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Table of Contents

Michał Mochocki, Yaraslau I. Kot	
Editorial: EHGS and Ukrainian Games of War	[5]
Aliaksandr Razhkov	
Features of the Use of Religious Symbols in Ukrainian Games of War	[9]
Jagoda Kościelniak	
The Semiotics of Wartime Kharkiv in Ukrainian Video Games	[29]
Emilia Mazur, Kacper Karwacki	
The Spectacle of the Absurd: Parody in Video Games as a Tool of Political Satire Relating to Russia's Invasion of Ukraine	[50]
Anna Sroka, Igor Kwasigroch	
Chinese-Speaking Steam Communities in the Face of Russian Aggression: The Case of the <i>Ukraine War Stories</i> Game	[84]
Michał Palmąka	
Preserving Wartime Video Games: Criteria and Methods in the Context of the War in Ukraine	[110]
Yaraslau I. Kot	
Ukrainian Games of War: Born in the Flames of Invasion	[128]

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Preserving Wartime Video Games: Criteria and Methods in the Context of the War in Ukraine¹

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[Abstract]: The ongoing war in Ukraine has influenced various aspects of cultural production, including video games. Unlike traditional forms of historical documentation, video games provide interactive experiences that capture emotions, testimonies, and unique perspectives on war. This paper explores the significance of preserving video games developed during the war in Ukraine and proposes a methodology for their preservation processes. It outlines criteria for selection, methods of digital storage, and potential institutions responsible for their preservation, such as archives, libraries, and museums. The study also discusses technical and legal challenges, including issues related to DRM (Digital Rights Management), digital decay, and copyright laws. In addition, it examines the public reception of these games, highlighting both positive feedback and controversies surrounding their ethical matter. By treating war-related video games as valuable historical testimonies, this research argues for their systematic preservation to ensure accessibility for future research and the public. The findings emphasize the role of video games as a contemporary form of war documentation and the necessity of dedicated institutional efforts to secure them.

[Keywords]: cultural heritage, digital archiving, video game preservation, Russia-Ukraine war, war testimonies

¹ The author acknowledges the use of OpenAI's ChatGPT in the linguistic editing of this article. The tool was used to enhance grammar and academic register, without changing the substance of the arguments.

1. Introduction

The ongoing war in Ukraine has profoundly affected both soldiers and civilians. For many, direct participation in or witnessing the consequences of the conflict has been a traumatic experience. In response, numerous individuals – both amateurs and professionals – have begun creating various forms of cultural expression, including not only board and table-top games but also video games. These games, often produced under unstable and dangerous conditions, represent an emerging form of digital testimony.

Preserving such materials poses significant challenges. Recent studies have shown that a vast majority of video games – especially those distributed digitally – are at risk of disappearing over time (Winslow 2023). Given the unique circumstances of their creation, war-related video games developed during the Russian invasion of Ukraine require special attention, including tailored selection criteria and archival methods.

This article proposes a structured approach to preserving these digital testimonies. Its aim is not to theorize about war-related games as a general cultural phenomenon, but to present a practical framework for their selection, classification, storage, description, and accessibility (Palmąka and Piłat 2023, 74–85). The following research questions underlie my analysis:

- > What criteria should be applied for the preservation of the games created during the conflict in Ukraine?
- > Which institutions are best suited to store such testimonies?
- > What are the key technical and legal challenges in preserving war-related games?
- > What method of description should be used for these testimonies?
- > How can these games be more accessible to potential future researchers and users?

The proposed methodology draws primarily from Polish archival and records management science. Although originally designed for the Polish State Archives, this approach can be adapted to other institutions dealing with digital heritage. The analysis is supported by case studies of selected games and examples of current preservation practices, legal contexts, and institutional frameworks.

2. Literature review

The question of how to preserve video games emerged in the late 1990s and early 2000s. This discussion was primarily driven by the fragility and instability of existing data carriers, the disappearance of older games from public access, and the growing recognition of video games as both a public good and a form of cultural heritage. Institutions such as the Library of Congress in the United States began efforts to collect, catalog, preserve, and study commercially released games. These initiatives laid the foundation for the first theoretical frameworks and practical approaches to video game preservation, which later developed into an academic field of study (Waters and Garrett 1996; Winget and Murray 2008, 1).

