

AI.MAGINATION

Pablo Gobira, Ana Luiza Pedrosa Camilo, Gabriel Augusto Duarte Rios, Vinicius Viana Rafael

UEMG

Belo Horizonte, Brazil

pablo.gobira@uemg.br; analuizapedrosacamilo@gmail.com; bielagusto2742@gmail.com; viniciusvianaacademic@gmail.com

Abstract

In this article we present the metaverse blockchain exhibition AI.MAGINATION: appropriations, hybridism, and realities (2023). An accomplishment anchored in the research of the group Laboratório de Poéticas Fronteiriças (LabFront) that combines the arts, sciences, and technologies. This work intends to present the poetic participation of the curator in the design exhibition actions carried out within AI.MAGINATION. In addition, the exhibition applies pioneering techniques of the twentieth-century avant-garde, such as appropriation. Elevating it to the context of infocognotechnologies, demonstrating how applications of this context were made in creating Visual Identity, 3D modeling in blockchain metaverse environment, and designing exhibition compositions.

Keywords

AI.MAGINATION exhibition; Artificial Intelligence; Appropriation; Digital Art; Curatorship; Blockchain Metaverse.

Introduction

In this article, we expose technical and conceptual constraints of the exhibition in blockchain metaverse: "AI.MAGINATION: appropriations, hybridism, and realities" (2023). The subjects that will be addressed in this work have relations with the research developed in the Laboratório de Poéticas Fronteiriças (LabFront), a group of research, development, and innovation (UEMG/CNPq), whose thread of the discussions and productions put and seen on the site (<http://labfront.weebly.com>) cover the arts, sciences, and technologies.

We will divide this article into three sections to achieve our goal, including this introduction. First, we will develop the complexity of developing a digital exhibition and its curatorship as poetic. In the second section, we will address the concept of appropriation and the influence of this concept in the context of digital art. In the third, we will present the uses of infocognotechnologies in the post-digital context and the design of digital works. Finally, we will address the creation of the exhibition AI.MAGINATION, its characteristics, and possibilities certainly influenced the design and the final result of the exhibition space.

Poetics in the Digital Curatorship

A possible statement about digital arts is that it has a deep connection with interdisciplinarity due to the various production possibilities within this umbrella term. According to Pablo Gobira, when dealing with digital arts, we must understand its broad, productive, and poetic reach, which goes beyond the boundaries between fields of knowledge. [1] Another conception that describes its intersection with technologies is that "the work of art is created from its relationship with science and technology after the emergence of the computer in the 20th century". [2] Expanding a little more, it is worth mentioning that from the research by Lucia Santaella on the media and the pluralism of the arts that with the modern computer - "media of all media, swallower, and transmuted of all other media" - branches appear in the field of arts. [3] In this sense, digital arts begin to create subcategories such as web art, net art, cyberart, digital art, collaborative art, telepresence, robotic art, augmented reality, virtual reality, software art, database aesthetics, mobile art, bio art, nano art, neuro art, etc. [3]

Thus, another field of study that inevitably walks alongside the digital arts is curatorial studies, which undergo transmutations in their state through the insertion and intersection between art, science, and technologies, in which "all artistic fields can, in one way or another, according to the need of the poetics of the work in the artist's action, make use of digital technologies" in this field dedication in research on curatorship and digital or curatorship of digital arts. [4] Specific needs differentiate the curatorship of digital arts from the curatorship of traditional arts, which we characterize as the arts that are not closely linked to the alternatives of digital technologies. From the mid-twentieth century, the figure of the curator emerged within the field of arts, and from the 1970s-1990s, the curators began to gain strength in this system, increasingly defining the nature and the direction of taste in contemporary art. [5] At this time, with the poetic insurgencies imposed by the avant-gardes of the twentieth century, especially after the second half of the century, the role of the curator begins to change, especially when we deal with the context of digital arts and its multiple modes of exposure. Consequently, curatorship becomes a fundamental activity in the art system.

Because of this, "the curatorial field can and needs to make use of digital technologies to provide discussions, exhibitions, critiques, etc., that cover the needs imposed by them". [1] For this utilization to be done in a way that contemplates the poetic and technological specificity of the works, broad research and theoretical knowledge are necessary by the curatorship about the poetics exercised by the works and the techniques that permeate them, as well as the technologies available for display. A relationship that imposes on the curatorial activity the relationship with various materialities of an exhibition. Thus, the curator is "composing poetically in space, whether physical or not, to reveal a complex arrangement". [1] This arrangement directly relates to creative choices by the curator, who models how the works will be experienced. In addition to the fact that when we deal with some of the works of digital art, "there is a constant process of recreating the work, something that the artist (or the curator) undergoes when changing hardware or software, or even improving the code". [4] Generating more and more situations in which the curator needs to make poetic and compositional decisions from the exhibition of a digital work of art.

