

GAME DESIGN AT THE ART MUSEUM: THE NUBLA CASE OF EDUCATHYSSEN

GAME DESIGN NO MUSEU DE ARTE: O CASO NUBLA DO EDUCATHYSSEN

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ABSTRACT

The article discusses one of the main projects of the Education Department of the Thyssen-Bornemisza National Museum (Madrid/ES). *Nubla: Laboratorio de Arte, Educación y Videojuegos* is a project designed in 2013, which took shape between 2015-2017, and is still active to this day. In this paper, I sought to understand what defines *Nubla* and how the project differs from the video games previously created by EducaThyssen (2001-). The methods used were: exploratory research (in the institution's online platforms), and bibliographic review. First, the article contextualizes and briefly describes the *Nubla*. Then, it discusses how this laboratory explores the language of video games, the game design process, and the development of media products. EducaThyssen works in collaborative dynamics, carried out with young audiences and in partnership with universities and companies in the video game industry. Finally, the article analyzes *Nubla* based on the concepts "active visitor" (1998) and "post-museum" (2000) by Eilean Hooper-Greenhill; and "communicative ecosystem" (2004) and "plural museum" (2000) by Jesús Martín-Barbero. It concludes that *Nubla* actively contributes to the transformation of practices and values, not only in the world of museums but also in the fields of art, education, and the video game industry.

Keywords: Video game, Education museum, Visual arts, Museum studies, Game studies

RESUMO

O artigo discute um dos principais projetos do departamento educativo do Museu Nacional Thyssen-Bornemisza (Madri/ES): *Nubla: Laboratorio de Arte, Educación y Videojuegos*, projeto esboçado em 2013, que ganhou corpo entre 2015-2017 e segue em curso. Neste artigo, busca-se compreender o que define *Nubla* e de que forma diferencia-se dos jogos digitais criados pelo EducaThyssen anteriormente, desde 2001. Foram utilizados os procedimentos de: pesquisa exploratória, nas plataformas online da instituição, e revisão bibliográfica. Primeiramente, o artigo contextualiza e descreve o caso *Nubla*. Então, discute como esse laboratório explora a linguagem dos videogames, o processo de game design e o desenvolvimento de produtos midiáticos. Destaca que o EducaThyssen realiza tudo isso de forma colaborativa, com o público jovem e através de parcerias com universidades e empresas da indústria de videogames. Por fim, analisa *Nubla* a partir dos conceitos "visitante ativo" (1998) e "pós-museu" (2000) de Eilean Hooper-Greenhill; e "ecossistema comunicativo" (2004) e "museu plural" (2000) de Jesús Martín-Barbero. Conclui que *Nubla* contribui para transformações de práticas e valores, não apenas no âmbito do museu, mas nas áreas de arte, de educação e na indústria dos videogames.

Palavras-chave: Videogame, Educação em museu, Artes visuais, Estudos de museu, Estudo de jogos digitais

1. INTRODUCTION

The article deals with the presence of digital games (videogames) in art museums. But the focused topic is not the curation of video games in art museums, either for temporary exhibitions or acquisition. This subject is also pertinent to be addressed, discussing cases

such as that of the Museum of Modern Art in New York - MoMA that a few years ago incorporated 14 video games to the collection, including *Pac-Man* (1980), *Tetris* (1984), *Myst* (1993), *The Sims* (2000) and *fIOW* (2006) (Antonelli, 2012). Going the other way, this article discusses art museum actions that

produce digital games, taking tangible collection pieces (such as paintings, sculptures, and prints) as their subject. Thus, it is given continuity to the research that had been started before, when I conducted a mapping and classification of initiatives of this kind, from museums around the world (Bahia, 2008).

For decades, art museums have been conceiving and producing digital games from their collections. These are usually initiatives of the institution's education department, which brings us to another piece of history: the use of video games in non-formal education is as old as the origin of this type of media.

The first electronic game was developed for an exhibition at Brookhaven National Laboratory (New York), even before there were arcades and portable video game consoles. It was the *game Tennis for Two* (1958), in which two people could control, separately, the throw of the point (representation of a ball) from one side of a line (representation of the tennis net) to the other, appearing on an oscilloscope, equipment that served as a screen. The oscilloscope and controls were connected to an analog computer that processed the game. *Tennis for Two* was created by nuclear physicist Willy Higinbotham, for the Laboratory's annual public visitation day, with the intention of making such an educational event more interactive and interesting to the visiting public. As Higinbotham wrote: "it might liven up the place to have a game that people could play, and which would convey the message that our scientific endeavors have relevance for society" (Brookhaven, 2008, s/p). The initiative was well received, visitors lined up to have the opportunity to try the playful educational device.

From Higinbotham's game until today, several other non-formal education institutions started to produce digital games with the intention, among other things, to involve younger generations and enhance the collection's meaning. A successful example is the *Bosch Adventure Game* (2000), a multi-user online game produced by the Boijmans Museum in Rotterdam for an exhibition of the Dutch artist Hieronymus Bosch. The game was among the seven finalists for the Museums and Web Award 2001 in the category best pilot application, and received two awards at the

EuroPrix 2001, in the categories Knowledge, Discovery and Culture and highlight of the year. In justifying the award, the EuroPrix jury said the initiative was an updated variation of Bosch's work, acting as both entertainment and educational media, aimed at both adults and young people (Bahia, 2014).

