

Monika Bogdanowska*, Miłosz Horodyski**

Authenticity of a monument in virtual historical reconstruction. The case of Kijow Cinema in Krakow

Abstract

This article analyses the issue of authenticity in architectural heritage in the context of virtual historical reconstruction. The starting point was the question of whether, and to what extent, a digital model of a building can convey selected aspects of material, intangible and contextual authenticity. The discussion is based on a case study of the Kijow cinema in Krakow, whose original 1967 state was digitally reconstructed using laser scanning, archival research and 3D modelling, and subsequently implemented in the Unreal Editor for the Fortnite environment. The authors combined an analysis of conservation doctrines with reflections on digital representation, experience of a place and the platform-based nature of the gaming environment. They highlighted the difference between a digital twin and a virtual historical reconstruction. They discussed the risks arising from the model operating within a closed commercial environment. The conclusions drawn from this case study highlight the need for transparency in the reconstruction process, documentation of interpretative decisions, and archiving data outside the game platform.

Key words: authenticity, architecture, virtual historical reconstruction, “Kijow” Cinema, Fortnite/UEFN, digital representation

Introduction

Modern digitisation techniques offer previously unattainable precision in documenting heritage, together with new ways of experiencing it. Yet can the key value of heritage – authenticity, which identifies an object as real, genuine and credible – be transferred to a virtual environment, where a digital representation may gradually become detached from the material original or even replace it in the minds of some audiences? Some scholars have proposed recognising the authenticity of a virtual object through another of its attributes, namely credibility, provided that it conveys both the tangible and intangible values of the original. This recognition must, however, be accompanied by a “credibility meter”; without one, the object may be misrepresented and lose its intrinsic function as a historical document (Bentkowska-Kafel 2008).

The motivation for the study was the observation that, in the age of cultural-heritage digitisation – particularly of architecture – the concept of authenticity is changing. Reconstructions of historic buildings in virtual environments reveal both the potential of digital mediation and the risk of losing the “spirit of place”, as defined in the Quebec Declaration (ICOMOS 2008). The London Charter (2009) emphasises that the authenticity of a digital visualisation depends not only on the reliability of the source data but also on the transparency of the process by which those data are transformed.

This article aims to analyse changes in the concept of authenticity and the conditions under which it may be preserved in virtual historical reconstruction. The discussion focuses on architecture, for which the perception of space, context and spatial sequence, together with technologically mediated experience, is central to reception (Rasmussen 1999). The study encompasses changing definitions of authenticity in heritage discourse, examples illustrating major tendencies in the digital representation of historic buildings, and a case study of Kijow Cinema in Krakow – a listed building and one of Poland’s pioneering examples of transferring architectural heritage into the Fortnite/

* ORCID: 0000-0003-2227-2093. Faculty of Architecture, Krakow University of Technology, Poland, e-mail: monika.bogdanowska@pk.edu.pl

** ORCID: 0009-0005-4659-6422. Higher School of Business – National Louis University (WSB-NLU), Nowy Sącz, Poland.

UEFN (Unreal Editor for Fortnite) game environment. The UEFN model is treated not as a digital twin in the engineering sense, but as a virtual historical reconstruction: an interpretative digital model created within a specific platform context. On this basis, the article examines the relationship between documentation, reconstruction and the platform environment.

Methods

The article presents a case study of Kijow Cinema in Krakow, supplemented by an analysis of conservation doctrines concerning authenticity and a selective comparative overview of practices in the digital representation of heritage. The method is interdisciplinary: it combines a conservation perspective, focused on the reliability of documentation, the transparency of the reconstruction process and the relationship between the representation and the original, with a media-studies perspective on digital representation, platformisation, interaction and the model's increasing narrative autonomy. Given the scope of the topic, the literature review is organised into two areas – conservation doctrine and media studies – which are discussed in separate sections.

