Memory Void: Digital Games Preservation in Portugal

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Abstract. *Some collective efforts to preserve and disseminate Portuguese digital games are led by retro gaming communities and have contributed to the emergence of other narratives about the history of video games in the last decade in Portugal. In this paper, we present two of these communities, namely Planeta Sinclair and RetroArquivo, and examine how their preservation activity can be a way to promote the recognition of the cultural, historical, and material values of old games. We conclude that digital game preservation is mostly contained in an informal and networked infrastructure, within which archival libraries of these same artifacts are developed.*

Keywords— *retro gaming, preservation, communities, Portugal*

1. Introduction

Since 2019, we have been researching how the different contexts in which digital games are developed contribute to elaborate the trends that the games and the industry gaming will follow. Some authors suggest that digital games, as one of the drivers of digital culture, are a reflection of the society and culture that created them [Shaw, 2014; Swalwell, 2021]. In addition, the gaming industry itself is a reflection of the social and economic contexts that drive its development. These social, cultural, and economic aspects also contribute to shaping the narratives on the history of digital games. Some of these narratives then result in either the inclusion or exclusion of some groups of people (such as women, transgender and disabled people) in the gaming industry, the games market, and the gamer communities [Eklund, 2022; Kirkpatrick, 2015; Swalwell, 2021]. An essential factor to consider in the micro-processes of exclusion in this sector is how the history of digital games is told. Hegemonic narratives are retold globally by the industry that produces and markets them. These are notably homogeneous narratives, with only minor differences between them, which boil down to examples of country-specific game productions or game-related events.

In turn, this historical bias helps to maintain the forgotten productions, events, and agents (such as local businesses and people) that played an active and relevant role within this industry at some point in its development. This is usually caused by individuals whose role is to choose, decide and establish what from the past is important and worthy of being remembered. Swalwell [2012] named this oblivion as *hobbyware*. It refers to productions that have been lost and omitted because they are seen (by gamers, influencers, journalists, and biased researchers) as productions of little

importance. In this way, the growing *hobbyware* collection, as well as all the people, processes, and cultural conditions around it, contribute to the construction of a stock of detritus, present only as ghosts of the amnesic narratives that some people tend to reproduce.

The selection of what should be forgotten and remembered is made by specific agents participating in the global and national digital gaming industry. Generally, this occurs because the collaboration between the gamer communities and the gaming industry is established by specific agents who, over time, guide the focus of their narratives toward some productions, people, and game experiences to the detriment of others. This selection has helped compose what is known as the legitimate history of digital gaming. These agents include gamer and retro gamer community members, the media, the global gaming industry, and, finally, the museums [Decker *et al.,* 2012; Eklund, 2022; Nylund *et al.*, 2020]. These four agents are, therefore, the primary gatekeepers as far as knowledge of that history is concerned.

Examining the narratives concerning digital games in Portugal is an exercise that allows us to challenge historical biases proposed by academics, game collectors, and journalists, who are more concerned with arranging the games on watertight shelves (i.e., lists and maps). The critical analysis of the first book on the history of Portuguese digital games [Zagalo, 2013] by Gouveia [2014] has challenged us to identify the other agents helping to recover the forgotten narratives about that history. Some collective efforts to preserve and disseminate Portuguese digital games led by retro gaming communities have contributed to the emergence of other narratives about the history of digital games in the last decade. In this paper, we present two of these communities - *Planeta Sinclair* and *RetroArquivo* - and examine how their preservation activity can be a way to promote the recognition of the cultural, historical, and material values of old games. To achieve this purpose, we interviewed some people responsible for the preservation work of Portuguese digital games. However, this paper is only one part of a larger research that we started in 2019 [Lima, 2023].

2. Preservation of digital games: importance and barriers

Digital game preservation is becoming increasingly important worldwide [Mochocki, 2022; Nylund *et al.*, 2020; Stuckey *et al.*, 2015]. Different reasons contribute to reinforcing this importance. One of the main reasons is the technological obsolescence. Over the years, the physical media on which the obsolete games are stored can no longer be read and decoded; and, in addition to the progressive increase of technological incompatibility between hardware, these games also undergo a high degree of actual physical degradation [Barwick *et al*., 2011; Carta, 2017; Guay-Bélanger, 2021].