But *Bosch Adventure Game* is not the only game that stands out among those produced by art museums. In this article, we focus on the case of *Nubla*, from the Thyssen-Bornemisza National Museum. Located in Madrid, the museum's education department has explored possible and innovative articulations between its role as a social institution, digital communication technologies and the concept of Game.

First, the article contextualizes (i) **the video games of EducaThyssen** (educational department of the Thyssen Museum). From there, it presents (ii) **the case of Nubla: Laboratorio de Arte, Educación y Videojuegos**, a project that EducaThyssen outlined in 2013 and that has been carried out since 2017. Therefore, in the second part, the article summarizes the results of exploratory research on the case, conducted on the institutional website (www.educathyssen.org) and in other places that document the museum's educational actions and of the interpretations woven from the procedure of "playing the game" (Aarseth, 2003). In the third part, it discusses the case, (iii) **thinking Nubla in the context of museum education**, drawing on the concepts "active visitor" (1998) and "post-museum" (2000) of Museum Studies professor Eilean Hooper-Greenhill; and "plural museum" (2000) of communication thinker Jesús Martín-Barbero. Finally, it presents the (iv) **conclusions** of the case study, indicating avenues for future research.

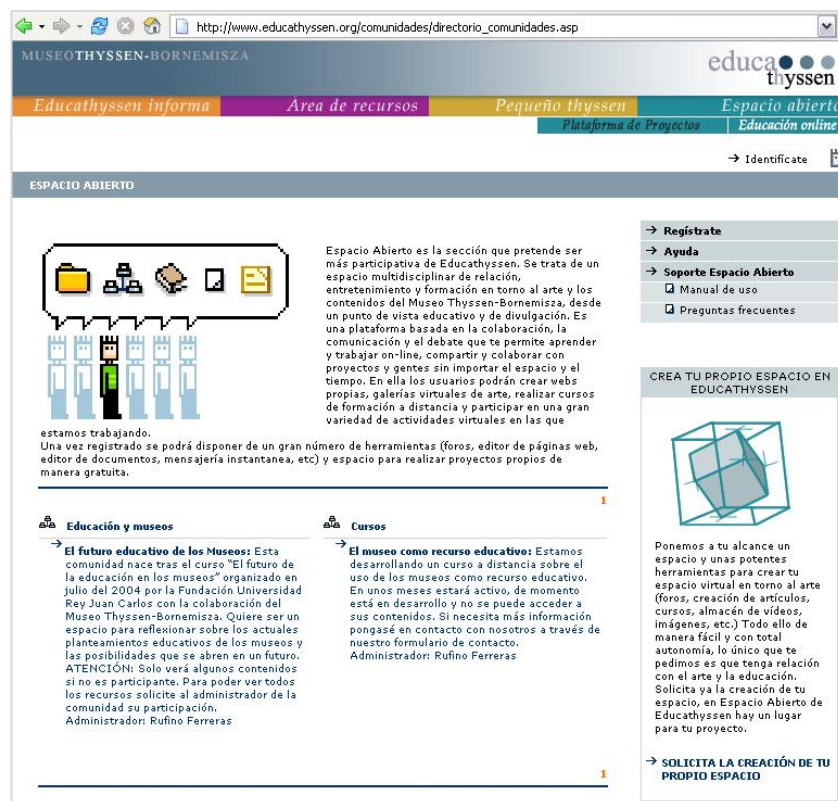
2. THE VIDEO GAMES OF EDUCATHYSSEN

The Thyssen-Bornemisza Museum (here abbreviated as Thyssen Museum) was founded in 1992 from the collection of the Thyssen-Bornemisza couple of barons. The following year the collection was acquired by the Spanish government, and the museum became a national institution with a collection available for public visitation. However, it

continued to be run by the foundation of the family, which faced the challenge of making known an important collection of works of art that had previously been accessible to a few. Compared to other art museums (such as the Prado Museum from 1819), the Thyssen Museum is extremely young. However, its foundation almost coincides with the birth of the World Wide Web (1989), with the beginning of the popularization of the Internet on personal computers. This was exploited by the institution

in the context that the Google search engine was launched, in beta version, before there was Facebook (2004), Youtube (2005) and smartphones (cc. 2007). The Web was accessed by a tiny portion of the world's population: in 2001, there were 502 million Web users (just over 8% of the population at the time); today there are 5.2 billion (about 60% of the current population) (Internet Live Stats, 2022).

Figure 1 - The screenshot of the website *Espacio Abierto*, taken in 2006 (EducaThyssen)



Source: The author's research collection

In 2001, less than a decade after the founding of the museum, EducaThyssen had already created the website *Espacio Abierto* (Figure 1). There it promoted the cooperation of visitors in the production of content (such as posting comments in forums and opening discussion themes) and in discussions about art education. It is worth remembering that these were the days of the first blogs, when

computers were much more expensive and rarer than they are today, a commodity that aroused little interest from people. The site was rated AA-WAI (it followed international guidelines for accessibility of web content for people with disabilities) and, although it included multimedia files, it adopted HTML as its standard language, so that all content could be crawled through web search engines.