The theoretical section analyses doctrinal documents and scholarship on heritage authenticity, including the Venice Charter (ICOMOS 1964), the Nara Document on Authenticity (UNESCO 1994), the Quebec Declaration (ICOMOS 2008), the London Charter (2009) and the Seville Principles (ICOMOS 2017). The empirical section examines the process of creating the virtual historical reconstruction of Kijow Cinema, from laser scanning and archival research, through modelling and optimisation, to implementation in UEFN. The analysis is complemented by a phenomenological reflection on the experience of place and an examination of the platform medium, within which the model begins to function as an interpretative and narrative object.

Because the study concerns a single case, its conclusions are analytical and interpretative rather than generalisable. The authors do not seek to formulate a general theory of authenticity in virtual environments, but to identify the conditions, limitations and risks revealed by the case.

Research context: authenticity in heritage conservation

Evolution of the concept

In conservation discourse – as most clearly reflected in the Venice Charter (ICOMOS 1964) – “authenticity” was treated as a foundational concept: a fundamental value assumed to be intuitively understood. In common usage, the term denotes the quality of being real, genuine and credible. Accordingly, what is not real cannot be authentic¹.

Western theory emphasised material authenticity, an emphasis that was difficult to reconcile with Eastern perspectives grounded in other values, such as the continuity of tra-

dition or craftsmanship (Tomaszewski 2012). The Nara Document on Authenticity (UNESCO 1994) therefore broadened the concept to encompass intangible heritage. Herb Stovel (2008) described this evolution as a shift from an absolute value to a relative, culturally conditioned concept. The same approach is reflected in the World Heritage Committee's guidance: inscription on the World Heritage List requires the demonstration of Outstanding Universal Value, accompanied by an assessment of the property's authenticity and integrity. Authenticity is assessed by examining the credibility of attributes including form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, understood as “sources of information” about the property's values (UNESCO 2003a).

Contemporary approaches to virtual heritage have been shaped by three ideas: documentation, reconstruction and accessibility. The Quebec Declaration (ICOMOS 2008) identified digital technologies as tools capable of connecting tangible and intangible heritage. In reconstruction, authenticity began to be sought less in material fabric itself than in a documentation process grounded in reliable sources, transparent procedures and the social function of access. The safeguarding of intangible heritage, which is carried by people, has brought the public interest to the fore (UNESCO 2016). Yet making heritage accessible also entails its transformation into a product, a process that may weaken – or even falsify – the relationship between the representation, the material original and its context (Smith 2006).

This situation calls for deeper reflection on the nature of authenticity, which can now be considered in three dimensions: material, intangible and contextual. The material dimension concerns the authenticity of substance, form and construction techniques – the aspects most closely associated in Western conservation tradition with the “original” and its physical continuity. The intangible dimension concerns cultural practices and social uses of an object: rituals, memories, narratives and experiences shared by a community, through which a space becomes a place. The contextual dimension encompasses the object's relationships with its urban, historical and symbolic surroundings, as well as the conditions of its contemporary mediation, including modes of presentation, interpretative frameworks and the logic of the medium, such as a commercial platform. These factors jointly shape the perceived “truthfulness” of heritage. The remainder of the article adopts this triad as an analytical framework for assessing which dimensions of authenticity can be transferred to a virtual environment and which are inevitably transformed.

Authenticity in digital reconstructions

The London Charter shifts the focus of the discussion of authenticity from the physical monument to the process of its digitisation (Denard 2012). The authenticity of a virtual reconstruction can be considered on two levels: documentation, meaning the fidelity and reliability of the historical data used, and reconstruction, meaning the transparency of the final visualisation. The Charter emphasises that authenticity in the digital domain depends on the reliability

¹ “Authenticity: the quality of being real or true” (Cambridge Dictionary n.d.).

and availability of the documentation on which a model is based. This principle is one of the key points of reference for the present analysis.

One attempt to redefine authenticity in light of new technological possibilities is the concept of “digitised authenticity”, based not on the originality of material fabric but on the credibility of a digital representation (Zapłata 2016). The creator of a digital model thus ceases to be a neutral documentarian and becomes a co-author or interpreter of heritage. The work involves not merely copying but a series of decisions – from the selection of source data and modelling methods to the form of final presentation – that shape how the work is received.

