy art and electronic literature employ different media, they share certain affinities at a medial level and connect even more intriguingly when it comes to glitch aesthetics. I have already examined examples of copy art that demonstrate how it incorporates glitch as a fundamental feature. In what follows, I aim to support my argument with examples of glitches in electronic literature and related forms, such as Twitter bots.

Several well-known works of electronic literature explore user expectations and the challenges of reading or interacting with digital objects initially intended to be readable. However, this does not necessarily mean they embody glitch aesthetics. For a work to be identified as a manifestation of glitch, it must deliberately provoke a radical overload of its contents and a disruption of its structural coherence.
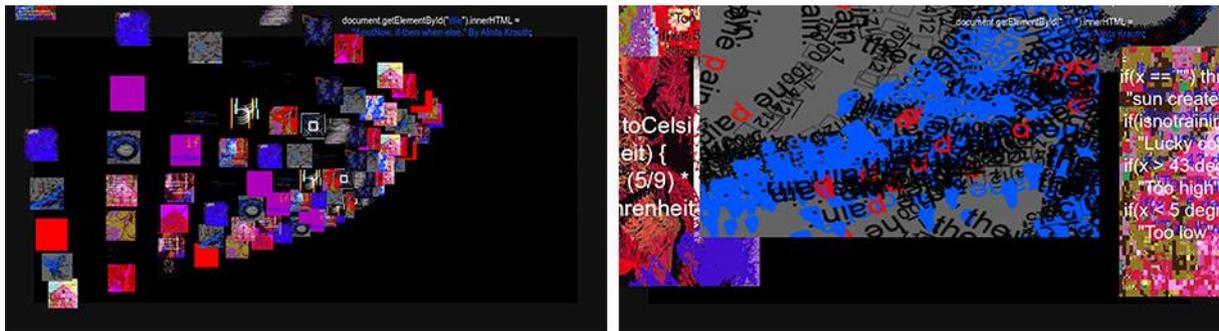
Figures 8 and 9. *if-notNow, if-then-when-else* (Screenshots)

At a glance, it is clear that digital artist and poet Alinta Krauth was aligning herself with glitch art communities when she created *if-notNow, if-then-when-else*[21] (2015) (Figures 8 and 9). This work addresses climate change as disruption, employing a fragmented interface composed of numerous small movable squares. Within these squares, pro-

21   http://www.alintakrauth.com/ifthen/

gramming code is interwoven with natural language, accompanied by flashing colours and continuously shifting forms. Navigation is intentionally the opposite of user-friendly. Similarly, synthesised voices, sound noise and repetitive overloads amplify the disorienting experience. The glitch engages the eye and ear even before the brain has time to process it. In this sense, glitches manifest through distortion, noise and the disruption of our perceptual channels.

With this in mind, we can draw on Andersen and Pold's concept of a "metainterface",[22] which captures user behaviour, or refer to what Marques has termed a "haptic Inter[(SUR)Face]",[23] an interface that engages the senses through different surfaces of mediated bodies. Glitch gains its power within this perceptive labyrinth, serving as a potent counterbalance to the prevailing ideology of frictionless, user-friendly interfaces, which prioritise utility and seamless interaction. As Jakko Kemper explains:

> Frictionlessness shapes a strange perceptual situation where the reduction of notable friction in user experience is glorified (technology should be convenient and on-demand, host entirely noiseless communication and operate without delays), but where the way in which this is achieved is by expanding *and* obscuring vast systems of material extraction, exploited labor and environmental destruction.[24]

Once again, glitch derives its strength from the perceptive labyrinth, creating small windows that allow us to glimpse imperfections, misunderstandings and flaws. As the GLI.TC/H collective (Nick Briz, Rosa Menkman and Jon Satrom) aptly describes, "[a] glitch is an unexpected, non- or mis-understood break in a technological flow that for a moment reveals (gives a window into) its system."[25] In this way, glitches shift our attention from the artefact and its aesthetic qualities to the underlying processes and methodologies.

Furthermore, glitch aesthetics challenge not only the medium itself but also the broader social context that intertwines media, people and politics. While glitch works alone may not directly bring about social change, they can play a significant role in rais-

22 Christian Ulrik Andersen and Søren Pold, *The Metainterface: The Art of Platforms, Cities, and Clouds*. London, England/Cambridge, Massachusetts: The MIT Press 2018.

23 Diogo Marques, "Reading Digits: Haptic Reading Processes in the Experience of Digital Literary Works" (PhD dissertation in Materialities of Literature, University of Coimbra, 2018), http://hdl.handle.net/10316/81171

24 Jakko Kemper, "The Environment and Frictionless Technology", *Media Theory* 6, no. 2 (2022), p. 62.

25 GLI.TC/H collective (Nick Briz, Rosa Menkman, and Jon Satrom), "GLI.TC/H – the F.A.Q. Page", GLI.TC/H Website, 2012. https://gli.tc/h/faq/

ing awareness of the material conditions that shape our lives and experiences. In this sense, we can echo Ted Gournelos, who states: "Exploiting error and noise (…) is not about challenging the Dominant itself as much as it is about challenging the symbols and codes by which the Dominant retains control."[26]

This is exactly what occurs in several works and series by the Jim Punk collective, whose members, for a time, flooded Twitter (now X) with content under the handle @crashtxt (Figure 10). Similarly, bots like @ClearCongress and @GlitchLogos polluted social media with glitch aesthetics by spamming Twitter with messages from the United States Congress that featured erased sections (Figure 11) and distorted brands and logos (Figure 12).
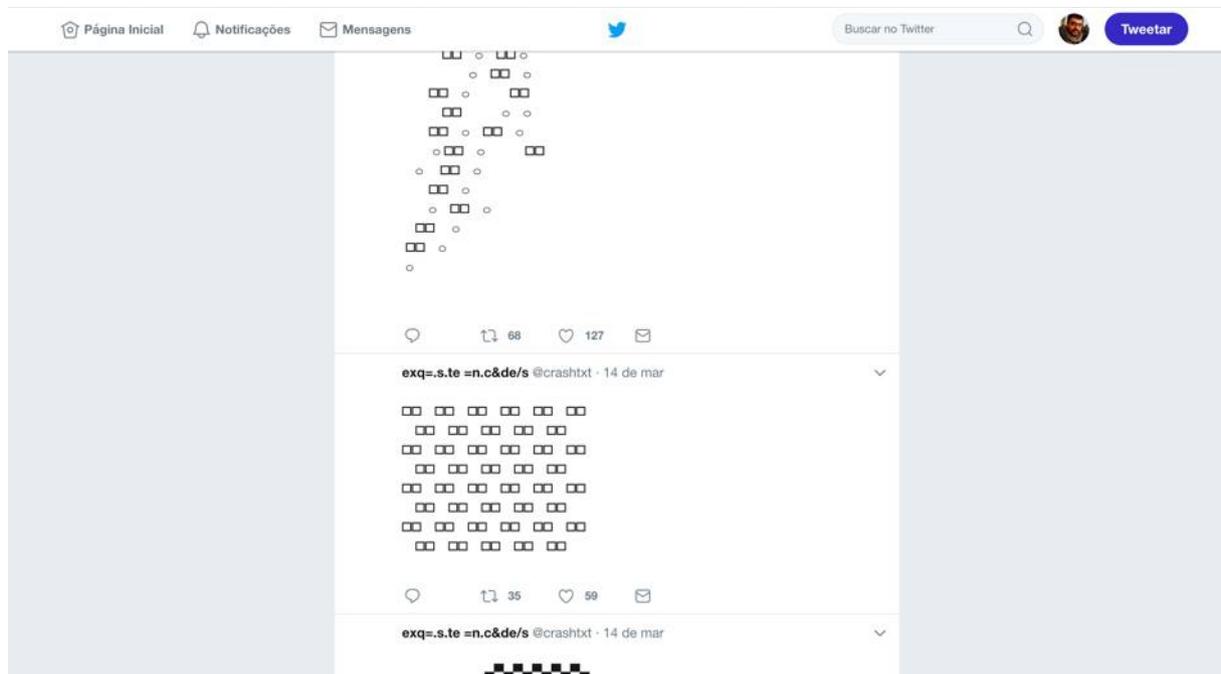

Figure 10. @crashtxt (Screenshot 2017)

26   Ted Gournelos, "Disrupting the Public Sphere: Mediated Noise and Oppositional Politics", in: *Error: Glitch, Noise, and Jam in New Media Cultures*, Mark Nunes (ed.), New York/London: Continuum 2011, p. 166.

Figure 11. @ClearCongress (Screenshot 2017)
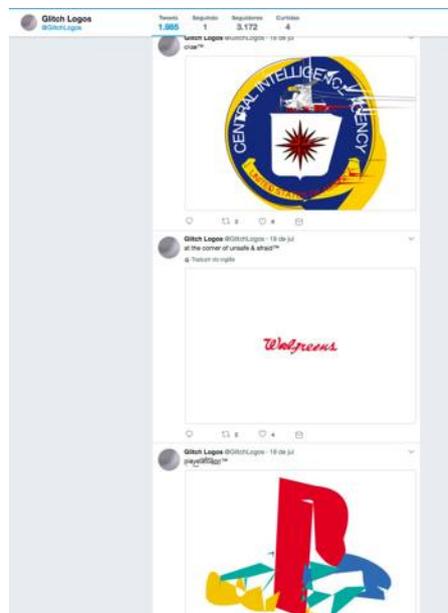
Figure 12. @GlitchLogos (Screenshot 2017)

Examining bots like these, some researchers and creators have argued that they are overtly political.[27] One might assert that most are political at least in the sense that they engage with social media platforms to disrupt them. However, as is often the case with platform-specific art forms, this battle is destined to fail from the outset. To clarify, in February 2023, Twitter revoked free access to its API, rendering obsolete many bots that did not produce what Elon Musk then described as "good content" according to his own personal criteria.

While Twitter bots are often explored in electronic literature scholarship, they are not considered the most canonical digital literary form within the genre. Key historical traditions of electronic literature include animated and kinetic poetry, hypertext fiction and generative or combinatorial works, among various other sub-genres.[28] This indicates that the most recognised forms of electronic literature predominantly rely on "cerebral" approaches to meaning construction. Consequently, they often exclude the possibilities of messy excess and information overload, which are defining features of our current algorithm-driven culture and interface-centric society.[29]

We could then ask: Where is the visual noise and sound pollution in electronic literature? Is there room for error and malfunction? Is there space for an "assault on the interface"?

The expression above is a quote from Lionel Kearns, a Canadian visual poet who, in 1969, published a book with the long and exciting title *By the Light of the Silvery McLune: Media Parables, Poems, Signs, Gestures, and Other Assaults on the Interface*. Beyond its creative nod to McLuhan, the title, for me, also resonates with what Stewart Home would later describe as an "assault on culture",[30] referring to the actions of utopian artists and writers challenging mass culture and its exploitative mediations.

---

27 See for instance Leonard Richardson's text "Bots Should Punch Up" (*Crummy*, 27 November 2013, https://www.crummy.com/2013/11/27/0) and Mark Sample's "Call for Bots of Conviction" (*Medium*, 2014, https://medium.com/@samplereality/a-protest-bot-is-a-bot-so-specific-you-cant-mistake-it-for-bullshit-90fe10b7fbaa). For a short introduction and extensive reviews of different Twitter bots, check this index page written by Leonardo Flores in 2013: https://web.archive.org/web/20240222120419/http://iloveepoetry.org/?p=5427

28 See Scott Rettberg's *Electronic Literature* (Polity, 2019) for a survey of the traditional genres of electronic literature, including chapters dedicated to combinatory poetics, hypertext fiction, interactive fiction and other gamelike forms, kinetic and interactive poetry, and network writing.

29 It is worth checking ELMCIP for a virtual collection curated by Gonzo Gaard with "77 hackable works of elit," some of which akin to glitch aesthetics: https://elmcip.net/research-collection/qmvyz2vu

30 Stewart Home, *The Assault on Culture: Utopian Currents from Lettrisme to Class War*, 2nd edition. Edinburgh: AK Press 1991.
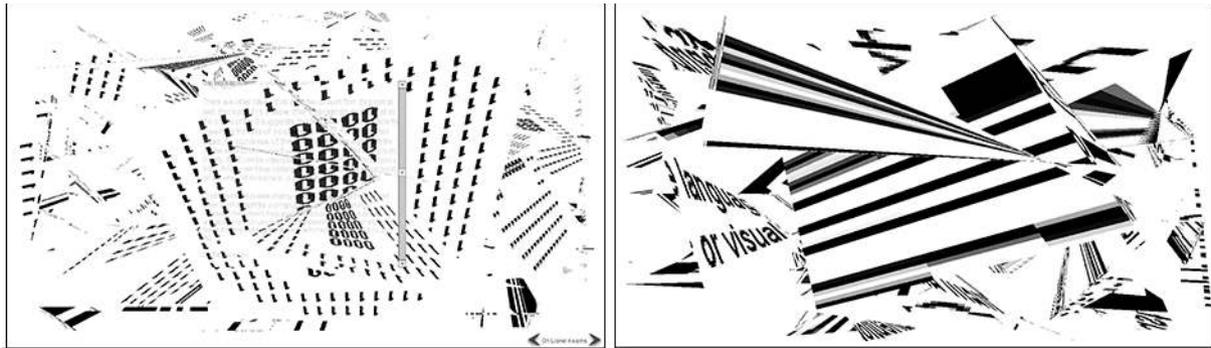
Figures 13 and 14. On Lionel Kearns (Screenshots)

Jim Andrews' digital poem *On Lionel Kearns*[31] (2004) establishes a connection between visual poetry and electronic literature by using some of Kearns's historical works as the foundation for glitch-based experiments. To create this piece, Andrews appropriated Kearns's visual poems, constructing glitch screens with interactive animation and deformation through repetition and juxtaposition. Interaction in this context means that the user influences what occurs on the screen, but paradoxically, they lack full control over the experience. For instance, deformations occur when the user moves the mouse and clicks on the screen, but these distortions continue reproducing themselves autonomously, leaving the user lost in the interface. This glitch is not incidental – it is an integral part of the experience.
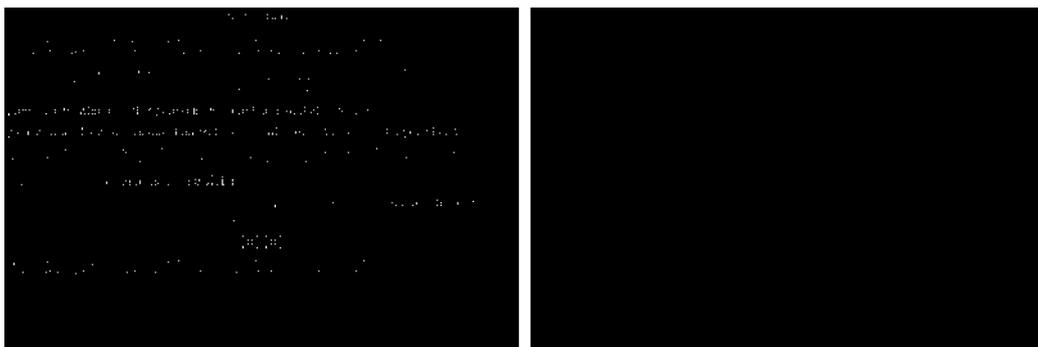
Figures 15 ad 16. degenerative (Screenshots by the artist 2005)

31   https://vispo.com/kearns/indexenglish.htm

Eugenio Tisselli's work *degenerative*[32] (2005) began as a straightforward text (Figure 15) that gradually became unreadable, as its web page was programmed to delete one character with each visitor's access. The author documented the various stages of this degeneration. Initially, the page displayed the sentence, "your visit will leave a permanent mark." After day 1, it read, "your _sit wil leave a pe*manet ma-k," and by day 8, "yor t*wl**eave a _e mane*ma__ *." Beyond this point, tracking the sentence's remnants became nearly impossible (see day 13 in Figure 16). According to Tisselli, after four months, the page had transformed into a blank interface. Davin Heckman and James O'Sullivan described it as a "Schrödinger's Cat interface",[33] noting that "the reader does not control, but nevertheless is implicated in the singularity of the work as a series of events that belong, if they exist at all, in memory".[34]

As of today, clicking the link "read more" at the bottom of the index page leads to a defaced page titled "Hacked By Nero Hacker!" In hacker culture, defacement is a common method of intrusion, involving the replacement of the original page's content. This act leaves a mark, akin to a "tag" in graffiti culture. In this case, the defacement is particularly intriguing because it resonates with the work's central concept of deformation. Tisselli is probably aware of this defacement and didn't seem to bother with it. Again, here too, I would say that this is an integral part of the experience.

Figure 17. *11 Ways to Escape the Symbolic Regime* (Screenshot)

---

32   http://motorhueso.net/degenerative/ (also available in Spanish: http://www.motorhueso.net/degenerativa/).

33   Davin Heckman and James O'Sullivan, "'your visit will leave a permanent mark': Poetics in the Post-Digital Economy", in: *The Bloomsbury Handbook of Electronic Literature*, Joseph Tabbi (ed.), London, England/New York: Bloomsbury Academic 2018, p. 106.

34   *ibidem.*, p. 107.

Among the works of Andreas Maria Jacobs, *11 Ways to Escape the Symbolic Regime*[35] (2013) stands out for its chaotic interfaces, teeming with hyperlinks and low-resolution images interspersed with unreadable text. These words are illegible not only because they are tangled with other words and pictures but also because they are presented in multiple languages. The fact that its interface can be described as radical nonsense is, perhaps, one of the work's most significant and thought-provoking aspects.

Navigating through a labyrinth of hyperlinked pages and scrolling from top to bottom on each one, we experience a sensory overload. This excess of stimuli opens the door to nonsense. From personal experience, we know that having too much information can feel like having no information at all. To some extent, this mirrors the experience of doomscrolling on social media. Such endless, mindless scrolling is characterised by both boredom and addiction. It also reflects what has been termed "digital lethargy", defined by Tung-Hui Hu as "a recalcitrant set of feelings here—of being passive, or wanting to disassociate and be anyone but yourself, or avoiding decisions."[36]

However, taking a more radical perspective, Hu argues that "digital lethargy" also reflects a deeper alienation, manifesting as "exhaustion, disappointment, and listlessness experienced under digital capitalism." This perspective aligns with the curators of the exhibition *Chercher le texte*, who highlighted the potential of *11 Ways to Escape the Symbolic Regime* to "emphasize the eroding effects the internet has on the literacy of the 'general audience'."[37] All these glitches disrupt the automatisms that underpin our assumptions of transparency in mediated everyday life. This disruption – again – is an integral part of the experience.

It is notable, yet not surprising, that modern browsers such as Firefox immediately display an error message when attempting to access Jacobs' work. The message warns, "Warning: Potential Security Risk Ahead", presenting two options: "Go Back (Recommended)" or "Accept the Risk and Continue". While access is not outright denied, the implication is clear – it is risky to proceed. In the context of glitch, however, one must embrace uncertainty, take the leap of faith, accept the risk and choose to continue.

35   https://www.nictoglobe.com/11waystoescapethesymbolicfield/

36   Tung-Hui Hu, *Digital Lethargy: Dispatches from an Age of Disconnection*. London, England/Cambridge, Massachusetts: The MIT Press 2022, vii.

37   This work was presented in 2013 at the Bibliothèque Nationale de France in Paris, during the Electronic Literature Conference – *Cherchez le texte*. Archived here: https://web.archive.org/web/20150908045801/http://gallery.dddl.eu/en/gallery/11_ways_to_escape_the_symbolic_field/. Record also available in ELMCIP: https://elmcip.net/creative-work/11-ways-escape-symbolic-field.

Final remarks (or glitching it all)

We know from experience that successive copies of a document gradually lead to its disappearance. As Lev Manovich has observed, there is a prevalent myth suggesting that "in contrast to analog media where each copy loses quality, digital media can be copied endlessly without degradation".[38] Scholars such as Manovich have demonstrated that this is not entirely accurate, as compression is not an "aberration" but rather "the very foundation of computer culture".[39] Thus, whether analogue or digital, glitch works – like those analysed here – reveal that media inherently entails failure, because achieving a truly noiseless channel of communication is ultimately impossible.[40]

However, glitches are not always caused by technical malfunctions. According to Rosa Menkman, a glitch is "a (actual and/or simulated) break from an expected or conventional flow of information or meaning within (digital) communication systems that results in a perceived accident or error". Thus, as the artist-theoretician explains, "a glitch occurs on the occasion where there is an absence of (expected) functionality, whether understood in a technical or social sense".[41]

The "social sense" is crucial here, as it highlights the politics of glitch. As stated, "[i]n its 'failure to communicate,' error signals a path of escape from the predictable confines of informatic control: an opening, a virtuality, a *poiesis*".[42] Glitches possess symbolic power that transcends media regimes, guiding us toward what Ellen Rutten and Ruby de Vos have recently termed "the imperfect turn".[43] While another "turn" in academic discourse might make us feel a little dizzy, it provides a useful framework for encompassing a wide range of creative works and scholarship – from the pioneering net art of Olia Lialina and the glitch art of Ant Scott (Beflix) to the glitch feminism of Legacy Russell[44] and the post-digital glitch poetics described, for instance, by Nathan

38 Lev Manovich, *The Language of New Media*. London, England/Cambridge, Massachusetts: The MIT Press 2001, p. 54.

39 *ibidem*, p. 55.

40 Rosa Menkman, *The Glitch Moment(Um)*. Amsterdam: Institute of Network Cultures 2011, p. 65.

41 *ibidem*, p. 9.

42 Mark Nunes, *Error: Glitch, Noise, and Jam in New Media Cultures*. London/New York: Continuum 2011, p. 3.

43 Ellen Rutten and Ruby de Vos, "Trash, Dirt, Glitch: The Imperfect Turn", *European Journal of Cultural Studies* 26, no. 1 (2023), pp. 3–13, https://doi.org/10.1177/13675494231152371.

44 Legacy Russell, *Glitch Feminism: A Manifesto*. London/New York: Verso 2020.

Allen Jones.[45] As I see it, the "imperfect turn" also embraces the works I have explored in this imperfect essay.

The works I analysed merely scratch the surface – or perhaps, more aptly, the interface. From my perspective, what they truly promote is an interference with the interface. This interference operates on a virtual level, as the scratch impacts only the surface, leaving the deeper mechanisms of technological and social systems untouched. For instance, programming code does not tolerate malfunction or error; when something goes wrong, it must be debugged. In contrast, the interface permits accidents, the unforeseen and the unexpected. Thus, we can conclude that this interference occurs exclusively at the interface level, yet it suggests that "interface interference" is precisely the condition under which a glitch becomes political.

Bibliography:

1. Andersen, Christian Ulrik and Søren Pold. *The Metainterface: The Art of Platforms, Cities, and Clouds*. London, England/Cambridge, Massachusetts: The MIT Press 2018.

2. Aragão, António. *Electrografia 1 (o elogio da loura de Ergasmo nu Atlânticu)*. Lisboa: Vala Comum 1990.

3. Drucker, Johanna. "Performative Materiality and Theoretical Approaches to Interface", *Digital Humanities Quarterly 7*, no. 1 (2013): http://www.digitalhumanities.org/dhq/vol/7/1/000143/000143.html.

4. Eichhorn, Kate. *Adjusted Margin: Xerography, Art, and Activism in the Late Twentieth Century*. London, England/Cambridge, Massachusetts: The MIT Press 2016.

5. Figueiredo, César and Jürgen O. Olbrich, *ROTE BETE (Trip in Supermarket)*. Porto: self-published, 1993.

6. Goddard, Michael. *Guerrilla Networks: An Anarchaeology of 1970s Radical Media Ecologies*. Amsterdam: Amsterdam University Press 2018.

7. Gournelos, Ted. "Disrupting the Public Sphere: Mediated Noise and Oppositional Politics", in: Mark Nunes (ed.), *Error: Glitch, Noise, and Jam in New Media Cultures*. New York/London: Continuum 2011.

45 Nathan Allen Jones, *Glitch Poetics*. London: Open Humanities Press 2022, http://www.openhumanitiespress.org/books/titles/glitch-poetics/.

8. Heckman, Davin and James O'Sullivan. "'your visit will leave a permanent mark': Poetics in the Post-Digital Economy", in: Joseph Tabbi (ed.), *The Bloomsbury Handbook of Electronic Literature*. London, England/New York: Bloomsbury Academic 2018.

9. Home, Stewart. *The Assault on Culture: Utopian Currents from Lettrisme to Class War*. Edinburgh: AK Press 1991.

10. Hu, Tung-Hui. *Digital Lethargy: Dispatches from an Age of Disconnection*. London, England/Cambridge, Massachusetts: The MIT Press 2022.

11. Jirsa, Tomáš. *Disformations: Affects, Media, Literature*. New York: Bloomsbury Academic 2021.

12. Jones, Nathan Allen. *Glitch Poetics*. London: Open Humanities Press 2022.

13. Kemper, Jakko. "The Environment and Frictionless Technology", *Media Theory* 6, no. 2 (2022).

14. Landy Sheridan, Sonia. "Generative Systems versus Copy Art: A Clarification of Terms and Ideas", *Leonardo* 16, no. 2 (1983), pp. 103–108.

15. Legacy, Russell. *Glitch Feminism: A Manifesto*. London/New York: Verso 2020.

16. Manovich, Lev. *The Language of New Media*. London, England/Cambridge, Massachusetts: The MIT Press 2001.

17. Marques, Diogo. "Reading Digits: Haptic Reading Processes in the Experience of Digital Literary Works". Ph.D. dissertation in Materialities of Literature, University of Coimbra, 2018, http://hdl.handle.net/10316/81171.

18. McKenzie, Wark, *The Beach Beneath the Street: The Everyday Life and Glorious Times of the Situationist International*. London / New York: Verso 2011.

19. McLuhan, Marshall. "Address at Vision 65", *The American Scholar* 35, no. 2 (1966).

20. Möller, Karl-Hermann. *Xerophonie. Ein Stück für Bild- und Ton-Reproduktionsmaschinen*. Kassel: KHM 1985–1990.

21. Rutten, Ellen and Ruby de Vos. "Trash, Dirt, Glitch: The Imperfect Turn", *European Journal of Cultural Studies* 26, no. 1 (2023), pp. 3–13.

22. Schwartz, Hillel. *The Culture of Copy: Striking Likenesses, Unreasonable Facsimiles*. New York: Zone Books 2014.
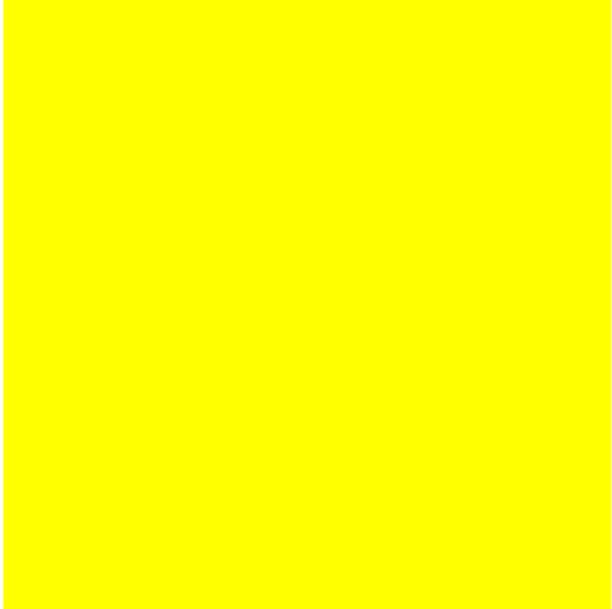
Beyond the brush: exploring the intersection of art and technology in Hetamoé's pen-plotted paintings

Ana Matilde Sousa

University of Lisbon, Faculty of Fine Arts
https://orcid.org/0000-0003-3747-3541
DOI: https://doi.org/10.59862/F7k2B9xQ-06

Introduction

In this article, I present a series of paintings produced using a pen plotter, which is part of the artistic work developed during my PhD and continued in my current project, *PLOT AGAINST. A painting-based research project into the pen plotter and other peripheral devices in the cyborgian imagination* (DOI 10.54499/2021.00832.CEECIND/ CP1706/CT0001). This ongoing investigation focuses on the aesthetics, politics and material-semiotic valences of peripheral devices in contemporary art and theory, using a computer-controlled pen plotter – a technology often considered obsolete – as a starting point. It aligns with the broader scope of my work, as I have long been interested in cyborgian partnerships, incorporating experiences with computers, printers and other devices into my artistic practice (another notable example being the graphic novel *Einstein, Eddington, and The Eclipse: Travel Impressions*, first published in 2019). More indirectly, and without wanting to delve too deeply into an auto-ethnographical perspective, I believe my fascination with the machinical stems – rather than from "hard" technical or scientific aspects – from an emotional and imaginative engagement with machines, with their artistic, nostalgic or representational qualities. One shaped by an early engagement with the raw creativity of computer games from the 1980s and 1990s, and perhaps even more so by Japanese manga, anime, fantasy and sci-fi, which had just started being regularly broadcast on European television stations during my childhood, and which have become integral to both my creative practice and academic research. Of course, the connection between robots and anime/manga has become a given or something of a trope, as (for numerous reasons extensively studied over the past two decades) these mediums often delve into the interplay between humans and machines with less apprehension, or at least with a greater sense of playfulness and openness to sensuality, than is typically seen in Western narratives; as scholar Sharalyn Orbaugh puts it, after all, Japanese children's earliest encounters with robots are often through friendly characters like Doraemon, rather than menacing figures like Darth Vader.[1] In hindsight, having Androids 17 and 18 from *Dragon Ball Z* as the epitome of "cool" during my preteen years in 90s Portugal has probably left an indelible mark on my sensibilities to this day.

1　Sharalyn Orbaugh, "Sex and the Single Cyborg: Japanese Popular Culture Experiments in Subjectivity," in: Christopher Bolton, Istvan Csicsery-Ronay, and 巽, 孝之 (eds.), *Robot Ghosts and Wired Dreams: Japanese Science Fiction from Origins to Anime*. Minneapolis: University of Minnesota Press 2007, p. 174.

My current project, *PLOT AGAINST*, aims to bring together all of these interests while probing into questions about identity, authorship and the continuous cycle of technological advancement and obsolescence, and the series of works addressed in the following pages play a significant role in achieving this goal. However, as the project encompasses additional theoretical components exploring the aesthetics and affects of the cyborgian, machinic and prosthetic imagination in art and popular culture, the present text is intended, primarily, as a more contained discussion of the custom methodology I developed for creating the pen-plotted paintings, as well as of how this process seeks to challenge the boundaries of the technological medium. The type of research involved in writing academically about the creation of one's artistic work has long been a staple of practice-based research (PBR) in the visual arts, as well as in the arts in general, and this approach is recognised for its value – not only practical, but intellectual and educational – in offering insights into the creative process, methodologies and conceptual frameworks that underpin artistic works.[2] Therefore, my text will compile a series of original tacit and empirical insights gained through the hands-on creation of the work, interwoven with critical reflections on how this knowledge contributes to the project's "cyborgian partnership", in a kind of reflexive account of the development of the paintings and the plotting process. I will complement this description with a brief exploration of the origins and resurgence of the pen plotter, as well as of the artistic possibilities it presents by demonstrating how my own work, while rooted in the tradition of art created with this tool, takes a distinctive approach that (to the best of my knowledge) represents a novel application of the technology and, as a result, contributes to the advancement of knowledge.