Figure 2 - The screenshot of the game Guido against el Señor de las Sombras, taken in 2007 (EducaThyssen)



Source: The author's research collection

There, on the still uninhabited Web, EducaThyssen published its first online game: *Guido contra el Señor de las Sombras* (2001) (Figure 2). It was experimenting with a new way to present the works in the collection to the children's audience. According to the coordinator of EducaThyssen, Rufino Ferreras (2017), it was not just about joining the fad of online games, the intent was to develop communicational strategies consistent with the 'game of interpretation' theorized by philosopher Hans-Georg Gadamer (1996). According to Ferreras, the question that led the creation of the museum's online interfaces was: What characterizes the experience, and not the appearance, of being in an art museum? The chosen answer was the adventure of "entering" the works. Hence, the idea of creating game narratives that interweave visual and semantic aspects of the collection's pieces.

The metaphor of the work of art as a "window" to alternative realities, and that of "diving into the work" to represent the interpretation process, are not new. In fact, it is a recurring strategy in games, books, and educational events proposed by art museums. It is present

in the children's books of the collection written by James Mayhw, whose main character is the girl Katie who lives adventures in art museums, something that always starts with her entering a work of art and develops in a journey through the other works exhibited there (Bahia, 2008). But EducaThyssen has polished this idea. For over 20 years, it has explored the metaphor from the concept of Game and the video game media, developing educational actions that are done online and in person, in its exhibition rooms or in the headquarters of partner agencies.

The trajectory of EducaThyssen in the field of digital game production began modestly. The first online game (*Guido...*) was nothing more than an interactive and non-linear narrative, whose protagonist was more interested in talking about the works than in promoting the player's interaction with the paintings in the collection. The very name of the character, Guido, evidenced the intent to personify a museum guide. But EducaThyssen continued to experiment, seeking more and more effective strategies for communication in museums and informal art education.

Figure 3 - The screenshot of the game Los enigmas de EducaThyssen, taken in 2007 (EducaThyssen)



Source: The author's research collection

It has developed games in the form of quizzes and web-gymkhanas. An example is *Laberinto Thyssen: el arte te desafía* (2002), which mobilized 300 teams and 2,000 players (Bahia, 2008). The challenge was to solve puzzles launched weekly, quickly, and objectively search the museum's online database (digitalized collection) to decipher puzzles created from information about specific works of Thyssen Museum. There was also *Los Enigmas de Educa Thyssen* (2005) (Figure 3), which was more complex (it involved 49 puzzles) and longer (it lasted more than a year, from November/2005 to February/2007). In both, competition was emphasized more than collaboration between visitor-players. The EducaThyssen team itself recognized (Ferreras, 2017) that in the gymkhanas they sought to engage the public through extrinsic motivational resources (such as ranking and prizes), exploring little of what moves us to Play (experience) with the artwork.

But *Guido...* was different. He demonstrated the artistic "interpretation game" better than the web gymkhana. There were also *El Misterio de las Miradas del Thyssen* (2008) and *El caso del ladrón de medianoche* (2010) that also explored the investigative game genre. But let's go back to the first game made by EducaThyssen.

The *Guido...* was a simple video game, as already discussed (Bahia, 2008), but not simplistic. The curation of work was careful. Those mentioned in the game were key paintings from the Thyssen collection, besides depicting characters provided with some supernatural element to be incorporated into the game's fictional narrative and, therefore, to be used by the player to compose his own superhero. For example, when Guido comments on *Rosary's Triptych* (Von Kulmbach, 1510), we learn that Moses' horns are a symbol of wisdom and that this would help the player defeat the villain of the narrative of the game, the Lord of Shadows. Also incorporated into the game were the angel's wings from a gothic painting, the violin from a surrealist painting, among other elements. The narrative and aesthetics of *Guido...* were based on semantic and formal aspects of the works mentioned above. Moreover, the mechanics of the game (Guido's dialogues with the player, so that the latter chooses which element to borrow from each work) represent the hermeneutic movement of playing with art. There is no "wrong" choice in the dialogues, but the choices made in this non-linear narrative immerse the player in an iconographic labyrinth. The trip ends after the player has gone through eight works, when he reaches the final module: a lab to create his superhero.

The conceptual consistency of *Guido...* was built on multimedia authoring software, Flash, which does not compare with the complexity of features of professional video game development platforms. Such limitation was, in fact, the power of this tool. As discussed previously (Bahia, 2021), this tool was widely used in the first decade of the twentieth century, for having a friendly interface for amateur creators (non-programmers), enabling the development of digital games at low costs and in a format suitable for independent publication on the young Web. Flash allowed artists, educators, and other non-programming professionals to appropriate programming as a "tool of empowerment", as reminds Lev Manovich (Bahia, 2021).

For all these reasons, it is plausible to say that the artistic-educational team of EducaThyssen was able to closely follow the process of conception, production and polishing of *Guido...*, ensuring that production is aligned with the idea of offering visitors an interpretive adventure through the works of the museum.

Even so, the player of *Guido...* remained more in the position of "who receives messages" than in that of "who builds content" in the museum, so that it did not fully realize the purposes that led the Thyssen Museum to use digital technologies (Espadas & Ferreras, 2003). Then, the team realized that it should expand the possibilities of interaction offered to the targeted publics. They began to realize the expressive, creative, collaborative and, therefore, educational character of the game design experience (process of conceiving the aesthetic, narrative, mechanical and technological dimensions of a game, as defined by Jesse Schell, 2011).