The Seville Principles (ICOMOS 2017) set out guidelines for virtual reconstructions. They emphasise a fundamental rule of intellectual integrity: every element that is hypothetical or constitutes a contemporary addition must be visually distinguishable from elements supported by firm evidence. Jesús Muñoz Morcillo et al. (2017) go further by advocating the acceptance of a “plurality of authenticities”. Because reconstructions are interpretative, multiple scientifically justified versions may exist; each may be regarded as “authentic” within its own context, provided that methodological transparency is maintained.

Embodied experience plays a key role in human perception, a central proposition of phenomenology (Merleau-Ponty 2001). Increasingly, however, reality is perceived not directly but through digital technologies, and these technologies are not neutral: they mediate and transform how the world is perceived (Ihde 2009). In virtual reconstructions, this transformation often narrows perception to an incomplete range of sensory experience (Asanowicz 2012). At the same time, digital representations are modular, variable and open to further transformation, which affects how they function in platform environments (Manovich 2006). Information technologies have advanced to the point at which virtual experiences can produce real physical responses, including cybersickness (Stauffert, Niebling and Latoschik 2020).

Comparative contexts of digital heritage representation

The relationship between architecture, identity and digital space did not emerge only with contemporary gaming platforms. An important earlier point of reference was the Virtual Guggenheim Museum, developed by Asymptote for the Guggenheim Foundation. The project was not a reconstruction of an existing historic building but an attempt to create autonomous digital architecture for works of art existing in an online environment. It already revealed a tension between the immaterial logic of digital space and the habits and expectations of audiences shaped by physical architecture (Guggenheim Going Virtual 2000).

Another form of digital heritage representation comprises documentary models and digital twins, whose purpose is not primarily to create a narrative experience, but to support monitoring, data integration, archiving and information management. In this approach, the digital model remains closely subordinated to the material original and to its present or historical condition (Niccolucci, Felicetti and

Hermon 2022). The digital preservation of Tuvalu’s heritage in response to climate threats illustrates this approach: the representation is intended to support memory, cultural continuity and the state’s political visibility (Dev 2025).

Heritage interpretation raises a further problem: how can the message carried by an object be conveyed faithfully while also being made engaging for a specific audience?

This was the central challenge of the Glastonbury App, designed to support visits to a medieval abbey: children had to be entertained without compromising the sacred character of the site. The developers rejected treasure hunting, Arthurian legend and magic as themes because they considered them a distortion of the spirit of place; magic was also regarded as unacceptable on axiological grounds. Instead, they adopted a narrative of pilgrimage, which referred directly to the site’s tradition and used a shared journey in search of spirituality to connect past and present generations. The example shows how easily the historical truth of a heritage site can be distorted when popular narratives displace an interpretation of the site’s essential character (Gilchrist et al. 2025).

At the opposite end of the interpretative spectrum from documentation (science) and education lies commercialisation. The Yuanyuzhou platform, for example, offers metaverse technologies – avatars, AIGC, 3D, digital twins – as a digital framework for heritage tourism in Henan Province. Exploring heritage through VR headsets makes the experience feel “real”. The platform gives users access not only to extensive information about a site, but also to services in the physical world, including purchases. It therefore exemplifies the movement from online to offline in meeting users’ needs; avatar customisation, including physical features and clothing, is only a minor addition. The application demonstrates the scale on which technology can be used to promote and commercialise heritage (He, Qin 2024). Questions of a heritage site’s authenticity recede into the background, though they do not disappear altogether. Visiting a place always involves many kinds of experience: encounters with other people, memories of the comfort of a hotel room, shopping, local cuisine and more.

The case of Kijow Cinema lies between these models. It is not a digital twin because it is not dynamically connected to the physical building. Nor is it autonomous digital architecture created from scratch for the internet, or a tool for commercialising the site. It is a documentation-based virtual historical reconstruction that, once implemented in Fortnite/UEFN, acquires additional exploratory, interactive and narrative dimensions. The resulting tension between documentation, interpretation and the model’s increasing autonomy within the platform is the central object of analysis.