Appropriation and Art

Appropriation are embraced in the exhibition AI.MAGINATION through the collaborative use of Artificial Intelligence. Not only do the works in the exhibition discuss the perspective of the artistic operation with Artificial Intelligence tools, but also in its construction process. The technical team of this conceptual exhibition appropriated the results generated through the commands described for the Artificial Intelligence tools. By bringing the discussion of appropriation to substantiate this work, we point out that we understand this practice through the avant-gardes who have experienced combative practices against the past to try to overcome it somehow. The appropriation and its various possibilities of uses mark the disruptive side of the history of the visual arts. At the end of the 19th century, we observe the movement of radicality of the social sphere spreading to the artistic sphere. Thus, the avant-gardes sought "the liberation of art and the end of the constraint of the canons of traditional representation, simultaneously contradicting the accustomed expectations and the regularity of bourgeois culture". [6]

The thought of rupture of avant-gardes such as Dada, Surrealism, Situationist International (IS), and others potentiated several artistic experiments involving techniques of parody, copying, appropriation, destruction, deformation, and critique of works of art, among other manifestations of opposition. According to Marques, the situationists rose to this challenge in addition to challenging the artistic institution. [6] They radicalized even more by denying representation and defending the liberation of artistic forms. This research apprehends the legacy of the avant-gardes by their experiences of rupture that teach us that any element can be used to make new combinations. [7]

When mass access to computers and digital devices is promoted, artists and researchers cannot only experience digital tools making use of art history. The accessibility of digital has also contributed to anyone being able to appropriate these tools to experiment creatively. These relationships reflect the boundaries between art, science, and technology.

Infocognotechnologies

The widespread access to tools that use data and information to generate images, videos, texts, and so on is already an unavoidable reality. Even if some are against using these tools, in one way or another, people and corporations widely use this type of technology that uses information and data to generate something. Such technologies are understood as infocognotechnologies that, according to Gobira e Silva, "[they] are digital developments that use information and cognitive technologies". [1] Within this broad use of infocognotechnologies, some use directly impact the creative fields: Artificial Intelligence (AI) and Cognitive Computing (CC), being CC more comprehensive than AI.

Thus, a connected world in which everything communicates - Internet of Everything (IoE) - and in this process, countless data are stored, it becomes impossible not to investigate the possible poetic creations that arise from this context. Creations that draw directly from infocognotechnological tools or that at least involve this context in their poetics. Therefore, an exhibition like AIMAGINATION (<https://exposicaoaimagination.weebly.com/>) arises precisely because of our reality's technological and informational intersections. But for an exhibition like AIMAGINATION to be created and curated, it is necessary to understand all this context, beyond the possibilities of the digital arts field, so that works of this type are arranged in the same exhibition space. According to Gobira e Silva, this is "an arrangement that involves the question of space, and the assembly related to it, but also choices, agency, interpretations, various researches". [1] This, of course, comes from the curator precisely because of the multidisciplinary characteristic of this type of production that strains the boundaries between fields, which leads to the need for research by the curator to be supported.

The next section will demonstrate how the curator carried out this multidisciplinary research in the exhibition AIMAGINATION, held in the year 2023, but which was thought from a year earlier.

The AIMAGINATION

From what has been discussed, the poetic role of the curator in an exhibition of digital art, appropriation techniques in the historical context of the arts and access to decentralized and available technologies for use, we will now present the exhibition "AIMAGINATION: appropriations, hybridity and realities". This exhibition unites all these aspects in one production. It originated from the classes offered by professor Doctor Pablo Gobira, "Ateliê transartes", whose content was the techniques undertaken by artists, mainly avant-garde, experiments, hybridisms, and alternate realities. At the end of the discipline, the students were given the opportunity to participate in an exhibition in blockchain metaverse (Voxels). The exhibition's collaboration occurs with the use of Artificial Intelligence beyond the three concepts cited previously. And what characterizes the poetic choice of the curator were the

forms of design exhibition creation that will be briefly described below.

First is the conception of the exhibition's visual identity, which is intrinsically related to the presented technique of appropriation. Using a database created with the Stable Diffusion system - an image generator with AI - with images of all works exposed, we could extract information from the aesthetic set formed initially by the curatorship of the works found in AIMAGINATION. The collaborative use of the intelligent system enabled the search in the Text2Img format in the database through commands, generating images and extracting three fundamental characteristics for a visual identity [Figure 1]: color palette, typography, and graphic elements. After extracting a new layer of images appropriated from the works, there was a second curation of the AI's answers for fine-tuning the characteristics in image manipulation software finalizing the visual identity in the exhibition.

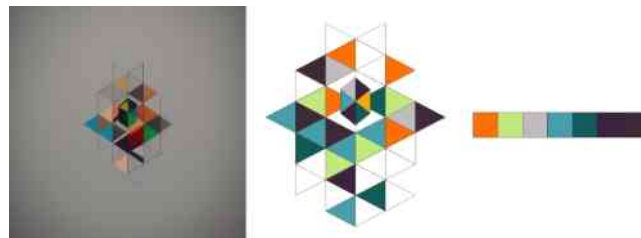


Figure 1. Graphic element generated by the AI/Graphic element manipulated for graphic use/Colour palette.