From this came the idea of involving museum visitors in the game design process. Interested people and institutions were invited to participate in the creation of the EducaThyssen games. The idea took shape in the *Nubla* project: a laboratory that investigates the

relationship between art, education, and videogames, created to promote the experience of design, production, development, and publication of games based on the works in the collection. More than just producing games, the museum began to build new links with the local community, emphasizing young people, and establishing partnerships with universities and organizations in the video game industry.

3. THE CASE OF NUBLA: LABORATORIO DE ARTE, EDUCACIÓN Y VIDEOJUEGOS

In 2013, from conversations between Rufino Ferreras (coordinator of EducaThyssen) and Daniel Sánchez (game designer and founder of the Gamera Nest studio), came the idea of creating a dynamic and collaborative environment for discussion, creation, and development of digital games at the museum. Two years later, the idea took shape with the opening of the first permanent digital game studio at EducaThyssen, the *Nubla Art Game* (Sanchez, 2015). In 2017, the program was renamed *Nubla: Laboratorio de Arte, Educación y Videojuegos*, bringing together different types of activities (workshops, meetings, events, among others) and even the production of video games.

So far, the following video games have been produced and released by the Lab: *Nubla 1* (2015) (adapted in versions for PS4 console, computer, and Android and iOS mobile systems), *Nubla 2: M, la ciudad en el centro del mundo* (2019) (versions for PS4 and computer). In addition, there is the *Las Islas de Nubla* application (Android and iOS).

Each game has its own consistency, but all share the same narrative universe: the world of *Nubla*. The exploration of this world is planned to take place in three stages, each of which deepens the narrative and expands the possibilities of discovering the world. The third part has not yet been released. However, let us see what the first two are about.

Figure 4 - The screenshot of a scene of the game Nubla 1 (EducaThyssen)



Source: <https://store.steampowered.com/app/1101000/Nubla>

The video game *Nubla 1* (Figure 4) focuses on the construction of the identity of the protagonist who seeks to recover his lost memory. The very title *Nubla*, which means "cloud" in Spanish, can be read as a problematization of the fragility of memory entrusted to Internet servers, "saved" in the "cloud".

The scenarios are constructed from work from the museum's collection. The highlight of *Nubla 1* is *La casa de la esquina* (Ludwig Meidner, 1913), but also present are: *Muerto acechando a su familia* (Yves Tanguy, 1927), *Árbol solitario y árboles conyugales* (Max Ernst, 1940), *Casa giratoria* (Paul Klee, 1921), *Habitación de hotel* (Edward Hopper, 1931), among others.

The player begins by choosing his or her avatar, a boy or a girl, although this choice does not really impact the course of the game. He then begins to wander through an obscure gallery in a museum, where he comes across empty picture frames. He encounters characters in different artistic styles (surrealist, cubist, impressionist, and others), perhaps straight out of the paintings. The player selects one of them to accompany him, and each one has a special ability (flying, teleportation, among others) that impacts the experience in the game. From there, the player enters frames and experiences unusual situations. In the first dive into a painting the player discovers that the "elephant of [Salvador] Dalí" has disappeared and receives his game mission: to find this elephant. He does this by traversing

the different parts of the *Nubla* world, each created from a style/group of artworks. There you encounter puzzles and get hints on how to solve them.

The gameplay is centered on exploring the world and solving puzzles, although it does mix platform game mechanics at times. But *Nubla 1* has some control issues and a system crash at the end of the game (Huerto, 2015). Nevertheless, scenarios play a central role in the player's experience and seamlessly integrate with puzzles to solve.

The game *Nubla 2* continues the concept presented in *Nubla 1* but it explores in greater depth the theme of time. The exploration of the game world again is with an avatar (boy or girl) chosen initially. But the journey is broader and with richer aesthetics (sonically and visually) than the first game. The featured work is *Metropolis* (George Grosz, 1917), hence the subtitle of the game: *.M, the city in the heart of the world*. The player must overcome puzzles to continue trying to recover the memory and creativity that his or her avatar has lost. As the narrative progresses, the player discovers the problems of .M City and engages in an underground revolution led by a group of women artists. As in *Nubla 1*, play remains focused on exploring the world and solving puzzles, but there are challenges that require the use of different motor and cognitive skills than those required in the previous title.

Nubla 2 (Figure 5) is a much more complex game and better aligned with the parameters of

video game production. Even for this reason, it won the 3D Wire 2016 and Fun & Serious Game 2018 awards (EducaThyssen, 2022).

Figure 5 - The screenshot of a scene of the game Nubla 2



Source: https://store.steampowered.com/app/1610450/Nubla_2/

The curation of works for Nubla's world was done in the lab's workshops. Participants were motivated to 'enter' the works and build interpretations and narratives from them, then appropriate what they found there and, in a process of re-reading, collectively create the world, the plot and the challenges of the game. So, unlike *Guido...*, the works are not presented as paintings in *Nubla*. Even though the game starts in a museum gallery, amidst empty frames, and the avatar enters the works, the narrative unfolds beyond the museum and the player interacts with characters who have already left the works. As a result, the boundary between the world of each work and the game world is blurred. *Nubla* "evokes", not reproduces, works and museums (Ferrerías, 2017).