A historical overview of pen plotters

Pen plotters are vector graphics devices that use a pen – or a similar tool – to draw on paper. Unlike raster printers, which create images through a grid of dots, pen plotters

2   Michael Biggs and Henrik Karlsson (ed.), *The Routledge Companion to Research in the Arts*. London: Routledge 2012; Linda Candy, "Research and Creative Practice", in: Linda Candy and Ernest Edmonds (eds.), *Interacting: Art, Research and the Creative Practitioner*. Faringdon: Libri Publishing 2012, pp. 33–59; Richard D. Hickman, *Research in Art and Design Education: Issues and Exemplars*. Bristol: Intellect 2008; Shaun McNiff (ed.), *Art As Research: Opportunities and Challenges*. Bristol: Intellect 2013; Hazel Smith and Roger Dean, *Practice-Led Research, Research-Led Practice in the Creative Arts*. Edinburgh: Edinburgh University Press 2009, https://doi.org/10.1515/9780748636303 [accessed: 28.11.2024].

excel at creating line art, including text, but are slow to operate due to the pen's mechanical movement; while they struggle with producing solid areas of colour, they are able to create the effect of gradation by drawing multiple parallel lines one close to another.[3] The plotter technique can be traced back to the 18th century, with the creation of one of the first modern seismographs by an Italian geologist, mathematician and physicist Andrea Bina, who used a pendulum and a pointer to produce line tracings in the sand to register seismic activities.[4] This early form of plotting laid the foundation for the subsequent developments of the analogue XY writers and, eventually, of the digital plotters that gained popularity as a printing tool in the 1960s, but fell out of favour with the advancements in technology that happened throughout the subsequent decades.[5] Indeed, pen plotters were most popular when computer memory was expensive and processing power limited, since they offered an economical way to produce large-scale drawings and high-resolution vector-based artwork.[6] However, they have since become outdated, quickly replaced by large-format inkjet and toner printers that provided more efficient and versatile graphic output.[7]

While the technical and industrial applications of the pen plotter decreased, their artistic potential emerged as artists began to view these devices as tools that bridged the analogue and digital realms; namely, the advent of the Information Age and the Digital Revolution made art increasingly cyborgian by incorporating computers into the repertoire of tools and techniques available to creators. Among the notable pioneers of this medium, Vera Molnar (1924–2023) stands out for her exploration of algorithmic design in generative and computational art, using the pen plotter as a tool of execution.[8] Similarly, Frieder Nake (b. 1938), another of the earliest artists to adopt pen plotters, produced intricate, mathematically driven artworks in the 1960s.[9] Georg Nees (1926–2016) and Manfred Mohr (b. 1938), both key figures in the field, also used pen

3 "Pen Plotter, History", *Macro Enter*, https://www.macroenter.com/blog/pen-plotter-history/.

4 Duncan Geere, "Pen Plotters Are the Perfect Tool for Data Storytelling", *Medium* (19.05.2020), https://medium.com/nightingale/pen-plotters-are-the-perfect-tool-for-data-storytelling-b05c71ceadd5.

5 *ibidem.*

6 "Pen Plotter, History", *op.cit.*

7 *ibidem.*

8 Richard Whiddington, "A New Show in Paris Celebrates Vera Molnár's Pioneering Generative Art," *Artnet News* (10.05.2024), https://news.artnet.com/art-world/in-pictures-vera-molnar-pompidou-2446604.

9 Carole Spearin McCauley, *Computers and Creativity*. New York: Praeger 1974, p. 66.

plotters to create geometric designs and abstract structures.[10] Building on these historical examples of pioneering artists, younger creators like Andreas Gysin (b. 1975) have also explored the potential of the pen plotter in their works.

Although they have never experienced a widespread comeback, recently pen plotters have been an object of a niche revival of interest within certain creative communities and the culture of do-it-yourself makers, active on social media platforms such as Instagram and Reddit.[11] Within these groups, enthusiasts and artists embraced this tool for its retro charm and the unique aesthetic qualities combining features of a hand-drawn work with a mechanical process that results in intricate line drawings and vector-based designs. The availability of open-source software and DIY kits has also made pen plotters more accessible, which helped to consolidate the small but dedicated community of enthusiasts.[12]

Notes on the process

The paintings that are the main subject of this article, and which were produced with the pen plotter, made their debut during my doctoral exhibition in November 2020. Figure 1 showcases two of the larger artworks, each measuring approximately 140 x 140 cm. Additionally, due to spatial constraints in the exhibition room, a series of six paintings, each sized at 50 x 70 cm, was arranged in a panel-like configuration.

These pen-plotted paintings were the result of months of hands-on experimentation with a commercially available pen plotter, during which I developed and perfected a custom methodology to materialise vivid and complex digital images, using Japanese archival ink pens on Bristol paper. I chose to use archival pens for a few reasons. First, because of how long the works take to execute, I wanted to ensure they are durable. Second, the specific brand of pen I selected has a unique materiality – when layers of ink overlap, the colours become very solid and vibrant, almost like the colours of a screen; this resonance between the paper and the screen interested me greatly. Finally, while the limited colour palette available for these pens might seem like a limitation,

10   Miloš Todorović, "AI and Heritage: A Discussion on Rethinking Heritage in a Digital World," *Uluslararası Kültürel ve Sosyal Araştırmalar Dergisi* 10, no. 1 (June 28, 2024), p. 5, https://doi.org/10.46442/intjcss.1397403.

11   Duncan Geere, *op.cit.*

12   Una Tao, "Best 5 Open Source Pen Plotters for Makers: Unleash Your Creativity", *UUNATEK* (14.07.2023), https://uunatek.com/best-5-open-source-pen-plotters-for-makers-unleash-your-creativity/.

I saw it as a way to give the works a unified base aesthetic and coherence, while still enabling sufficient variation in their combinations. The Bristol paper, with its brilliant white hue, transformed the backdrop into a distinct material presence, almost like a colour in its own right. In Figure 3, I present two details, extracted from the larger-scale paintings, which provide a closer view onto the works' complexity.

Figure 1. The two larger pen-plotted paintings (140 x 140 cm) produced for t he doctoral exhibition.
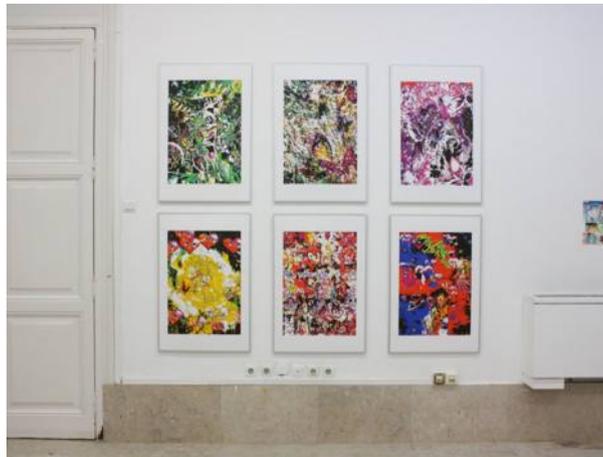
Figure 2. The series of six 70 x 50 cm pen-plotted paintings produced for the doctoral exhibition.

Figure 3. Details of the larger pen-plotted paintings.

In this part, I will go into more detail on some of the challenges I encountered. My process for these paintings began (and always begins) with the creation of digital collages out of assembled digital and photographic materials, which were then used as the basis for what would be plotted. These digital collages were carefully divided into separate layers of colour – in total, seven colours plus the white of the paper – and then converted into crosshatching vectors to create solid patches of colour. For visual reference, Figure 4 provides a glimpse of the pen plotter in action, bringing one of the paintings to life, while Figure 5 highlights a detail from one of the artworks, where the texture of cross-hatching becomes evident in the colour patches.

Figure 4 The pen-plotter's mechanical arm, equipped with a pen, is in action.

Figure 5 Detail of the cross-hatching.

A major challenge was to make large, solid patches of colour using a pen plotter whose designated function is to draw simple, singular lines. For this reason, as it was stated earlier, the creation of such multilayered paintings demanded printing each colour layer individually. As I delved further into the process, I also quickly realised the need to establish an organisational system and adapt to several unforeseen circumstances that arose along the way.

One of them was discovering how important it was to know the characteristics of the pens I worked with. For instance, I began dividing the pens by their weight in grams, which was a way of estimating how much ink was left in them and, thus, anticipating when a pen may run out. Furthermore, I observed that yellow pigment tends to dry up faster than others inside the pen, which increased the likelihood of yellow layers failing. In consequence, starting with yellow made sense not only because it is a lighter colour that can easily get smudged by other colours, but also because it helped to avoid leaving this more "risky" layer until the very end. Additionally, I learned to listen to the subtle nuances of the noise produced by the servo motors responsible for moving the pen up and down, so I could discern when they were nearing the end of their lifespan, allowing me to take proactive measures, such as replacing them.
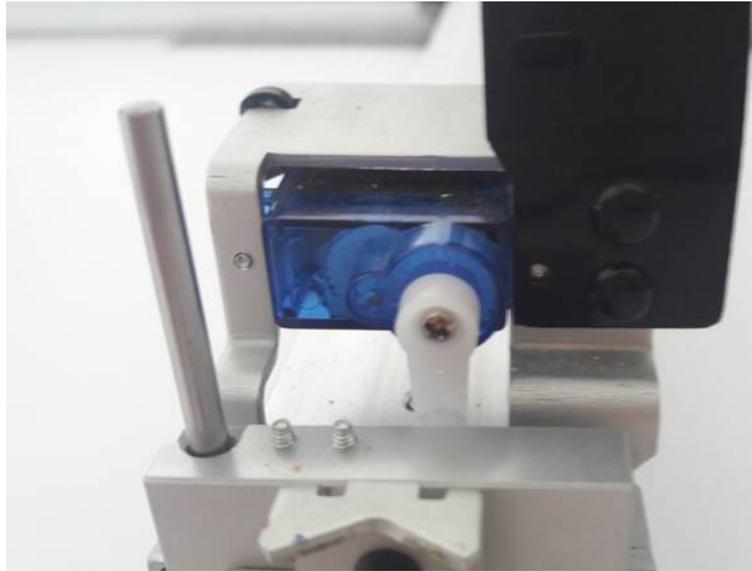
Figure 6. The servo motor governing the pen's vertical motion during printing is a component susceptible to accelerated wear under intensive pen plotter usage.

Environmental factors also played a significant role in the precision and quality of the printing process. I observed that variations in humidity levels could affect the outcome, causing the paper to subtly expand or contract, which leads to deviations as the pen plots on a surface that, despite appearing static to the human eye, is actually shifting and reacting to its surroundings. Moreover, the pen plotter exhibited variations in precision across different areas of its drawing surface – for instance, the pen plotter is more precise near the motor and closer to its base, gradually losing accuracy as it moves further away – which introduces yet another factor to consider in this already complex process. To illustrate some of the technical issues, in Figure 7, I provide a video sequence (available via the link) extracted from a brief video demonstration that showcases the work of the pen plotter, including the sounds it generates and whose aurality carries a charm of its own. In contrast, the video sequence in Figure 8 (available via the link) captures the plotter malfunctioning due to a catastrophic accident in which one of the cables broke; later, the affected element was patched up to fix the problem.

Figure 7. Sequence of frames illustrating the normal pen-plotter's motion, available via the link
https://drive.google.com/file/d/1WrdpC7U1sbZWjt6Dtu4HQ8gTJzQRIUrn/view?usp=sharing.

Figure 8. The pen plotter with a ruptured cable, available via the link
https://drive.google.com/file/d/17nLXtSYDdrj3WhjdDBxQmoUo2lk73LfL/view?usp=sharing.

The point of reporting all these details and unexpected accidents is not only to record them as a reference for myself and others who might find them useful but also to illustrate how I realised the importance of constant engagement with the machine. Contrary to my initial expectations, leaving the pen plotter unsupervised to draw was not a viable approach. Instead, I found myself continuously monitoring and attending to the machine's operation, looking for solutions to any issues that arose. As it turned out, drawing with a pen plotter entails more than passive execution and a cursory glance of supervision from the human "in charge". The pen plotter, through its mechanical and computerised mediation, creates a partnership where human intuition blends with mechanical precision in a dynamic feedback loop that not only extends but transforms the operator's rhythms, routines and ways of working. An anecdotal example is that during the more than two months I spent living in a studio to prepare for my PhD exhibition – printing nonstop – my biorhythms became uncannily synchronised with the printer's timings: I ate, stepped out of the studio for grocery shopping or brief outdoor activities, and slept according to the intervals needed to start new layers or change pens, and would wake in the dead of night to switch a pen or adjust a motor to avoid wasting precious time. Due to this immersion, returning to "normal" life after completing the paintings felt like a readjustment to a reality I had left behind to inhabit an alternative plane. And, as all this took place during the COVID pandemic, which had already disrupted everyone's routines, the sense of disconnection was heightened for me, as what I was primarily experiencing was a withdrawal from the time spent with my pen plotter, which had become such a central part of my daily life.

On another note, the idea that accidents and mistakes can become integral to the creative process is far from new and will be familiar to most creators and practitioners (not just artists, I would argue). Such moments of unpredictability often expand the meanings of the final work and potentially – hopefully – enhance its emotional resonance. For example, in Figure 9, some unintended lines appeared when the servo motor lost power mid-print. These accidental lines were intentionally retained in the final artwork to accentuate a sense of glitch-like motion in the composition. To be sure, the purposeful exploration of such accidents and mistakes was one of my first ideas when I started working with the pen plotter, a concept I also applied in the comic *Violent Delights*, which I will briefly discuss further below.

Figure 9. Example of accidental line in a pen-plotted painting.

One aspect I find of particular interest in the finalised artworks is how the ostensibly flat surfaces of these pen-plotted paintings disguise the labour-intensive nature of their creation. Each painting comprises hundreds of metres of lines, drawn over dozens of hours, necessitating more than a week of continuous machine operation for larger formats. So, unlike the emphasis on the linear found in more traditional pen-plotted drawings, the lines in my works are "concealed" as colour patches, rendering their temporality and lengths imperceptible at first glance, which is a distinctive characteristic of them. Naturally, painting as a medium always has this spatial and temporal dimension inscribed in its surfaces, but with the pen plotter, these can be measured down to the second and millimetre, even more so with software that reports the length and duration of each vector path.

This pictorial use I make of the pen plotter is a characteristic that sharply sets it apart from the artistic use of the pen plotter for mathematical or geometrical drawings (admittedly what the technology is supposedly better suited for) as outlined in the historical overview and its associated artists, which, though I find them beautiful to look at, do not personally align with my interest in rendering digital images of a completely different kind. My interests in machines, particularly the pen plotter, are, by contrast, more closely aligned with what is termed the post-digital, a topic I will explore in the

following section through closely related concepts such as Glitch Feminism, digital folklore, "sparkle-vomit" and other interconnected ideas tied to the "internetification" and globalisation of our societies. If we define post-digital as "a state in which the disruption brought about by digital information technology has already occurred and, as such, represents a crisis of the cybernetic notion of 'system' which neither 'digital' nor 'post-digital' – two terms ultimately rooted in systems theory – is able to leave behind, nor even adequately describe",[13] then we are talking about an aesthetic sensibility that blurs the line between digital and analogue, embracing imperfection, materiality and the fusion of digital tools and cultures with traditional, tactile art forms.

In this context, it is also worth mentioning that, despite the flat surfaces of the pen-plotted paintings, I have observed that viewers are invariably drawn to engage with them up close (Figure 10). Based on insights I have gathered from informal conversations with various viewers, this can be attributed to either the visual complexity of the artworks themselves and a curiosity regarding the technique, or a desire to explore the intricacies once the gimmick is unveiled. The notion of the "gimmick" and its capacity to pique spectators' curiosity – quite literally drawing them into the artworks – is another compelling feature of the pen-plotting technique; in fact, the prominent cultural theorist Sianne Ngai has dedicated her latest book, *Theory of the Gimmick: Aesthetic Judgment and Capitalist Form* (Harvard University Press 2020), to this theme, in which, in keeping with her broader critical project, she underscores the significance of the "the irritating yet strangely attractive gimmick"[14] as a frequently overlooked yet fundamental category within contemporary aesthetics. While a comprehensive exploration of the relationship of the pen plotter with the gimmick falls outside the scope of this article, this is an avenue I intend to explore at a later time, all the more so because pen-plotted paintings use the gimmicky process creation as an anchor in which a genuine intermedial dissolution is opened and takes place. By embracing the fundamental unit of drawing, the line and employing the classical technique of cross-hatching, it blurs the boundaries between the pictorial and the graphic, the analogue and the digital, the precision of the machine and the proverbial artist's touch.

13 David M. Berry and Michael Dieter, "Thinking Postdigital Aesthetics: Art, Computation and Design," in: Michael Dieter and David M. Berry (eds.), *Postdigital Aesthetics: Art, Computation And Design*. New York: Palgrave Macmillan 2015, p. 7.

14 Sianne Ngai, *Theory of the Gimmick: Aesthetic Judgment and Capitalist Form*. Cambridge (MA): Harvard University Press 2020, p. 1. https://doi.org/10.4159/9780674245365.

Figure 10. Example of spectator looking closely into one of the pen-plotted paintings.

Themes and composition

Thematically, the pen-plotted paintings focus on the intersections of the glitch – i.e., a small, often temporary malfunction in a system that produces errors and unexpected result – with the aesthetics of digital folklore and the internet. In the context of digital aesthetics, the term "glitch" often takes on a metaphorical meaning, referring to the kind of "digital culture that goes against the grain of efficiency and ergonomics, and embraces the reserves that reside in noise, error and glitch."[15] For instance, the contemporary movement and ideology of Glitch Feminism, coined in 2013 by Legacy Russel, draws inspiration from the glitch in technology to challenge conventional ideas of perfection and disrupt established systems of gender and identity.[16] In turn, the concept of "digital folklore", as defined by Olia Lialina and Dragan Espenschied, refers to "the customs, traditions and elements of visual, textual and audio culture that emerged

15 Peter Krapp, *Noise Channels: Glitch and Error in Digital Culture*. Minneapolis: University of Minnesota Press 2011, ix.

16 Legacy Russell, "On #GLITCHFEMINISM and The Glitch Feminism Manifesto. By Legacy Russell", *Res (*17.10.2017), http://beingres.org/2017/10/17/legacy-russell/.

from users' engagement with personal computer applications during the last decade of the 20th and the first decade of the 21st century".[17] While not all technological glitches fit within digital folklore – and, likewise, not all aspects of digital folklore align seamlessly with the tenets of glitch feminism – these notions are interconnected, sharing a few areas on which they overlap. Indeed, a great deal of digital folklore engages with the traditionally female-coded aesthetics of the cute and the pretty and, therefore, has often been purposefully harnessed as a form of guerrilla tactics by cyberfeminist artists.

The shift in the portrayal of automatons from obedient servants – like Hephaestus's mechanical creations in Greek mythology, Heron of Alexandria's self-operating devices in *Automata* (probably 1st or 2nd century AD) and Leonardo da Vinci's courtly automatons of the 15th century[18] – to "glitchy" figures (e.g., tragic or defiant) in 19th-century literature reflects anxieties driven by philosophical, industrial and cultural changes. Descartes' mechanistic philosophy and the Industrial Revolution blurred the line between human and machine, raising fears of losing control over creations and being rendered obsolete.[19] Romanticism, with its warnings against hubris, cast automatons as symbols of overreaching ambition, as seen in Mary Shelley's *Frankenstein*, where the Monster's rebellion stems from "a science unconcerned with its consequences".[20] For their part, gendered narratives that portray artificial female figures, such as Olympia in *The Sandman* and Hadaly in *L'Ève Future*, further explored societal unease, depicting idealised companions designed to fulfil our desires, yet whose relationships with humans (notably, men) are inevitably fated to end in disaster.[21] Moreover, as the Gothic and science fiction genres evolved, their stories used automatons to embody the uncanny, warning of the ethical and existential risks of technological advancements and the fragility of human dominance. For instance, as early as 1872, the writer Samu-

17   Olia Lialina and Dragan Espenschied, "Do You Believe in Users?", in: *Digital Folklore*. Stuttgart: Merz & Solitude 2009, pp. 9–10.

18   Ana Matilde Sousa and Maria Paula Diogo, "Será que a Hatsune Miku sonha com ovelhas eléctricas? Vocaloides, agentes inteligentes e pós-humanidade", in: Atilio Butturi Junior, Davide Scarso, and José Luís Câmara Leme (eds.), *Antropoceno, Biopolítica e Pós-Humano*. São Paulo: Pontes Editores 2020, pp. 234–35.

19   Ethan Stephenson, "Automata in the Victorian Imagination: Fictional Responses to Industrialization, Technology, and Human Perfectibility", PhD thesis from Southern Illinois University 2020, p. 1, https://opensiuc.lib.siu.edu/dissertations/1860.

20   Mark Coeckelbergh, *New Romantic Cyborgs: Romanticism, Information Technology, and the End of the Machine*. Cambridge (MA): The MIT Press 2017, p. 47, https://www.jstor.org/stable/j.ctt1mtz81z.2017

21   Stephenson, *op.cit.,* p. 1; Sousa and Diogo, *op.cit.,* pp. 234–35.

el Butler, in his satirical novel about the fictional land of *Erewhon* (1872), introduced the rebellion of machines as an apocalyptic scenario.[22] In the postmodern age, however, "cyborg theory" emerged as lens for exploring the broader integration of humans and machines, with thinkers like Donna Haraway (*A Cyborg Manifesto*, 1985) and N. Katherine Hayles (*How We Became Posthuman*, 1999), among many others, redefining the cyborg as a symbol of technological hybridity, challenging traditional boundaries of identity and the nature-culture divide.

My pen-plotted paintings align with this latter vision of the cyborgian partnership, drawing from Haraway's focus on resistance, adaptability and fluidity, which naturally extends into the principles of Glitch Feminism. Nevertheless, I am also interested in exploring the more "Ngai-esque" crevices of this relationship – those hooks and nooks, and the contradictions, of "compromised forms… extravagantly impoverished, simultaneously overperforming and underperforming",[23] as I believe that, in the oppressive mediascape of contemporary capitalism, liberation cannot be achieved by simply rejecting such forms in pursuit of an imagined purity. Hence, the compositions of the pen-plotted paintings embody playful and glitchy amalgamations of cute, fantasy and pop aesthetics, as well as incorporate elements of Japanese anime and manga, for which, as previously mentioned, I hold a particular appreciation; these have all consistently permeated my artistic expressions and remain my main cultural references. Most of the characters featured in the paintings are appropriated from contexts that are either girl-oriented, such as magical girl shows, or heavily "girlified", such as those involving Japanese idols (*aidoru*),[24] videogames like dating sims (called "girl games") or visual novels,[25] or the *moé* genre of manga and anime, characterised by a kind of cuteness heavily associated with otaku ("nerd" or "geek") culture. Some characters are taken from popular series and may be recognisable to viewers; however, such recognition is not essential, as my intent is to evoke the ideas outlined earlier in this paragraph, even without relying on these specific references.

22 Sousa and Diogo, *op.cit.,* p. 236.

23 Ngai, *op.cit.,* p. 1.

24 An idol is a highly curated public figure, often in music, acting or entertainment, who embodies idealised traits and serves as a cultural icon, particularly in industries such as Japanese and Korean pop, where they are celebrated for their talent, appearance and carefully managed personas.

25 Dating sims and visual novels are video game genres focused on narrative-driven gameplay, where players make choices to develop relationships or progress through interactive stories, often blending romance, character-driven plots and stylised anime-inspired visuals.

In addition to these characters, composing the pen-plotted paintings entails blending various other elements, such as hearts, butterflies, doodle, glitter and so on. For example, I often extract elements from photographs of glitter or other decorative appliques floating in water or viscous liquids, which, after manipulation, appear to hover over the main image or disrupt it like dust or visual noise. Here, the reference more explicitly connects to the realm of feminised "digital folklore" mentioned earlier, inspired by the famous (and infamous) website Blingee, which reigned supreme in early 21st-century internet by enabling users to adorn digital images and turn them into sparkly, animated GIFs. I have written elsewhere about the cultural, aesthetic and philosophical dimensions of Blingee and its excesses of glitter, cuteness and kitsch, in the article "Of Sparkle-Vomit and Base Materialism: Field Notes on Blingee GIFs",[26] to which I would redirect any curious reader. The case in point, however, is that "sparkle-vomit" aesthetics and the amateur production methods of Blingee challenge digital modernist ideals of refinement, while its nostalgic, girly culture subverts, often masculinised, notions of high art. In my paintings, the visual elements that recreate or are appropriated from old Blingee GIFs are occasionally complemented by words or excerpts of texts. Even in the absence of explicit textual components within the visual compositions, the titles often play a reinforcing role by utilising sentimental words or phrases, i.e., that appeal to nostalgia, tenderness or are overly emotional; for example, one of the larger paintings is titled *Then, on awakening, these magic memories faded into the sombre reality*, and some of the smaller ones have names such as *Pretty guardian* or *Academy rose*. By mobilising and articulating these different visual and textual resources, I seek to push the pen-plotted paintings towards an imaginative realm where traditional values of high and low art – as well as other binaries and their hierarchies, such as human versus machine or reality versus fantasy – are purposefully blurred, allowing for alternative possibilities and interpretations to arise.

The restricted palette of seven colours contributes to this effect, permitting countless variations derived from a primitive chromatic scheme, evoking the pen-plotting technologies of the 1960s, as well as the brutalist innocence of early computer graphics. Figures 11 and 12 present a selection of smaller-scale paintings featured in the doctoral exhibition. These works, measuring 30 x 20 cm and 17 x 12 cm, exemplify the thematic, compositional and chromatic considerations that have been discussed earlier.

26   Ana Matilde Sousa, "Of Sparkle-Vomit and Base Materialism: Field Notes on Blingee GIFs", in: *Proceedings of the 9th Conference on Computation, Communication, Aesthetics & X* (xCoAx, Porto: i2ADS, 2021), pp. 391–410, https://2021.xcoax.org/data/pdf/xCoAx2021-Sousa.pdf.

Figure 11. Series of 30 x 20 cm pen-plotted paintings.

Figure 12. Series of 17 x 12 cm pen-plotted paintings.

Moreover, it is important to mention that some paintings include physical "dirty matter",[27] such as photographs of trash on the street, graffiti on the walls or various painted leftovers collected in my studio, which I digitally incorporated into the compositions that were about to be plotted. In Figure 13, one can observe the coexistence of a large brushstroke of paint on the left and the digital brushstrokes done in MS Paint 3D on the right. In another other example, presented in Figure 14, I used photographs of dirty sheets of paper and paint splatters from my studio to make the digital collages that got plotted into the final work. The idea of having this analogue, actual traces of a paintbrush reproduced minutely and painstakingly by a machine which, unlike the human hand, can only materialise them through a rigid, mechanical XY system, appealed to me for how it subverted our expectations of how artistic tools and mediums are meant to function.

Figure 13. Detail of pen-plotted painting combining digital strokes made in MS Paint 3D with brush strokes made with ink. These physical brush strokes were scanned and integrated into the digital composition.

27   Jussi Parikka, "New Materialism as Media Theory: Medianatures and Dirty Matter", in: *Communication and Critical/Cultural Studies* 9, no. 1 (March 2012), pp. 95–100, https://doi.org/10.1080/14791420.2011.626252.

Figure 14. *Then, on awakening, these magic memories faded into the somber reality, of 2020*. Archival ink pens on acid-free Bristol paper, frame and plexiglass, 140 x 100 cm.

In addition to the pen-plotting method discussed here, I will briefly touch on other ways I have explored and hope to explore in the future using the pen plotter for my artworks. One of the directions that I am eager to pursue involves using the pen plotter in a manner more aligned with its original purpose, primarily for drawing lines; I intend to blend this approach with the use of physical mediums such as acrylic paint, either applied with a brush attached to the pen plotter or through the use of acrylic markers. Figures 15 and 16 show an artwork created using this hybrid technique.

Figure 15. *Man-made monstrosities*, 2020. Acrylic markers and spray-on foam-core with artist's frame, 100 x 70 cm.
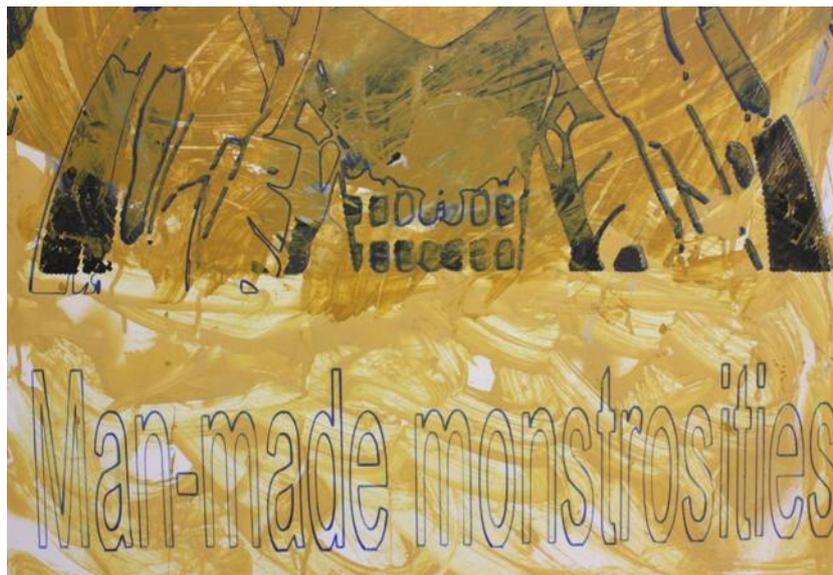
Figure 16. Detail of *Man-made monstrosities*.

Another path that I have been exploring in my studio – although I have not yet show-cased any of these artworks publicly – involves creating collages using various sheets of pen-plotted paintings, by layering these sheets to create overlaps. Using this tech-nique, I started creating compositions inspired by the concept of windows in computer GUI interfaces and the sense of *mise-en-abyme* they evoke, as well as the phenome-nological experience of working in graphic programs such as Photoshop, where multi-ple windows often coexist and overlap, and distinct spaces or planes within the work-space. Figure 17 provides a photographic record of one such experiment.

Figure 17. Experiments with combing and overlapping different pen-plotted paintings.

Besides exploring painting techniques, I am also interested in taking pen-plotted paintings into the expanded field of installations and, as a member of the MASSACRE artistic collective, I conceptualised an artwork of this kind for our exhibition *Loot Box* at the gallery of the FCT-NOVA library, held in 2020. This was a ground piece titled *En plein air (after Zelda)*, in which I used the pen plotter to recreate pixelated sprites from the classic video game *The Legend of Zelda* from the 1980s. The pen-plotted sheets were then assembled into a ground piece/installation that evolved and changed its shape modularly over time.[28] The exhibition catalogue, published by MASSACRE, includes a detailed text discussing the concept, making and key characteristics of this artwork.

28   For more information about this piece, please visit the following link: https://www.heta.moe/loot-box/.

Figure 18. *En plein air (after Zelda)*, 2020. Archival ink markers on Bristol paper mounted on foamcore, model trees, grass mats, trolleys and toy signs, laser prints on fluorescent cardboard, on black foamcore bases. Variable dimensions.

Finally, one of my most successful experiments with the pen-plotter is the 28-page comic book titled *Violet Delights*, which I created for the mini-kuš collection by the Latvian art comics publisher Kuš. During its creation, I employed the pen plotter to draw vector graphics, while simultaneously intervening with pigment markers and physically manipulating the paper to create analogue glitches. Figures 19 and 20 show the book's cover, which was one of the smaller-scale paintings in my post-doctoral exhibition, and an excerpt from the book, featuring the protagonist from the anime *Sailor Moon*. This comic was also the subject of a presentation at the 2024 Comics Studies Society conference, titled "Comics Out of Joint: The Use of Glitch Aesthetics in Hetamoé's *Violent Delights*". In this presentation, which I am currently developing into a full-length paper, I focused on glitches rooted in the pen-plotter's machinic process yet generated through non-digital means, encompassing glitches created with pen and paint on paper, as well as narrative glitches arising from the overlapping, remixing and collapsing of cultural, temporal and aesthetic dimensions.