Currently, there are two dominant approaches to video game preservation in the literature. The first focuses on institutional frameworks, aiming to theorize or describe institutions dedicated to the archiving of video games. These studies primarily address the preservation of commercially released games (Winget and Murray 2008; Wood and Carter 2018), often overlooking independent developers who create games under extraordinary circumstances, such as armed conflict. A second group of publications takes a more technical and legal perspective, examining barriers to preserving not only the games themselves but also related materials (Harkai 2022), as well as the communities involved in game archiving (Dym et al. 2023). While these studies make important contributions to the field, they do not offer a methodological framework specifically for war-related video games or address their role as digital testimonies.

3. Characteristics of war-related games

During the ongoing war in Ukraine, several noteworthy video games have been released. One example of a war-related game connected to the conflict is *Putinist Slayer* (Bunker 22 2022). In this game, the player shoots at aliens whose faces are replaced with those of Russian politicians. It can be described as a meme-like expression or an emotional reaction of its creator

(Zinovieva 2023, 216–217). Another title is *What’s up in a Kharkiv Bomb Shelter?* (Dahuanna 2022), which was developed as a distraction from the horror of the bombardment of Kharkiv in 2022 by one of the survivors and later released in Lviv. This game serves as a valuable source for studying the experiences of civilians during the bombing of the city.

A third example is the well-known collection of visual novels titled *Ukraine War Stories*, which presents testimonies of civilians from Gostomel, Bucha, and Mariupol. The gameplay primarily involves selecting dialogue options to advance the narrative (Starni Games 2022). Another title is *Death from Above*, a drone simulator in which the player operates a drone to destroy enemy vehicles, clear mines, and carry out tactical missions. An interesting feature is the ability to explore a wide area, classifying the game as a sandbox (Rockodile 2024). Additionally, there is a multiplayer first-person shooter (FPS) titled *Glory to the Heroes*, which is expected to be released in Early Access in 2025 on Steam. The game emphasizes tactical combat and allows players to choose from a variety of roles (Deaf Tone Games 2025). These examples represent a new form of documenting wartime memories and emotions through interactive media.

Most of the games mentioned above have been recognized by the gaming community and press for their unique narratives and perspectives on the war. For instance, the website for *What’s up in a Kharkiv Bomb Shelter?* features numerous comments from players, including messages encouraging Ukrainians to resist Russian aggression and thanking the developer for sharing their personal experience (Dahuanna 2022). *The Guardian* also published an article highlighting games that share perspectives on the war in Ukraine. The author briefly describes several titles and emphasizes their testimonial value (Evans-Thirlwell 2022).

In contrast, some titles have sparked public debate. An article discussing *Death from Above* raises ethical concerns about profiting from war-related content (Goncharenko 2023). Opinions on the game have been divided. While some players criticize it as propaganda, others appreciate its gameplay and argue that it was unfairly targeted by Russian review bombing (GOG.com 2025b). On Steam, *Death from Above* holds a “Very Positive” rating (91%) (Rockodile 2024), whereas its Metacritic user score, based on five reviews, is notably lower at 6.8/10, reflecting its controversial reception

(Metacritic.com 2025). Another game, *Ukraine War Stories*, has a “Very Positive” rating (87%) on Steam, with over one thousand player reviews. Some users accuse the developers of spreading Ukrainian propaganda, but the majority praise the game for its emotional storytelling and its encouragement of resistance to Russian aggression (Starni Games 2022). These examples demonstrate that games related to the war in Ukraine are part of a broader public discourse. They serve not only as entertainment but also as testimonies of the conflict.

4. Criteria for preservation of the games

Video games constitute a vital part of our contemporary cultural heritage. Unlike traditional media such as books or films, video games are inherently interactive, enabling users to actively engage with the presented narrative. This interactivity is particularly significant in the context of war-related games, as it allows players to simulate, witness, or emotionally process the everyday experiences of civilians and soldiers during conflict.

As Espen Aarseth (1997) argues, video games are ergodic texts, that is, narratives that require nontrivial effort from the player to progress. This distinguishes them fundamentally from passive media, where reception is largely linear and observational. In the context of war-related games, interactivity translates into a simulated experience of agency, choice, and consequence, which is particularly relevant when portraying trauma and survival.

For archivists and other professionals interested in preserving war-related video games, the preservation process cannot be limited to the software or source code alone. The entire experience consists of narrative content, user interface, decision-making structures, platform limitations, and emotional design. These elements, taken together, contribute to the full testimonial value of a game and require a specialized archival approach.