In light of these examples, authenticity in digital environments requires careful qualification. Digital representations can support heritage documentation, education and accessibility, but their value depends on their relationship to source evidence, the transparency of interpretative decisions and the durability of data beyond the immediate presentation environment. The developments in conservation doctrine outlined above show that authenticity can no longer be reduced to an object’s material fabric. This does not mean that materiality has lost its importance; rather, assessments must



Fig. 1. Façade of Kijow Cinema in Krakow
(photo by W. Plewiński, 1967, courtesy of Kijow Cinema collection)

Il. 1. Fasada kina „Kijów” w Krakowie
(fot. W. Plewiński, 1967, źródło: ze zbiorów Kina „Kijów”)



Fig. 2. Vestibule of Kijow Cinema in Krakow (photo by M. Horodyski)

Il. 2. Westybul kina „Kijów” w Krakowie (fot. M. Horodyski)

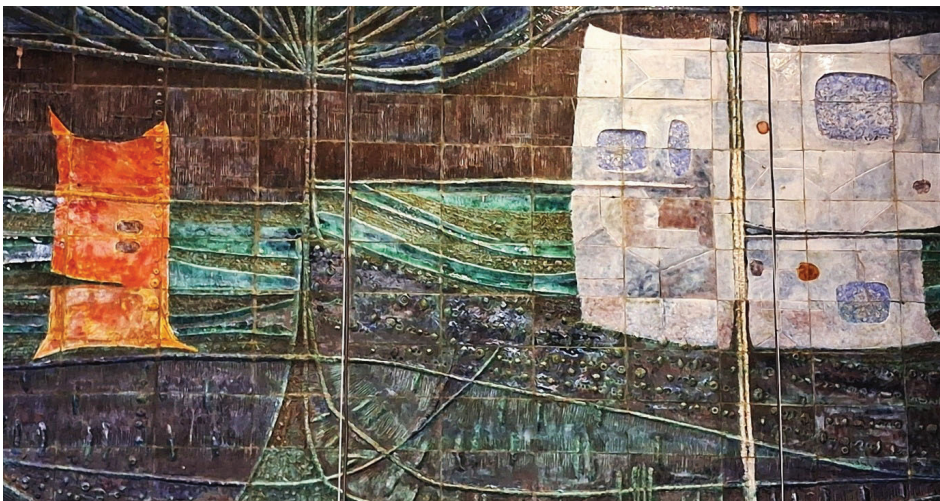


Fig. 3. Kijow Cinema in Krakow
– detail of the Cosmos mosaic,
designed and executed by
K. Zgud-Strachocka, 1967
(photo by M. Bogdanowska)

Il. 3. Kino „Kijów” w Krakowie
– fragment mozaiki „Kosmos”
zaprojektowanej i wykonanej
przez K. Zgud-Strachocką, 1967
(fot. M. Bogdanowska)

also consider the reliability of documentation, the transparency of reconstruction and the relationship between a digital representation and its original.

Kijow Cinema: between the material original and the virtual reconstruction

Kijow Cinema exemplifies a project that moved beyond the constraints of socialist functional modernism. Designed by Witold Cęckiewicz in 1967 and conceived in close relation to the Cracovia Hotel, the building was intended as a space of prestige and an ideological demonstration of the Polish People's Republic (PRL) authorities' openness to the world (Fig. 1). Its architecture can be read as the symbolic language of an era: a system of signs and a carrier of cultural meanings in which form, function and social context jointly create the meaning of place (Tuan 1977; Norberg-Schulz 1980).