Figure 19. *Mini kuš!* #87 "Violent Delights" (cover).

Figure 20. *Mini kuš!* #87 "Violent Delights" (excerpt of the inside).

Concluding remarks

In this article, I have described in some detail the artistic journey – so far – resulting from my "cyborgian partnership" with a pen plotter, focusing on aspects such as style, process and the themes I explore in my work. I have delved into how these pen-plotted paintings fit in between traditional and digital art, exploring and teasing the connection between humans and machines in the context of posthumanism, glitch aesthetics and

cyberfeminism. In the latter part of the article, I have also discussed potential future directions and opportunities for exploring additional techniques using the pen plotter for painting, as well as its application in other mediums such as comics and installations.

Ultimately, by pushing the boundaries of the pen plotter's capabilities, these artworks seek to transcend the limitations imposed by obsolescence. They bridge diverse cultural, temporal and aesthetic scales – standing out within the tradition of pen-plotter art for their shift from the linear to the pictorial, and from the geometric and abstract to an aesthetic that not only incorporates numerous figurative elements and characters but also aligns with a post-digital sensibility, engaging closely with the aesthetics of the internet, including digital folklore and "sparkle-vomit" styles, and the globalised imaginaries of anime and manga. To conclude, I want to express that participating in the POR-POL NET project, including one of its exhibitions at Saco Azul Gallery in Porto, the colloquium at Faculdade de Letras da Universidade de Lisboa and now this publication, has been not only a pleasure but a highly productive experience. The exchange of ideas during these events has been invaluable and will undoubtedly greatly influence my ongoing project and its various aspects.

Bibliography:

1. "Pen Plotter, History", in: *Macro Enter*, 28.02.2014, https://www.macroenter.com/blog/pen-plotter-history/ [accessed: 10.10.2023].

2. Berry, David M., and Michael Dieter. "Thinking Postdigital Aesthetics: Art, Computation and Design", in: *Postdigital Aesthetics: Art, Computation And Design*, Michael Dieter and David M. Berry (eds.) Basingstoke; New York: Palgrave Macmillan 2015.

3. Biggs, Michael, and Henrik Karlsson (eds.), *The Routledge Companion to Research in the Arts*. London: Routledge 2012.

4. Candy, Linda. "Research and Creative Practice", in: *Interacting: Art, Research and the Creative Practitioner*, Linda Candy and Ernest Edmonds (eds.), pp. 33–59. Witney: Libri Publishing 2012.

5. Coeckelbergh, Mark. *New Romantic Cyborgs: Romanticism, Information Technology, and the End of the Machine*. Cambridge: The MIT Press 2017.

6. Geere, Duncan. "Pen Plotters Are the Perfect Tool for Data Storytelling", in: *Medium,* 19.05.2020, https://medium.com/nightingale/pen-plotters-are-the-perfect-tool-for-data-storytelling-b05c71ceadd5 [accessed: 10.10.2023].

7. Hickman, Richard D. *Research in Art and Design Education: Issues and Exemplars*. Bristol: Intellect 2008.

8. Krapp, Peter. *Noise Channels: Glitch and Error in Digital Culture.* Minneapolis: University of Minnesota Press 2011.

9. Lialina, Olia, and Dragan Espenschied, "Olia Lialina and Dragan Espenschied, "Do You Believe in Users?", in: *Digital Folklore*. Stuttgart: Merz & Solitude 2009, pp. 9–10.

10. McCauley, Carole Spearin. *Computers and Creativity*. New York: Praeger 1974.

11. McNiff, Shaun, (ed.), *Art As Research: Opportunities and Challenges*. Bristol: Intellect 2013.

12. Ngai, Sianne. *Theory of the Gimmick: Aesthetic Judgment and Capitalist Form*. Cambridge (MA): Harvard University Press 2020.

13. Orbaugh, Sharalyn. "Sex and the Single Cyborg: Japanese Popular Culture Experiments in Subjectivity," in *Robot Ghosts and Wired Dreams: Japanese Science Fiction from Origins to Anime*, Christopher Bolton, Istvan Csicsery-Ronay, and 巽, 孝之 (eds.) pp. 172–192. Minneapolis: University of Minnesota Press 2007.

14. Parikka, Jussi. "New Materialism as Media Theory: Medianatures and Dirty Matter", in: *Communication and Critical/Cultural Studies* 9, no. 1 (March 2012), pp. 95–100, https://doi.org/10.1080/14791420.2011.626252 [accessed: 06.10.2023].

15. Russel, Legacy. "On #GLITCHFEMINISM and The Glitch Feminism Manifesto", in: *Res.*, 17.10.2017, http://beingres.org/2017/10/17/legacy-russell/ [accessed: 04.10.2023].

16. Smith, Hazel, and Roger Dean. *Practice-Led Research, Research-Led Practice in the Creative Arts*. Edinburgh: Edinburgh University Press 2009.

17. Sousa, Ana Matilde. "Of Sparkle-Vomit and Base Materialism: Field Notes on Blingee GIFs", in: *Proceedings of the 9th Conference on Computation, Communication, Aesthetics & X*, pp. 391–410. Porto: i2ADS 2021, https://2021.xcoax.org/data/pdf/xCoAx2021-Sousa.pdf [accessed: 06.12.2024].

18. Sousa, Ana Matilde, and Maria Paula Diogo. "Será que a Hatsune Miku sonha com ovelhas eléctricas? Vocaloides, agentes inteligentes e pós-humanidade," in: *Antropoceno, Biopolítica e Pós-Humano*, Atilio Butturi Junior, Davide Scarso, and José Luís Câmara Leme (eds.), pp. 231–277. Campinas (S. Paulo, Brasil): Pontes Editores 2020.

19. Stephenson, Ethan. "Automata in the Victorian Imagination: Fictional Responses to Industrialization, Technology, and Human Perfectibility." Carbondale (IL): Southern Illinois University 2020, https://opensiuc.lib.siu.edu/dissertations/1860 [accessed: 06.12.2024].

20. Tao, Una. "Best 5 Open Source Pen Plotters for Makers: Unleash Your Creativity", in: *UUNATEK* (blog), 14.07.2023, https://uunatek.com/best-5-open-source-pen-plotters-for-makers-unleash-your-creativity/ [accessed: 10.10.2023].

21. Todorović, Miloš. "AI and Heritage: A Discussion on Rethinking Heritage in a Digital World", *Uluslararası Kültürel ve Sosyal Araştırmalar Dergisi* 10, no. 1 (June 28, 2024): pp. 1–11, https://doi.org/10.46442/intjcss.1397403 [accessed: 06.12.2024].

22. Whiddington, Richard. "A New Show in Paris Celebrates Vera Molnár's Pioneering Generative Art." Artnet News (blog), 08.03.2024, https://news.artnet.com/art-world/in-pictures-vera-molnar-pompidou-2446604 [accessed: 06.12.2024].
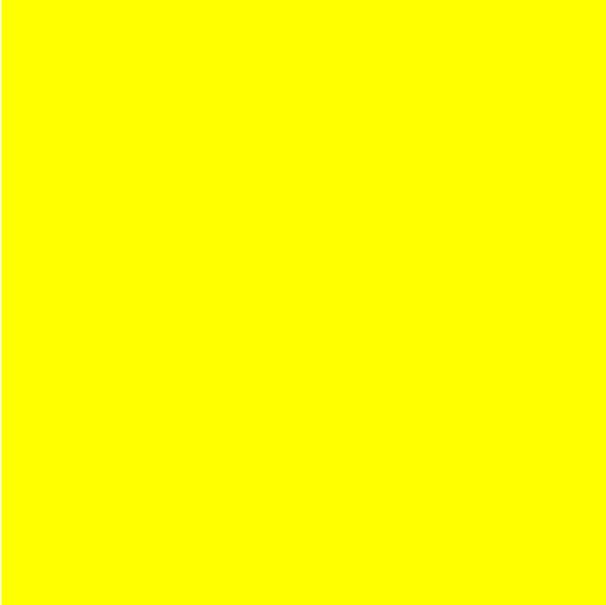
GIF as an artistic support[1]

Lorena Ramos Lomba

Faculty of Fine Arts, University of Lisbon
https://orcid.org/0000-0002-6569-8767
DOI: https://doi.org/10.59862/F7k2B9xQ-07

Introduction

The visual arts have been connected to video and cinema for decades, and are increasingly linked to the internet, which serves both as a theme for and as a means of production, discussion and distribution of artistic works. Currently, more than ever, formats tend to mix, and art and entertainment often meet and overlap.

   In this context, it is intriguing to think why GIFs, which have already existed for three decades, are still so little studied in academia. Although still very much connected to pop culture and humour, they are also interesting support for artistic creation that allows one to explore the terrain between a static image and video, in addition to offering extremely modern support. By presenting examples of artists who have used GIFs as a means for their production, this paper will discuss the use and inherent properties of this format from an artistic and conceptual point of view, as well as its relationship to appropriation and interdisciplinarity.

A brief history of GIFs

Created in 1987 by Steve Wilhite and his team at tech giant CompuServe, the GIF format promptly stood out for being a compressed, light image format that could display complex information without requiring much machine memory. Initially used only for static pictures, it was soon also adopted to create image sequences, introducing the element of movement in image file format, facilitating embedment. Especially for the early web, which could not count on great speed and bandwidth, this simplification of data was of utmost importance for designers, users and developers, making the GIF a resounding success, particularly in personal web pages, popular in the 1990s.

   With the evolution of the internet and coding, compressed formats became less of a necessity, and the aesthetics of the early web soon turned outdated and undesired by the people who were now much more interested in high-quality image formats, vector art and high-definition videos. To add to that disfavour, in 1995, CompuServe entered a licensing agreement with Unisys after discovering that the LZW compression method employed in GIF format was subject to a patent. Subsequent license modifications in 1999 sparked concerns among webmasters, who feared potential charges for hosting GIF files. In response, the League for Programming Freedom initiated the "Burn All GIFs" campaign, urging users to adopt the patent-free PNG format instead of GIFs.

In the late 2000s and early 2010s, however, GIFs were retrieved by users, partly due to a nostalgia around the previously unsought appearance of the early web, and partly for its practicality for social media: MySpace, Tumblr and Reddit are a few examples of online communities on which people started using GIFs to communicate again. Jason Eppink notes how "Tumblr is also responsible for igniting mainstream interest in the GIF as an aesthetic form",[2] turning them to a sophisticated visual language used to convey emotions, humour and cultural references. This shift in perception led to the widespread adoption of GIFs in various online contexts, solidifying their place in popular culture. Not much later, platforms started offering embedding options for users: Facebook, WhatsApp and others collaborated with Giphy and Tenor – the two largest GIF hosting websites at the time – to add GIFs to their chats and posts.

It can be stated, then, that one important aspect of this format's popularity is its community-oriented character. As observed by Miltner and Highfield in the article *Never Gonna GIF You Up: Analyzing the Cultural Significance of the Animated GIF*, "while GIFs may be organized by platforms or repositories, their creation is not dictated or constrained by them: users can make and distribute their files".[3] This differentiates GIFs from other visual communication resources used online, such as emojis, that are created by companies to be adopted by users. The authors also reflect: "It offers rich opportunities for remix and intertextual play; user-created and remixed GIFs provide further examples of 'vernacular creativity,' as users appropriate existing media and produce new content using digital media."[4]

Another aspect to consider regarding this topic is how the meaning of GIF is established by groups. The source of the material may often target a specific public, and its use and recontextualisation are built in different online communities to create their own humour and inner logic. In that scenario, the same image can be used in different groups to reflect different meanings, and the meanings attributed by online communities can be distinct from that of the material's source. In *In Defense of the Poor Image*, Hito Steyerl comments: "The condition of the images speaks not only of countless transfers and reformattings but also of the countless people who cared enough about them to convert them over and over again, to add subtitles, re-edit, or upload them."[5]

2   Jason Eppink "Tumblr is also responsible for igniting mainstream interest in the GIF as an aesthetic form", *Journal of Visual Culture*, Vol. 13, no. 3, 2014, p. 302.

3   Kate Miltner and Tim Highfield, "Never Gonna GIF You Up: Analyzing the Cultural Significance of the Animated GIF", *Social Media + Society*, 3(3) 2017, https://journals.sagepub.com/doi/10.1177/2056305117725223, p. 4.

4   *ibidem,* p. 3.

5   Hito Steyerl, "In Defense of the Poor Image", *E-flux Journal,* Issue 10/2009, https://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image/.

This and other aspects present in the use of GIFs have been widely explored by artists since the format's first appearance in the late 1980s – at first, as noted by researcher Paddy Johnson, mostly in Europa and North America, and more recently all over the world.[6]

The cyclic nature of GIFs

Looping and repetition are inherent to the GIF format. This feature can produce the intended humorous effect, reinforce the meaning of the message, or offer an interesting way of manipulating the image and catching the viewers' attention. Miltner and Highfield comment that "while looping may be a technical affordance of the file format, repetition as a rhetorical or communicative feature influences meaning and interpretation".[7] The automatic looping, say the authors, expands the image's meaning, allowing for reinterpreting the action, highlighting its aspects or even creating seamless repetitions in which it becomes impossible to identify the beginning and end. "A new temporal form emerges where fixity coexists with mobility, variation with monotony, change with stability", points out Monica Dall'Asta.[8] The repetitive and continuous image of a GIF, then, allows artists to explore such themes as time, motion and repetition. In this sense, GIFs can be seen as a contemporary manifestation of the longstanding artistic tradition of using circularity and loops in visual arts.

The loop is a subject frequently revisited since antiquity: the figure of Ouroboros, for instance, appears in ancient Egypt and Greece as a representation of self-contained circularity, embodying the paradoxical notion that endings and beginnings are interconnected, forming an unending cycle that cannot be unwoven. This notion continues to be present in art, literature and cinema up to the present day. *Anémic Cinéma* by Duchamp, *Box with the Sound of its Own Making* by Robert Morris and *Life, Death, Love, Hate, Pleasure, Pain* by Bruce Nauman are a few examples of the loop represented in modern and contemporary art that will be further examined in this paper.

---

6   Paddy Johnson, "A Brief History of Animated GIF. Part One", *Artnet,* 02.08.2014, https://news.artnet.com/art-world/a-brief-history-of-animated-gif-art-part-one-69060.

7   Kate Mitlner and Tim Highfield, *op.cit.,* p. 5.

8   Monica Dall'Aasta, "Gif Art in the Metamodernist Era", *Cinéma & Cie,* vol. XVI, no. 26/27 (2016), https://www.academia.edu/35372102/GIF_Art_in_the_Metamodernist_Era.

Marcel Duchamp's *Anémic Cinéma*, created in 1926, was a pioneering example of a loop and the notion of circularity applied in experimental filmmaking. Consisting of spiralling optical illusions and rotating discs adorned with puns and other wordplays, Duchamp's work disrupts traditional linear narrative structures, immersing the viewer in a never-ending visual and linguistic repetition. By employing circular motifs and text and images presented in loops, *Anémic Cinéma* creates a hypnotic and disorienting experience, challenging the viewer's perception and blurring the boundaries between the static and the dynamic.

Figure 1. Marcel Duchamp, *Anémic Cinéma*, 1926. Still from the movie.

In *Box with the Sound of its Own Making* from 1961, Robert Morris explores the loop's self-referential nature. The piece consists of a wooden box that contains a tape recording of the sounds produced during the construction of the box itself. When viewers approach the artwork, they hear the repetitive sounds of sawing, hammering and sanding, forming an auditory loop that mirrors the physical construction process. This recursive audio element draws attention to the act of creation and the labour involved in making art. The loop in *Box with the Sound of its Own Making* reinforces the idea of the artistic process as an ongoing, cyclical endeavour, highlighting the continuous relationship between the artist, the artwork and the viewer.

Finally, Bruce Nauman's artwork *Life, Death, Love, Hate, Pleasure, Pain* from 1983, utilises the concept of a loop to explore the human condition and the cyclical nature of emotional experiences. The installation features a fixture made of neon with the title's six words arranged in a circle. Words light up one by one and the process is repeated endlessly. Through it, Nauman emphasises the rhythmic and often contradictory nature of emotions and human existence, with the looping structure serving as a reminder

that the fundamental aspects – life and death, love and hate, pleasure and pain – are inextricably intertwined and reoccur interchangeably. This can be connected to Friedrich Nietzsche's concept of the *eternal return*, which suggests that life and history are but a constant repetition of certain events.

A different concept that introduces an element of a loop in certain types of art is *mise-en-abyme.* Meaning "placed into the abyss", it refers to a technique in which an image, story or a work's detail introduces a smaller, self-contained representation of itself, creating a recursive structure. In visual arts, *mise-en-abyme* often manifests itself as a painting within a painting: a mirror reflecting another mirror, or a frame within a frame. This technique creates a sense of depth, perspective and repetition. The two emblematic examples are Jan van Eyck's *Arnolfini Portrait* (1434), which contains the representation of a mirror that reflects the whole scene, including the painter himself, and M.C. Escher's *Drawing Hands* (1948) – an iconic lithograph depicting two hands, each holding a pencil and drawing one other. In this last example, the interplay between the hands creates a loop-like structure, where the acts of drawing and being drawn become recursive. In the same vein, also Yayoi Kusama's *Infinity Mirror Room* (1965) can be seen as a representation of a loop, with its mirrored walls endlessly repeating the room and the viewer.
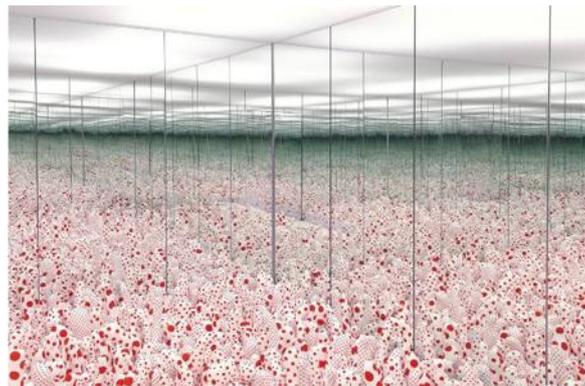
Figure 2. Yayoi Kusama, *Infinity Mirror Room*, 1965. Phitography by Cathv Carver.

Brian Hatton, Professor of Architecture at John Moors University, suggests two ideas to consider when regarding loops in art: first, that the loop can be seen as a structural form that contextualises contents in symbolic conditions intrinsic to circulari-

ty; and second, that the loop itself can be a phenomenon of form and aesthetics.[9] This convergence of the loop as both content and medium speaks directly through GIFs and makes them a unique form of expression, which can be explored not only with the intention of communication and humour but also in an artistic context as the following examples should prove.

In Laura Brothers's work, which explored themes of memory, nostalgia and the cyclical nature of emotions, the loop is part of how the dreamy and surrealist convention, and it evokes a sense of enchantment and nostalgia. Seamless repetition is also present in the works of Giselle Zatonyl and Micaël Reynaud, who both create scenes that, through loops, produce an effect of suspended temporality. In the case of the former artist, the 3D-created images are often animated in loops to present abstract landscapes and sensorial images that allude to the human body, while the latter manipulates pictures to repeat a moment in time or change a perception of a specific object. Similarly, the Japanese collective rrrrrrroll explores the idea of a loop to manipulate time and play with three-dimensionality by creating scenes in which a single person or object turns infinitely in full circles, forever stuck in a moment of simultaneous movement and stillness.

Figure 3. Laura Brothers, *I Can See It in your Eyes*, 2007. Still from an animated image.

9   Brian Hatton, "Looping the Loop", *Art Month,* issue 406, 2014*,* https://www.artmonthly.co.uk/magazine/site/article/looping-the-loop-by-brian-hatton-may-201, pp. 6–10.
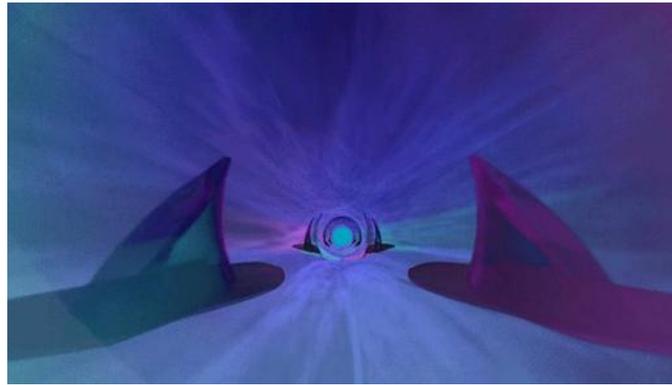
Figure 4. Giselle Zatonyl, *Wombstretch*, 2007. Still from an animated image.

Figure 5. Micaël Reynaud, Untitled, ca. 2002. Still from an animated image.

Figure 6. rrrrrrrroll, *R_76*, 2013. Still from an animated image.

GIF and appropriation

Another aspect that is intrinsic to the GIF is the possibility of working with appropriation. A great number of GIFs made and shared on the internet are, in fact, reproductions of short snippets taken from other media – TV shows, movies, concerts, interviews, viral videos, etc. By selecting a certain scene from the original work and adapting it to a GIF format, a person ends up highlighting a specific message, which may gain new meanings every time it happens to be used online. To quote Nicolas Bourriaud, art critic and curator: "Since the early nineties, an ever-increasing number of artworks have been created based on preexisting works; more and more artists interpret, reproduce, re-exhibit, or use works made by others or available cultural products. This art of postproduction seems to respond to the proliferating chaos of global culture in the information age, which is characterized by an increase in the supply of works and the art world's annexation of forms ignored or disdained until now. These artists who insert their work into that of others contribute to the eradication of the traditional distinction between production and consumption, creation and copy, readymade and original work."[10]

The repetition or reproduction of other media and other artworks is commonly discussed in contemporary art. Richard Prince, Sherrie Levine and Elaine Sturtevant all tackle this controversial topic and raise several questions: Who owns a work? What sets up authorship? Is the art in the intention and conception or the final product? The first of the mentioned authors is known for the exploration of appropriation, particularly through rephotographing and recontextualising the already-existing images. One notable example is his series *Cowboys* (1980–1992), in which he reappropriated photographs from Marlboro cigarette advertisements. In this particular case, Prince removed the original text and logos, isolating and enlarging the figures of cowboys against monochromatic backgrounds. In 2014, however, he proposed a reappropriation of some non-commercial photographs, namely photos published by Instagram users. In *New Portraits*, he used screenshots of other people's posts – primarily selfies and other kinds of self-representations – that got enlarged, framed and exhibited as his artwork. Through these acts of appropriation, Prince challenged notions of authorship and originality, prompting viewers to question the authenticity and power dynamics inherent

10 Nicolas Bourriaud, *Postproduction – Culture as Screenplay: How Art Reprograms the World*. New York: Lukas & Sternberg 2002, p. 13.

to mass media representations, as well as the matter of privacy once someone shares their image online.

Sherrie Levine is another artist known from rephotographing and reproducing existing works. One of her most notable series is *After Walker Evans* (1981), in which she photographed and reprinted photographs from the renowned album *American Photographs* (1938). By reappropriating Evans' iconic images, Levine raises the question of the nature of artistic creation and the artist's role as a mere reproducer or interpreter of existing cultural artefacts and phenomena. In this case, through the act of copying and presenting famous photographs as her own, Levine puts to trial the romantic notion of the artist as a unique and autonomous creator, while asking where lays the boundary between repetition and invention. In consequence, she puts to the forefront the ways through which meaning is constructed, reproduced and transformed in the realm of art.

Sturtevant's practice, in turn, evolved around creating meticulous replicas (or reenactments) of other artists' works, including those by Andy Warhol, Roy Lichtenstein, Marcel Duchamp and Joseph Beuys. Nevertheless, it calls attention to similar problems as Levine, from the notion of an artistic genius and the aura of the original artwork to the nature of cultural and commercial systems that help to elevate certain creators. Her work often carries an undertone of subversion, highlighting the tension between the original and the copy, while forcing viewers to reevaluate their own understanding of the art object and the artistic process.

Another layer of meaning is brought by the act of a woman reappropriating a male artist's work, for which both Levine and Sturtevant happen to be good examples. In such instances, what becomes apparent is the questioning of the power dynamics and traditional gender roles within the art world, and the criticism of the myth of the creative genius as one usually attributed to male artists. Through this kind of reappropriation, female artists scrutinise factors that influence the cultural and market value of artworks. Simultaneously, they assert their presence within the historical narrative and challenge the tendency for omitting, marginalising or – quite ironically – disregarding or misattributing the authorship of works produced by other female artists.
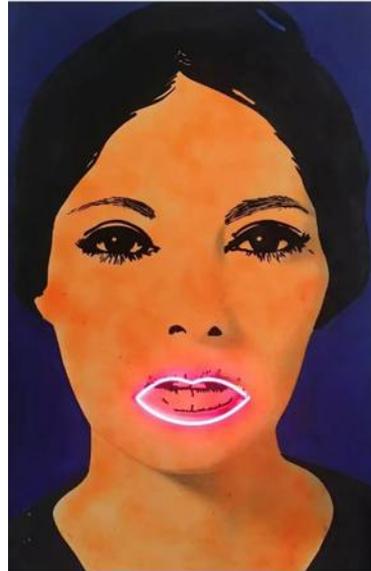
Figure 7. Elaine Surtevant, after Martial Raysse's, *Paeinture a Haute-tension*, 1968.

The history of reappropriation in art is undoubtedly linked to GIFs and their contemporary use in the internet culture, where content from different sources is commonly repurposed and exploited by anonymous authors – and, quite interestingly, so far without any copyright controls established to prevent this practice. Moreover, as it has already been mentioned, the meaning of a GIF can change drastically depending on who uses it and in what context, with perpetual sharing naturally accentuating the medium's malleability.[11] This is often used for humorous purposes when the knowledge of the original content that generated the GIF contrasts with the unconventional situation to which it was applied, creating a new layer of meaning. In other cases, the knowledge of the original content leads to an instant sense of connection and belonging for a viewer.

The creative exploration of both reappropriation and recontextualisation can be seen in other artists who employ GIFs to their practice. James Kerr, for instance, selects characters from different Renaissance paintings to relocate and present them in new context in order to obtain a comic effect that not only configures a completely new narrative but also excavates the humoristic potential of the original artworks, which are normally put on a pedestal as representative of a highly inspirational moment in art

11 Kate Miltner and Tim Highfield, *op.cit.*, p. 5

history. Thus, by composing digital works as complex as their Renaissance versions, the artist offers a rereading of the past and present. A somewhat different approach is characteristic to Bill Domonkos' works. In them, he takes paintings and photographs from other authors and manipulates them by adding information or animating the characters to create loops that would change the meaning of the original work.
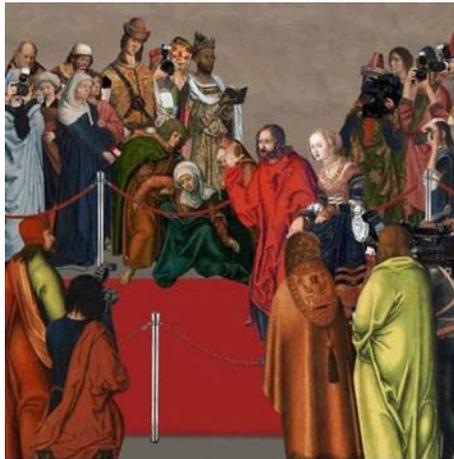
Figure 8. James Kerr, Untitled, 2015. Still from an animated image.

Figure 9. Bill Domonkos, Untitled, 2019. Still from an animated image.

Lorna Mills is another artist who frequently works with found visuals: sometimes her

GIFs feature TV characters, other times they include snippets from internet videos. In each instance, the looping effect and incorporation of the aesthetics of low-quality digital images create a sense of comedy or critique. This exploration of the poor quality universally associated with the GIF format resonates well with Hito Steyerl's reflections on the poor image. In her words: "Poor images are poor because they are heavily compressed and travel quickly. They lose matter and gain speed. But they also express a condition of dematerialisation, shared not only with the legacy of conceptual art but above all with contemporary modes of semiotic production."[12]

Figure 10. Lorna Mills, *Eight Wanda*, 2021. Still from an animated image.

Multiplicity and interdisciplinarity

In *GIFs as Floating Signifiers*, researcher Camelia Gradinar states that "art GIFs exploit the strategies of intertextuality, irony, pastiche and collage, and thus their meanings are not fixed".[13] This multiplicity can be seen not only in content but also in how GIFs

---

12   Hito Steyerl, *op.cit*.
13   Camelia Grandinaru, "View of GIF as floating Signifiers", *Sign Systems Studies*, 46(2/3), 2018, https://doi.org/10.12697/SSS.2018.46.2-3.05, p. 304.

have been incorporated into multimedia works. In addition to allowing multiple layers of meaning, GIFs attract different forms of artistic expression, from photography and video, to dance, painting, graphic design and technology. For this reason, any serious analysis of a GIF, says Marisa Hayes, requires an interdisciplinary look at the different means that are part of its construction.[14]

Petra Cortright, a contemporary artist who works with digital painting and video, also creates works in GIF format that bring the compositional thinking of painting to it, combining traditional qualities of media with these of contemporary technology. Her works focus on the place between physical and digital, exploring the contemporary aesthetic and behavioural culture. A similar aesthetic is explored by Faith Holland, who investigates themes present on the internet – from content produced and consumed by an extensive community of cat fans to several works that point to the immense quantity of erotic sites, photos and videos available online. In the *Visual Orgasms* series, several GIFs present montages of mundane images such as bells, explosions and popcorn, which are re-enacted through the title.
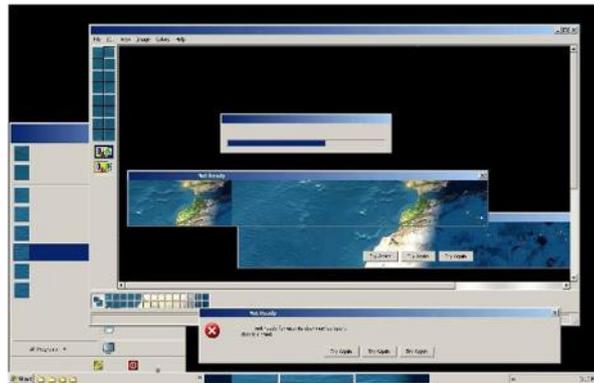
Figure 11. Petra Cortright, *System Landscapes*, 2007. Still from an animated image.

14   Marisa C. Hayes, "Brief Thoughts on the Art of the Animated GIF", *Screen Dance Studies*, 08.04.2016, https://screendancestudies.wordpress.com/2016/04/08/brief-thoughts-on-the-art-of-the- animated-gif.
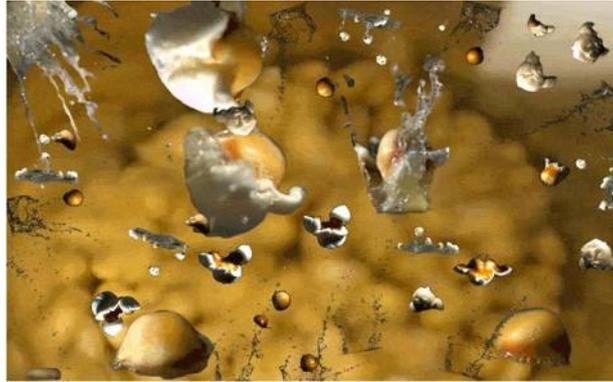
Figure 12. Faith Holland, *Popcorn (Visual Orgasms)*, 2013. Still from an animated image.