In *Guido...* the protagonist (museum guide) gained prominence in the narrative. In *Nubla*, it is the world itself created by the participants coauthoring the game that stands out. In Alejandro Alcolea Huertos (2015) view, the hero of *Nubla* is the environment itself, which integrates perfectly with the puzzles and makes the game precious. As Daniel Sánchez (2015) reinforces, Nubla's puzzles were created to be simple to solve: they require some intellectual work, but they do not generate prolonged interruptions of the game's movement, they do not compromise the

narrative rhythm. In this way, the most important thing is to be taken care of: to maintain the "interpretation game" experienced by the player.

The development process of *Nubla 1* moved from the university context to the business context. It started with the participation of students from Escuela Universitaria de Diseño, Innovación y Tecnología - ESNE (OZ Lane Games Collective) and, as the project grew and had new demands, it was embraced by the video game studio Gammerra Nest - a studio that is also a partner of ESNE and recently carried out an action with the Prado Museum (200 y +...Taller de videojuegos, 2018). Students from ESNE and other universities, such as the University of Nebrija and Complutense de Madrid, participate in this second moment of *Nubla*, so the project has consolidated its importance, not only in the museum context, but in that of higher education. *Nubla* was a teaching motto for students in game design, animation, programming, music, design, audiovisual, art and art history, those who want to work with digital games.

Another distinctive feature of *Nubla* compared to previous games produced by EducaThyssen was the adoption of specialized platforms for video games, such as the PlayStation console

and Unity development software. This allowed *Nubla* to be enrolled and selected by the PlayStation®Talents program (Sony/Spain), which promotes the development of local and innovative content for this platform, generating products that can be distributed in different countries. Specifically, it has integrated the arm of the program aimed at university training: PlayStation®First (Playstation Talents, 2019).

Daniel Sánchez highlights advantages of participating in PlayStation®Talent: the team had access to development kits, and the organization helped them set a work rhythm and have broader knowledge about marketing and promoting a digital game. Thus, the young people were able to expand knowledge in technology and market, they became professionalized: "eso hace que el juego vaya convirtiéndose en algo 'real' que es capaz de ser distribuido" (Sánchez, 2015, s/p.). Such dimension is not separated from the museum and art education purposes that mark *Nubla*, as these purposes configure the differential and innovative character of this game concept, which also justifies its selection in PlayStation®First.

Nubla does not repeat the main trends of the entertainment video game industry. The conception of the games begins in the museum rooms, dialoguing from works and, thanks to the diversity of areas and institutions involved in the Lab, it is possible to build effectively plural dialogues and generate differential solutions: "abrir la imaginación y nuestras mentes a todo tipo de propuestas y no nos 'atan' a lo esencialmente comercial" (Sánchez, 2015). The games taken as reference by the *Nubla* team have an experiential character, as Sánchez explains. Games that seek to make the player "feel something" when going through a narrative, as is the case of *Braid* (Jonathan Blow, 2008), *Machinarium* (Amanita, 2009), *Limbo* (Playdead, 2010), *Journey* (ThatGameCompany, 2012), among others.

It is undeniable that by joining the PlayStation platform, EducaThyssen has also moved away

from some audiences, such as those who do not own this expensive video game console. There are *Nubla* games that are only available for PS4, that need to be purchased from the PlayStation Store - for modest amounts, it is true, about five Euros per game - that require the use of this console to be played.

But the motivation of the Lab's team to adopt the PlayStation as a delivery platform is related to diagnoses previously raised by EducaThyssen. As Ana Gómez González reports, the institution wanted to reach a public that rarely visited the Thyssen Museum - that is, teenagers and university students:

We entered a completely new terrain that generated questions [...] as to how to engage in meaningful ways with the content that young people habitually consume, both on a technological and aesthetical level, and deliver it to their screens in the format enriched with critical and educational aspects in which we want to train the museum's audience? (González, 2018, p. 2)¹

Everything indicates that it has achieved such a goal. The very continuation of *Nubla* on PS4 is due to the commercial success already achieved by *Nubla 1*: by 2017, more than 20,000 units had been sold in countries such as the United States, the United Kingdom, Germany, and Spain (Playstation Talents, 2019).

Regardless of whether it culminates in published video games or not, *Nubla*'s creative workshops always begin in the museum's rooms, where participants choose and dialogue from works. Thus, the world of *Nubla* is being expanded and the story of the main character continues to be written, in the quest to recover a lost memory, strolling through the gallery with paintings of different artistic styles, all of which are part of the museum's collection.

EducaThyssen carries out face-to-face activities especially geared to the video game-playing public of *Nubla*. Yet, although the video game media is the mobilizing element of the

¹ "Nos adentramos en un terreno completamente nuevo que nos generaba preguntas [...] ¿cómo generar un discurso coherente con los productos que consumen habitualmente los jóvenes, tanto a nivel tecnológico como estético, llevándolo a sus pantallas y a la vez mantener la

base crítica y educativa en la que queremos formar al público del museo?" (González, 2018, p. 2, translated into English by Gabriele Salciute Civiliene, 2022).

project, *Nubla* is not defined solely as such. *Nubla*'s narrative argument is also used in presentational educational actions that do not even aim at media production; actions that involve visitors of different ages and professional areas. An example is the activity *Cartografías de Nubla* (Figure 6), a face-to-face journey through the museum's rooms with the mission

of building narratives from works of art in the collection.