One of the most widely discussed examples of a game addressing civilian experiences in wartime is *This War of Mine* (Zieliński 2014). Although the game provides a strong emotional narrative, it was developed in a peaceful and stable environment. In contrast, the situation is very different for games

created under direct war conditions, such as during active bombardment or displacement. Another issue is the difficulty of discovering and documenting such titles, especially because of the sheer volume of new releases. In 2024 alone, over 15,000 games were published on the Steam platform, a significant increase compared to previous years (Statista 2026). Statistically, only a small fraction of these games address the war in Ukraine, underscoring the need to preserve them systematically.

In order to identify which games should be preserved, it is necessary to define clear criteria for their selection. The following section proposes a classification system based on narrative content, authorship, and production context.

[Table 1]: General criteria for the archival selection and specific criteria for the selection of the video games discussed

General criterion	Specific criterion
importance of the creator	creation of the game during the invasion
historical significance of the creator	the impact of the narrative presented
information value	narrative of personal experiences during the invasion
uniqueness of information	non-use
uniqueness of the texts	non-use
typicality	popularity of the game genre
uniqueness	innovation in mechanics and presentation of war experience
age	preservation of all games created before 2025
degree of preservation	number and quality of surviving copies, rarity

[Source]: own elaboration based on: (Robótka et al. 1989, 39–42), (Palmąka and Piłat 2023, 76).

The first general criterion focuses on the conditions under which a specific video game was created. Priority should be given to preserving games developed during the invasion itself. These titles are important because they

serve as immediate emotional records created by direct witnesses to the war. Games developed outside Ukraine can be preserved later.

The second general criterion concerns the narrative dimension of the testimony. Some war narratives are more historically significant than others and are likely to become primary sources for future scholarly research.

The third criterion relates to individual emotional experiences. Different people perceive and remember events in different ways; thus, each personal experience carries unique informational value.

The typicality criterion highlights the need to preserve representative examples of common game genres. These can serve as references for research and study.

The uniqueness criterion emphasizes the importance of preserving games that are innovative in their mechanics or in how they present war experiences. These titles may serve as case studies for future research.

The age criterion addresses the practical need to limit the scope of preservation. It is not feasible to preserve every game released. For the purposes of this project, the cut-off point is set at the end of 2025. This decision is justified by two factors: first, three years will have passed since the full-scale invasion began, and eleven years since the start of the recent Russian-Ukrainian conflict. Studies indicate that ten years is often enough for video games to become effectively lost (Winget and Murray 2008, 1). Second, a potential ceasefire or resolution to the conflict may shift the production context, which means that future games will likely be developed under less extreme conditions.

The final criterion suggests prioritizing rare games and securing the best-quality copies of each preserved title and related materials.

It should be acknowledged that a similar methodological approach was employed by Yaroslau Kot in the *Ukrainian Games of War* database (Kot 2026). The author classifies entries not only according to the technical form of the ludic work (game, DLC, mod), but also according to narrative categories, such as *Games of Support*, *Ukrainian Cultural Renaissance Games*, and *Patriotic Literacy and Educational Games*. Furthermore, the database includes additional metadata, such as information on availability and game genre. The overall structure and level of detail demonstrate a high degree of

methodological rigor, indicating that the database was developed in a highly professional manner and merits scholarly recognition.

5. Potential institutions and practices

Once the selection criteria have been established, it is equally important to consider the types of institutions capable of preserving these materials. When organizing such content, it must be acknowledged that many games may become unplayable over time because of software and hardware obsolescence. Therefore, the institutions responsible for preservation must be able to provide appropriate long-term storage conditions.

In Poland, several organizations meet these requirements. One of the most prominent is the National Digital Archive in Warsaw, which primarily preserves photographic and audiovisual documentation. However, its charter explicitly states that it may also store digital materials with an “established and defined structure” (BIP 2022, par. 6, sec. 2). Other state archives may also preserve video games through donation agreements signed between the archive and the creator or owner of the game (art. 15, sec. 4, Act of 14 July 1983, on National Archival Resources and Archives, Journal of Law No. 38, item 173). Although the act does not explicitly mention video games, it refers more broadly to materials related to science and technology as well as culture and art, which allows video games to be interpreted as falling within this scope.

Support for this approach also comes from examples outside Poland. One of the leading institutions in this field is the Computer and Video Game Archive at the University of Michigan, established in 2008. According to a 2018 study, the archive holds over 8,000 games for various platforms. Users can browse the catalog and play selected titles on-site, with access typically granted for one hour per session, extendable depending on demand (Wood and Carter 2018, 188–193; University of Michigan Library 2025).