In another work, the artist plays with the relations and boundaries between the GIF format, the video and the performance: in *Wire Bath*, a triptych of GIFs accompanied by a video, she submerges in a bathtub filled with electronic cables. Here, once again, the limits of the physical and the virtual, the digital and the analogue are explored, along with our intimate relationship with technology which is scrutinised by an artist who, through a satire, addresses the problem of the female body's sexualisation, especially in the digital world. A different approach to similar topics can be seen in Olia Lialina's *All Work and No Play* – a short film using GIFs instead of filmed scenes. The work is presented as an online webpage, which gives it an interactive character, enhanced by the act of scrolling being employed as its important part.
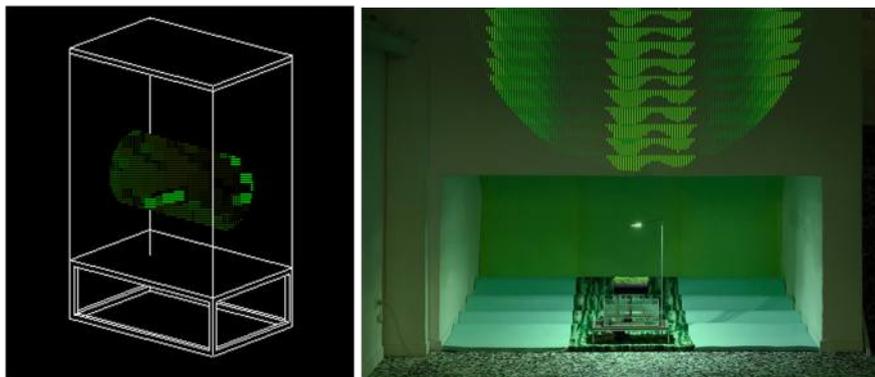
Figure 13. Faith Holland, *Wire Bath*, 2017. Still from an animated image.

Another contemporary artist, Nicolas Sasson, creates GIFs using digital means only, such as 3D modelling software and binary code models that were commonly used in the early years of computing. Nevertheless, his works transgress also to the material world, be it at the individual or collective exhibitions or video mapping projections on architectural elements. In the series *Vessels*, his GIFs serve as models for sculptures of plants and algae, which are then assembled and displayed alongside the original animated images. "INDEX, AVENUE and SKYLIGHT" is an example of a large format GIF presented on a website, in which the composition of the images is determined by the space between them, as well as by scrolling the page by a user. As full-room installations, these works create an immersive ambience.

Figure 14. Nicolas Sasson, Vessels, 2017. Still from an animated image.

GIFs and the art market

Since the early 2000s, artists have already created a number of alternative, online platforms to share GIF art, with the two most notable examples being Digital Media Tree and Computer Club. Gradually, this format also gained space in galleries and art spaces, finding the support of the contemporary art market. In 2011, digital art organisation Rizhome sold a selection of GIFs at the Armory Art Show, and, in partnership with GIF creation and exhibition platform Giphy, it promoted the 2016 exhibition LOOP DREAMS in New York, which featured works of 25 artists. The gallery TRANSFER, also in New York, has been promoting different artists who employ the GIF format, including Faith Holland and Lorna Mills – both having presented their works at solo shows in 2020. These two artists, in collaboration with Wade Wallerstein, have been also engaged in the promotion of GIFs through the Well Now WTF website, which currently features works by more than 100 creators.

Another example of promoting this unusual format was the 2011 exhibition dedicated to GIFs called Graphics Interchange Format at Denison University, curated by Paddy Johnson, founder of the platform Art F City, who has since then discussed the impact of GIF on the art world and its relation to contemporary culture. Her take on a brief history of GIF art can be read on Art Net's website.[15] A major shift came with GIF Free For All produced in 2014 in collaboration with Computer Art Congress 4 in Rio de Janeiro and launched both online and offline. Since the following year, the FILE Festival in São Paulo has been reserving a fraction of each exhibition for presenting GIF works, having already shown dozens of artists from all over the world, including Bill Domonkos, Sandra Crisp and Sabato Visconti. Moreover, in 2017, the festival introduced a GIF Award, to acknowledge the input of the artists working with this format. The very same year, the exhibition Surface, held at the gallery Mana Contemporary presented works of five resident GIF artists, focusing on the materiality of these works. Finally, over the past few years, the Museum of the Moving Image in New York City also featured exhibitions dedicated to GIF art, including The GIF Elevator (2017–2019), The Situation Room (2019–2022) and Refreshing the Loop (2023–2024).

An alternative model applied by some art institutions relies on the organisation of online exhibitions and creation of virtual platforms that offer access to GIF art. The gallery Klaus von Nichtssagend, for instance, has created the website Klausgallery.net, where it promotes online events and shows. Another example is the Whitney Museum of American Art, which designed Artport – an online platform to exhibit net art, which not only presents and documents new media art from the museum's collection but also makes commissions. Similarly, in 2020, Arebyte Gallery invested in Olia Liliana's "Hosted"[16] – a network performance, as the author herself calls it, presented online as a series of links to hosted images that should be opened in different tabs of a browser and then navigated with a browser shortcut, allowing all pieces to be seen in sequence, with the effect of a frame-by-frame animation.

Given the scope of this phenomena, there are surprisingly few examples of art galleries and art fairs that incorporate GIF art as part of their collections and exhibitions. Still, this increase in interest suffices to attract collectors who slowly begin to realise the potential of digital art, including works produced in a GIF format. At the same time, alongside mainstream recognition, many independent initiatives blossom, such as The

15   Paddy Johnson, *op.cit.*

16   The work can be accessed at: https://hosted.z21.web.core.windows.net.

Wrong Biennale, SPAMM, Ani-Gif and the Off Site Project. The first one has organised, since 2013, digital art exhibitions that are exclusively online. With the intention of decentralising access to art, this initiative encourages anyone to apply for open calls, either as an artist or a curator. GIFs are welcomed and often well-represented at the exhibitions they are organising. A similar model characterises SPAMM – or Super Modern Art Museum – which brings together international artists under the curatorship of a French creator, Michaël Borras. Ani Gif is an exceptional case here as it is an online gallery focused exclusively on GIF art. So far, they have created two online exhibitions: one between 2011–2012 and another between 2013–2014. The last of the initiatives mentioned, the Off Site Project, is an online platform founded in 2017 and dedicated to creating opportunities for emerging new media talents. It specialises in online exhibitions and downloadable ZIP shows.

The examples presented above demonstrate well that to many contemporary artists and curators being integrated into traditional art institutions is not necessarily the only – or even the best – way to explore GIF art and to exhibit it. In *The Affect of Animated GIFs,* Sally McKay states: "For online artists, the use of the animated GIF demonstrates a willingness to plunge into the vernacular of online production, blurring boundaries between art and non-art categories."[17] This may mean that for some of these artists, the very choice of the GIF format may be a statement against the imposed limits of what is considered acceptable or desirable on the art market.

Conclusion

GIFs are a unique medium that allows artists to navigate the space between static images and videos. The history of GIFs, from their early popularity on the web to their resurgence in the 2010s, demonstrates their transformative power and their ability to convey meaning in diverse contexts.

The cyclic nature of GIFs, with their looping and repetitive structure, opens up possibilities for exploring such themes as time, motion and repetition. This is reminiscent of the earlier artistic traditions that often utilised recurring structures. In the case of GIFs, however, the loop used both as content and a medium encapsulates the cyclicality of

17   Sally McKay, "The Affect of Animated GIFs", *Artfcity,* 16.07.2018, http://artfcity.com/2018/07/16/the-affect-of-animated-gifs-tom-moody-petra-cortright-lorna-mills/.

the digital era, where images and information circulate endlessly and rapidly. It reflects the constant flow of content online and the way in which digital media are consumed, shared and revisited often blurring the line between the creator and the consumer, as well as that between what can be considered art and what cannot.

This discussion is also prompted by the acts of reappropriation common in GIF art, through which artists challenge notions of authorship, originality and autonomy, provoking viewers to question the power dynamics and meaning-making processes within mass media and the art world. Apart from that, GIFs have already been incorporated by multimedia artists and gained many different platforms of exposition, both online and offline.

Bibliography:

1. Bourriaud, Nicolas. *Postproduction – Culture as Screenplay: How Art Reprograms the World*. New York: Lukas & Sternberg 2002.

2. Dall'aasta, Monica. "Gif Art in the Metamodernist Era", in: *Cinéma & Cie*, vol. XVI, no. 26/27, pp. 77–88. Academia.edu, https://www.academia.edu/35372102/GIF_Art_in_the_Metamodernist_Era [accessed: 16.06.2023].

3. Eppink, Jason "Tumblr is also responsible for igniting mainstream interest in the GIF as an aesthetic form", *Journal of Visual Culture Vol. 13, no. 3*, 2014, p. 302. https://journals.sagepub.com/doi/pdf/10.1177/1470412914553365 [accessed: 23.11.2024].

4. Gradinaru, Camelia. "View of GIF as floating Signifiers", in: *Sign Systems Studies*, no. 46 (2/3), 2018, pp. 294–318, https://doi.org/10.12697/SSS.2018.46.2-3.05 [accessed: 16.06.2023].

5. Hatton, Brian. "Looping the Loop", in: *Art Monthly*, issue 406, 2017, pp. 6–10. https://www.artmonthly.co.uk/magazine/site/article/looping-the-loop-by-brian-hatton-may-2017 [accessed: 15.06.2023].

6. Hayes, Marisa C. "Brief Thoughts on the Art of the Animated GIF", in: *Screendance Studies,* 08.04.2016. https://screendancestudies.wordpress.com/2016/04/08/brief-thoughts-on-the-art-of-the-animated-gif [accessed: 18.06.2023].

7. Johnson, Paddy. "A Brief History of Animated GIF Art, Part One", in: *Artnet,* 02.08.2014. https://news.artnet.com/art-world/a-brief-history-of-animated-gif-art-part-one-69060 [accessed: 16.06.2023].

8. McKay, Sally. "The Affect of Animated GIFs (Tom Moody, Petra Cortright, Lorna Mills)", in: *Art F City*, 16.07.2018. http://artfcity.com/2018/07/16/the-affect-of-animated-gifs-tom-moody-petra-cortright-lorna-mills/ [accessed: 16.06.2023].

9. Miltner, Kate M. and Tim Highfield. "Never Gonna GIF You Up: Analyzing the Cultural Significance of the Animated GIF", in: *Social Media + Society*, *3*(3). https://doi.org/10.1177/2056305117725223 [accessed: 15.06.2023].

10. Rourke, Daniel. "The doctrine of the similar (GIF GIF GIF)", in: *Dandelion* 3(1), pp. 1–5. *Academia.edu,* https://www.academia.edu/2012914/The_Doctrine_of_the_Similar_GIF_GIF_GIF_ [accessed: 13.06.2023].

11. Steyerl, Hito. "In Defense of the Poor Image", in: *E-flux,* issue 10, November 2019, https://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image/ [accessed: 16.06.2023].

12. Taylor, Pamela G. "Hyperaesthetics: Making sense of our Technomediated World", in: *Studies in Art Education*, 45(4), pp. 328–342.
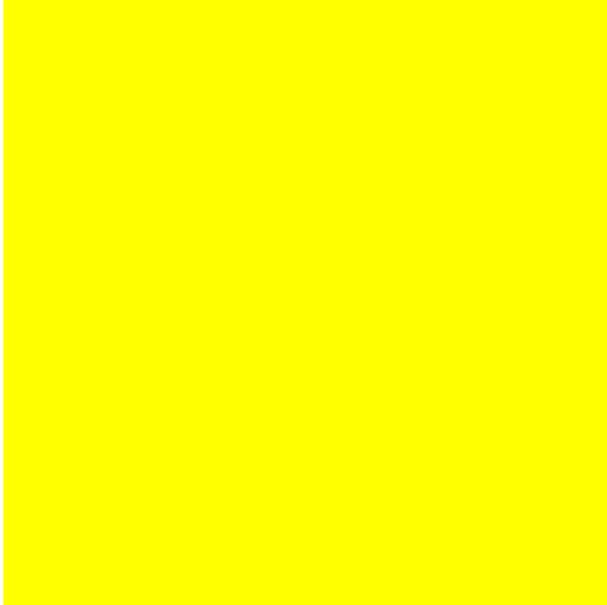
Things I Do When I'm Bored[1]

Pedro Ferreira

Faculty of Fine Arts, University of Lisbon
https://orcid.org/0000-0001-8061-187X
DOI: https://doi.org/10.59862/F7k2B9xQ-08

Things I Do When I'm Bored

The artwork *Things I Do When I'm Bored* from 2017–2022 addresses vloggers' relationship with feeling bored. The work is composed of a browser-based video compilation and a video installation that assembles found footage from YouTube vlogs with less than 100 views.

    The work explores the feeling of boredom on social media and with daily life suffused with digital media technologies as part of a post-digital symptom of disenchantment in which social media and the internet fail to entertain these vloggers.

The corporate web and digital folklore

The amateur web of the 1990s and early 2000s has transformed into our present hegemonic corporate web rich in social media platforms, real-time data streams and subscription services of ever-increasing high-definition video. With this incorporation of web services into everyday life, internet users have been expressing themselves in the form of amateur videologs, or vlogs, on popular platforms, such as YouTube, since the mid-2000s.

    Vlogs are similar to blogs as both are online diaries that share personal experiences, but instead of using text, vlogs use video as the form of expression. The vlogger community has developed an audiovisual language that includes video, spoken commentary, text, graphics, animation, gaming – anything that can be performed in front of a webcam, camera, smartphone and even video screen captures.

    Vlogs are a form of "e-folklore", the electronic transmission of folklore that develops "new forms of written, oral, aural and visual folkloric phenomena",[2] which circulate on the internet on popular platforms such as YouTube. Vlogs are a part of "Digital Folklore," which refers to the aesthetic manifestations of popular culture and customs created by "users' engagement with personal computer applications".[3] Vloggers engage creatively with applications (or apps) for video editing and media manipulation as well as with pop-

---

2 Violetta Krawczyk-Wasilewska, "e-Folklore as a Part of Digital Culture", in: *Folklore in the Digital Age: Collected Essays*, (Łódź/Kraków, Poland: Łódź University Press & Jagiellonian University Press 2016), p. 27.

3 Olia Lialina and Dragan Espenschied, "Do You Believe in Users?", in: *Digital Folklore: To Computer Users, with Love and Respect*, ed. Olia Lialina and Dragan Espenschied. Stuttgart: Merz & Solitude 2009, p. 9.

ular references and internet culture. Vlogging is a popular online practice that entangles daily life and digital technologies in an audiovisual form. The practice has developed an aesthetics that differs from the audiovisual content available by the entertainment industry provided on video streaming services based on industry standards and modes of production, while vlogs follow an amateur approach to the production of audiovisual content.

Vlogging because I'm so bored

Boredom, in German *Langeweile*, constructed from *Lange* (long) and *Weile* (while), literally translates as "a long span of time" – being bored in the German translation implies that boredom both lasts in time and stretches the experience of time.

The work *Things I Do When I'm Bored* analyses the vloggers' relationship with being bored through a collage of found footage from YouTube vlogs. The vlogs have been chosen from videos with less than 100 or zero views to emphasise vloggers' self-awareness in their performative statements of boredom as they look at their representation on-screen with the hope of being viewed, subscribed to, commented on, liked, shared and followed by their peers.

The vlogger looks at the screen as one who faces the "mirror in which the subject alienates himself in order to find himself, or stares at himself only to see his own death".[4] On the one hand, the vloggers in *Things I Do When I'm Bored* stage boredom as prosumers, as both producers and consumers of vlogs. On the other hand, they stare at their deception as their vlogs do not reach an audience. Despite the lack of views, they continue to create vlogs as a practice included in their daily routines and as a mode of online expression that shares their personal life.

As social media platforms such as YouTube fail to entertain these vloggers, boredom is seen, in part, as a consequence of the experience of social media. Online time is reduced to the consumption and production of content that triggers boredom. Being bored is caused by the lack "of the Spectacular, the very power to appeal",[5] a notion established by the entertainment industry.

4   Jean Baudrillard, *Seduction*, trans. Brian Singer, CultureTexts. Montréal: New World Perspectives 1990, p. 169.

5   Trinh T. Minh-Ha, "All-Owning Spectatorship", in: *When The Moon Waxes Red: Representation, Gender and Cultural Politics*. New York: Routledge, 1991, p. 94.

Boredom experienced on the internet can be understood as part of a post-digital symptom of disillusionment with a daily life suffused with digital technologies. In the artwork, I address boredom from within the post-digital condition delineated by the social and cultural effects of digital technology. Besides boredom, other feelings and social anxieties related to social media usage are comparison, isolation, envy, depression or "fear of missing out" (FOMO).[6]

I'm so bored so I decided to make a vlog

The work *Things I Do When I'm Bored* is composed of a browser-based (random) video compilation and a (linear) video-loop installation.[7] It explores the online/offline dichotomy as a diffuse state, since online time is now incorporated into daily life through the proliferation of portable devices such as smartphones and the wide availability of internet access.

To create this work, I first selected found footage from YouTube by searching the queries: "I'm bored" and "I feel bored". Initially, I searched YouTube as any regular user would by using the search function and then downloading the videos using a browser extension. I had previously outlined the parameters to be less than 100 views as well as older than six months. These parameters would allow me to excavate YouTube as a (video) library and filter its huge number of videos.

However, a regular search on YouTube does not allow users to filter and sort the search results by the least viewed and makes it rather difficult to find videos with zero views. To reach videos with zero views, I had the help of the artist and programmer Brian Vogelgesang, who created a script to automate my search query using the YouTube API.[8]

6   FOMO, the fear of missing out, is a social anxiety related to a negative psychological condition with compulsive use of Facebook. Zuboff describes that: "FOMO sufferers obsessively checked their Facebook feeds-during meals, while driving, immediately upon waking or before sleeping, and so on. This compulsive behavior is intended to produce relief in the form of social reassurance, but it predictably breeds more anxiety and more searching", Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. London: Profile Books Ltd. 2019, p. 463.

7   I started this work during my participation as a guest student in the seminar *Mindwandering and boredom in the arts* where I created an earlier version of this work, a seven-minute video-loop. The seminar was taught by the cognitive scientist Marjan Sharifi and the artist and professor Nina Fischer at the University of Arts in Berlin, Germany, during the winter semester of 2017/2018.

8   The script *youtubeSearchCli* collects links from YouTube with 100 or less views and is available here: https://github.com/KidA001/youtubeSearchCli.

With this script, I was able to directly scrape YouTube links with my desired parameters. From the large list of links, I proceeded by filtering and selecting the vlogs that I found most personal and then downloaded them using the Pytube library.[9]

In total, I borrowed around 200 vlogs from the excavation process, which amounted to around 8 GB of mp4 files or about eight hours of video. With this, I assembled the material to examine boredom online. In the browser-based work, the user can watch the archive of the vlogs and with a click skip to a random video which opens a space for a montage based on chance and requires the active participation of the viewer to create a new mash-up.[10] This is broadly associated with a "reflexive mash-up"[11] in which the browsing experience of vlogs are juxtaposed with new vlogs by the user's click, who takes a critical role in subverting and recombining the vlogs to build a new mashup. The video-loop displays a 27-minute cut from the excavated boredom vlogs. The video editing follows the amateur aesthetics of vlogs through a simple collage technique of cut and paste to build a "reflexive remix"[12] that appropriates peculiar samples from the vlogs to subvert them and build a conceptual critique on online boredom. The aim is to introduce critical reflection and commentary on the effects of social media and challenges the viewer to "reflect on the meaning of the work and its sources".[13] During the video editing, I assembled the vlogs from a process of trial and error in a dramaturgy that follows and remixes the four patterns of boredom that I describe in the following section.[14]

Boredom vlogging patterns

Following the excavation process, the footage selection and the video editing, I found four main patterns in the boredom vlogs that I categorise as: (1) I am bored, (2) I am bored, what can I do, (3) What you can do when you are bored, (4) Mockery of boredom. The

9   Pytube library: https://pytube.io.

10   The browser-based work can be accessed here: https://pedroferreira.net/thingsidowhenimbored

11   Eduardo Navas writes that "[…] the reflexive mashup is a regenerative remix that opens the space for Remix to become discourse, because it allows for constant change much how culture itself keeps changing", Eduardo Navas, *Remix Theory: The Aesthetics of Sampling*. Vienna: Springer 2012, p. 93.

12   Navas describes that "[…] the reflexive remix takes parts from different sources and mixes them striving for autonomy", *ibidem*, p. 81.

13   *ibidem.*

14   The video-loop can be previewed here: https://pedroferreira.net/moving-image/things-i-do-when-im-bored

vlogs that fall into the last pattern "Mockery of boredom" are the vlogs higher in creative content and contrast the pattern (1) of spoken personal statements of being bored, which adhere to diary-style emotional self-reflection. The patterns (2) and (3) show a desire for online participation and community engagement where vloggers communicate with each other through comments and vlogs. But this desire for engagement fails because it requires views by users and participation by other YouTubers

The expression of feeling bored through vlogging may result in the vlogger's pursuit for purposeful tasks to do, or rather a boredom that is comprehended as a feeling that takes a highly imaginative and creative path initiated by one's boredom. These vloggers handle their boredom in a constructive and creative way by creating new vlogs. The browser-based video compilation and the video-loop installation aim to explore boredom and hopefully let the audience also experience boredom critically and to engage with it creatively and empathically with these vloggers.

Let there be more boredom

Things I Do When I'm Bored explores the feeling of being bored as part of a post-digital condition in which daily life is enmeshed with digital media technologies that are no longer exciting new media gadgets. By lacking newness and the spectacular, these technical objects and digital platforms trigger boredom as they have become ordinary devices of everyday routine.

Boredom is interpreted here as one of the many effects of the post-digital age in which users are disenchanted, oversaturated and bored with digital technologies. What if users took the experience of this boredom as a chance to become more present instead of trying to separate themselves from it? What if users did not feel the need to kill time but, rather, befriend it? To engage with one's boredom is perhaps to find oneself becoming more creative and imaginative. As the cognitive scientist Marjan Sharifi points out, there is a positive cognitive correlation between boredom, mind-wandering and creative thinking.[15]

With this work I introduce a remix montage of several vlogs that have not been seen before or have been pushed away from YouTube's search results and suggestions. This

---

15 Marjan Sharifi, "Designing Mind Wandering", https://www.marjansharifi.com/mindwandering [accessed: 02.05.2024].

goes to show that YouTube's algorithms are not neutral but serve corporate interests as videos with a few or zero views do not bring the company profit. YouTube algorithms mainly promote viral videos or the most viewed. This grabs user attention, influences what is seen, shown and propagated, all to exploit user data for targeted advertisement. By contradicting this algorithmic agency, *Things I Do When I'm Bored* can be understood as a way to grasp YouTube's infrastructure, its sociocultural effects and provide an alternative form to watch its contents by shifting one's attention to videos that have been ignored and neglected by its algorithms.

Bibliography:

1. Baudrillard, Jean. *Seduction*. Brian Singer (trans.). CultureTexts. Montréal: New World Perspectives 1990.

2. Krawczyk-Wasilewska, Violetta. "e-Folklore as a Part of Digital Culture", in: *Folklore in the Digital Age: Collected Essays*, pp. 21–38. Łódź/Kraków: Łódź University Press & Jagiellonian University Press 2016.

3. Lialina, Olia and Espenschied, Dragan. "Do You Believe in Users?", in: *Digital Folklore: To Computer Users, with Love and Respect*, Olia Lialina and Dragan Espenschied (Eds.), p. 9–13. Stuttgart: Merz & Solitude (Merz Akademie & Akademie Schloss Solitude) 2009.

4. Minh-Ha, Trinh M. "All-Owning Spectatorship", in: *When The Moon Waxes Red: Representation, Gender and Cultural Politics*, p. 81–105. New York: Routledge 1991.

5. Navas, Eduardo. *Remix Theory: The Aesthetics of Sampling*. Vienna: Springer 2012.

6. Sharifi, Marjan. "Designing Mind Wandering", https://www.marjansharifi.com/mind-wandering [accessed: 02.05.2024].

7. Zuboff, Shoshana. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. London: Profile Books Ltd. 2019.
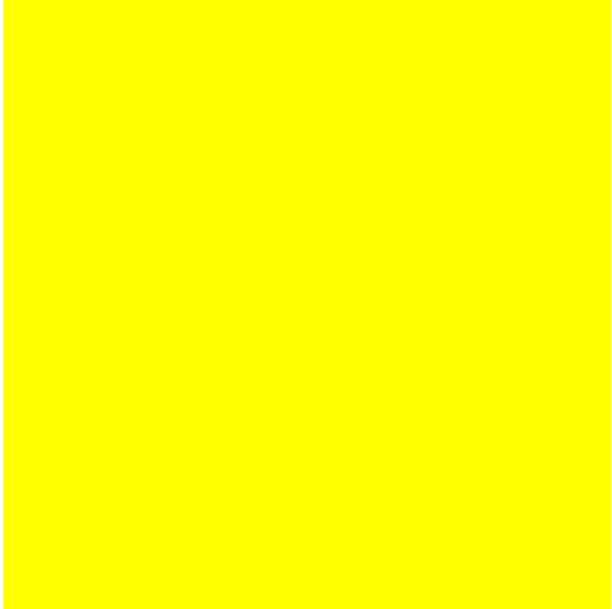
Artefact-beings: hybridising painting through artificial intelligence[1]

Rafaela Nunes

Faculty of Fine Arts, University of Lisbon
ITI/LARSyS, eGamesLab
https://orcid.org/0009-0006-8588-6286
DOI: https://doi.org/10.59862/F7k2B9xQ-09

When we speak about hybridising painting, what are we proposing? We can perhaps declare all painting as being a hybrid, always transforming and adapting. Always, and especially, after so many declarations at different times that painting was dead. "Painting" is a comprehensive term for a large and growing diversity of media that have in common the purpose of representing something through something else. The limits that confine our definition of painting change and evolve according to emerging technologies. The very first paintings that we know of were made with charcoal, dirt, minerals and carbonised bones smudged with the painter's hands on rocks. Today, due the rapid evolution of technology and artists' constant appropriation of it, defining painting continues to be a difficult task.

The concept of transmedia art has been gaining momentum as artists appropriate an ever-increasing array of different media that relate with each other to create fictional narratives. Artificial intelligence (AI) models, particularly text-to-image (TTI) models, have been under the spotlight as a source of both fascination and criticism that seems to create a problematic new challenge for the role of the artist. However, the potential of painting with physical and simultaneously virtual means, in transmedia logic, is still yet largely left to explore. This project aims to question, using AI models within this hybrid practice, how the pictorial and the virtual can be intersected in poetics of remixing and hybridisation, challenging the ontological status of both media as systems of representation.

In the following text, we will analyse the expansion of the disciplines of painting and sculpture towards a growing hybridisation of their practices, contradicting the modernist paradigm of the search for purity of the medium. Based on this, we will understand how the notion of medium specificity has been losing relevance within post-modernist art, analysing the dissonances through which the work of art operates. We will then see how various authors have studied the concept of hybridisation in contemporary art, within the context of technological development, the digital and post-internet era and theories of convergence and transmedia culture. This way we will see what happened to the idea of painting as a discipline and category based on a medium, and contrast it with a reflection on the current status of this type of category. With that objective, we aim to re-evaluate the pertinence of this medium condition and raise other ways of thinking about the meaning and transformation of the discipline of painting.

Natural	**–**	**Artificial/Cultural**
landscape	–	architecture
3D	–	2D
dynamic	–	static
reproducible	–	singular
physical	–	virtual
authentic	–	fake
real	–	fictional
...	–	...

Table 1. Arrangement of various dichotomies present in the categorisations of artistic media

The present project is a continuation of my artistic practice. In this work, I created what I shall call "artefact-beings", digital three-dimensional forms constructed through the intersection of painting with AI. These are hybrids that represent the confrontation between perceived reality and constructed representation – in other words, the transformations resulting from the attempt to represent aspects of reality that are inevitably influenced by subjective perspectives, tendencies and biases. With this objective, representations of concepts were played with through images and words – the visual and the semantic. This, as we will see, is expressed with the infusion of human characteristics through words – such as words for feelings, personality traits and political or philosophical opinions – as well as characteristics from other beings or even inert things – such as words for morphologies, textures and abilities. These traits are hybridised with painting through the use of Stable Diffusion (SD), a deep learning text-to-image and image-to-image AI model, to shape images that are then transformed in a procedural way to 3D models and animations. To that end, a methodology was created to make various iterations – artefact-beings – characterised by automated processes that use AI (Stable Diffusion as well as ChatGPT), conditioned and supervised through aesthetic and artistic human choices.

Through the confrontation between the organic and the artificial, real and imaginary, authentic and fake, physical and digital expressed through these hybrids, I address the complexities of how we see, understand and represent things. To confront these ideas,

paintings needed to be the starting point for a transposal to the digital world through different processes that imbued them with diverse traits, such as feelings and beliefs, while simultaneously transforming the physical two-dimensional image into a virtual three-dimensional thing. This procedure uses different media, as we will analyse, intersecting them in an unprecedented way.

Expansion of the field of painting

In her seminal work "Sculpture in the Expanded Field" (1979), Rosalind Krauss refers to how modernist sculpture "had entered the full condition of its inverse logic and had become pure negativity: the combination of exclusions."[2] By moving away from its condition as a monument, its traditional stationary location and its pedestal, the sculpture was transformed by artists into something that is arguably hard to characterise and even more difficult to categorise. According to Krauss, modernist sculpture had come to enclose a field that resulted from two absences: it was simultaneously "not-landscape" and "not-architecture".[3] Moreover, there has been a further expansion to sculpture's field of action since post-modernism. Since then, this art form has moved beyond the previous two binaries precisely into what it used to deny: its opposites – architecture and landscape. Krauss concludes that post-modernist art practices no longer organise themselves over the definition of a given medium, of certain physical attributes, but around concepts that are felt as opposites. The author amplifies the concept of sculpture that the last century built into various possible combinations of landscape, not-landscape, architecture and not architecture, as fields that artists can explore and occupy.

The type of quaternary system that Krauss employed has been adopted by different authors in attempts to organise other disciplines into expanded fields as, for example, architecture, writing, video games and performance.[4] This system was also employed

---

2 Rosalind Krauss, "Sculpture in the Expanded Field", *October*, vol. 8, 1979, pp. 289–290. *JSTOR*, https://doi.org/10.2307/778224.

3 *ibidem*.

4 See: Ila Berman and Douglas Burnham, *Expanded Field: Installation Architecture Beyond Art*. Novato: ORO Editions 2016; Lucinda Strahan, "Permissions: On expanding the field of writing", in: *Writing in the Expanded Field*, 2018, https://expanded-field.acca.melbourne/2-permissions.html; Alice Nant, "Video Game in the Expanded Field", *An Ants Eyeview*, 03.02.2020, https:// anantseyeview.com/2020/02/03/videogame-in-the-expanded-field/; Alessandro Zambelli, "Performance in the Expanded Field", *Scandalous Artefacts: Between Architecture, Archaeology*

by Gustavo Fares with the task of understanding the similar condition that transformed painting in the last century.[5] Just as it happened with sculpture, Fares argues that painting, having moved away from a delimitation based on its "positive" attributes as pigments on a surface, also came to be defined by its "negative" outline: three-dimensional and in movement. Painting in the expanded field exists, therefore, within the fields created by the opposing concepts of 3D, not-3D, movement and not-movement. To this, Fares also adds another polarity initially proposed by Krauss: singularity/reproducibility. Accordingly, this model potentially includes fields such as installation, performance, video art, body art, photography and digital art, among others.