The form of Kijow Cinema – monumental yet light, owing to its glazed façade and column-free main auditorium – communicated modernity and technological openness unequivocally (Fig. 2). Its distinctive roof, conceived as a “fifth elevation” visible from the hotel rooms, was not only an innovative engineering solution but also an aesthetic accent in the spatial dialogue of the complex. A monumental ceramic wall composition by Krystyna Zgud-Strachocka became integral to the building's symbolic dimension. Created in the spirit of abstract modernism and inspired by space exploration, it constituted an aesthetic rebellion against socialist-modernist conventions and emphasised the aspiration to modernity (Fig. 3). Over time, the building underwent numerous alterations: the foyer was remodelled, and the transparent glazing was replaced with tinted glass.

The research undertaken by a team led by Professor Grzegorz Biliński of the Academy of Fine Arts in Krakow aimed to recreate digitally the building's original appearance in 1967. In the context of the authenticity debate, this was an attempt to restore not only the architectural form but also the building's original context and the way it was experienced (Fig. 4).

The foundation of the virtual historical reconstruction was the creation of as faithful a representation as possible

of the building's original appearance. The team carried out a detailed laser scan of Kijow Cinema in its current form; the building's overall volume has not changed substantially. Over six days in May 2023, every part of the cinema was systematically recorded with a Faro Focus S350 scanner. The resulting high-density point cloud enabled the reconstruction of details at high resolution. This precision made it possible to capture even very small architectural features, a prerequisite for discussing authenticity – understood here as fidelity of representation – within conservation doctrine.

The next stage was archival research into Cęckiewicz's designs, Wojciech Plewiński's photographs and details of Zgud-Strachocka's ceramic composition. These materials provided the basis for transforming the raw point cloud into an interactive model. The process was not purely technical; it comprised a sequence of deliberate interpretative decisions. Every optimisation involved a compromise between geometric complexity and performance and could therefore reduce the fidelity of the representation. First, the raw scan data were cleaned and combined into a coherent whole in Leica Cyclone and Autodesk ReCap. A 3D model was then constructed in Autodesk 3ds Max from this digital record, with realistic material textures applied while maintaining high geometric precision. At this stage, the team had to decide which elements required full fidelity, which could be simplified and which had to be reconstructed hypothetically. The final stage was to adapt the model for real-time operation in UEFN. This involved simplifying the geometric mesh, reducing the polygon count, and preparing variants at different levels of detail (LOD), displayed according to the user's distance from the object. The Lumen lighting system and ambient sound were used to improve spatial legibility and strengthen the sense of presence. These measures were necessary to ensure smooth performance in the Fortnite platform environment, but they also required decisions about the extent of simplification and therefore affected the preservation of the model's geometric and material fidelity (Fig. 5).

The research concluded with qualitative analyses intended to assess the credibility of the reconstruction from the user's perspective. VR workshops were organised for a small group of experts and students. They examined phenomenological dimensions of the experience, including immersion and spatial perception. A complementary narrative analysis assessed the model's ability to convey the historical context and the "spirit of place" – the elusive quality that determines whether a digital copy remains a credible vehicle for the values associated with authenticity. The conclusions were then situated within current theoretical debates and the relevant scholarship.

Discussion

Digital twin versus virtual historical reconstruction

In conservation and technical literature, a digital twin is a dynamic, continuously updated model connected to a physical object in real time through sensor data (IoT). It is used primarily in engineering and in managing the life cycle of buildings or systems. A virtual historical reconstruction, also described as an interpretative digital model,

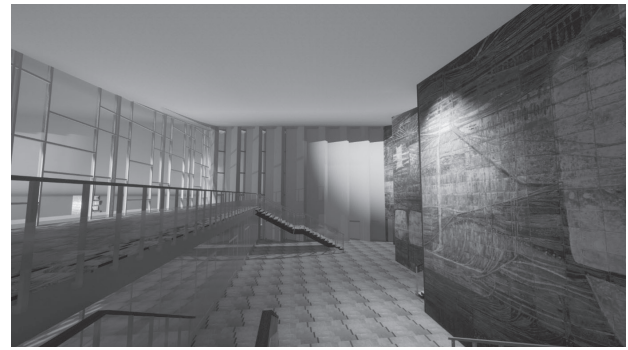


Fig. 4. Digital reconstruction of the vestibule of Kijow Cinema
(source: Studio OkO, 2023)