According to Santos Jr. and Nunes [2016], it was from the mid-1960s that more in-depth discussions on the theme of the preservation of electronic documents emerged in isolated communications and, in the following decade, in panels or working groups in congresses held by the International Council on Archives, in the United States. In the case of digital games, preservation has gained more importance since the 2000s. Thus, the notion that digital data can be easily lost and must be preserved is not recent. However, in many countries, including Portugal, there is no institutional solution for the preservation of digital games. As discussed in other publications [Lima, Pinto, Gouveia, 2022; Lima *et al*., 2023; Lima, 2023], digital games continue to undergo a pathological

cycle of constant forgetfulness and revival, fueled by the interests of institutional gatekeepers and different communities.

Barwick *et al.* [2011] compare what has been happening in digital game preservation with what happened in television program preservation. According to these authors, many television productions were lost because there were no initial preservation policies. The creation of preservation measures for these productions brought a greater collective awareness of their importance and cultural significance, something that could also happen in the case of digital games and all the tangible and intangible materials associated with them.

The preservation of these productions often involves duplicating the software. Despite being a non-commercial activity, duplicating with the intent to preserve can be regarded as unauthorized copying. This is one of the main barriers to preservation of digital games. That is, although preservation ensures that the historical and cultural values of these productions are not forgotten, copying the original software is an activity that can be deemed as a practice that generates legal and economic problems and is often interpreted as piracy [Barwick *et al.*, 2011; De Kosnik, 2020; Newman, 2012]. This means that the legal protections aimed at defending copyrights impede the preservation processes of these digital artifacts. In Portugal, this does not apply since, besides not having a consistent policy for digital game preservation, the few collectors and hobbyists who do this preservation independently do not encounter major obstacles regarding software duplication.

Legal barriers are not the only ones that impede the processes needed to preserve digital games. There are also the issues of long-term preservation, the issues of how to display and interpret the games, and the issue of the selection of material to include in a collection; problems identified over a decade ago as the main difficulties in the preservation of digital games [Barwick *et al.*, 2011]. These barriers, combined with the negative image still attributed to the video games sector in general [see Ecklund, 2022], are catalysts for something that will soon be part of the "digital dark age" [17]. Thus, many of the old productions, made since the beginning of the global and local gaming industry, may become entirely inaccessible for future generations, contributing to the construction of a memory void and the process of amnesia we have been talking about. However, as specific titles or publishers gain and lose relevance in the global scenario of digital games over time, the narrative around all these agents may also change. According to Swalwell [2021], this importance fluctuation translates into the value attributed to each production that, over its lifetime, can move from novelty level to junk level and vice versa, or be seen as a classic or retro object, gaining a renewed value that justifies its recovery and preservation.

3. Retro gaming communities and the preservation of the cultural legacy of digital games

Some communities have served to extend the useful life of old equipment and software, one of which is the retro gaming community. As some authors state, the membership in this niche has significantly increased in recent decades [Eklund, 2022; Nylund *et al.*, 2020; Newman, 2012]. This movement embodies values such as enthusiasm, nostalgia, and "continuing what was interrupted in the past," said one of our interviewees (from *Planeta Sinclair*).

Retro gaming is fostered by digital game fan communities and their niches that, sometimes, by adopting illegal and informal processes, manage to circumvent the barriers introduced to the preservation of games and all the material created around them. In this way, they develop and perfect techniques that should be used and maintained cooperatively between museums and the communities themselves [Barwick *et al.*, 2011; De Kosnik, 2020]. This community also keeps the original versions of both software and hardware available. Generally, this practice develops through the exchange and circulation of artifacts considered obsolete by the dominant culture. As this occurs within the formal economy, although outside the consumption circles of the general population, it grants these transactions a label of legitimacy and authenticity that allows retro to have a space within the mainstream culture.

Virtual communities or retro gaming websites can be categorized according to the interests of the individuals, namely interest in games, computers, and game consoles. These three branches of the retro gaming community can be further divided into the developers, buyers and sellers, and the technical problems and repairs group [Mora-Cantallops *et al.*, 2021]. Besides having an organized structure, retro gaming communities are important spaces for the dynamization of this subculture since they allow individuals to interact with like-minded people and take on the role of agents for the preservation of software and hardware and other materials associated with these artifacts. It is on the forums of these websites that individuals can share opinions, make symbolic and physical exchanges, and get valuable feedback for the creation of their games. It is also a showcase for retro games created for old platforms.

These communities can be composed of both senior and younger gamers. This means that, besides allowing the sharing of experiences of what it was like to play the game in their time, they also allow the production of new forms of appropriation of these artifacts, the emergence of new ways of playing, the creation of new and more diverse audiences, and, finally, the creation of new meanings around these old games, arising from these new forms of use and intergenerational interactions between gamers [Mora-Cantallops *et al.*, 2021]. It is through these new forms of use and production inspired by the past that game collectors are helping preserve that heritage. Moreover, getting new generations into contact with older digital artifacts allows the collective cultural imagination of new generations to expand to those same digital creations.