Libraries are another type of institution well-suited to preserving this kind of testimony. University libraries, in particular, are designed to support academic research. For instance, the University of Gdańsk Library Regulations

state: “The library’s tasks include preserving cultural heritage, conservation, study, and storage” (BIP 2024, par. 3, sec. 3; my translation). A specific subcategory of such institutions, known as media libraries, specializes in the preservation of music, film, and video games. In my opinion, this category is particularly appropriate for storing materials related to war-related games (Skoczyński and Grysa 1997, 59–60).

One prominent example of this type is the Library of Congress in the United States. As of 2019, it held nearly 5,000 video games, along with game guides, gameplay footage, advertising materials, industry periodicals, and some source code collections (Library of Congress 2019). Other libraries, including municipal and private institutions, may also serve this function if they have sufficient funding and qualified staff.

Museums represent another institutional model. Games can be treated as cultural artefacts worthy of preservation. Unfortunately, no public museum in Poland has yet expressed interest in preserving war-related video games. Private museums of computing and gaming in Poland tend to focus on commercial releases and retro hardware rather than on contemporary testimonies of conflict (Kraków Arcade Museum 2025; Wrocławskie Muzeum Gry i Komputery Minionej Ery 2025; Warszawskie Muzeum Komputerów i Gier 2025). Preserving such documentation is often not financially possible for them.

However, several international museums are actively engaged in video game preservation. The National Videogame Museum in Sheffield, United Kingdom, founded in 2008 and operated by the British Games Institute, preserves not only games but also gaming platforms, documentation, advertisements, and interviews with developers (National Videogame Museum 2025). Another example is The Strong National Museum of Play in Rochester, New York, founded in 1969. Its collection includes over 40,000 video game-related items such as consoles and manuals. The museum ensures long-term preservation through dedicated storage facilities and also operates the World Video Game Hall of Fame which has inducted 45 games since 2014 (The Strong National Museum of Play 2025a, 2025b, 2025c). While these institutions primarily preserve commercial products, they offer valuable models of good preservation practices.

Additionally, the Luxembourg Centre for Contemporary and Digital History has launched an initiative focused on collecting, preserving, and analyzing testimonies related to the war in Ukraine. It is conceivable that video games could also be incorporated into this preservation effort (Venken 2025).

There are also non-profit private initiatives devoted to video game preservation. One of the most notable is the Video Game History Foundation, founded by Frank Cifaldi. This organization works to preserve all forms of video game history, including magazines, art books, history publications, source codes, and development documentation. It also conducts educational activities such as blogs, podcasts, and museum exhibitions (Video Games History Foundation 2025).

Another non-profit effort is the Software Preservation Society, which focuses on games released for the Commodore 64, Atari ST, and Apple II. The organization maintains a list of archived games and those that are sought; however, no formal reports have been published since May 2010 (Software Preservation Society 2010).

These examples provide potential models and inspiration for organizing repositories for games related to the war in Ukraine.

6. Technical and legal challenges

All of these institutions and initiatives face significant legal and technical challenges, most notably related to copyright. The majority of games are protected under copyright law, which prohibits copying and storing them without the explicit permission of the creator. As a result, games cannot be preserved by public institutions unless appropriate legal conditions are established. Since many creators do not make their games available free of charge, dedicated legislation may be required to enable their preservation (Harkai 2022; Dym et al. 2023). To avoid legal conflicts, institutions should establish formal agreements with the creators or rights holders.

Another common issue involves Digital Rights Management (DRM), a form of software protection that prevents unauthorized copying. DRM systems

often require a constant internet connection, which complicates the preservation process (Karthik et al. 2020, 1–2). Some preservation initiatives have addressed this issue by bypassing or removing DRM. For example, the GOG² digital distribution platform offers games without DRM (GOG.com 2022). In 2024, GOG also launched the “GOG Preservation Program,” which ensures that selected games are regularly updated and patched to remain compatible with new operating systems (GOG.com 2025a).

Most of the war-related games discussed in this article were released via digital distribution platforms such as Steam or itch.io. This means that they lack physical copies, which simplifies storage and access but creates other vulnerabilities. To access these games, users typically require a PC with an internet connection and access to the relevant distribution platform. Institutions may consider maintaining their own servers to store purchased or donated games. This approach offers protection against removal from commercial platforms, which can occur for reasons such as licence expiration, lack of updates, or censorship. Furthermore, developers may alter game content post-release, highlighting the risk of relying solely on digital distribution (Švelch 2019, 5–13).