Let us look at the combination of the opposing terms proposed by both Krauss and Fares for sculpture and painting. They are grouped under the two main categories of Natural and Artificial/Cultural, which is the central dichotomy as suggested by Krauss herself, that conduces the tensions within the work of art between the constructed and the not-constructed. I added other dichotomies that are relevant to this discourse, namely physical and virtual, authentic and fake, real and fictional, while leaving the table open for other potential additions.

We are thus dealing with the dichotomies that characterise this natural versus constructed opposition. Within the space where these pairs exist, there are the fields in which artists work – at the tension between the borders of perceived reality (natural) and constructed representation (artificial/cultural). On one side there is our subjective understanding of the "real" world and the way we perceive it and, on the other, the various ways in which this perception is mediated and represented by us. As we have already seen with Krauss and Fares, post-modernist art no longer limits itself to the search for purity of representation or media but takes on a play with opposites whose relationship is mediated through interpretation. Throughout the operations of perception and representation and vice-versa, there is a divergence from and consequent transformation of the interpretation of phenomena. By acknowledging and exploring it, we gain insight into the complex relationship between experience and subjective narratives that inform our knowledge about the world. The implicit back-and-forth play in the processes of creating and experiencing a work of art relies, then, on what we see as natural or artificial through representations that exploit the ambiguity of such perceptions.

and Anthropology, 23.09.2022, https://scandalousartefacts.com/2022/09/23/performance-in-the-expanded-field/.

5 Gustavo Fares, "Pintura no campo expandido", *PORTO ARTE: Revista de Artes Visuais*, 18(31) / 2013, https://doi.org/10.22456/2179-8001.37934.

Our assumptions about what is "real" depend on how it is described and interpreted, and post-modernist art made obvious the processes of representation of the real and the fictional as well as their amalgamations by crossing the borders of fact and fiction, and hybridising, not assimilating them.[6] The process of convergence as well as its resulting transmedia aesthetic have been brought to the field of art making it possible to "consider that, finally, contemporary arts have become transmedia environments where artists use various means and media to summon their ideas and concepts about the world in which we live".[7]

Convergence and hybridisation

The concept of a "hybrid" is used by Lev Manovich to refer to different combinations resulting from the intersections of various types of new media – photographs, videos, 2D and 3D animations, 3D spaces, maps, social tools, etc. – that, according to the author, came to function as species in a common ecology (a shared software environment) and "started interacting [and] mutating".[8] According to Manovich, unlike typical multimedia documents, media hybrids are mixed in such a way as to create new gestalts experienced in a way different from experiencing their elements separately – a feature which results from remixing "not only content from different media but also their fundamental techniques, working methods, and ways of representation and expression".[9] Such an interaction between different methods of creation is what originates, according to the author, new visual aesthetics that did not previously exist.

Manovich also compares this process to a remix – the emergent aesthetic principle of the era of globalisation that, along with the introduction of personal computers, has transformed the whole of western culture by calling attention to the artistic potential of selection and recombination. As the author points out, this "cut and paste logic"[10] co-

6 See: Linda Hutcheon, *The Politics of Postmodernism*. London: Routledge 1986.
7 Patrícia Gouveia, "The New Media vs. Old Media Trap: How Contemporary Arts Became Playful Transmedia Environments", in: *Advances in Media, Entertainment, and the Arts*, https:// doi.org/10.4018/978-1-7998-3669-8. ch002. Pennsylvania: IGI Global 2020, p. 37.
8 Lev Manovich, *Software Takes Command*. London: Bloomsbury 2013, p. 164.
9 *ibidem*, p. 268.
10 Lev Manovich, *The Language of New Media*. Cambridge, MA: The MIT Press 2001, p. 131.

incided with the development of graphical user interfaces (GUI) and post-modernism. The usage of electronic tools in cultural production made its objects not only more self-referential but also mutable and variable given the nature of the electronic signal itself, which rendered the new media objects as "something that can exist in numerous versions and numerous incarnations".[11]

The concept of remix is used also by Nicolas Bourriaud to describe how artists employ available media beyond mere appropriation, associated with ownership, instead moving towards a collective culture of sharing.[12] This art of post-production, as Bourriaud describes, is a result of the ubiquity of the internet and a reaction to the chaos of global consumer culture, as enacted by artists whose works are products of said culture, no longer created from scratch but, rather, made of artefacts that are already in circulation and often already influenced by other cultural phenomena. According to the author, in this new paradigm, the work of art is no longer an end in itself but a moment – or a terminal – in an infinite web of contributions.

Claire Bishop confirms the artistic tendency to emphasise the recontextualisation of the existing artefacts. At the same time, however, she criticises the rejection of new media by visual arts.[13] According to her, the "hybridised solutions"[14] that the mainstream visual arts have been using, suffer from the tendency to exploit the new media as merely accessory or decorative, lacking the confrontation with "what it means to think, see and filter affect through the digital".[15] This, in her view, is due to the infinite variability of the digital image being incompatible with the need for affirmation through uniqueness, traditionally associated with the single or limited edition of an artwork. Within the post-internet art, however, there are authors that declare their practices as characterised by "hybridity and hyper-mediation of existing genres".[16] Art, in this context, affirms "an awareness that all culture has been reconfigured by the Internet – or by the Internet-enabled neoliberal capitalism".[17]

11 *ibidem*, p. 134.

12 See: Nicolas Bourriaud, *Postproduction. Culture as Screenplay: How Art Reprograms the World*. London: Lukas & Sternberg 2006.

13 See: Claire Bishop, "Digital Divide: Claire Bishop on contemporary art and new media", *Artforum*, 51(1), 2002, pp. 435–442.

14 *ibidem*, p. 441.

15 *ibidem*, p. 436.

16 Jennifer Chan, "Notes on Post-Internet", in: Em O. Kholeif (ed.), *You Are Here: Art After the Internet*. Manchester: Cornerhouse Publications 2014, p. 110.

17 Michael Connor, "Post-Internet: What It Is and What It Was", in: Em O. Kholeif (ed.), *op.cit.*, p. 61.

Mark Hansen suggests a "mixed reality" to explain the paradigm of the "fluid inter-penetration of realms"[18] that artists nowadays can activate, combining physical and virtual spaces and bodies. According to Hansen, this paradigm reconfigures virtual reality's origin to "a desire for complete convergence with natural perception".[19] Beyond the concerns of separating disciplines such as painting, sculpture, installation, net art and others, art has become ever more a hybrid due to associating itself with what, at the surface, it is *not*. It has become "transaesthetic", as Baudrillard expresses when describing the general tendency of various disciplines and areas of expertise towards losing their specificity and participating in a process of contagion.[20]

The practice of convergence in contemporary art is comparable to the concept of "plasticity": something that is subject to the transfiguration and modelling of forms[21] or to silt, that simultaneously represents construction and erosion.[22] Convergence culture, as defined by Henry Jenkins – "the flow of content across multiple media platforms"[23] – has been appropriated from media theory to the world of art, resulting in a new aesthetics that Jenkins calls transmedia storytelling, which relies on the creation of fictional worlds that "cannot be fully explored or exhausted within a single work or even a single medium".[24] Unlike in Clement Greenberg's ideas about medium specificity that called for the purity of each medium, we can affirm that much of art being made nowadays transcended such preoccupation. Artists openly articulate multiple languages through various media or by employing intertextuality.

Painting, then, is no longer an inert or a static discipline; it ceased to be one from the moment the paint stopped being its medium and the surface stopped being two-dimensional. Throughout the last century, we have been witnessing the transformation and expansion beyond rigid traditions of categorisations of art based solely on the media specificity. Artists have explored the frontiers of the territories that used to delineate disciplines and deny that which used to be painting, sculpture or art. A good

18 Mark B. N. Hanses, *Bodies in Code: Interfaces with Digital Media.* London: Routledge 2006, p. 2.

19 *ibidem*, p. 4.

20 See: Jean Baudrillard, *The Transparency of Evil: Essays on Extreme Phenomena*. New York: Verso 1993.

21 Patrícia Gouveia, *op.cit.*, p. 37.

22 Linda Hutcheon, *op.cit.*, p. 63.

23 Henry Jenkins, *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press 2006, p. 2.

24 *ibidem*, p. 114.

example may be the realisation that the techniques employed by painters – such as perspective, contrast, texture, scale, shadow, composition and so on – independently of the style or the artistic movement, have all been devices for creating the illusion of depth or movement. This shows how even a two-dimensional, flat and static painting is much more than that, playing with the apparent limits of representation. Painting can be thus considered a "surface of conversion"[25] a surface of equivalence and articulation between different ways of making and perceiving.

Considered as such, painting can be used as a live conversion medium, no longer confined to a specific set of material characteristics, but a part of a larger discourse that transcends them. The convergence of different media, along with intertextuality and the exploitation of each medium's boundaries, turn contemporary painting into a complex and versatile form of artistic expression. Thinking about painting as a hybrid encompasses its gradual development and engagement with diverse materials, techniques and modes of representation, challenging the conventional understanding of it, and taking advantage of the plasticity and variability associated with the post-modern era, particularly as regards the evolution of technology and digital devices.

In light of this, the question remains whether it is still relevant to talk about specific disciplines – such as painting or sculpture – or even "visual" art. These terms, more than hermetic and imperative categories, may serve to characterise artistic techniques, concepts or motivations, adding meaning and intention; just as well, however, they may be discarded.

Creating hybrids

This essay follows practice-based research through which I have created a series of "artefact-beings" based on a process that aims to explore Rancière's idea of painting as a surface of conversion. Each artefact was created from an iterative process resulting from a physical-digital methodology relying on the convergence of different media to create hybrids. These are hybrids because of their process of creation since they were produced through the complementary use of different media and techniques: painting, programming, text and image AI generation, procedural 3D modelling and animation. They are hybrids also because they result from the combination of personality traits and other characteristics, interlacing the previously analysed dichotomies of the natural and the artificial.

25 Jacques Rancière, *The Future of the Image*. New York: Verso, p. 75.

This project stems from a process that was transformed and refined through constant experimentation with different media and methods. It started with the intention to create digital objects from physical paintings and, in this sense, comes from an artistic practice that has been characterised by transposing painting into media that does not typically support it, playing with dimensionality and adaptability.

The name "artefact-being" arose initially as a way of calling the objects that were made up: they were not paintings, 3D models, or programs, but a mix of them. The fact that this process was always evolving and undergoing various transformations was also relevant to the idea that growth and metamorphosis were an intrinsic part of it, suggesting the necessity of conjugating a natural being with a constructed thing.
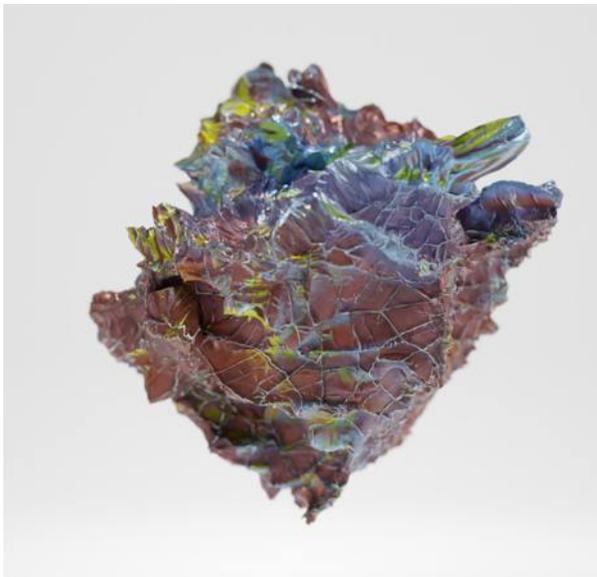
Figure 1. Artefact-being represented by a render from a 3D model, a name and a list of traits

The iterative process created to generate various artefact-beings involves several stages of successive "translations" from one medium to another, comparable to the children's game called Telephone or Chinese Whispers, in which a message is silently transmitted from person to person, often becoming misheard or intentionally changed. As soon as a part of the process is transposed to another medium, the image or message is in a way corrupted, acquiring new characteristics. This project is an exploration of such transference between different media.
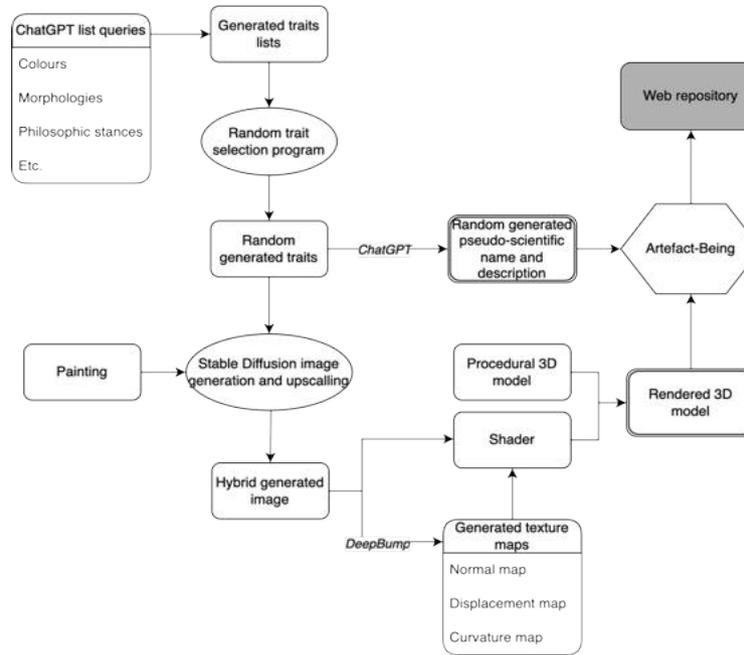
Figure 2. Workflow

As we can see in Figure 1, the workflow is non-linear. The starting points for each iteration that produces one, unique artefact-being, begin with a painting and a list of traits. Regarding the painting, we start with one image that is a fragment of a physical painting of mine, created with oils or oil pastels. This image is then processed into a Stable Diffusion 1.5 model (hereafter called SD) with the goal of achieving a mix between something that was initially created on canvas or paper with paint and afterwards modified through AI.

Trait generation

To transform these paintings through the imposition of traits, I asked ChatGPT to create several lists, each composed of 500 unique types of characteristics to be attributed to the artefact-beings. These same lists were used for each iteration and included names of colours, textures, visual traits, morphologies and sounds, as well as psychological characteristics, feelings, philosophical concepts and unusual abilities. The next step was to randomly assign a set of traits for each artefact-being, based on these lists. To that end, a program was created in C# programming language, which I called "Artefact-Being Generator". This program reads various lists and randomly selects a pre-determined number of traits from each of them. For example, it always selects three colours, two textures and one feeling, in this way helping to obtain both variety and consistency. Afterwards, the program exports each of these pre-selected sets to a text file.

 Each of these sets of traits is then used to create not only the image and then the 3D model that will be the visualisation of an artefact-being, but also to generate an accompanying text that is complementary to it and helps to integrate concept and form.

Colours:	Grasshopper green, Cool grey, Yellow
Textures:	Leathery, Flecked
Visual characteristics:	Bold, Bright
Positive psychological characteristics:	Tendrilous, Compound
Negative psychological characteristics:	Humble
Feeling:	Narcissistic
Climate:	Fulfilled
Stances:	Tropical paradise
Stances:	Atheism, Social constructivism
Rare adjective:	Obsequious
Weird ability:	Molecular manipulation
Sound:	Gush

Table 2.

Image generation from paintings with Stable Diffusion

Each set of traits was paired with a painting to generate a two-dimensional image through AI-based tools, which would then be used as a base for the texture and the morphology of the three-dimensional model. Accordingly, I used the SD model of image-to-image generation to imbue a set of traits into a painting. The traits served as prompts for SD to modify the painting. About 50 solutions were generated for each set of traits paired with a painting, and from these, only one was chosen to continue through the remaining part of the process. The criteria for choosing just one image from so many others were, on the one hand, aesthetic concerns and, on the other, the intention of selecting the option that could benefit most from subsequent stages of the process.

Prompts: Abstract, Grasshopper green, Cool gray, Yellow, Leathery, Flecked, Bold, Bright, Tendrilous, Compound, Humble, Narcissistic, Fulfilled, Tropical paradise, Atheism, Social constructivism, Obsequious, Molecular manipulation, Gush
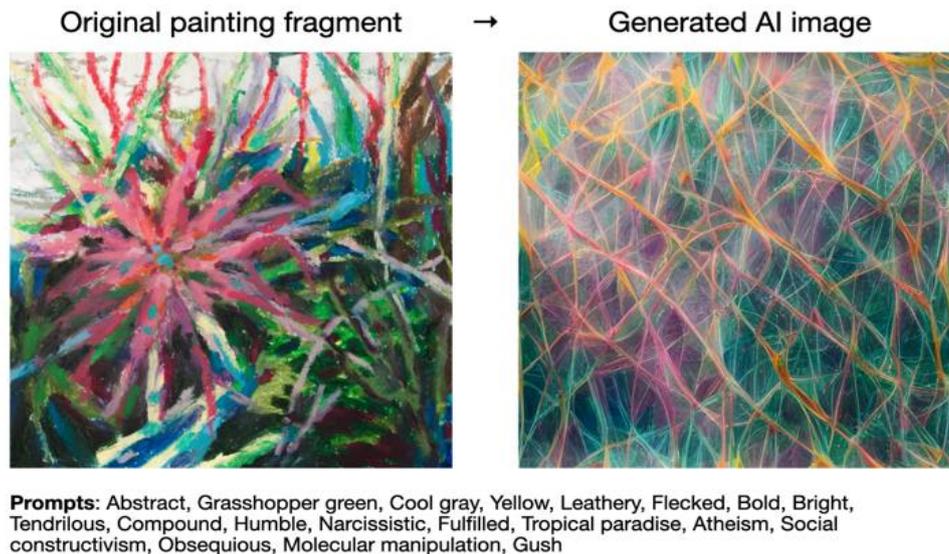
Figure 3. Generated image with Stable Diffusion from one painting and one set of traits as prompts

We can see some examples from the assortment of images generated with SD in Table 3. The images under the column "text-to-image" show the images generated with SD only with prompts. A major difference can be noticed between them and the images created by additionally conditioning SD with fragments of paintings, which automatically add not only aesthetic and formal qualities but also an authorial touch. In the same table, we can also see the seed numbers that act as unique identifiers of iterations, which are

what initiates the pseudo-random generation. In this context, it is worth stressing that the seed numbers only *imitate* randomness, since computers are deterministic and, thus, inherently incapable of generating something truly arbitrary.

Prompts	Original painting	Seed #	Image-to-image	Text-to-image
Abstract, Grasshopper green, Cool gray, Yellow, Leathery, Flecked, Bold, Bright, Tendrilous, Compound, Humble, Narcissistic, Fulfilled, Tropical paradise, Atheism, Social constructivism, Obsequious, Molecular manipulation, Gush	"Nightbloom"	3589152880		
		3241368950		

Table 3. Demonstration of the conditioning produced by one painting in images generated with Stable Diffusion

Texture maps and 3D procedural model generation

Stable Diffusion upscaled generated image	Generated normal map	Generated height map	Generated curvature map
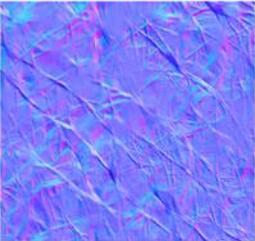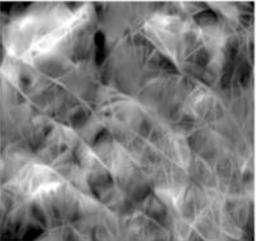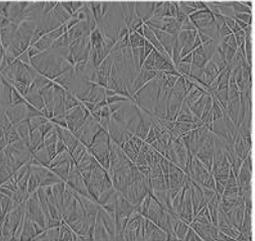
Table 4. Texture maps generation from a single image through DeepBump

The generated image was introduced into Blender, an open-source 3D graphics software, to initiate the process of turning this two-dimensional image into a three-dimensional object. First, the SD-generated image was used to endow the final model with colours and as a source for generating more images that would then be used as texture maps for the effect of three-dimensionality. With that in mind, I used Blender's add-on called DeepBump for each SD-generated image to create regular maps, displacement maps and curvature maps. Combined, along with the source image, they constituted the object's shader, which defined its texture and relief – the "skin" and the "mass". In it, the normal map added the appearance of relief, the displacement map defined topology and the curvature map supplied information about the apparent concavity/convexity of the image, which was used to further enrich the texture of each of the models.

Underneath this superficial layer, it was necessary to have a 3D model as a base whose shape could be modified from the surface – the shader that contained all the aforementioned maps. This "base model" was created from a sphere to which a Voronoi tessellation was applied to create random irregularities. Furthermore, a different seed in the fourth dimension of the Voronoi tessellation was added to generate successive random shapes.
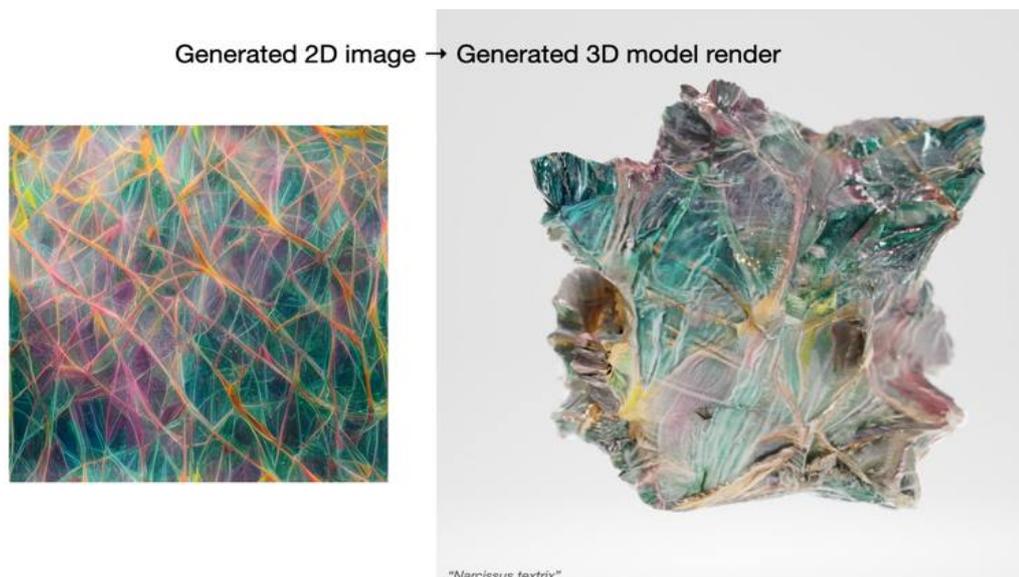
Figure 4. Comparison between the 2D image generated in Stable Diffusion with the final artefact-being model render

After this process and the addition of lighting and a neutral backdrop, a final model was attained, which can be seen on the right of Figure 2, from the generated 2D image on the left. For each of the artefact-beings, the same model was duplicated, with only texture maps and the procedural seed number altered. At the final stage, renders were generated, as well as some animations.

Generating a complementary description with ChatGPT

"Narcissus textrix"

"Narcissus textrix is a species of artifact-beings known for their striking appearance and unique abilities. They have a grasshopper green hue with gray undertones and splashes of vibrant yellow. Their tendrilous appendages, reminiscent of grasshopper antennae, allow them to manipulate molecular structures at a microscopic level.

Despite their narcissistic disposition, Narcissus textrix also exhibit humility and a lack of theological beliefs, embracing atheism and prioritizing empirical observation and rationality. They engage in complex social constructs, forming hierarchies and networks based on cooperation and interdependence, while maintaining harmonious relationships.

These artifact-beings thrive in tropical environments and appreciate the natural beauty of their habitats. Their radiant presence and molecular manipulation abilities contribute to the mesmerizing spectacle of their tropical abodes."

— ChatGPT text generation with provided trait prompts.

Figure 5. Generated text from a query in ChatGPT-3 for a scientific description of the "Narcissus textrix"

The set of traits initially generated for each artefact-being was ultimately used for two things: its form and character. These were represented through, respectively, a three-dimensional digital object as described above, and a written description. The latter was generated, like the rest of this work, through AI. In this case, the aim was to generate one text from another, for which ChatGPT was again used. First, it was prompted to make a list of different "scientific" names for an artefact-being with a set of previously defined traits. For example, in the case of Figure 2, the description was based on the characteristics referred to in Table 2. ChatGPT gave back various expressions that mimicked scientific names by simply Latinising or making allusions to the Greek roots of the inputted words.

Once one of these names was chosen for an artefact-being, ChatGPT was prompted to write a scientific description of it, taking into account the object's specific set of traits and attributes, such as the morphology, etymology and curious facts about it, while keeping an academic tone. The conjuncture of an academic tone, scientific form, fictional content and artistic vision gave interesting – even if at times contradictory – results, which Figure 5 well demonstrates.

Renders and animation

Figure 6. Renders of different artefact-beings

This way, with a 3D model and a corresponding description, we obtain a final form of an artefact-being. After the rendition, whose effects can be shown above, an accompanying animation was created, demonstrating the artefact-being's growth or evolution. It was done mainly by progressively changing the scales of texture maps that helped to transform the object from a simple model to a very detailed one.

Artificial intelligence in the creative process

The work *Portrait of Edmond Belamy*, created with AI and sold by Christie's for 432,000 dollars in 2018, ignited the debate on authorship in art while also raising questions on the notions of originality and autonomy.[26] Various authors compare the advent of art produced with AI and its resulting shock in pre-established modes of creating art to the invention of photography and its effect on painting.[27] This shows how in recent years the subject has been seriously discussed, particularly since 2022 with the popularisation of models similar to Stable Diffusion that was used in this project. The SD model, unlike other text-to-image (TTI) models, which take hundreds of hours of GPU computation, requires significantly fewer resources and allows a modification of the existing images through an image-to-image translation.[28]

Generative art, as created in this project, has a history that precedes the use of computers, since – at the very least – Jean Arp who in the 1910s created artworks governed by chance, John Cage who in the 1950s used random rules to create music and Sol LeWitt who in the 1960s used instructions to elaborate his works. In each of these cases, according to Hertzmann,[29] despite the generative element present in the artworks, it is the human that is considered the author, as it was the human that developed the whole creative decision process. The author considers that no matter what technology is employed, it will always be just a tool, just like the AI algorithms that have been emerging: there is always a human behind the work.

In this project, the aim was to explore the "capability of translating symbolic representations (textual descriptions) into iconic ones (images)".[30] The "understanding" that these systems have of images is literal, as they are trained on millions of them, paired with descriptions; consequently, the images they produce reflect the content of

26　Eva Cetinic, "Understanding and Creating Art with AI: Review and Outlook", in: *ACM Transactions on Multimedia Computing, Communications, and Applications*, vol. 18, 2022, pp. 1–22.

27　See: Aaron Hertzmann, "Can Computers Create Art?", Arts, vol. 7(2), no. 18/2020, https://doi.org/ 10.3390/arts7020018; Avijt Ghosh and Genoveva Fossas, "Can There be Art Without an Artist?", arXiv, 16.09.2022, http://arxiv.org/abs/2209.07667; Jon McCormack et al., "Is Writing Prompts Really Making Art?", arXiv, 26.01.2023, http:// arxiv.org/abs/2301.13049.

28　Anne-Sofie Maerten and Derya Soydaner, "From paintbrush to pixel: A review of deep neural networks in AI-generated art", arXiv, 14.02.2023, http://arxiv.org/ abs/2302.10913.

29　Aaron Hertzmann, *op.cit.*

30　Jon McCormack et al., *op.cit.*, p. 4.

the text literally, having no recognition of metaphors, analogies or visual poetry, as Mc Cormack et al. point out. Despite that, as often happens with internet searches, word searches give back the most common, stereotyped and discriminatory interpretations – for instance, a search for a "beautiful man" gives back images of a white, young and athletic man. Likewise, as the authors say, "when used as part of prompts, basic artistic concepts such as 'beauty' follow the statistical patterns expressed in the dataset, pre-cluding cultural differences, homogenising representations, and reinforcing biases".[31]

By exploring image generation with Stable Diffusion through a mix of concrete and abstract prompts, this theoretical-practical work takes advantage of the model's lim-itations as regards expressing human concepts, which in turn reveals many biases of our own condition.

Conclusion

As we can see, painting is capable of hybridising, contaminating and fusing with other modes of representation through interaction with them and the use of physical and digital media in a complementary way. This allows us to think about the artistic practice in which painting emerges as a "surface of conversion", like Rancière declared – a live conversion medium between the natural and the artificial.

To consider painting in this way, to "hybridise" it, allows us to challenge traditional notions of artistic media, expanding the possibilities of an author's expression and opening new opportunities for experimentation and innovation at the intersection of different disciplines, materials and techniques, which results in bringing together the ideas and approaches. This process can lead to the emergence of different perspectives, non-conventional aesthetics and unique artistic languages. Furthermore, hybridised painting reflects the cultural scene characterised by interconnectivity and digitalisation. It also acknowledges the influence of technology on our perception, as well as the fluid nature of contemporary identities, nar-ratives and representations. Finally, it encourages the reassessment of the role that has painting in contemporary practice by challenging the notion of it as something two-dimen-sional, static and singular. In this context, the idea of painting is no longer confined to a specific medium and becomes part of a larger discourse that transcends different media. Their convergence, the intertextuality and the exploration beyond boundaries characterise contemporary painting as a multifaceted mode of expression.

31 *ibidem*, p. 6.

This project was based on an iterative process, in which AI was used at various stages to intertwine painting and digital forms. However, the author's influence was always present. The elements of randomness and serendipity introduced at different steps were, in fact, pseudo-random procedures that relied on the computer's determinism as well as – even more substantially – being conditioned by the author. In this particular phase of the project, the painting served as a point of departure for AI's "imaginings", influencing the generation of the artefact-beings.

Artefact-beings themselves are hybrids. Each is an artificial object while, at the same time, it is imbued with a psyche, feelings, spirituality, convictions and so on. Each is a representation of a unique set of these traits. These attributes are inscribed in the process of its creation through words interpreted by programs that try to translate into images what the human understanding is of these words. The textures of the skins of artefact-beings, as well as their morphologies and colours, are defined by the ideas that they represent, imagined by a computer that stores our collective knowledge. Our reality is shaped by this vision. We see everything, including ourselves, through the shared images that we collect on computers. Artefact-beings are a conglomerate of things that exist and those that are imagined. As such, they exist in a space of liminality. They can be seen as symbolic representations of the play between perceived reality and constructed representations, incorporating the liminal space where these boundaries get blurred.

Bibliography:

1. Baudrillard, Jean. *The Transparency of Evil: Essays on Extreme Phenomena*. London: Verso 1993.

2. Berman, Ila and Douglas Burnham. *Expanded Field: Installation Architecture Beyond Art*. San Fransicso: Applied Research & Design 2016.

3. Bishop, Claire. "Digital Divide: Claire Bishop on contemporary art and new media", in: *Artforum*, 51(1), pp. 435–442.

4. Bourriaud, Nicolas. *Postproduction. Culture as Screenplay: How Art Reprograms the World*. London: Sternberg Press 2006.

5. Cetinic, Eva and James She. "Understanding and Creating Art with AI: Review and Outlook", in: ACM *Transactions on Multimedia Computing, Communications, and Applications*, vol. 18, 2022, pp. 1–22.

6. Fares, Gustavo. "Pintura no campo expandido", in: *PORTO ARTE: Revista de Artes Visuais*, 18(31), https://doi.org/10.22456/2179-8001.37934.

7. Ghosh, Avijt and Genoveva Fossas. "Can There be Art Without an Artist?", in: *arXiv*, 16.09.2022, http://arxiv.org/abs/2209.07667.