In short, as Ana Gómez González (2018) puts it, *Nubla* is a laboratory of interdisciplinary experimentation, "something alive," a flexible and continuously evolving creative/educational process.

Figure 6 - Screenshot taken in 2019 from the site www.educathyssen.org



Source: The author's research collection

4. THINKING *NUBLA* IN THE CONTEXT OF MUSEUM EDUCATION

The constant expansion of the limits and renewal of the forms of action of museums is something that runs through the history of this institution. In art museums, this has a direct impact on how art is seen, known, and lived (Bahia, 2008). The emergence of modern museums, in the late 18th century, for example, generated a set of values and habits in relation to works of art that did not exist before. As Goethe said at the time of the founding of the Louvre: the museum inaugurated a "new artistic entity," so that even historically earlier art became something entirely new and what had been removed from it will remain a mystery to future generations (Crimp, 2005). Therefore, it is difficult to suppose what understanding we would have of art if sacred works remained only in churches, if court art was not in public museums if genre paintings remained in domestic settings if it was not possible to go through "all" of the Western artistic tradition in a single space. Without places like the Louvre, the French artist Édouard Manet would not have dialogued

with "museum art"; and the Brazilian artist Hélio Oiticica would have little to contest about the mechanisms of legitimization of Art.

Back to the *Nubla* case: what values and habits are generated in this laboratory with the works of the Thyssen collection and with the museum institution itself? The research presented here did not extend to reception studies with the players-visitors-designers of *Nubla*, it is a fact. Even so, it was possible to study the case based on extensive exploratory research (something I have been doing since 2005, when I collected data for my PhD: Bahia, 2008) and literature review. So, in this section, we analyze the case presented, based on concepts and notions proposed by museum studies professor Eilean Hooper-Greenhill and communication thinker Jesús Martín-Barbero, when addressing the challenges of museums in contemporary times.

Let's start with Colombian anthropologist and communication researcher Jesús Martín-Barbero. Studying telenovelas, Martín-Barbero (1987) broke communication research paradigms and proposed to focus on

mediations (instead of media), to investigate the ways in which communication technologies are used, how this use alters the way people are together. This opened up an analysis perspective that extended to more specific communication contexts, such as school education and museum, each with its own singularities.

Martín-Barbero (2004) laments the educational actions that reduce communication to instruments and fail to give due attention to the diffuse and decentered educational environment in which we live, permeated by communication technologies. Martín-Barbero has named this environment "communicative ecosystem", which entails the following challenges and questions:

What does it mean to learn and know in the age of information society and networks that instantly include the local into the global? What cognitive and institutional shifts demand new devices to produce and acquire knowledge at the interface that links TV screens at home with the computer screens we use for work and those to play video games? Has education addressed these questions? And if it hasn't, how can it claim to be a genuine social and cultural space for the production and acquisition of knowledge? (Martín-Barbero, 2004, p. 58-59)¹

The author disagrees with those who argue that, to avoid the harmful effects of media consumption, the best thing to do is to turn off (the TV, the cell phone, the video game). This option disqualifies the spectator, implying that he or she is incapable of establishing a critical relationship with the media, of differentiating exhibitionist aestheticism from that which allows the construction of memory and imagination. It is a fact that the world has been suffering from low digital literacy. But, for

Martín-Barbero, the solution is not to ban the media, but to educate for/with the media.

The Nubla Lab is educational in this sense: it allows working on content and specific competences of museum and art education, while promoting a critical appropriation of the videogame media. Besides exploring the 'interpretation game' of the artworks in the collection, it promotes fluency in the videogame language and reflection about the productions of this media industry. It questions the forged separation between "low" and "high" culture, recognizing the diversity of images that make up us and how we relate to cultural heritage.

Thinking about the challenges of Latin American museums, Martín-Barbero (2000) proposed the notion "**plural museum**". He questioned the forms of communication that lead to the pasteurization of cultural heritage but pointed out: mass communication in museums is not caused by the use of audio equipment, video, or other technological resources. It depends on the permanence of the constitutive paradigms of modern museums, of the ideal of "democratization of knowledge". Today we know that it is up to the museums, besides giving access to cultural assets, to diversify the ways of communication of these assets, adopting strategies that induce the effective participation of the community in the processes of meaning of the heritage and of the museum itself. The media resources, when well employed, can also contribute this communication.

Martín-Barbero (2000) drew three communicational premises for the plural museum. First, it needs to **de-neutralize its discourses**, highlighting the ambiguities of traditions and problematizing the power of institutional discourses, constructing assumedly partial and fictional discourses. Second, **de-construct its image** as the "tradition vault" and present itself as a space of

¹ "¿Qué significan aprender y saber en el tiempo de la sociedad informacional y las redes que enseñan instantáneamente lo local en lo global? ¿Qué desplazamientos cognitivos e institucionales están exigiendo los nuevos dispositivos de producción y apropiación del conocimiento a partir del interfaz que enlaza las pantallas hogareñas de televisión con las laborales del computador y las lúdicas de los videojuegos?