Il. 4. Cyfrowa rekonstrukcja westybulu kina „Kijów”
(źródło: Studio OkO, 2023)

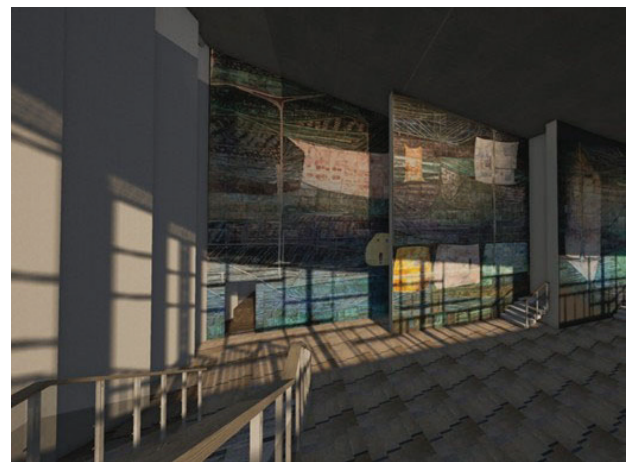


Fig. 5. Original transparent-glass façade restored in the digital reconstruction. The façade was originally designed so that the ceramic decoration would be visible from the street in daylight
(source: Studio OkO, 2023)

Il. 5. Przywrócona w ramach rekonstrukcji cyfrowej oryginalna fasada z przezroczystego szkła, którą zaprojektowano tak, aby ceramiczna dekoracja była widoczna od strony ulicy w świetle dziennym
(źródło: Studio OkO, 2023)

is different: it is not supplied with current data but is built from archival sources and historical materials. Its purpose is not monitoring, but the reconstruction or interpretation of an object. The Kijow Cinema model in UEFN belongs to this second category. It is not a digital twin, but a one-off, interpretative visualisation of the cinema's 1967 state, produced through a series of deliberate research and conservation decisions. This distinction is essential both for correctly assessing "digitised authenticity" and for transparently communicating to users the scope and nature of the interpretations introduced.

Technical authenticity and phenomenological experience

The geometric precision of the Kijow Cinema model, demonstrated by its high degree of correspondence with the scan data, supports its documentary value and meets the criteria

of credibility. The phenomenological dimension of authenticity, however – the subjective, multisensory experience of a place and its “aura” (Benjamin 2004) – remains largely unrealised. Restricting the virtual experience to sight and sound, without tactile, olfactory, or kinaesthetic feedback, substantially reduces immersion because an authentic experience of virtual heritage requires engaging multiple senses.

Between space and place

Recognition of the existence and value of intangible heritage – understood as practices, representations, expressions and skills recreated by communities and passed from generation to generation – has enriched the formal appreciation of architecture with social and ritual dimensions (UNESCO 2003b). An anonymous *space* becomes a meaningful *place* through experience and emotional investment (Relph 1976). Kijow Cinema became such a place through events that created strong social and emotional bonds. It was Poland’s first widescreen cinema capable of projecting films from 70 mm prints. Its prestige was built first by the Short Film Festival and later by the Film Confrontations series, which gave Polish audiences access to productions not normally available and created a bridge to Western popular culture. The record attendance of more than 800,000 viewers for *Gone with the Wind* confirms the cinema’s exceptional status. Its embeddedness in urban life was also expressed through “unofficial” practices, such as the activities of ticket touts known as *koniki*, which rounded out its social landscape. These relationships and micro-histories constitute the city’s emotional geography and create a map of attachment, or *topophilia* (Tuan 1977). In this way, the cinema became encoded in Krakow’s collective memory as a *lieu de mémoire*: a physical location saturated with symbolic meanings that preserve and reinterpret the community’s history (Nora 1984).