8. Gouveia, Patricia. "The New Media vs. Old Media Trap: How Contemporary Arts Became Playful Transmedia Environments", in: Em C. Soares and E. Simão (eds.), *Advances in Media, Entertainment, and the Arts*, pp. 25–46. Pennsylvania: IGI Global 2020.

9. Greenberg, Clement. "Towards a Newer Laocoon", in: Em C. Harrison & P. Wood (eds.), *Art in Theory 1900–2000: An Anthology of Changing Ideas*. Hoboken: Blackwell Publishing 2002.

10. Hansen, Mark B. N. *Bodies in Code: Interfaces with Digital Media*. London: Routledge 2006.

11. Haraway, Donna. "A Cyborg Manifesto", in: *Manifestly Haraway*. Minnesota: University of Minnesota Press 2016.

12. Hertzmann, Aaron. "Can Computers Create Art?", in: *Arts*, 7(2), 18, https://doi.org/10.3390/arts7020018.

13. Hutcheon, Linda. *The Politics of Postmodernism*. London: Routledge 1989.

14. Jenkins, Henry. *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press 2006.

15. Kholeif, Omar (ed.). *You Are Here: Art After the Internet*. London: Cornerhouse Publishing 2004.

16. Krauss, Rosalind. "Sculpture in the Expanded Field", in: Donald Preziosi (ed.), *The Art of Art History: A Critical Anthology*. Oxford: Oxford University Press 1998.

17. Maerten, Anne-Sophie and Derya Soydaner. "From paintbrush to pixel: A review of deep neural networks in AI-generated art", in: ArXiv, http://arxiv.org/abs/2302.10913.

18. Manovich, Lev. The Language of New Media. Cambridge (MA): The MIT Press 2001.

19. Manovich, Lev. Software Takes Command. London: Bloomsbury 2013.

20. McCormack, Jon, Camilo Cruz Gambardella, Nina Rajcic, and others. "Is Writing Prompts Really Making Art?", in: ArXiv, http://arxiv.org/abs/2301.13049.

21. Nant, Alice. "Video Game in the Expanded Field" in: An Ants Eyeview, 03.02.2020, https://anantseyeview.com/2020/02/03/videogame-in-the-expanded-field/.

22. Rancière, Jacques. The Future of the Image. London: Verso 2009.

23. Strahan, Lucinda. "Permissions: On expanding the field of writing", in: Writing in the Expanded Field, https://expanded-field.acca.melbourne/2-permissions.html.

24. Zambelli, Alessandro. "Performance in the Expanded Field", in: Scandalous Artefacts: Between Architecture, Archaeology and Anthropology, https:// scandalousartefacts.com/2022/09/23/performance-in-the-expanded-field/.

exhibition
catalogue

Alina Śmietana ● Ana Pessoa ● Bruno Ministro ● Carolf/Joel Od/ India Sadowska ● Franek Warzywa ● Hetamoé ● Kamila Walendykiewicz ● Kinga Dobosz ● Laura Peixoto ● Madalena Anjos ● Natalia Dopkoska ● Pedro Ferreira ● Pedro Tinoco ● Piotr Kopik ● Piotr Puldzian Płucienniczak ● Sebol Bejsbol/ Julia Tymańska ● TheMontaże ● d1g1t0 individual_collective_ / Agnieszka Bykowska /Tomasz Dalasiński ●

2K23
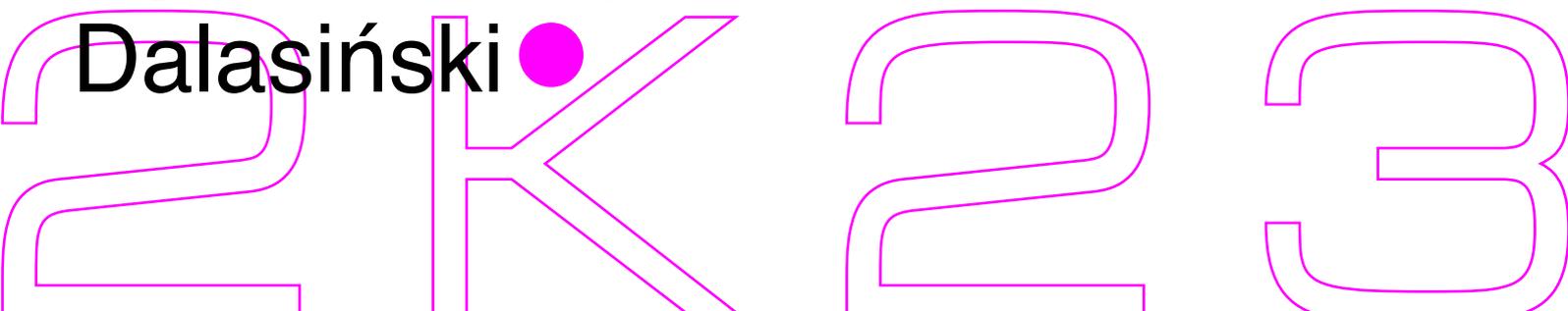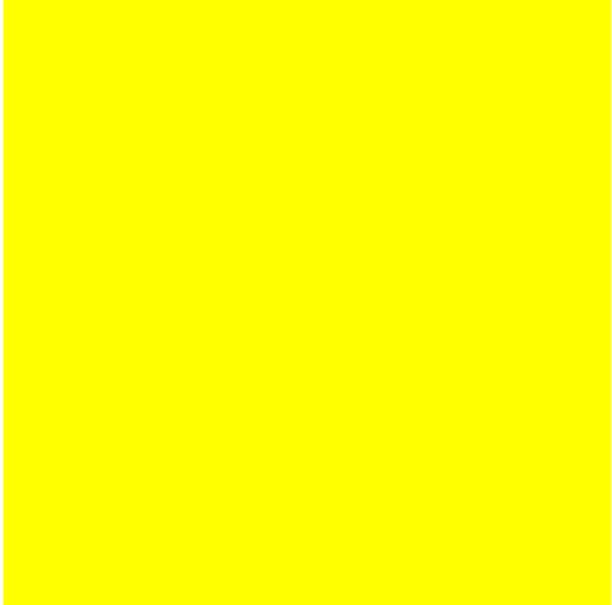
Transmission spaces: translocality and the network in contemporary art[1]

Magda Górska

Faculty of Fine Arts, Nicolaus Copernicus University
https://orcid.org/0009-0003-9272-0274
DOI: https://doi.org/10.59862/F7k2B9xQ-10

The international The POR-POL NET exhibition was the starting point – or even a base – of the POR-POL NET project and it aimed to illustrate the influence of today's internet culture on creative practices, in this case, of Polish and Portuguese artists. The objective was to create a space in which the works of invited artists could function analogously to the flow of information on the internet. For this reason, instead of following the conventional arrangement of the sterile, institutional exhibition interiors, the curatorial thought was to create a sense of absolute dispersion. To this end, in June 2023 several cultural institutions and galleries operating on two sides of the European continent were combined into a physical, conventional network.

The common belief in the openness of the internet and its perception as a place of absolute creative freedom and independence from the problematic rules of the art market was reflected in the selection of exhibition spaces that were either rooms in the grassroots cultural organisations (among them Saco Azul in Porto, Fabrica Braço de Prata, Passevite and Prisma Estúdio in Lisbon, Galeria UL in Gdańsk), unconventional areas of the galleries and institutions (the staircase in Wozownia Art Gallery in Toruń, the bookshelves of Bęc Zmiana Foundation in Warsaw, one of the co-working spaces at Goyki 3 Art Incubator) or functioning supplementary locations for creative or cultural activities within the academic institutions (BO Gallery at the Faculty of Fine Arts of the Nicolaus Copernicus University, and Patio ASP at the Academy of Fine Arts in Gdańsk).

From a curatorial point of view, it was crucial to propose an exhibition format that would allow the whole undertaking to remain decentralised yet fully accessible. Although the utopian vision of a greatly involved viewer who would choose to travel between the cities that lay on the two opposite sides of Europe was not excluded, an alternative to that was offered by a virtual variant of the exhibition presented at Piotr Kopik's Kliki i Obroty gallery. There, all the works were brought together in digital adaptations which viewers could explore by taking the role of a deformed human figure thrown into an undefined space. The act of throwing pieces of lithium and copper – metals mined, respectively, in Portugal and Poland, and used for the production of electronic appliances – was creating a new version of the same exhibition, haphazardly and at random.

The exhibition, coherent but open to independent orders and readings, was a kind of postmodern game, in which every possibility of organisation was equivalent; in the end, non-linearity, hypertextuality, hybridity, recombination and parasitism are some of the basic characteristics attributed to network culture. To contemporary artists, vir-

tuality – understood as an ideal, constantly updating and changing archive – is a field of various forms of exploration that generally continue the thought and practice of the 20th-century neo-avant-garde while referring to contemporary communication media.

In this context, the notions of cross-section and comparison became particularly important, resulting in a strategy of combining artists in pairs or groups to highlight changes and trends in contemporary post-media art. Following this logic, the invitation was extended both to artists still active in the second decade of the 21st century and those who are only just defining their relationship with the post-internet phenomena. Moreover, the criteria for invitation were broadened to include not only classical works that use the web as a medium but also those for which it is only a thematic or aesthetic inspiration – sometimes relatively distant or, at least at first glance, less obvious. In this sense, attention was drawn, on the one hand, to the ontological or performative status of the net and, on the other, to its self-reflexive character, often supported by the strategies of hybridisation, remix and reappropriation, as well as error, irony and deliberate camp. The projects included those engaged in the exploration of the idea of heterarchy and cognitive assemblages, and the entanglement of the web in pressing social issues, from class inequality and sense of loneliness in a world where instant communication has never been that accessible, to the current armed conflict in Europe and the climate crisis.

The aforementioned aspects outlined the narrative axes of the individual exhibitions, simultaneously set in spaces whose history and habitual function often constituted new themes and meanings. In this regard, the exhibition at Goyki 3 Art Incubator, where works by Bruno Ministro and Kamila Walendykiewicz were exhibited, may serve as a particularly good example. Presented in one of the coworking spaces of the historic 19th-century bour-geois villa Jünkegow, the works touched on two global problems arising from the Western world's leading economic system: capitalism. On the one side, set on a desk, we had the work of Ministro, a Portuguese theorist and poet who has been involved in copy-art and electronic literature for many years. In his interactive project *Progress in Work* (2021), the artist sought to draw attention to the abysmal conditions under which work those employed by Amazon Mechanical Turk. The randomly selected images and texts that form the basis of this work were derived from the tasks that Ministro himself had chosen to assign to pre-carious workers. They are responses to the request to show their faces and places from which they work, which were then paired with captions made of excerpts from Lawrence Venuti's *Invisibility of the Interpreter* translated into the workers' native languages.

While Ministro's approach treats the web both as a medium of interaction and as a source of subjects crucial for socially engaged art, for Walendykiewicz, the active sender-receiver relationship and the idea of co-creating the work with the participants of the online action is no longer relevant. Walendykiewicz recognises internet content as an integral part of reality: a building block that, even if peculiar, is uniquely malleable and readily available. This is evidenced by a series of paintings showcased at Goyki's exhibition space, alluding to virtual aesthetics and featuring forms reminiscent of crystals and gases. All of them bear colours of outer space, while their titles allude to motifs of proximity, signals and satellite communication.

In Walendykiewicz's view, the web is also an alternative space where utopian visions for the future after the Anthropocene can be concretised. Therefore, the *POST_PLANETA* website (www.postplaneta.com; from 2020) turns out to be a melancholic attempt to use the internet as a vehicle for a new earth, composed of images, sounds, codes and coupled hyperlinks. Within the exhibition, made available to viewers on a simple tablet placed on what appears to be a symbolic pedestal in the form of a white, wooden cubicle displayed on a sunny veranda full of lush plants, it recalled a world of comfort and tranquillity, despite reminding of the upcoming catastrophe.

A continuation of this theme could be seen in the exhibition at Lisbon's Prisma Estúdio, which brought together works by artists associated with the Gdańsk art scene: Sebol Bejsbol, Julia Tymińska and Kinga Dobosz. The installation by the former two artists was realised in the form of mobile graffiti, whose parts could be combined in various ways. It was a comically macabre vision of one of the many possible scenarios for the end of the human world. The most striking element was a variation on the street bon mot "GAME OVER", used also as the work's official title. The whole work was maintained in a pop-cultural aesthetic skilfully combined with a kind of randomness of images reminiscent of those that can be found on the internet or on various stickers, promotional materials and music videos. The graffiti tells a story in which the sun aims a blowtorch at planet Earth, while people aim guns at each other, drowning in flames combined with various references to consumer culture and late capitalism. Kinga Dobosz's video, *Anthropocene is Over Party* (2022), had similar overtones. On the one hand alluding to the motif of advertising and, on the other, to the aesthetics of computer games, the work invited viewers to an irrational, oneiric world in which the products and services offered to consumers highlight the absurd rules of the free market and the artificial generation of demand that is associated with it.

Similar themes were explored at the neighbouring Passevite – a typical urban venue in the Portuguese capital's centre that often hosts – rather small and informal – DJ sets. Significantly, the gallery activity it hosts is based on standard sales mechanisms, where the works on display can be purchased by visitors who have direct access to the price lists available at the exhibition. The leitmotif for this space, therefore, became the bazaar as a place where "made-in-China" underwear and imitations of golden jewellery can coexist with unconventional handicrafts and original paintings. The works presented in this context – inspired by *vaporwave*, pop and glitter aesthetics – combine a critical reflection on consumerism with an admiration for the world of advertising. The first room was occupied by Ana Pessoa's textile objects and Alina Śmietana's heart-shaped microscopic soaps packaged in metallic string bags (*Such a Pretty Girl with Such a Dirty Mouth*, 2023). Right next door, we could see a looped video *IDĘ NA BAZAR* (2021) made by Frank Warzywa – the artist known for activities on the Polish music scene and YouTube, with his career firmly focused on gaining recognition and acclaim. The floor below, Natalia Dopkoska's animation restored the charm the commercial break, presenting the logos of the project's fake sponsors with the accompaniment of today's essential audio meme: the soundtrack from *The Sims*. In this constellation, Pedro Tinôco's drawings, presented on both sides of the projection, took on a tinge of nostalgia, bringing to mind memories of long days of carefree fun and exaggerating suspicious motifs in cartoons broadcast on dedicated TV channels.

Complementary to the social problems addressed by the artists and related to the laws of the capitalist market and the not-so-cheerful consumption of symbols and signs, were insights into the emotional life of the virtual world. These were summarised in the exhibition at Galeria UL in Gdańsk. The works, presented against the black walls of the exhibition space, were imbued with feelings of loneliness and longing, explicit in Alina Śmietana's graphic object, *I haven't fallen in love yet* (2018–2023) and indirect in Pedro Ferreira's peculiar video collage *Things I do when I'm bored* (2017–2023), which compiled videos of random YouTube users announcing their boredom to viewers.

Located by the Baltic Sea, Galeria UL also became one of the shores of an updated project by the Portuguese poetry group wr3ad1ng d1g1t5 (Diogo Marques, Ana Gago), which this time worked in collaboration with Polish poets Tomasz Dalasiński and Agnieszka Bykowska. Their *Desvio* (2023) is a cyber-literary performance exploring the concept of otherness and the communication difficulties that we face despite globalisation and technological progress. It runs on a dedicated software that randomly selects

words and phrases from the texts sent to it and then combines them into a logical whole. Thanks to QR codes placed next to video installations, participants in Gdańsk and Porto's Maus Hábitos could interact with the work and one another. Their task was to create a collective image of the opposite shore of Europe – one which, by definition, does not exist. After all, without having been there, we only operate with simulacra, painstakingly developed as part of urban tourism strategies sustained and developed thanks to social media users.

Also presented for the first time at Maus Hábitos was Piotr Kopik's *The Chatter* (2023) – a chatbot, kept in the artist's characteristic aesthetics, with which the viewer can communicate by typing on a keyboard. Every attempt at establishing a meaningful dialogue, however, ends as a clashing of two monologues. *The Chatter* can be thus interpreted as a visual expression of today's humanist thought, showcasing the fascination and concern with the evolution of human-computer relations and, consequently, the changing ways in which relations between humans are shaped, including the sense of loneliness that often accompanies them.

Narratives based on a classical understanding of the concept of language were contrasted with the works of Magdalena Anjos and Hetamoé (Ana Matilde Sousa) exhibited in the same space. Their projects, made with traditional drawing techniques and experimental printmaking, extraordinarily expressive and multithreaded, are reminiscent of children's chatter and the playful act of creating one's own iconographic sphere inspired by what has been observed in our everyday – also virtual – life. In this regard, both works encompass a reality dominated by pop culture and cyber-folklore.

In Hetamoé's work, amidst abstract forms and deliberate glitches, fragments of text and anime characters are interspersed with banal motifs characteristic of GIFs and other simple visual elements that can be found on internet forums. In the series of graphics presented in Maus Hábitos, however, we find several short stories not only about women or cyberfeminism but also about depression, which is particularly prominent in *Sleepless* (2020) and *Pretty Guardian* (2020), whose protagonists are the typical "dead girls" and clowns – both common characters of today's memosphere.

By contrast, Anjos develops a kind of autobiographical mind map on the wall, using fragments of texts and images. The influence of internet culture is not as evident as in the case of Hetamoé. What is interesting here, however, is the recording of the peculiar relationship between life in the physical and digital worlds. Thus, for example, a fragmentary binary code noted on one of the graphic notes is located quite close to a

photographic portrait of the artist's dog, and a photograph of an ancient amphitheatre is placed under a screenshot of a desktop.

The theme of the interweaving of the physical world with the networked transmission of information can be found also in the painting by Piotr Puldzian Płucienniczak, which was displayed in the liminal space of the staircase at the Wozownia Art Gallery in Toruń. His *Weather Forecast for the City and Municipality of Krapkowice* (2023) is a painterly-graphic variation on the weather forecast record for the day and place where the artist was born – information that nowadays can easily be downloaded from the internet thanks to the international weather information sharing initiatives.

Another example of this kind of play with time and space could be experienced with the DJ set created by India Sadowska, Carolina Ribeiro and Joel Od, which was based on field recordings from Poland and Portugal. Broadcasted live on the 20th July 2023 in Portugal's independent Rádio Paranóia, it served as an event that took place simultaneously in Lisbon's Prisma and in Toruń's Centre for Contemporary Art. Since then, it is also available as part of Radio Palmiarnia's cyclical programs via Radio Kapitał – the first community-based, online Polish radio.

And yet, what about works not intended to correspond with post-media art forms? A series of paintings *Everything will be all right* (2017/2023) by Natalia Dopkoska can illustrate such a non-obvious intervention. In the space of Fábrica Braço de Prata in Lisbon, the artist presented a work that, within three years' scope, ended up combining three different media. It began in 2017 when she created a series of oil paintings that reinterpreted the package of a Ukrainian brand of toilet paper known for the slogan "Everything will be all right". With the outbreak of the pandemic and – shortly after – the war in Ukraine, both becoming haunting symbols of a global crisis, the work gained an entirely new dimension. For the POR-POL NET exhibition, the works – reprinted and provisionally hung on the red walls of Kandinsky's Corridor – served as a bitter observation of the extent to which the other European countries declare or engage in the support of Ukrainian citizens.

Dopkoska's paintings, originally created out of a momentary fascination with the advertising strategy of a toilet paper company, nowadays – exposed in a public space – took on an essentially political significance. The question of whether an individual "voice on the matter", uttered either in one of Lisbon's social spaces or on a social media platform, can produce a real, desirable result seems to have only one answer. Nonetheless, it remains important – even if only as another record of the present or

part of interconnected exhibitions. The diverse themes explored in various spaces, all intertwined with today's most important global medium – the World Wide Web – perfectly illustrate the blurring boundaries between the physical world and the virtual universe that takes place in our perception. By no accident, the billboard presented in Toruń's Galeria BO, which combined works by the Portuguese artist Hetamoé the Polish artist Kamila Walendykiewicz was accompanied by the slogan "The Internet is a parallel planet". A planet or, perhaps, Earth's simultaneous atmosphere.

Bibliography:

1. Górska, Magda, Stokowiec, Aleksandra. „Zdecentralizowana i sterytorializowana: wystawa POR-POL NET." *Zeszyty Artystyczne: ZA*, vol. 32, no. 2 (2023), pp. 654–659.
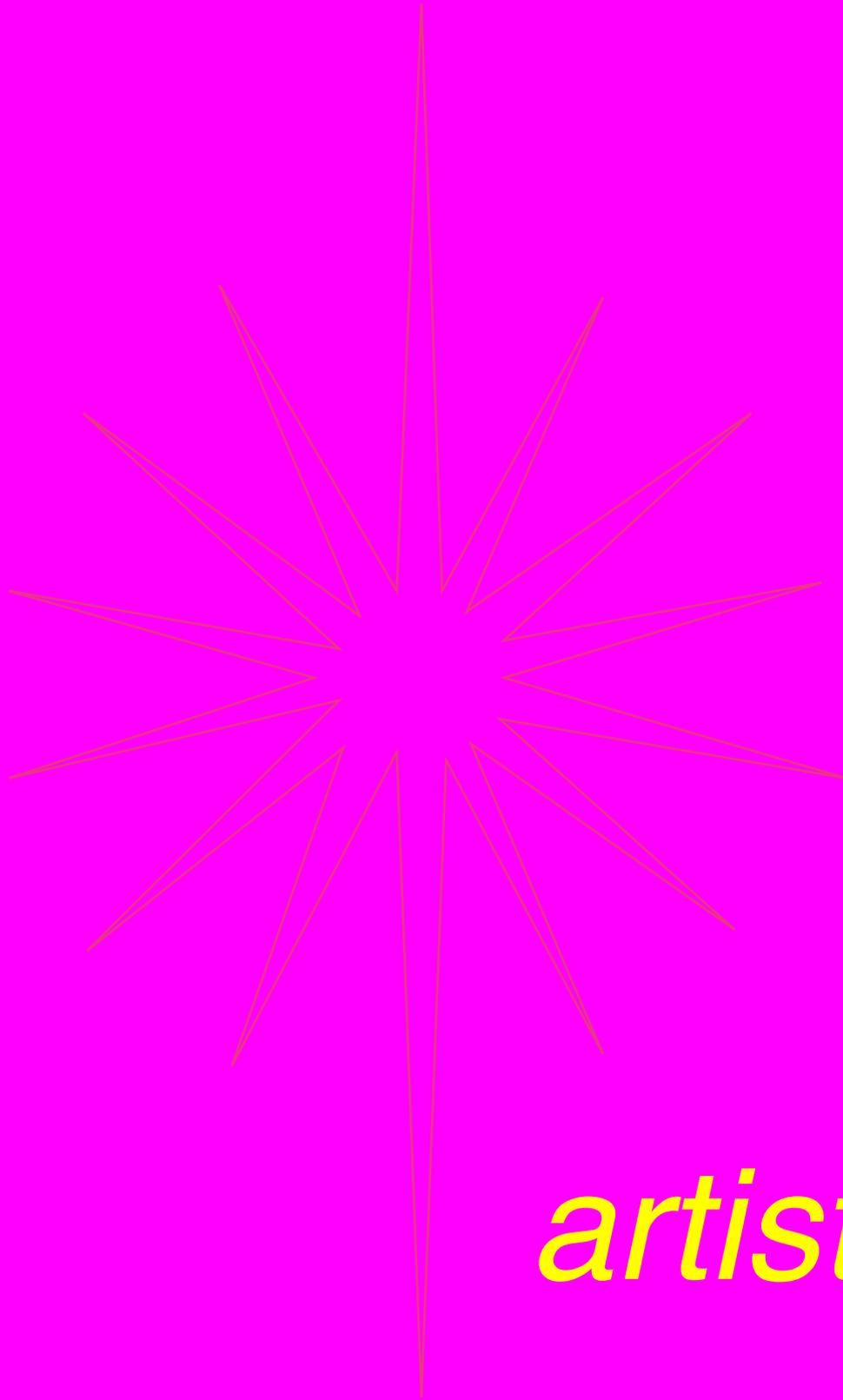
artists

Alina Śmietana

Alina Śmietana is a visual artist, born in 1996. She graduated from the Faculty of Fine Arts at Nicolaus Copernicus University in Toruń. She prefers to laugh, even through tears of helplessness, but against submission. She is interested in magical thinking observed in everyday rituals and spontaneous play with fate, and the search for instant substitute solutions. She explores power relations in co-created works.

She is most interested in live actions that are directly linked to the presence of people. This is why she often uses the medium of performance or intermedia. She tries to use familiar, everyday forms and meanings to make her works accessible, not overwhelming at first sight. She chooses life over the art circuit.

such a pretty girl with such a dirty mouth (2022)

The title phrase is a commonly used instruction, usually given by adults to little girls who use a lot of swear words or socially unacceptable statements in their speech. It is often accompanied by the announcement of the punishment of „scrubbing the face with soap" in the event of further disobedience.

For the artist, it is a familiar form of threat, which over time has taken on the shape of a suggestion. The original oppressive subject in the form of the mother, on the other hand, has given way to issues of patriarchy, reducing her to the role of a caring guide to passivity.

It would have been so much easier the further I got into life, but that meant going against myself. I've made little soaps that are easy to apply to any situation that stirs up dangerous opposition within us. They are cute, appetising and do their job of inducing nausea.

Alina Śmietana

such a pretty girl with such a dirty mouth
object, action, 1 x 1 x 1 cm
2022

Courtesy of the artist

Alina Śmietana

I haven't fallen in love yet
object, 3.5 x 18 x 15 cm
2023

Courtesy of the artist

I started drawing hearts out of boredom in 2018, and the sight of observers peering over my shoulder always has something to say. I've now organised a place for myself to collect these affirmative excerpts.

Ana Pessoa (Chikki Chikki)

Ana Pessoa graduated in fine arts from ESAD.CR. She lives and works in Caldas da Rainha. Her artworks are characterised by a distinctive sense of humour and numerous references to the fun and games of childhood and early adolescence. It is not difficult to find influences from internet subcultures such as Vapor Wave, the aesthetics of the 1990s and the associated pop culture of the time.

"Mom...this is not a phase!", 2023

A series of textile objects referencing iconic 90s pop culture artefacts. Preserved in a vapor wave aesthetic and encapsulated in a kind of art installation with the telling title *Mom...this is not a phase!* (2023), form a dummy of a teenager's dream room, or – as the artist herself suggests – an "emo unicorn teenage room".
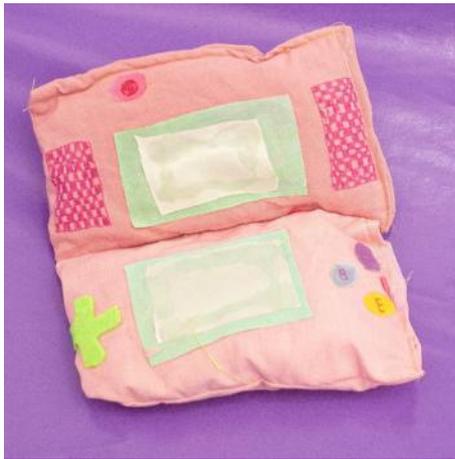
Ana Pessoa (Chikki Chikki)

Part of the art installation:
"Mom...this is not a phase!"
From the top left to right:
game boy, nintendo, pizza
textile object art
2023

Courtesy of the artist

Bruno Ministro

Bruno Ministro is a junior researcher at the Institute for Comparative Literature at the University of Porto. He received a PhD in Materialities of Literature from the University of Coimbra. His research sits at the intersection of literary studies, media studies and cultural studies, with an emphasis on intermediality and comparative media. His work focuses on experimental poetry, copy art and electronic literature. He is also a poet who believes in a practice-based research model for the production of knowledge. Some of his recent artistic and academic work can be found at hackingthetext.net

Progress in work (2021)

Progress in work (2021) is a content-based generator acquired through Amazon Mechanical Turk's crowdsourcing marketplace, where both individuals and companies can outsource processes and tasks known as HITs (Human Intelligence Tasks) to voluntarily registered workers from around the world. At the artist's request, each MTurk user was given the opportunity to complete a US$0.05 paid HIT, which consisted of translating an excerpt from Lawrence Ventui's *The Translator's Invisibility* and photographing their workspace. The resulting files then became the basic material for the randomly selected text and image combinations of the generator created by Ministro.

ARROZ DOCE E CORNETA (2021)

ARROZ DOCE E CORNETA (2021), on the other hand, is a digital poem conceived as a random generator of images with a superimposed photographic filter, which depicts police violence. The images are accompanied by an ill-fitting caption text generated by poor machine-vision methods. For instance, an image of police brutality towards protesters accompanied by the caption "a group of people close to each other"..
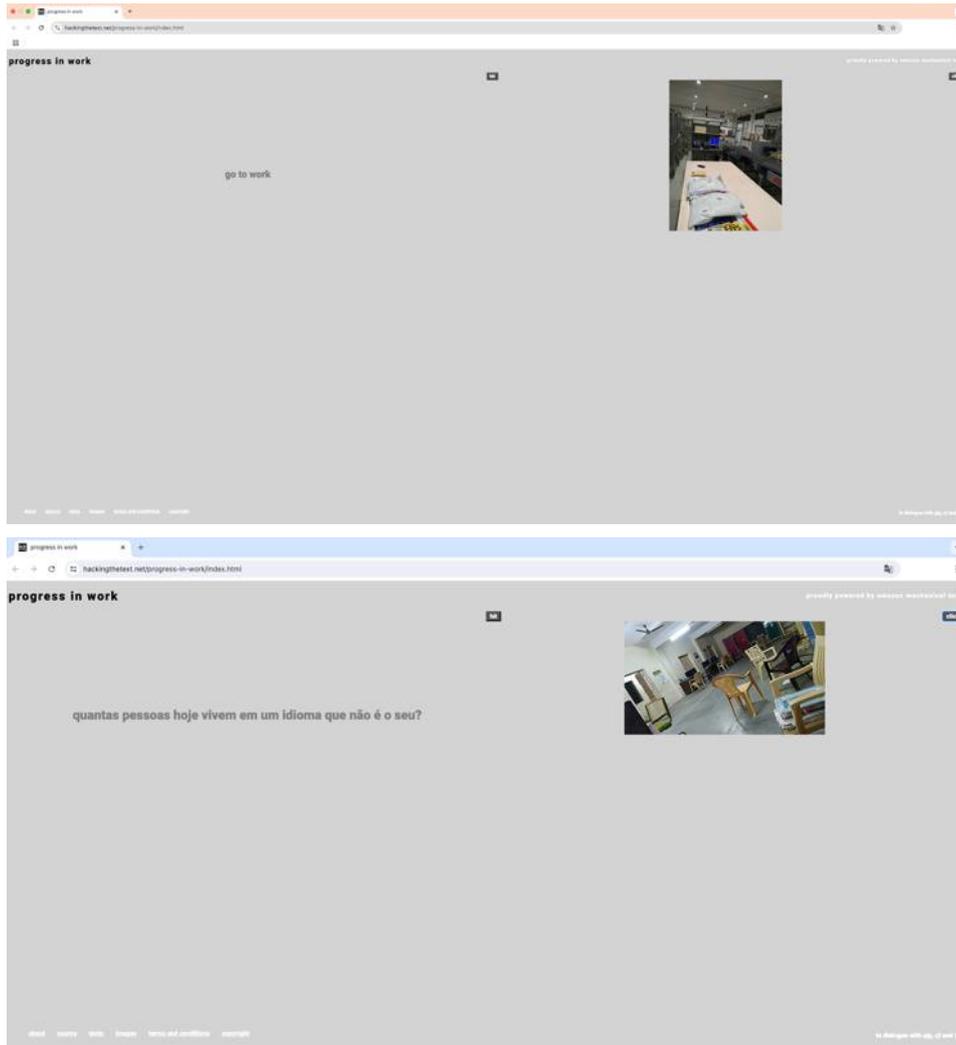
Bruno Ministro

Progress in work
Content-based generator
2021

Courtesy of the artist

Bruno Ministro

ARROZ DOCE E CORNETA
Random generator
2021

Courtesy of the artist

Carolf/Joel Od/ India Sadowska

Carolf (Carolina Ribeiro) is an ambient enthusiast and DJ from Lisbon, with sets focused on deep listening, experimental textures and sporadic rhythms. She is a part of the Living Room collective and has a monthly radio show ~ hush ~ on Rádio Paranóia.