Over the last decade, in the Portuguese context, there has been some awareness about the importance of preserving game titles, computers, game consoles, magazines, people, and events that, if it were not for the efforts of a small number of hobbyists and a few local government iniciatives, we might never get to know. The preservation work developed by the *Planeta Sinclair* and *RetroArquivo* teams is only a few examples that demonstrate the interest in valuing these digital artifacts.

4. Retro gaming communities in Portugal: *Planeta Sinclair e RetroArquivo*

4.1. *Planeta Sinclair*[1]

André Leão, Mário Viegas and Filipe Veiga are the editors of *Planeta Sinclair*. This retro gaming community disseminates and preserves old software produced in Portugal

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[1] http://planetasinclair.blogspot.com/

and other countries, focusing on productions made on ZX Spectrum computers. They also preserve magazines, newspaper supplements, and fanzines that circulated in Portugal in the 1980s. *Planeta Sinclair* was born in early 2016. It was a pioneer in the preservation of recreational and educational software in Portugal. "We went from a little over 20 preserved programs to more than 800 at the moment, so it is 20 to 30 times more than what there was initially". According to Filipe Veiga, *Planeta Sinclair* has a significant international projection, "we get up to 25 thousand views per month, and only 25% are Portuguese, or even less." There is not a lot of support from the Portuguese government nor much recognition of the importance of digital game preservation by the Portuguese society. Through an exhaustive work of identification, emulation, storage, and file organization that is often done with their resources, the *Planeta Sinclair* editors make the entire collection of preserved games available on their blog. For them, this activity is done out of pleasure, love, and care for this material that was part of their childhood and brings back good memories.

4.2. RetroArquivo[2]

Pedro Pimenta, *RetroArquivo's* founder, before talking about the beginning of this community, highlighted some important facts in the digital games sector. First, electronic sports (eSports) are mobilizing many people and enabling the creation of events and TV shows in Portugal, such as Moche XL eSports at the Altice Arena, the streaming platform RTP Arena (Portuguese Television Network), and SIC television station with the ADVNCE project. Second, gaming events are becoming more and more common in Portugal, some examples are Lisbon Games Week, Moche XL Games World, and Eurogamer Summer Fest; and, finally, due of their undeniable importance in the current art scene, digital games are being added to the Smithsonian's collections, the Museum of Modern Art or the Library of Congress, in the US. According to Pedro Pimenta, despite this excellent projection, the history of digital games is disappearing. With the evolution of technologies, most games created throughout history need to be made available for us to experience and study. Even in cases where games are already preserved, we need much more than their source code to tell their whole story. Historians need ephemeral media for a complete perspective that shows how and why they were created, advertised, and sold, or how the public received them in their time. He also pointed out that concept art, internal production documents, and prototypes are essential to telling the story of digital games and are, unfortunately, the most easily lost data. What reaches the general public, such as interviews, reviews of video games and advertising published in newspapers and magazines, or even the games' packaging, helps to complete this picture. "We can only avoid the danger of losing them forever by an organized effort to collect all these disposable and ephemeral materials, documenting them, preserving them in digital format, and placing them in an archive", said Pimenta.

5. Some concluding remarks

The game collectors interviewed spoke of the nostalgia and rediscovery that preservation brings them. For them, this activity is a way to preserve memories, enable the sharing of old games and computers, and create new experiences, by allowing new audiences and new ways to play on platforms considered obsolete. Through their

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[2] https://retroarquivo.wordpress.com/

resources and exhaustive collaborative work, these two communities are developing an important preservation work that formal institutions are beginning to support and show interest in. Some authors argue that mainstream institutions, such as museums, should harness these hobbyists' efforts to jointly develop official and sustainable rules for the preservation of digital artifacts, thus encouraging moving from the informality and, in some cases, the illegality to a formal and legal context. In Portugal, digital game preservation is still contained in an informal and networked infrastructure, within which archival libraries of these same artifacts are developed, creating what Nylund *et al.* [2020] have called amateur museums. That is, the public and consumers are simultaneously producers of their museum activity, and where amateur collectors and hobbyists are the ones who have all the knowledge about preservation techniques and the forgotten narratives about the history of the local digital games industry. Out of this informal activity of some hobbyists are emerging local institutions devoted to preserving and supporting the gaming industry like Load ZX Museum[3] and Marvila Library[4] in Lisbon.

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[3] https://loadzx.com/
[4] https://www.agendalx.pt/events/event/marvila-bibliogamers/

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