The identity of Kijow Cinema was not static. The political transformation of the 1990s and the emergence of multiplexes forced a redefinition of the building’s function. The revitalisation carried out between 2005 and 2008 transformed the single-screen cinema into a multifunctional cultural centre. Interpreted through the concept of placemaking, these changes show that place is a process continually produced through social relations and practices (Lefebvre 1991). Despite these transformations, Kijow Cinema retained symbolic continuity. Its sense of place, understood as a deep bond between people and space, was sustained and layered over time. This complex interaction between iconic architecture, collective memory and dynamic cultural practices constitutes, in terms of conservation doctrine, the dimension of authenticity that cannot be transferred to virtual space.

From documentary reconstruction to a platform-based environment

In the case examined here, the digital model of Kijow Cinema moves from a documentary-interpretative function towards an exploratory and ludic one. This does not amount to a simple break with the original, but to a gradual dis-

tancing of the representation from its sources as the model becomes subject to performance requirements, game rules and the logic of the user’s narrative. The stages can be characterised as follows:

1. The first level is documentary representation: because the 3D model is based on laser scans and archival materials, it retains a strong relationship with the material object.

2. The second level is interpretative reconstruction: the optimisation of geometry, the selection of textures and hypothetical additions introduce design decisions that must be documented explicitly.

3. The third level emerges after implementation in Fortnite/UEFN: the model becomes part of a task-oriented experience, and its reception depends on the platform’s rules, the game scenario and users’ actions.

A virtual historical reconstruction is therefore no longer a neutral carrier of data, but an interpretative process in which every optimisation decision, texture choice and interactive addition affects the degree of credibility retained.

A further issue is the closed nature of the Fortnite platform. The model’s digital existence depends on the infrastructure of a private corporation and carries no guarantee of long-term archiving, while the logic of gamification requires compromises in representational fidelity. Heritage consequently becomes vulnerable to commodification and to the loss of control over the long-term accessibility of data. The discussion of authenticity in virtual environments thus returns to the concepts of “digitised authenticity” and a “plurality of authenticities”: a methodologically rigorous and transparent reconstruction can serve as a valuable vehicle for selected dimensions of authenticity, but only if it is accompanied by open standards, interoperability and durable data storage outside the commercial platform.

Degrees of divergence between digital representations and the material original

The case study shows that, despite phenomenological limitations, a methodologically rigorous and transparent reconstruction can function as a valuable instrument of documentation and interpretation – not as a substitute for material fabric, but as a digital model that facilitates understanding of the original. The virtual reconstruction of Kijow Cinema results from interpretative decisions concerning the selection of sources, modelling methods and optimisation for the Fortnite environment, all of which affect geometric, material and contextual fidelity.

Table 1 presents the degrees of divergence between the digital representation and the material original. All digital levels are representational and interpretative, but they differ in their relationship to source documentation, the degree of methodological control and their susceptibility to increasing narrative autonomy within the platform environment.

Kijow Cinema as a modernist matrix and digital reinterpretation

The architecture of Kijow Cinema functions as a flexible matrix for reinterpretation in both physical and digital en-

Table 1. Degrees of divergence between the digital representation and the material original (elaborated by M. Horodyski)
 Tabela 1. Stopnie oddalenia reprezentacji cyfrowej od materialnego oryginału (oprac. M. Horodyski)

Dimension/attribute	Level I – material object	Level II – documentary and interpretative reconstruction	Level III – ludic, platform-based environment
Status of representation	original material object	digital model based on documentation and interpretation	model functioning as part of a game or platform environment
Relationship to the original	direct continuity of material fabric and context	indirect relationship controlled through sources, metadata and modelling decisions	relationship weakened by the logic of interaction, narrative and gameplay
Main function	heritage preservation, use, memory of place	documentation, education and interpretation	exploration, task completion, participation and entertainment
Type of experience	multisensory, embodied, in situ	visual-spatial and partially immersive	interactive, task-oriented and governed by platform rules
Scope of interpretation	constrained by the physical fabric of the object	high, but explicitly declared and documentable	dominant; the model may acquire narrative autonomy
Risk	degradation or loss of material fabric	reconstruction error or insufficient transparency	decontextualisation, commodification and loss of reference to the original
Example: Kijow Cinema	the 1967 building and its social memory	a 3D model based on scans and archival materials	Epic Troubles in Kyiv Cinema in Fortnite/UEFN