¿Está la educación haciéndose cargo de esos interrogantes? Y, si no lo está haciendo, ¿cómo puede pretender ser hoy un verdadero espacio social y cultural de producción y apropiación de conocimientos?" (Martín-Barbero, 2004, p. 58-59, translated into English by Gabriele Salciute Civiliene, 2022)

encounters and dialogues about memories to deconstruct its position as a source of truth. Third, to **de-limit its space** of action, to let itself be questioned by cultural tourism, by non-governmental organizations, among other institutions external to the museum. What Mantín-Barbero proposes is a museum willing to reinvent, not only its methods, but its position in society, aiming to promote less hierarchical forms of coexistence.

EducaThyssen's actions created with the purpose of de-neutralizing, de-locating and de-limiting the museum were already present since *Espacio Abierto* (Figure 1) but have become more evident over the years. The loosening of narrative control over the collection became explicit when it started inviting visitors to be coauthors of the video games it produced. This reached deeper levels. With *Nubla*, the institution's option to disentangle itself from certain constitutive paradigms of modern museums became evident, including those related to the ways of seeing and knowing art (such as the appreciation of the artwork as a genuine object, complete in itself, or contemplation as the best way to know an artwork).

Radical was also the option to enter the development of console games, of the video game industry. Even in the context of independent games (indie games), such action demanded from EducaThyssen to have to deal with technical knowledge and specialized professionals, something much more complex than what it had been doing in the production of instructional applications and online games (like *Guido...*). This step demonstrates how open the institution was to establishing effective partnerships (with universities, artists, game studio, and even one of the "giants" of the video game industry) and giving up the position of the holder of the truth about its collection.

Other examples of a plural museum can be cited here, involving collaborative productions in other media. An example is the initiative of the National Gallery of London in the early 21st century, in partnership with universities that produced authorial audiovisual productions created from museum collection pieces. There were two projects: *Transcriptions Animation*, a

partnership with Saint Martin's University Centre for Arts and Design, which involved postgraduate students in the production of short animations; *Transcriptions LFS Shorts*, with students from the second phase of the London Film School, which produced short live action films (Bahia, 2008).

Initiatives such as these are blunt responses to the harsh criticism that has been leveled at museums since the mid-twentieth century, when museums were singled out as "repressive and authoritarian symbols of a solid and unchanging modernity" (Hooper-Greenhill, 2007, p. 1). Criticism is still relevant to some institutions, but many have been deeply transformed and reworked their institutional identity.

To think of museums in the context of postmodernity, Hooper-Greenhill formulated the notion "**post-museum**", bringing together three characteristics: support its relationship with the public in a complex understanding of the relationships between culture, communication, learning and identity; seek to promote a more equal and just society; be aware of the social and ethical implications of dealing with culture, which operates through representations, reproductions and the constitution of identities.

Aware that the role of museums is not limited to the conservation of objects, the post-museum puts the **interpretation of collections** at the top of its priorities, always seeking to rework the ways of sharing and reinterpreting the collection. Since then, Hooper-Greenhill points out that new ways of thinking about the media audience have made a decisive contribution to the transformation of museums, which has led them to seek a more dynamic relationship with their public.

Considering that culture, communication, learning, and identity are key ideas of the post-museum, the institutions that work from this perspective emphasize educational actions in the museum, seeking to integrate educational projects to the other areas of the institution's organization. This brings us to the Thyssen Museum, as the actions of EducaThyssen are conceived in an integrated way with the exhibits. The educational department

contributes with the proposal of the exhibits and the way to present the permanent collection: the world of *Nubla* emerges from the physical museum, just as it is presented in the virtual world of the game; the fictional character of *Nubla*'s narratives does not prevent them from being revisited during guided tours, in the physical museum; the game creation workshops started in the physical museum are continued in other institutions, but include moments of return to the exhibition room to deepen the history and scenarios of the *Nubla* world.

Other comings and goings between the digital and the tangible, between the game universe and the museum collection, could be cited here. But what is important to highlight is that all this is coherent with broader pedagogical transformations, which question the understanding of education as something trapped between dualities (such as uncertainty and certainty, consumption, and knowledge, play and study, body, and mind). Hooper-Greenhill (2007) cites the term "**serious play**" as an example of deconstructing this dichotomous view of knowledge processes as a fruitful path for museum education.

Hooper-Greenhill (2007) also points out that contemporary education has been aimed at contributing to the strengthening of personal identities, self-confidence, and people's ability to evaluate and make judgments about their own individual interests and desires. In this sense, museums are an important place to learn today, as important as education.

But museums need to pay attention again to the content of their discourse, not only to pedagogical methods. It is necessary to inquire what each museum proposes to teach. Hence the importance of the institution reflecting on the implications of the interpretations present in its sayings: what is said, by whom, and for what purpose. Through communicational resources (from exhibition design to media artifacts), museums construct a look, present a history, interpret and assign meaning to the collections. Hooper-Greenhill calls this "**museum curriculum**" (2007), which has a lot of weight, as museums are institutions that "teach what to teach."