One important issue is digital decay, the process by which digital content becomes inaccessible or unrecoverable over time. Storing games on institutional servers or media library systems can help mitigate this risk. For titles released on physical media, proper environmental storage is essential. This includes secure storage spaces, acid-free boxes and sleeves, and climate control (15–24°C and 20–50% humidity) (NeoOnline Store 2026). Data from physical carriers can later be transferred to institutional servers for long-term access.

Preserving mobile games presents additional challenges. Accessing and studying these titles requires compatible mobile devices or emulators. For Android games, the emulator BlueStacks is recommended (Now.gg 2025), while iOS games can be emulated using the Remoted iOS Simulator in Microsoft Visual Studio (Microsoft Corporation 2024). Installing mobile games

² Good Old Games (GOG) is a digital distribution platform founded in 2009 by the Polish video game company CD Projekt SA. It focuses primarily on selling and preserving classic and obsolete video games, although it also offers contemporary titles (No-clip 2018).

requires software package files: “.apk” (Android Package Kit) for Android and “.ipa” (iOS App Store Package) for iOS (Android Developers 2019; Raz 2017). Games may be removed from platforms like Google Play or the App Store, necessitating extraction from existing devices where the games reside as executable files or packages. One of the most effective ways to ensure access to these titles is by uploading them to the Internet Archive, making them publicly available from anywhere in the world (Internet Archive 2004).

7. Archival description and standard

Studying video games as testimonies of the war in Ukraine should be conducted through a structured process. The first stage involves preliminary research, which includes identifying the conditions under which a specific game was created. This may involve collecting supporting documentation and conducting interviews to determine the game’s origin and, if unknown, to identify the creator.

Once the origin is established, the next step is selecting an appropriate storage institution. The archival arrangement of the materials must then be determined. Games may be ordered alphabetically by the creator’s name or grouped by genre. After organizing the materials, each game should be assigned a unique identification number using a *numerus currens* system. The final step is the creation of detailed metadata and a full description in digital form (Palmąka and Piłat 2023, 79–84).

The metadata structure can be based on the international standard ISAD(G), which defines several descriptive areas:

- > identity statement area;
- > context area;
- > content and structure area;
- > formal and technical description area;
- > conditions of access and use area;
- > allied materials area;
- > notes area;
- > description control area.

Each area contains specific elements. For example, the identity statement area includes:

- > name of the institution;
- > institution reference code;
- > file reference number;
- > title;
- > date(s);
- > extent and medium of the unit of description (quantity, bulk, or size).

The context area should contain:

- > name of the creator(s);
- > biographical history;
- > game genre;
- > date of release;
- > name of the developer and the publisher;
- > immediate source of acquisition or transfer.

The formal and technical description area includes:

- > type of data carrier;
- > save format – file compression type;
- > data carrier capacity;
- > name of the game engine;
- > minimal system requirements;
- > recommended system requirements;
- > language(s) of the game;
- > has the game been moved to another carrier? (all information about the transfer should be given, original and secondary carriers);
- > technical condition.

The conditions of access and use area consist of:

- > conditions governing access;
- > conditions governing reproduction;
- > copyright information;
- > information about age rating and content rating (e.g., PEGI).

The allied materials area should list the name of the person preparing the record, the date of the record's creation, and details about related materials. The notes and description control areas may include additional contextual

notes and references to auxiliary bibliographies (Palmåka and Piłat 2023, 82–84; International Council on Archives 2000, 13–35).

8. Conclusions

Video games are not only a significant part of our cultural heritage because of their interactive nature, they also serve as valuable testimonies of contemporary armed conflicts. The proposed criteria and adapted archival methods, including the use of ISAD(G), offer a practical framework for preserving games related to the war in Ukraine. To ensure their long-term survival, suitable institutions such as archives, libraries, or museums must invest in necessary infrastructure: servers for storing digital files, computers for playback, and physical space for storing traditional data carriers. Internet access is also recommended to enable comparison with other digital resources related to the war.

Treating these games with scholarly attention and respect and ensuring their future accessibility are essential not only for researchers but also for preserving the memory of individuals who lived through the conflict. Their digital testimonies deserve a place in the collective historical record.

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