vironments. The Fortnite experience *Epic Troubles in Kyiv Cinema*, created by Veles Productions, incorporates an interpretative digital model of Kijow Cinema within a game-play setting (Veles Production). The historic building's physical form is placed within a game scenario in which architecture is not merely a backdrop, but an active space for the user's actions. This reinterpretation demonstrates considerable potential for popularisation, but it also requires the boundary between documentation, reconstruction and the ludic layer to be communicated clearly.

Transferring a modernist icon into Fortnite/UEFN therefore reveals both the potential to reach new audiences and the risk of commodification and of weakening the educational context when entertainment begins to dominate documentation. This perspective underscores the need for open data formats, principles of transparency and archiving mechanisms capable of protecting heritage against loss or appropriation within closed platform ecosystems.

Summary and conclusions

The analysis of Kijow Cinema shows that virtual historical reconstruction can convey selected dimensions of an architectural monument's authenticity, particularly those connected with geometry, form, documentation and educational interpretation. It cannot, however, replace material authenticity or the full experience of place, because it does

not reproduce the embodied, multisensory relationship with the object and its actual social context.

The model developed for Fortnite/UEFN should be understood not as a digital twin, but as a documentation-based interpretative digital model. Its value depends on the transparency of its sources and modelling methods, the extent of hypothetical reconstruction and the way the relationship between model and original is communicated to users. Understood in this way, such models can function as documents, interpretative tools and – as Waldemar Affelt (2011) proposes – “catalysts for cognitive curiosity” that lead users towards engagement with material heritage.

The case study also reveals the risks associated with operating a reconstruction in a closed platform environment: limited control over data longevity, the subordination of experience to the logic of gameplay and the possible weakening of the connection to the material original. Standards for documenting and archiving virtual reconstructions should therefore be developed on the basis of transparency, open data formats and a clear distinction between source-based, interpretative and ludic elements.

The conclusions are case-specific and do not purport to establish a general theory of authenticity in virtual environments. They may nevertheless provide a starting point for further comparative research on the relationship between 3D documentation, digital reconstruction and platform-based forms of experiencing heritage.

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Streszczenie

Autentyzm zabytku architektury w wirtualnej rekonstrukcji historycznej. Studium przypadku kina „Kijów” w Krakowie

W artykule przedstawiono analizę problemu autentyzmu zabytku architektury w kontekście wirtualnej rekonstrukcji historycznej. Punktem wyjścia było pytanie, czy i w jakim zakresie cyfrowy model obiektu może przenosić wybrane walory autentyzmu materialnego, niematerialnego i kontekstualnego. Rozważania oparto na studium przypadku kina „Kijów” w Krakowie, którego pierwotny stan z 1967 r. został zrekonstruowany cyfrowo na podstawie skanowania laserowego, kwerendy archiwalnej i modelowania 3D, a następnie zaimplementowany w środowisku Unreal Editor for Fortnite. Autorzy artykułu połączyli analizę doktryn konserwatorskich z refleksją nad cyfrową reprezentacją, doświadczeniem miejsca i platformowym charakterem środowiska gry. Wskazano różnicę między cyfrowym bliźniakiem a wirtualną rekonstrukcją historyczną oraz omówiono ryzyko wynikające z funkcjonowania modelu w zamkniętym środowisku komercyjnym. Wnioski mają charakter studium przypadku i wskazują na potrzebę transparentności procesu rekonstrukcji, dokumentowania decyzji interpretacyjnych oraz archiwizacji danych poza platformą gry.

Słowa kluczowe: autentyzm, architektura, wirtualna rekonstrukcja historyczna, kino Kijów, Fortnite/UEFN, reprezentacja cyfrowa