Therefore, EducaThyssen's action of articulating 'fine art' with video games has a significantly more profound impact than that of other games created from works of art history - such as *A Mansão de Quelícera* (Casthalia, 2005) and *The Procession to Calvary* (Joe Richardson, 2020). Public narratives have differential weight in the construction of knowledge and identities. Even for this reason, museum discourses are permeated by power struggles, and the visitor acts in this battle space, as an active protagonist, despite not being sovereign. Therefore, the importance of cultural representations in museums is recognized by the public as something that is always relative, so that it can create a sense of belonging. Without this, the learning promoted there will be "harmful and destructive" (Hooper-Greenhill, 2007, p. 13), putting the "museum curriculum" (Hooper-Greenhill, 2007) needs to be thought out from the identities of its visitor-learners. It must articulate the different subjectivities of its audiences, echo the stories of its visitors. Hooper-Greenhill ([1994]1998) noted the importance of museums building solid "bridges" with their publics, suggesting that institutions do research, seeking to know what the museum means to people, how they use that space and how the exhibitions echo (or not) in their lives. From there, it is possible to establish segments of public and design forms of access to information differentiated by segment. This is what has been sought with *Nubla Lab*, an effective approach with young public and college students, a profile that no longer frequents the museum because they do not accompany their parents on family trips, nor join school visit groups.

But in each public segment there are plural interests. That is why Hooper-Greenhill (1998) suggests that museums work together with their publics, inviting them to be "active visitors". An example is when people from minority groups are invited during the preparation of exhibitions. In any case, the museum should take care to provide experiences in which visitors really want to act in the museum so that they do not feel coerced to do so.

The strategies developed by EducaThyssen seem to awaken this kind of desire in those

who participate in the Nubla Lab, providing an experience that articulates several kinds of pleasure: of fruition, of playing, of learning, of developing technical skills, of being more than before. And this is not restricted to visitors who engage in the development of video games. It also reaches those involved in educational actions in the museum building, when the museum promotes a "journey of discovery of the potential of works of art to tell and create stories" (EducaThyssen, 2022).

And even among those who participate in the creation of the video games, different ways of seeing, knowing, and living together are offered. The Lab intersperses contemplation activities with moments of design, production, and development of the video games. One participant may identify more and prefer to contribute to one type of activity, but the multidisciplinary team needs to work collaboratively, where everyone follows the process, and one ends up contributing to the activities of the colleagues. Thus, it is common for one person on the team to discover new interests and aptitudes, highlighting the laboratory as a learning space. To paraphrase Hooper-Greenhill (2007): learning is to transform who we are and what we can do. Or in other words, it is to be.

5. CONCLUSIONS

In an issue of *Revista do Patrimônio Histórico e Artístico do Brasil*, dedicated to thinking of museums as a space of "anthropophagy of memory," the anthropologist José do Nascimento Júnior (2005) took a concept from Marcel Mauss and defined the museum as a space of gift: its function is less in collecting and preserving objects, more in offering such objects to new generations; and who makes the offering seeks to promote the practice of gift itself, so that who receives the offering today, practices the gift tomorrow.

This is how I interpret EducaThyssen's actions as promoting the practice of giving. The museum has managed not only to awaken the interest of a segment of the public that had been drifting away from the institution, but also to shift this public from the position of spectator to that of active visitor (Hooper-Greenhill). The choice of the Play concept (Gadamer) and the

video game media proved to be opportune. More than that, it achieved promising results thanks to the insistence and commitment of the EducaThyssen team in maintaining such a focus (Ferreras, 2017), seeking to polish and deepen their strategies.

We have seen that EducaThyssen started producing online games, understanding these as mere educational tools. Then it went on to explore the media language and the very process of video game design and development, without losing sight of the educational purpose of its actions. This institutional journey culminated in the *Nubla* project: a collaborative laboratory in which narrative contexts and game mechanics are created from visual and semantic elements of works from the Thyssen collection. In addition to the Educa Thyssen team, interested visitors, the game development studio Gamera Nest, partner universities (with ESNE) and students of various courses (from game design to art history) participate in this creative process, and the project has already been funded by PlayStation©Talents (Sony/Spain). Thus, EducaThyssen built horizontal relationships with the community and deconstructed the museum's image as a "strong box" of tradition.

In future studies, it will be interesting to deepen the analysis based on an ethnographic study with the visitor-participants of the Nubla Lab. It would also be valid to map other museums that explore the game design process as a strategy to de-naturalize, de-locate and de-limit (Martín-Barbero) their communication and education in museums. It is also known that the Thyssen Museum is not the only one interested in creating games from its collection, collaboratively, in the context of the creation laboratory.

The Thyssen is not even a pioneer in the matter. Something similar was already done by the Boijmans Van Beuningen Museum in Rotterdam, in 1999, in partnership with V2_Lab for the Unstable Media, for the creation of the multi-user online game *Bosch Adventure Game* (2000). Another, even older example is the game *The Third Face of the Letter* (1996), developed for the Virtual Museum of Brazilian Art, in a co-creation work between the museum's director, Matteo Moriconi, and artist

Arthur Omar, based on a photographic series by the artist himself (Bahia, 2008). Perhaps there are even more remote initiatives, which, like the two cited here, are in the process of being forgotten. Games that can no longer be played because they have been transmitted or played with outdated computer resources (specific file players) (Bahia, 2021).

EducaThyssen's *Guido...* is already being forgotten. It has not been available online since when the required player for this type of file was discontinued in late 2020. And *Nubla*, how long will it be playable? Or will the continuity of the "gift space" be interrupted by something banal: the planned obsolescence that digital media suffers from.

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