Joel Od is a web developer from Aveiro, Portugal. He is passionate about discovering music from any genre, especially artists from different decades that were overlooked in their time.

For the last four years, I've been sharing some of my favourites through the (almost) weekly mix show Familiar Textures, at Rádio Paranóia.

India Sadowska is an art conservator by training, who has been privately exploring basements of music for several years. She is a member of the Palmiarnia Collective, which initially pursued its concept of bringing the underground to the ground floor, during weekly music events in Toruń, Poland. For the past four years, their focus has shifted to monthly broadcasts for the community radio station, Radio Kapitał. These broadcasts take various forms, ranging from musical mixes to intricate narrative radio plays, all revolving around a specific theme for each episode. Additionally, she is a member of the experimental girl band Suczy Napar and the Toruń Improvised Orchestra.
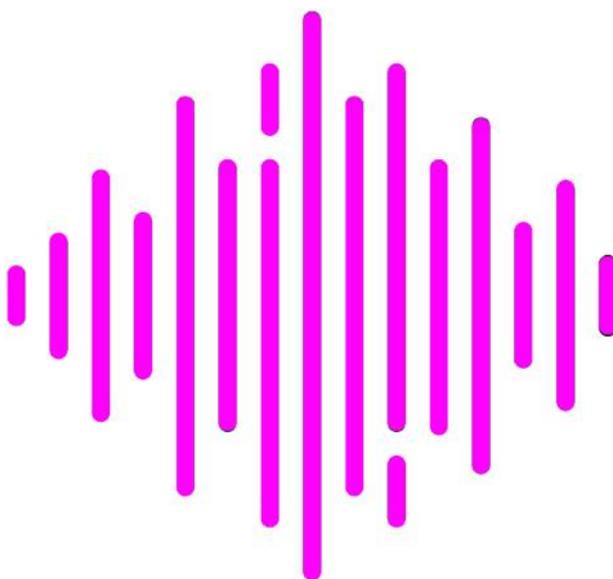
Carolf/Joel Od/India Sadowska

Radio Por-Pol NET
live stream/music broadcast
2023

Courtesy of the artists

A music broadcast created as part of the project, originally intended as a simultaneous live broadcast, which took place on June 20, 2023, at Prisma Estúdio (Lisbon, PT) and operating at the Center for Contemporary Art in Toruń Cafe pARTer (Toruń, PL). It was born from the idea of connecting two countries through local, grassroots, internet radio stations (Radio Kapitał and Rádio Paranóia). It is based on three DJ sets whose main theme is soundscapes, which are currently available under number #043, as part of the regular broadcasts of the Palmiarnia Collective broadcast on Radio Kapitał.

d1g1t0 individual_ collective (Diogo Marques, Ana Gago)/

Agnieszka Bykowska/ Tomasz Dalasiński

Working at the intersections of science, art and technology, wr3ad-1ng d1g1t5 collective has been betting on the potential of digital media as a self-reflexive questioning with regard to haptic wreading processes and the materialities derived from it. In the wake of an experimentalist tradition, wr3ad1ng d1g1t5 collective continues the poetic and aesthetic concerns of creative researchers such as Ana Hatherly, Ernesto Manuel de Melo e Castro, António Aragão and Pedro Barbosa,namely by exploring dialectical tensions between tradition and innovation, such as the ones conveyed by the combination of computational creativity and the revitalisation of intangible heritage. Among the various exhibitions and art

festivals in which they participated are PLUNC 2015, ELO 2017, FOLIO 2017, FILE 2017, ARTeFACTo 2018, ELO 2021 and ELO 2022, POETRISHY#2, and Electronic Literature Collection ELC4.

Diogo Marques (PhD in the Materialities of Literature, University of Coimbra, Portugal) is an author, curator and translator of (cyber) experimental literature, as well as a co-founding member of d1g1t0 individual_collective (wreading-digits.com). As an artistic researcher, he is a member of ILCML, Instituto de Literatura Comparada Margarida Losa, and CODA – Center for Digital Culture and Innovation (Faculty of Arts and Humanities, University of Porto, Portugal).

Ana Gago is an author of experimental literature, and an active member of cyberliterary collective, d1g1t0 (wreading-digits.com). As an artistic researcher, her practice lies at the intersection of the arts, heritage and cultural programming. She is a PhD Candidate at the Research Centre in Science and Technology of the Arts – CITAR (School of Arts, Catholic University of Portugal) and a member of both Engage (National Association for Gallery Education) and ICOM Portugal.

Tomasz Dalasiński is the creator of poetic and prose texts, doctor of humanities in the field of literary studies, and the author of books with poems, including *Sztuka zbierania mgły* (eng. *The art of collecting fog*) which was nominated for the "Orfeusz" award for 2022, and prose books, including: *Przystanek kosmos i 29 innych pieśni o rzeczach i ludziach* (eng. *Cosmos stop and 29 other songs about things and people*) and *Dzień na Ziemi i 29*

nowych pieśni o rzeczach i ludziach (eng. *A Day on Earth and 29 new songs about things and people*). He is a scholarship holder of the Ministry of Culture and National Heritage, the City of Toruń, the Marshal of the Kuyavian-Pomeranian Voivodeship and ZAIKS in the field of culture. He lives in Brzozówka near Toruń.

Agnieszka Bykowska is a sound artist, poet and has published texts that include among others in Wydawnictwo J, Stoner Polski, Strona Czynna. She is currently focused mainly on sound activities, balancing between the genres of ambient, minimal synth, drone, and using mechanisms of layering and stratification. She is inspired by memories, nostalgia and the perception of time. In 2021, she debuted with the album *Automatic Reply* (Jvdasz Iskariota Rec.).

Desvio/Zwrotnica (2023)

"Desvio" is a cyberliterary artwork that delves into the concept of alterity, examining it through the unique lens of transnational perspectives. By exploring the idea of someone who writes as if she were observing herself from another country while simultaneously experiencing the perspective of an outsider looking in, ZWRTONICA aims to challenge conventional notions of identity, culture and belonging. By utilising technology and poetry, the project facilitates an interplay between the wreader's self-perception and the perceptions of others, fostering a deeper understanding of how one's own perspective is shaped by external influences and cultural contexts.

sacras pontes , eternos abraços por dar

twoje smutne miasto znów na chwilę stało się taneczne
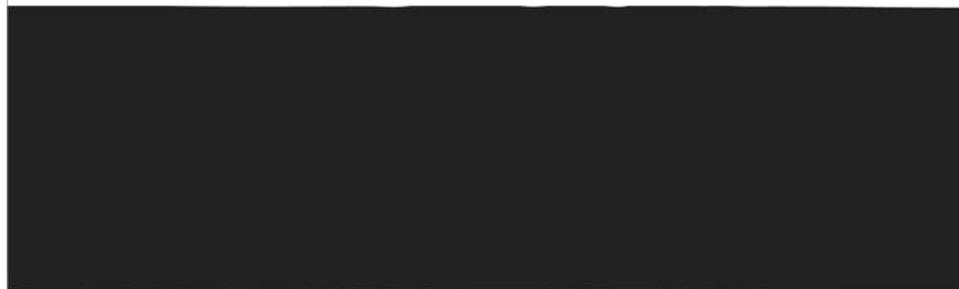
d1g1t0 individual_collective
(Diogo Marques, Ana Gago)/
Agnieszka Bykowska/Tomasz Dalasiński

Desvio/Zwrotnica
2023

Courtesy of the artists
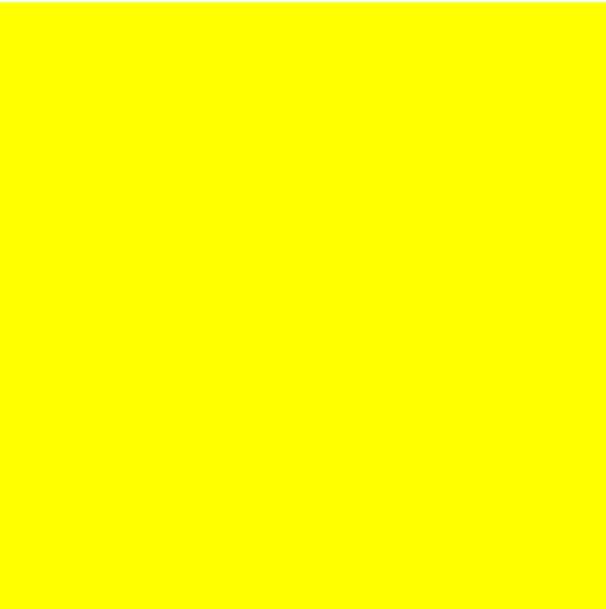
Franek Warzywa

Born in 1998, Franek Warzywa graduated from the Faculty of Media Art at the Academy of Fine Arts in Warsaw. He is a Polish singer, painter, video artist and internet personality, known primarily as the vocalist of the emo-pop duo Franek Warzywa & Młody B____, and the true school rapper group Francio and Robcio.

Franek Warzywa

IDE NA BAZAR
video performance
Documentation: Martynka Dagmarka
2021

Courtesy of the artist

Posted on the YouTube platform, a video documenting the artist's trip to the market to buy carrots.

Hetamoé (Ana Matilde Sousa)

Ana Matilde Sousa is a visual artist and scholar from Lisbon. In 2012, she co-founded the Portuguese zine label Clube do Inferno and began creating manga-inspired "art comics" under the pseudonym Hetamoé. Since then, her works have been featured in alternative comic publishers and other venues both in Portugal and internationally, including Chili Com Carne (Portugal), Kunsthalle Lissabon (Portugal), Le Monde Diplomatique (Portuguese edition), kuš! (Latvia), Ediciones Valientes (Spain), Éditions Trip (Canada), the Anthropocene Curriculum (Germany), the Zupełnie Inny Świat magazine (Poland), Silent Army (Australia) and the Kuti magazine (Finland). In 2020, she co-founded the artist collective MASSACRE.

More recently, she began to experiment with themes related to history, science and technology, and the Anthropocene, in comics like *Asbestos in Ambler* (Anthropocene Curriculum, 2017), the graphic novel *Einstein, Eddington and the Eclipse: Travel Impressions* (Chili Com Carne, 2019) or her contribution to Kuti # 65 "Contemporary Portuguese Comics", *Welcome to the Anthrobscene*, which uses images generated by artificial intelligence.

She presents and publishes articles on Japanese contemporary art and pop culture in classrooms, journals, and conferences. She holds a PhD in Painting from the Faculty of Fine Arts of Lisbon and currently works there as an FCT Junior Researcher and teacher.

Pen plotted paintings (2020–)

A series of works that explores the material and semiotic valences of the pen plotter, an "obsolete" technology consisting of a computer-controlled plotter that prints lines with pens.

Thematically, Hetamoé is focused on the intersections of the concept of "glitch" with cute fantasy aesthetics typical of digital folklore and the internet, as an imaginative resource and recurrent guerrilla tactic in cyberfeminism, reflecting changing configurations and relationships of gender, technology and identity. The compositions are amalgamations of anime characters, hearts, butterflies, doodles, text fragments and glitter. Some images include other types of more tangible "dirty" matter, such as photographs of trash on the street, graffiti on walls or of various painted leftovers collected in her studio, which she digitally incorporated into the compositions that are then plotted. The restricted palette of seven colours allows for endless variations from a primitive chromatic scheme, evoking the brutalist innocence of early computer graphics.
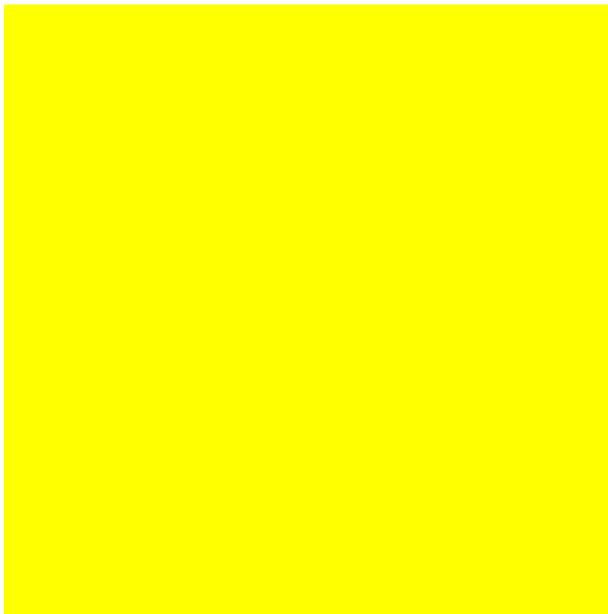
Ana Matilde Sousa (Hetamoé)

Pen plotted paintings
Original technique
2020–
From top left to bottom right:
Academy rose, Pale face, Flower of her age,
Mal des ardents, Pretty guardian, Sleepless

Courtesy of the artist

Kamila Walendykiewicz

Kamila Walendykiewicz was born in 1997 in Warsaw. She is a graduate of the Faculty of Painting at the Academy of Fine Arts in Warsaw, and a scholarship holder at the Academy of Fine Arts in Ljubljana, Slovenia. She is a visual artist working mainly in painting and exploring the concept of post-photography. By creating a virtual representation of nature, she develops a new narrative about the need for change in ecological thinking and observes how the concept of nature changes in different contexts. She explores web content as a constant and integral part of the world we live in. In her artistic practice, she seeks to find a solution to the impending climate catastrophe by creating a planet that exists only on the internet, thus referring to theories of posthumanism and post-internet aesthetics.

POST_PLANETA (2021)

POST_PLANETA's geology consists of images, texts and sounds whose interactivity encourages the viewer to create their own version of the topography of a new, virtual world. A landscape filled to the brim with hyperlinks directing visitors to various Google Earth findings, articles and educational websites. In the background, cosmic, distorted computer-generated sounds mingle with the sounds of whales.

POST_PLANETA's lyricism, however, is combined with a warning: streamlining capitalism technology can also be dangerous if we allow it to fully control our lives, in parallel moving us further and further away from the nature that offers respite and peace.
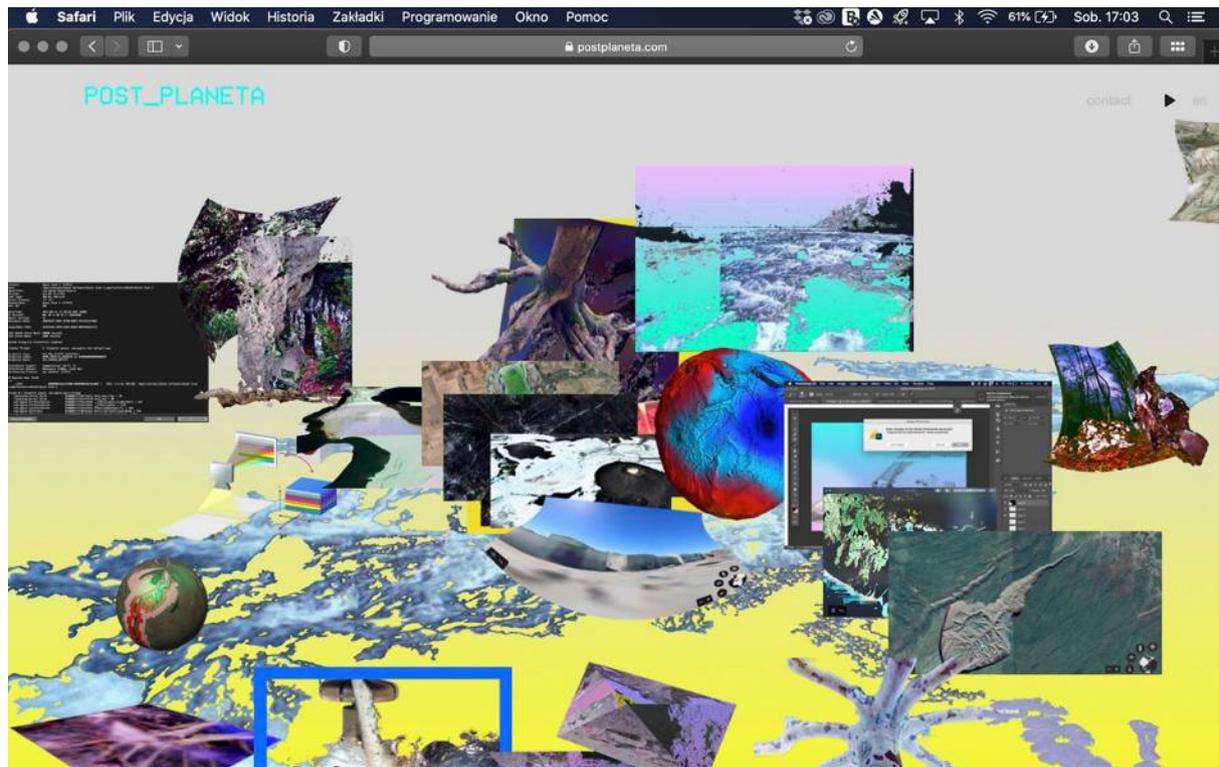
Kamila Walendykiewicz

POSTPLANETA

website (www.postplaneta.com)

2021

Courtesy of the artist

Kamila Walendykiewicz

From the left:
point of no return
oil on canvas, 80 x 80 cm
2022

signal
oil on cancvas, 30 x 30 cm
2022

Courtesy of the artist

Kinga Dobosz

Kinga Dobosz is an intermedia artist who creates sculptures, installations, videos and post-photographs. She is a graduate of the Academy of Fine Arts in Gdańsk in the field of inter-media. Her interests include broadly understood economics and capitalism as the dominant economic system. She is interested in between practices of vernacular cultures and attempts to apply tactics effective in a simple world to a complex, capitalist one social reality.

Every time a new era arrives the score will magically return to zero.

Kinga Dobosz

Anthropocene is over party
video art
2021

Courtesy of the artist

An experimental film that refers to the theme of a television commercial for a product. In this case, high-energy water, which is supposed to provide infinite potential. Together with the cyber shaman, we are transported to an oneiric vision of the future, in which capitalism's characteristic focus on progress and the increase of efficiency rates ultimately lead to the annihilation of our civilisation.

Laura Peixoto

Laura Peixote was born in 1995. She lives and works in Lisbon and holds a BA in Painting by the Faculty of Fine Arts, University of Lisbon (2017). Between many interests, she finds comfort in navigating through diverse techniques and universes, finding herself mainly working through painting, object making and video editing. Inspired by life's idiosyncrasies, she jumps between the weirdest and the everyday affairs, playing with the climatic and anti-climactic – expectations of what is and is not supposed to be, the crystallisation of cultural values and their questioning.

The editing technique used by Laura Peixoto is reminiscent of the amateur-made and shared video compilations associated primarily with the YouTube platform. In her videos, the artist uses found elements of pop culture close to her in order to create original stories about her culture, the people she observes and the emotions that drive them, through *deep remixability* (Manovich, L., p. 46).

Bibliography:

L. Manovich, *Software Takes Command: Extending the Language of New Media*, New York: Bloomsbury Academic 2013, p. 46.
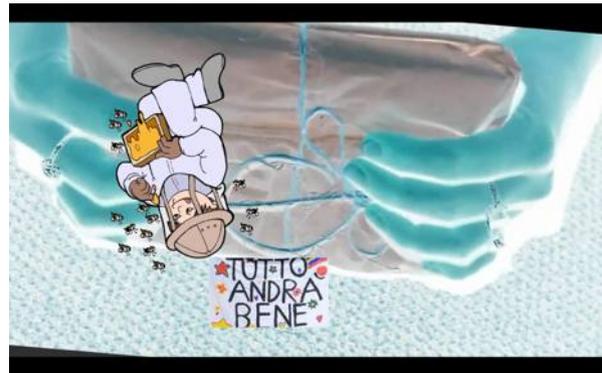
Laura Peixoto

In the left column (top to bottom):
About Emotion
video art
2022

maxx
video art
2020

Courtesy of the artist

In the right column (top to bottom):
congrats
video art
2020

NEW VIDEO!!! 2020 QUARENTINE 1ST COMPILATION REVEALED
video art
2022

Madalena Anjos

Madalena Anjos was born in 1995. She lives and works in Lisbon and holds a bachelor's degree in Communication Design and a master's degree in Painting from the Faculty of Fine Arts of Lisbon. In 2018, she studied for a semester in the Visual Communication department at the Weissensee Kunsthöchschule Berlin.

She has participated in collective exhibitions such as: "First edition Paula Rego Prize" – Casa das Histórias Paula Rego; "Coexistência e Negociação" – Condes de Castro Guimarães Museum, Cascais; "Como bebe uma flor", Jardim das Amoreiras; "Twilight Zone", Lx Lapa; "Stayin Alive", Duplex Air; "a Loja", Drogaria (Porto); "Spike to Spica", Monumental Gallery, Lisbon and "Pedra Papel ou Tesoura", Alfaia Association, Loulé.

Madalena held the following individual exhibitions: "Work Pop-up", Campolide; "Um abraço que nos derruba", Faculty of Fine Arts of Lisbon and "Ténia's Dream", Mala Gallery. She has participated on the artistic residencies, including: "Rés-Vés", Castelo de Vide; "MArt, Escola de Arte", Lisbon; "Chapim", Herdade da Tojeira, Castelo Branco.

Madalena Anjos

Psychogeographic studio
collage and mixed media on paper, various sizes
2023

Courtesy of the artist

Natalia Dopkoska

Natalia Dopkoska comes from the medium-sized town of Ostrołęka. She finished her adventure with the Academy of Fine Arts in Gdańsk at Elbląska Market, where in 2019 she held a showcase of her graduation paintings. Together with Piotr Szymon Mańczak and Piotr Tadeusz Mosur she opened UL Gallery in Gdańsk. As she likes to say about herself: she has only ever won one national art competition entitled "My Journey with John Paul II", because she drew herself with the Pope.

In her free time, she likes to paint, cut things out of paper, stick self-adhesive letters and use Instagram.

Natalia Dopkoska

Wszystko będzie dobrze (element of the series)
oil paintings/posters
2017–2023

Courtesy of the artist

Wszystko będzie dobrze [_Everything Will Be All Right_] (2017–2023), is an artwork that combines three different media created over three years. It began in 2017 when Dopkoska created a series of 11 oil paintings reinterpreting the packaging of a Ukrainian toilet paper brand known for its slogan "Everything will be all right". Digitalised and shared on the artist's Instagram profile in October 2020, it became a humorous, yet bitter form of support directed at the post's audience. A year after the outbreak of war in Ukraine, a series of paintings, reprinted and hung in a makeshift fashion on the red walls of the Kandinsky Corridor at Fabrica Braço de Prata, served as a bitter observation of the extent to which other European countries can and do help the Ukrainian people.

Natalia Dopkoska

Dziękuję/Obrigada
animation
2023

Courtesy of the artist

An animation created during the Erasmus+ programme in Portugal. By painting the logos around me, I wanted to thank the opportunity to do a student exchange. Through this opportunity, I was able to get to know the country thanks to which Poland has a chain of Biedronka (Jeronimo Martins) shops. In the animation, we can see the logos of various Portuguese and Polish discount stores (which made my everyday life abroad easier), the logos of the universities where I studied, the logo of the Polish National Health Fund (NFZ), toasted bread or toothpaste.

Pedro Ferreira

Pedro Ferreira is a multimedia artist based in Berlin, Germany, born in 1988 in Oliveira de Azeméis, Portugal. In 2007, he studied Multimedia at the Polytechnic Institute of Bragança, Portugal, and, in 2011, pursued a master's degree in Multimedia Arts and Culture at the University of Porto, Portugal, with a focus on experimental film and live cinema performance. In 2018, he enrolled in a PhD programme in Fine Arts, Multimedia Art, at the University of Lisbon, Portugal, where he researched post-digital aesthetics in audiovisual art and addressed the effects of digital technologies in daily life, society and on the environment. In 2023, he earned his PhD with honours distinction and his thesis *Audiovisual Disruption: Post-Digital Aesthetics in Contemporary Audiovisual Arts* was published in 2024. In his artistic research he engages in artistic experimentation with media materiality and critique on the consequences of computational technologies. His works range from experimental music, sound art, generative art, audiovisual performance, experimental film, documentary, video art and net art.
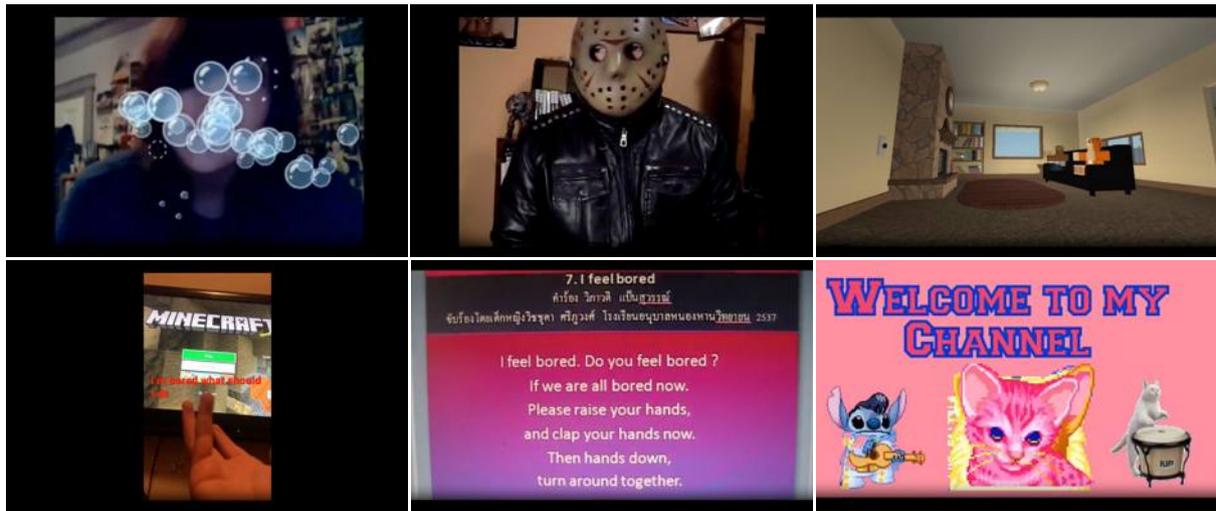
Pedro Ferreira

Things I Do When I'm Bored
experimental film/browser-based
2017–2023

Courtesy of the artist

The work is a video compilation, and a browser-based work created using fragments of found footage from the so-called "end of the internet", borrowed from YouTube vlogs. The leitmotif in this case is a sense of boredom, many times manifested in vlogs by the – often juvenile – protagonists of the video. *THINGS I DO WHEN I'M BORED* refers to the attitude of disillusionment with social media, which has been raised in recent years and which activates in young users an unhealthy need to be watched, shared and liked and, on the other hand, usually offers only a temporary form of barely constructive entertainment.
Browser-based work: https://pedroferreira.net/thingsidowhenimbored

Pedro Ferreira

SCROLLING AROUND
interactive art/public art
2022

Courtesy of the artist

A performance in which the artist moves through the streets of Berlin with a specially constructed object similar to a scrollbar, with repeated motion of scrolling, interacting with it in various ways. The performance is a form of critique of the meticulously devised tactics of addiction by design on digital platforms that conditions users to mindlessly scrolling through seemingly attractive content for hours on end, while simultaneously separating themselves from the physical world.

Pedro Tinôco

Pedro Tinôco was born in 1998 in Porto. He graduated in Painting from the Faculty of Fine Arts of the University of Lisbon, having carried out the Erasmus programme at the École Nationale Supérieure d'Art Paris – Cergy in 2021. In 2023, Pedro was awarded a Calouste Gulbenkian Foundation Scholarship for the master's programme at LUCA school of Arts in Brussels.

Pedro Tinôco

Untitled
scribing materials on paper, various sizes
2022

Courtesy of the artist

Piotr Kopik

Piotr Kopik is a multimedia artist, graduate of the Academy of Fine Arts in Warsaw, and the co-founder of the szu szu group. He has exhibited at the Centre for Contemporary Art in Warsaw, BWA Wrocław, Art Museum in Łódź, BWA Zielona Góra, Wyspa Institute of Art in Gdańsk, Kunsthaus Dresden, Bat-Yam International Biennale of Landscape Urbanism, rotor in Graz, Lokal_30 Gallery in Warsaw, Harbor Gallery in Boston, FILE in Sao Paulo and Planete+ Doc Film Festival. He runs the 3D and Virtual Events Studio I at the Academy of Fine Arts in Warsaw.

Piotr Kopik

The Chatter
chatbot
2023

Courtesy of the artist

Experimental conversational chatbot programmed to make it impossible to sustain a conversation.
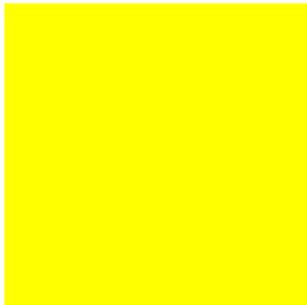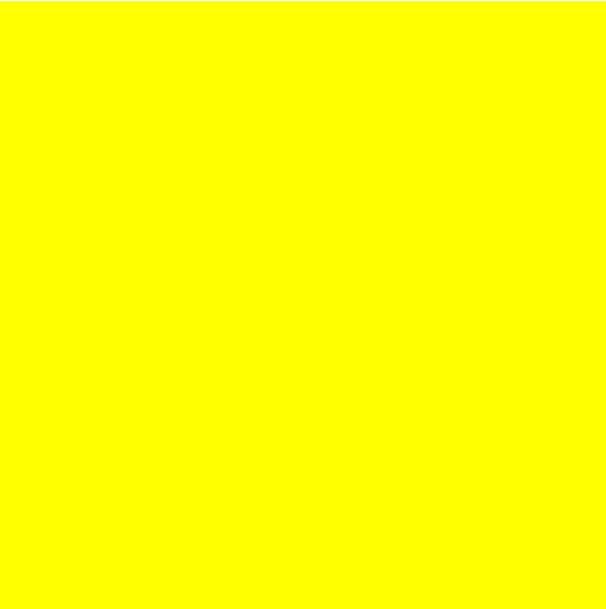
Piotr Puldzian Płucienniczak

Piotr Puldzian Płucienniczak is an artist and sociologist working at the Artistic Research Department of Academy of Fine Arts in Warsaw. He runs Dar Dobryszyc publishing house that focuses on local experimental literature.
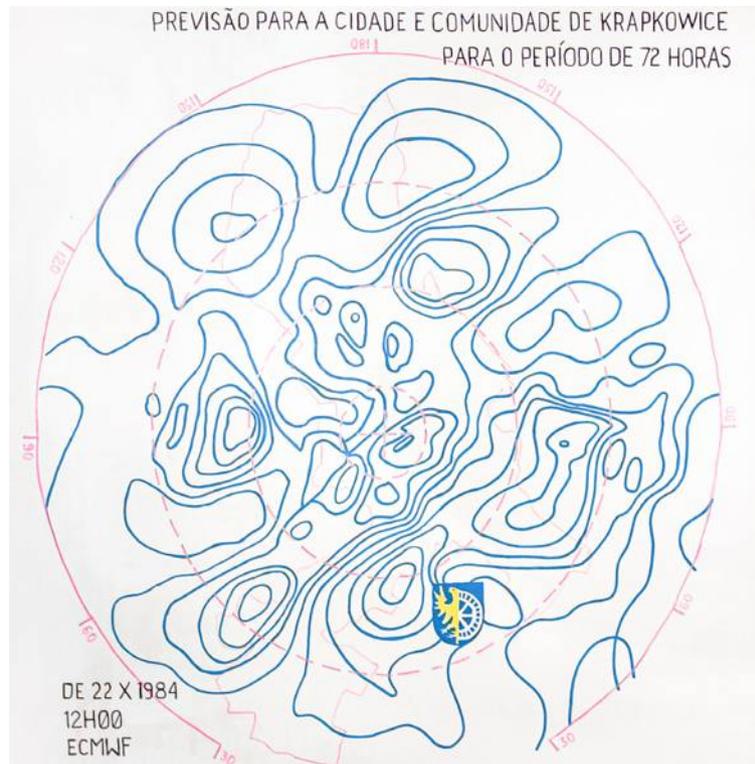
Piotr Puldzian Płucienniczak

Portuguese weather forecast for the city and municipality of Krapkowice
acrylic on canvas, 100 x 100 cm
2023

Courtesy of the artist

It is difficult to be a meteorologist in one country. Hence, international weather exchanges have been organised since the mid-19th century. Over time, these led to the creation of organisations such as the World Meteorological Organisation or the European Centre for Medium-Range Weather Forecast, which are mentioned in the painting. There is a precedent for supranational climate agreements. The Portuguese can look after us and we can look after them. This is good to know.