Secondly, it is also necessary to discuss the collaborative and appropriation mode given to the 3D modeling of the exhibition space. With the help of the Midjourney AI, a process similar to the visual identity was carried out, but a database was not generated at this stage. It was requested through commands (prompts), exhibition strategies, and gallery models to anchor the modeling. Some commands were: "The gallery of an exhibition of digital visual arts in a parallel reality. The works tension reality by building alternative realities; The gallery in a blueprint, minimalist style, for an exhibition of digital visual arts". In addition, four others were used. Following the same path, there was a curation of the images provided by the image generator to begin modeling the space. Thus, in addition to architectural features that can be applied in the Voxels system - which has limitations - with the appropriation of the images generated, it was possible to obtain exhibition characteristics in the AIMAGINATION [Figure 2].

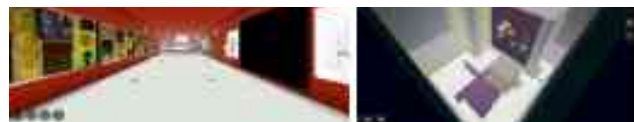


Figure 2. Screenshot of the internal part of the exhibition's first floor and external part.

In the context described so far, it is possible to conclude that curatorship has played an active role within the poetics exhibited in AIMAGINATION. Especially when we observe the use of infocognotechnologies. Developing the visual identity with the direct appropriation of the works on display with the cognitive aid of Artificial Intelligence ensures a cohesive aesthetic. It demonstrates the poetic freedom of curatorship within the design exhibition. Later, with 3D modeling also anchored in AI, new exhibition possibilities were found that acted directly on how the public interacts with the work. Overcoming the "complex arrangement", and directly interfering with the poetics of the work from the curator's choices of how it is arranged in regards to another work, the location, whether it is on the wall, off the wall, framed or not, all these exhibition choices within a 3D modeled [Figure 3] space extrapolate and simultaneously cause other poetic possibilities for curatorship. [1]



Figure 3. Screenshot of the internal part of the exhibition's third-floor.

Acknowledgements

The reflections in this article are the result of a research project supported by the National Council for Scientific and Technological Development (CNPq), the Minas Gerais State Research Support Foundation (FAPEMIG) and PROPPG/UEMG, to which we are grateful. And we would like to thank Emanuelle Silva, who helped us to put this in the template.

References

- [1] Pablo Gobira; Emanuelle de Oliveira Silva. "Poética da curadoria do digital, convergência infocognotecnológica e inteligência artificial". In: *32º Encontro Nacional da ANPAP* (Belo Horizonte: ANPAP, 2023).
- [2] Pablo Gobira. "Verbete: Artes digitais." In: *Termos e ações didáticas sobre cultura escrita digital* ed. Mônica Daisy Vieira Araújo, Isabel Cristina Alves da Silva Frade and Ludymilla Moreira Morais, (Belo Horizonte: UFMG/FAE/CEALE/NEPCED, 2022), 47-49.
- [3] Lucia Santaella. "Arte, ciência & tecnologia: um campo em expansão." In: *Percursos contemporâneos. Realidades da arte, ciência e tecnologia* ed. Pablo Gobira. (Belo Horizonte: UEMG, 2018), 27-54.
- [4] Pablo Gobira. "A preservação da obra de arte digital: reflexões críticas sobre sua efemeridade" In: *23º Encontro Nacional da ANPAP* (Belo Horizonte: ANPAP, 2014), 2757-2771.
- [5] Olu Oguibe. "O fardo da curadoria". *Magazine Concinnit As*, v. 1, n. 6, 2004, 6- 18.
- [6] Susana Lourenço Marques. *Cópia e apropriação da obra de arte na modernidade*. Dissertação, Lisboa, 2007, 138-164.
- [7] Guy Debord and Gil Wolman. *Um guia prático para o desvio*. Les Lèvres Nues #8. Ken Knabb (Trad.). In: *Métodos de Desvio*. 1956.

Author(s) Biography(ies)

Pablo Gobira is a professor doctor at the Guignard School (UEMG) and a member of the permanent staff of PPGArtes (UEMG), PPGACPS (UFMG) and PPGGOC (UFMG). Director of the Laboratório de Poéticas Fronteiriças (CNPq/UEMG).

Ana Luiza Pedrosa Camilo is an undergraduate student in a Visual Arts Degree from the State University of Minas Gerais (UEMG), at the School of Design and a member of the research, development, and innovation group LabFront (<http://labfront.weebly.com>).

Gabriel Rios is an undergraduate student in Interior Design from the School of Design of Environments at UEMG (University of the State of Minas Gerais), CNPq fellow, and a member of the research, development, and innovation group LabFront (<http://labfront.weebly.com>).

Vinicius Viana Rafael is an undergraduate student in Plastic Arts at the State University of Minas Gerais (UEMG), Guignard School, and a member of the research, development, and innovation group LabFront (<http://labfront.weebly.com>).