Sebol Bejsbol/ Julia Tymańska

Sebol Bejsbol a graduate of the Faculty of Painting of the Academy of Fine Arts in Gdańsk; employee of the Promotion Office at the same Academy. He is the originator and implementer of the first live battle of illustrators in Poland, "Battle. asp" (2023–2024), and the initiator of the Minecraft ASP server in Gdańsk. He is the co-organiser of the "UnderGdańsk" art festival (2022–2023), promoting independent artistic initiatives; founder and curator of the Pawlacz Gallery, operating as part of the Gdańsk Open Workshops (2020–2023); four-time winner of the Cultural Scholarship of the City of Gdańsk (2020–2024), including: for creating the platform game "Danzig Adventures" (2021). Fascinated by artificial intelligence, he actively uses it in his artistic work.

Julia Tymańska is an interdisciplinary artist that often goes beyond the framework of… (insert the missing word). She is the curator and founder of the Pawlacz Gallery, spy.
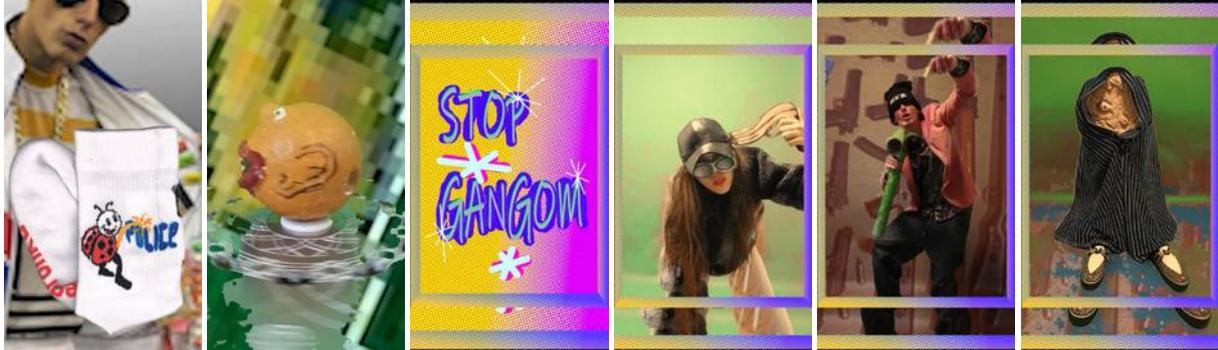
Sebol Bejsbol/Julia Tymańska

From the series: *Short rap forms*
video
2023

Courtesy of the artists

Short rap forms are short audiovisual works in a rap style. In the rap world, they play a role analogous to sketches in visual arts. Like sketches, they can be autonomous, stand-alone works, but they also serve as impressions or creative notes, allowing artists to quickly capture ideas and emotions.

Sebol Bejsbol uses the short rap form in its full glory. Although it is unknown whether anyone has introduced this term before, Sebol Bejsbol feels that he is the first to come up with the idea of using the name "short form rap". Some of his works use scenographical elements of the @bananowafontanna (Julia Tymańska), and the artist herself even took part in one of them.

The short rap form combines the conciseness of the message with musical expression, constituting a unique tool of artistic expression within the contemporary music scene. It allows creators to experiment with form and content without creating longer compositions, promoting innovation and freshness in the genre.
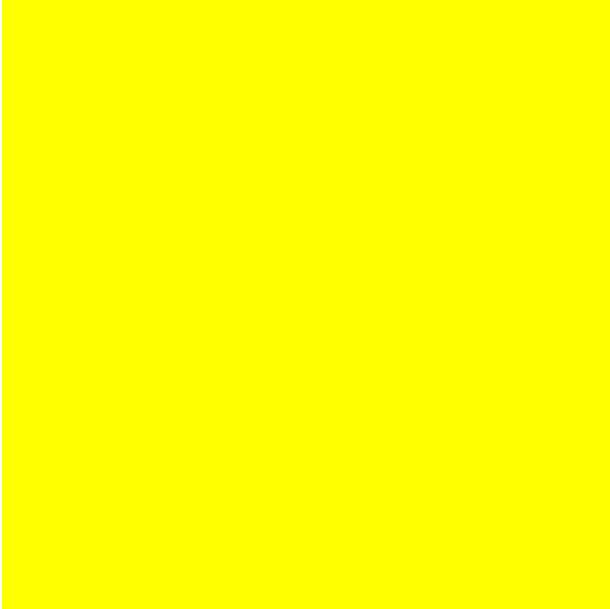
TheMontaże
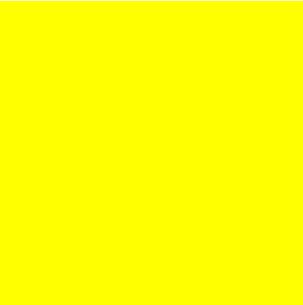
TheMontaże is a channel operating on YouTube and Instagram. It was created at the end of 2018 with the aim of creating a place where the contexts of found materials can be changed, and creative expression can be achieved through them. In 2020, someone outside the closed group discovered TheMontaże and sent them out into the world. TheMontaże then became a place where anything is posted: for people, about people, with people in mind.
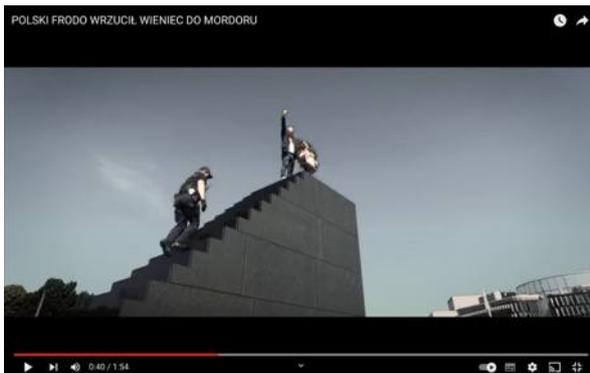
TheMontaże

In the left column (top to bottom):
Górale torturują Polaków
video
2021

POLSKI FRODO WRZUCIŁ WIE-NIEC DO MORDORU
video
2021

Courtesy of the artists

In the right column (top to bottom):

KONKURS CHOPINOWSKI W SIŁOWANIU NA RĘKĘ
video
2022

Uzdrowienie od filozofii
video
2022
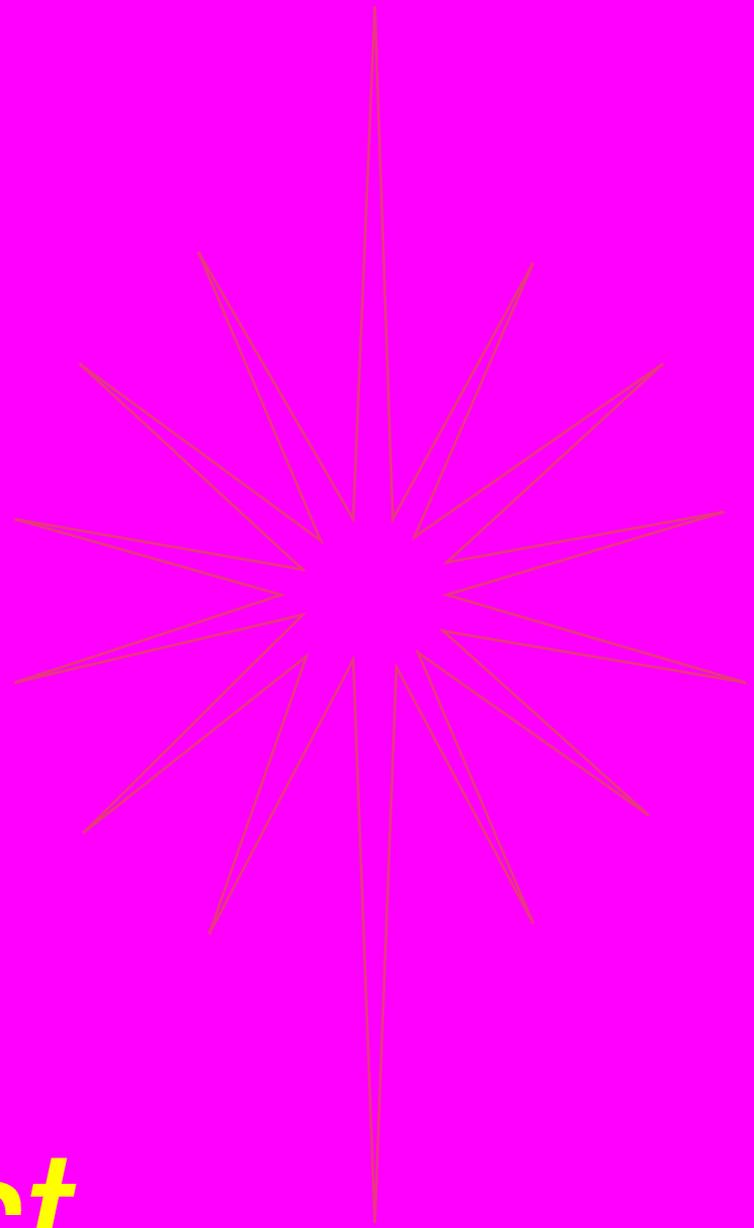
project

documentation

# Kliki i obroty

www.klikiiobroty.eu

Saco Azul

Photographs: João Pádua

Goyki 3 Art Incubator

Photographs: Konrad Kulczyński
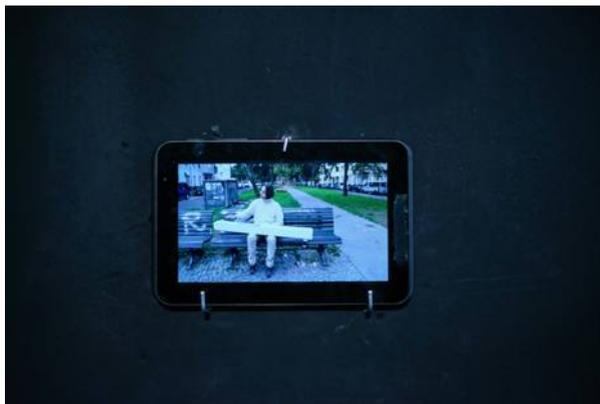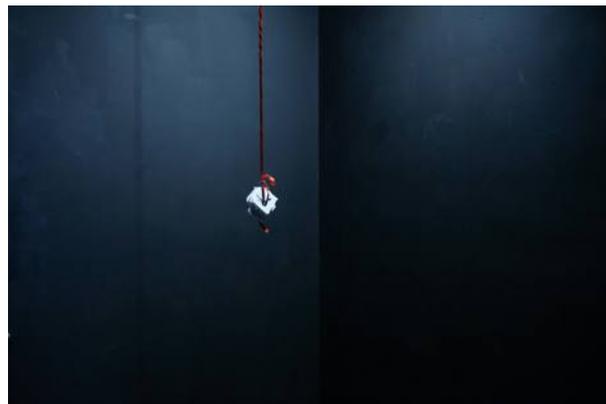
Galeria UI

Photographs: Katarzyna Oliwia Serkowska

Galeria BO

Photograph: Magda Górska

Bęc Zmiana Bookstore

Photograph: Magda Górska
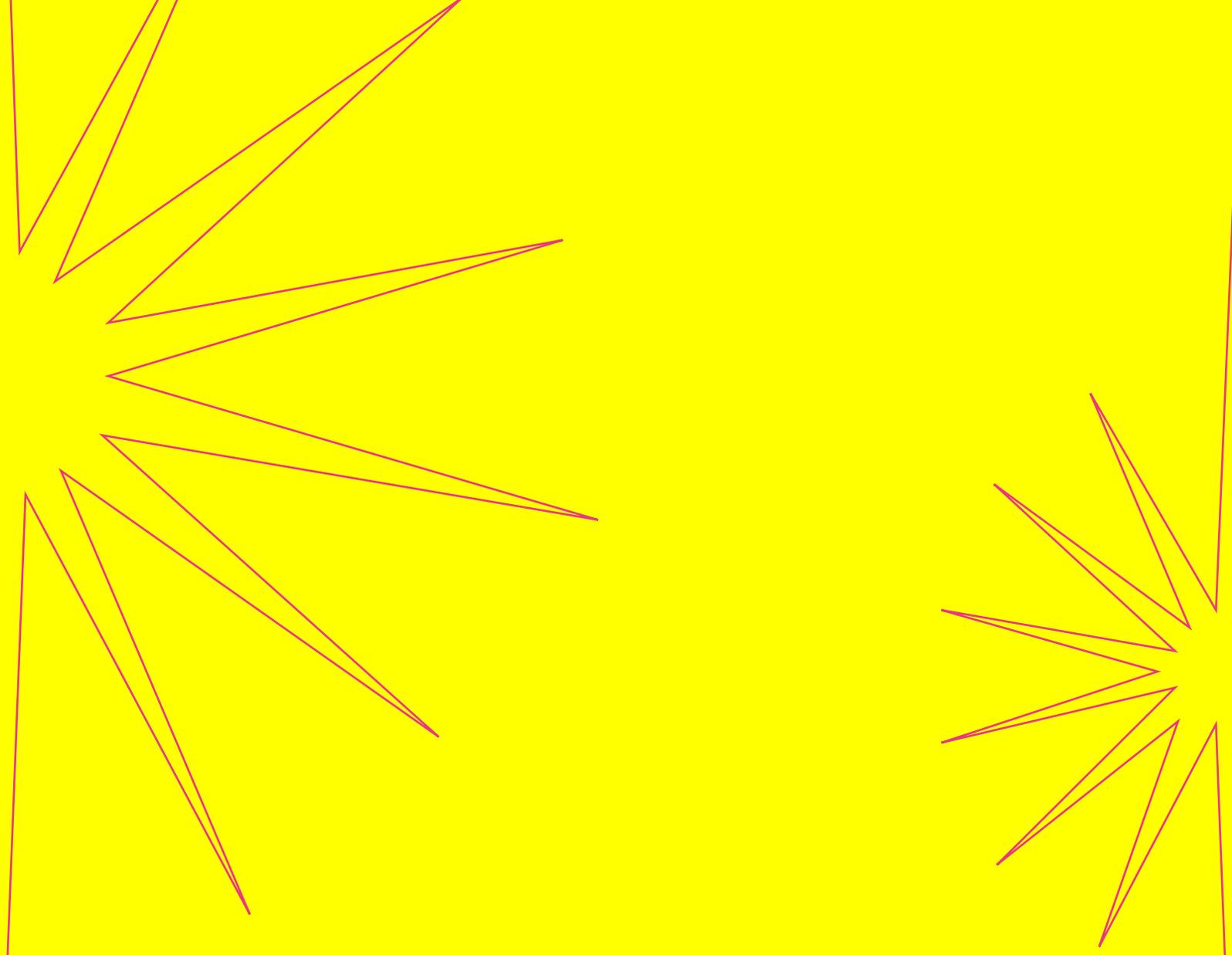
Accompanying
event
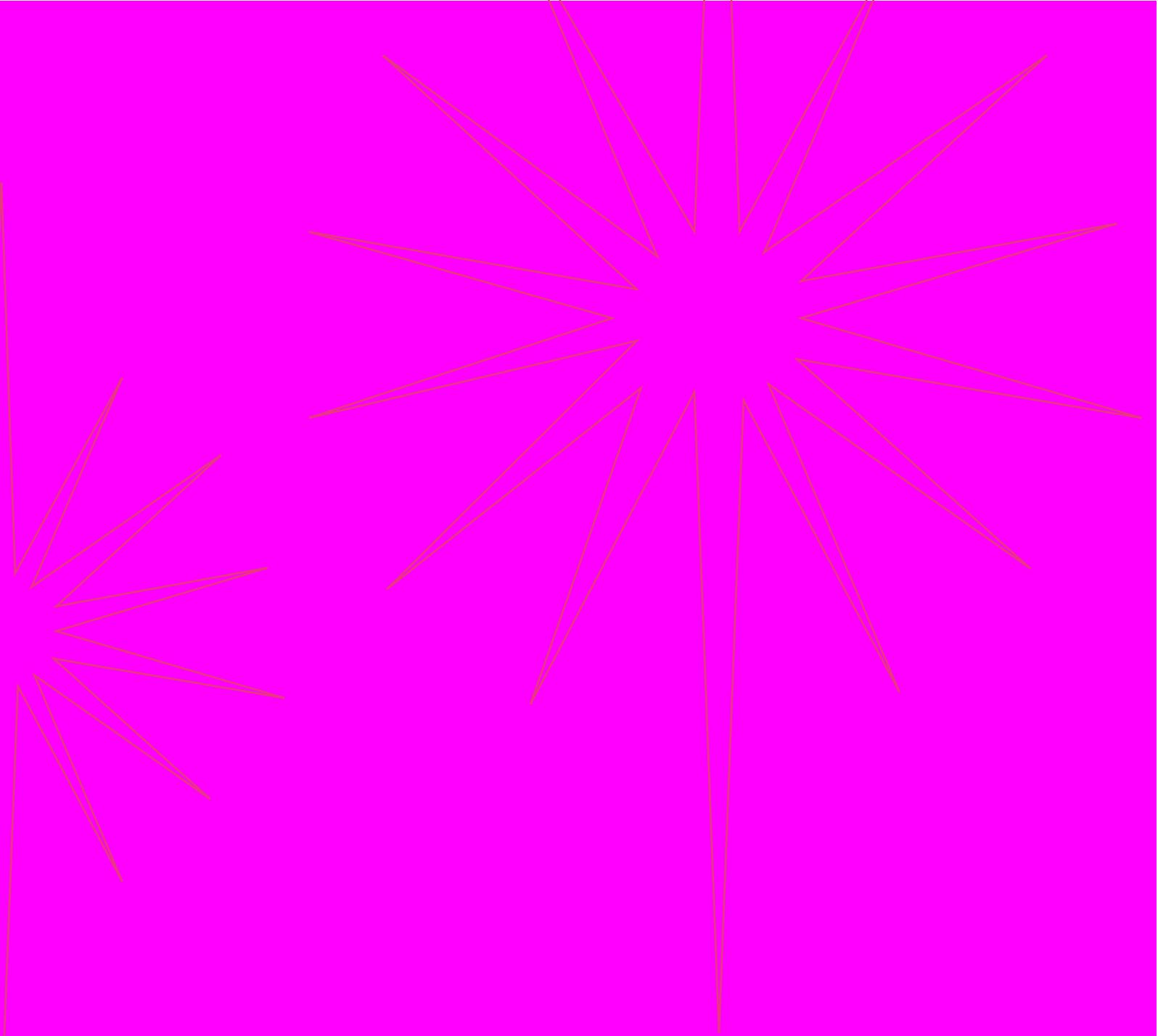
Colloquium

Contemporary Net Art Colloquium

Focused on some of the most recent examples of works and ideas coming from the two opposite sides of the European continent, the Contemporary Net Art Colloquium aimed at provoking a broader reflection on generational and technological shifts inscribed in the notion of net art, the emergence of the so-called vernacular digital cultures and the formulation of new concepts in literary theory, artivism and curatorship. The initiative was intended as a critical follow-up to a series of exhibitions organised in Poland and Portugal throughout June 2023. As such, it combined a roundtable with artists and curators involved in the project, with a series of presentations from the leading specialists in the field.

Ryszard W. Kluszczyński

A Work of Art in the Age of Network Presentation. Preliminary Issues

I describe the processes that are taking place in the world of contemporary artistic creation thanks to the emergence and spread of the internet as an environment for artistic practices, in particular, for the presentation of art. I look at the changes concerning the status of a work of art, as well as making it available to the public. I reflect on the consequences of the contemporary networking of art – in the context of the transformations of art that are unfolding as a result of ever-changing and developing technologies and media, and concerning the concepts of Walter Benjamin (the work of art in the mechanical age) and Bill Nichols (the work of culture in the age of cybernetic systems). Three visions of the artwork emerging from the processes analysed here are discussed: the mediated, the replaced and the multiplied artwork. The COVID-19 pandemic provides an additional context for consideration.

Piotr Kopik

Virtual Then, Now, There, and Here

The presentation will address questions related to corporeality, identification and communication in the context of virtual realities, or the internet as such. I will reflect on how an individual artistic expression is possible within the aesthetic and systematic limitations imposed by the broadly available platforms; to what extent the creation and the use of an avatar can be an action that – apart from concretising very specific fantasies or aesthetical preferences – may actually evoke a physical presence; finally, whether the internet artistic practice or any artistic practice that relies on networking, can have an ontological potential. I will try to approach these questions in relation to my own artworks, experiences and didactic practice.

Ana Matilde Sousa

Beyond the Brush: Exploring the Intersection of Art and Technology in Hetamoé's Pen-Plotted Paintings

This talk will present my series of paintings produced with a pen plotter, a supposedly obsolete technology currently experiencing a resurgence in DIY and maker culture. While the pen plotter was originally designed to print simple lines, I have developed a custom methodology, refined through months of experimentation, that allows me to produce intricate digital images on paper using archival ink pens. By using such a procedure, I challenge the limits of this technological medium to create large patches of colour that appear flat but actually contain hundreds of metres of lines drawn over dozens of hours. The restricted palette of seven colours allows for endless variations, evoking the brutalist innocence of early computer graphics. These pen-plotted paintings, whose thematic compositions revolve around glitches, digital folklore and internet visuals – and, in some cases, "dirty matters" such as photographs of trash on the street, graffiti on walls or painted leftovers from my studio – explore the intersections of the pictorial and graphic, analogue and digital, and interweave various cultural, temporal and aesthetic scales. Drawing with a robotic arm demands a transformative cyborgian

partnership between the machine and the human "in charge", which may expand the meanings of the image and its emotional reach.

Bruno Ministro

HIT and Repeat: Humans in the Loop and the Loop in the Machine

Throughout history, the tech industry has depended on the hard work of countless lower-skilled and lower-paid workers to build its computer empires. This includes punch-card operators from the 1950s to modern-day OpenAI contractors who annotate and train large volumes of data. Online gig work through crowdsourcing platforms like Amazon Mechanical Turk (AMT) became even more prevalent with new forms of digital labour brought in the last decade. On Amazon's platform, an anonymous crowd of workers performs HITs (Human Intelligence Tasks), and they do it for pennies. HITs are micro-tasks that cannot be completed automatically by a machine. Tech companies – no matter how AI-based they say they are – still need humans to complete repetitive tasks that machines cannot perform on their own. These people are the "humans in the loop", as they call them in computer science and machine learning. Over the past few years, many artistic and literary works have ironically engaged with AMT to reveal the unsettling truth of digital labour in the globalised post-industrial society. In my talk, I will explore two works that parasite Amazon's platform: Piotr Marecki's book *Wiersze za Sto Dolarów* (2017) and my own digital piece, "Progress in Work" (2021).

Domenico Quaranta

Digital Kitsch: Art and Kitsch in the Information Milieu

How has the advent and widespread use of digital media affected our understanding of kitsch and its relationship to art? In this talk, the author introduces the term "digital kitsch" not to describe specific, conventionally "kitschy" manifestations of digital aesthetics, but to identify the default mode for all creative endeavours with digital media: tools that have made visual literacy accessible to all, turning the strategies and lan-

guages of the avant-garde banal and commonplace; tools that elicit technophilia, rather than critical, informed use, and whose built-in limitations and ideologies condition their creative outputs. Digital kitsch takes in everything from amateur internet creations to professional content, from low-res "poor images" to mainstream media productions, from pixel graphics to hi-res CGI, and more. By no means exhaustive, this paper looks at how art might exist in this arena, in relation to digital kitsch, but without identifying it.

Rafaela Nunes

Hybridising Painting: Constructing Virtual Spaces from Physical Paintings with Stable Diffusion

The concept of transmedia art has been gaining momentum as artists are appropriating for themselves an increasing range of different media which work together to create fictional narratives. Artificial intelligence models, particularly the most recent Stable Diffusion models, have also been under the spotlight as a problematic new challenge for the role of the visual artist. However, the potential of painting within transmedia physical and simultaneously virtual modes of creation has yet to be further explored, as well as applications of AI within an artist's existing work as part of his or her practice. This project aims to find, using AI models in a transmedia practice, how the pictorial and the virtual can be intersected in a poetics of remixing and hybridisation, challenging both media's ontological status as systems of representation and simulation of spaces. In this paper, through my own practice-based research, I will examine how the artist's own physical, two-dimensional painting can be deconstructed and expanded into the digital world, while creating parallels with other contemporary artists working in the same field. This way, as it will be studied, painting's significance can be further explored, namely by transforming and broadening it through different iterations with the aid of AI supervised generation. The objective is to study the analytical and poetic relationships between pictorial and virtual spaces. This will help us analyse the complementary relation of painted and digital artefacts, while exploring material and virtual image production to reflect on how we construct our reality through digital processes.

Lorena Ramos

The Use of GIFs as an Artistic Support

The visual arts have been linked to video and cinema for decades, and are increasingly linked to the internet, which serves both as a theme and as a means of production, discussion and distribution of artistic works. Currently, more than ever, formats mix, and art and entertainment often meet and overlap. In this context, it is intriguing to think why GIFs, which have already existed for three decades, are still so little studied in academia. They are, it is true, still very connected to pop culture and humour. However, they are also an interesting support for artistic creation that allows for exploring the terrain between static image and video, in addition to configuring an extremely current support. This presentation will discuss the use of this support, its inherent properties from an artistic and conceptual point of view and its relationship to appropriation and interdisciplinarity, as well as bring examples of artists that have used GIFs as a means for their production.

Pedro Alves da Veiga

Contemporary Net Art in "The Everywhere Museum of Everything"

"The Everywhere Museum of Everything" is a research and action proposal, founded on the array of aestheticised online content, rooted in a culture of consumerism, black-boxed mobile applications and social networks. It posits the curation of this wealth of digital information, and the elevation of contemporary net art above the global noise floor, in order to create a meaningful territory of online culture, art and knowledge creation. Individual and networked experiences in the digital realm are very often short-lived and inconsequential, and the new rise of AI-assisted images and media is further testament to this reality. It also signals a new step in the continuous trend of remixing, through training datasets, but despite the hype and success it seems to enjoy, the majority of this production has already become irrelevant and forgotten. However, it could still be accessed through an augmented view of the world, as digital media is frequently anchored to locations through geotagging, hash-tagging or referencing. What this

collection lacks in systematisation and classification, it compensates through multiple possibilities of exploration for artists, curators, historians and scholars.

Patricia Gouveia

Cyberfeminism, Net.Art and the Spread of Digital Culture

"Between Poets" (2000), "Jizo" (2001) and "Soong Sisters" (2001) were three web-based projects I created more than 20 years ago that took advantage of specific web browser and hypertext markup language (html) technical characteristics and possibilities at the beginning of this millennium. These works were commissioned by a gallery, a digital magazine, a cultural centre and, finally, one of them was bought by a Spanish museum. At that time, I was using these technologies, and the spread of the internet, in my artistic practice to be able to work in an international context. I used Adobe Photoshop for image creation, Macromedia (now Adobe) Dreamweaver web software for programming and Adobe flash to do the animations. Today, these works are not available due to software obsolescence. Currently, I am using a methodology that mixes media archaeology and autoethnography to let some traces of this work for future generations. For this purpose, I will examine the literary texts I used to build these works, emphasising a historical perspective, with the aim to show how net.art and cyberfeminism shaped my artistic practice 20 years ago in a peripheral country such as Portugal.

Piotr Puldzian Płucienniczak

Remnants of the Future: Artifacts of Polish Cyberpoetry as Seen Today

Cyberpoetry was a short-lived, yet curious phenomena of Polish literature in the 2010s. Works of cyberpoets of Perfokarta and Rozdzielczość Chleba art collectives appeared both in schoolbooks and PhD theses. Using software as a medium, these artists managed to transcend borders of literature and venture into the visual arts. During my talk I'll offer a guided tour of works of cyberpoets created in height of their creativity. Can we understand artifacts of this lost civilisation? Are they even understandable from our contemporary perspective?

Acknowledgements

Reaching the final stage of the POR-POL NET project is a moment both long-awaited and somewhat unreal as – despite all kinds of setbacks and difficulties we encountered – it turned out to be first and foremost a practical exercise in making connections. What began as a casual email exchange between once fellow undergrad students (itself likely an effect of mere, post-pandemic nostalgia), quickly sprouted into a rich network of artists and researchers curious about the shifts that the internet brought into the fields of visual arts and literature. Without the enthusiasm and knowledge of everyone involved, the idea of setting a constellation of exhibitions and accompanying events that served as a point of departure for a scholarly discussion and this publication, would have most likely remained just a vague plan kept for an eternal "later".

In the first place, we would like to express our gratitude to the artists and authors who contributed to the project. Your time, trust and skills – as well as good humour and immense patience – were a major motivation, especially when it was necessary to move from plan A to plan D, or when we were just about to declare something as impossible to pull out. Here, we would like to pass special thanks to Piotr Kopik for unwearied creativity with setting up the online exhibition and, as the production work often goes unnoticed, to Daniel Pires and Filipe Confraria at Saco Azul, and Piotr Mańczak and Natalia Dopkowska at Galeria UL, whose experience and engagement helped to make for extraordinary exhibitions – even when it took pacifying (and then regularly refreshing) a rusty PC or busting up a wall.

The organisation of the colloquium would not be possible without the trust and kind guidance of Prof. Claudia Fischer and Amândio Reis, as well as the patient support of Joana Azinheira at the CEComp's secretary. We are also thankful to Bruno Leal for having accepted to chair one of the panels and to Sandra Camacho for voluntarily helping out on the day of the event. Finally, we would like to thank Marzia D'Amico for being not only an excellent moderator by daylight and a resourceful event manager by night, but above anything else a kind and understanding friend; and to Olga Grybowicz, who pulled out the widely-praised posters and book of abstracts, and remained a friend despite battles fought with a printing studio and moments of communication (if not mental) breakdown.

A personal thank you goes also to Gabriel, Dário and Facundo for having been the most caring and open home – also to all the nomads that needed a shelter when

working on the project: Carmen who proofread ideas, Margarida who proofread the texts and Sarah, a skilled and determined dancer, even when caught dismantling an exhibition on top of a ladder.

Supporting Institutions:

Main Media Partner:

bęc zmiana

Media Partners:

Galleries: