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# **Use of Symbolic Reconstructions in Open-Air Museums**

**Abstract.** The Russian-Ukrainian war, which took on a full-scale form in February 2022, became a tragedy and set the question of restoring lost monuments with new vigour. Therefore, the publication which aims to identify the specific features of symbolic reconstructions' use for the representation of lost architectural monuments becomes especially relevant. Based on a comprehensive architectural-typological and comparative analysis of the renovation of architectural structures and non-existent objects, open-air exhibiting methods in Ukraine and the world (fixation, interpretation, revitalisation, reconstruction, and modelling), the study reflects on the possibilities to preserve the history of destroyed monuments. Open-air museums offer a wide range of activities allowing to include monuments that are not subject to further functional adaptation into the expositions. The study proposes to use symbolic reconstructions to reproduce and exhibit lost monuments. Graphic (the simplest and most universal, consist of the two-dimensional image demonstration), physical (larger-scale, permanent, three-dimensional stylised installations that carry information about the lost monument's nature), virtual (the most flexible and the most promising, do not require the direct impact on the exhibit, include the use of augmented reality technologies), and performative (one-time or temporary activities, most often are used in the associative landscapes' territories) symbolic reconstructions on the example of their use in museums and open-air exhibitions were examined in detail. The effectiveness of these measures in open-air museums was considered and recommendations for their use, which can become the basis for further implementation in practice in Ukrainian exhibition institutions, were formulated

Keywords: lost monument, exhibition, symbol, installation, virtual technologies

#### INTRODUCTION

Ukraine has been rich in cultural, architectural, archaeological, and historical monuments for centuries. The difficult economic situation, incompetent political decisions, and the influence of time in recent decades have led to numerous destructions of such facilities. An even greater tragedy was the war in Ukraine, during which Russian troops destroyed and ruined not only individual monuments but entire cities. At the end of May/start of June 2022, UNESCO recorded the destruction or damage of 146 Ukrainian monuments [1], and the Ministry of Culture and Information Policy of Ukraine – over 360 [2].

The question of how to restore the lost becomes more acute. Housing or infrastructure can be rebuilt, but the

authentic value of architectural monuments cannot be replicated. Despite the available examples of valuable structures reproduction (for example, St. Michael's Golden-Domed Cathedral in Kyiv, the historic centre of Warsaw, etc.), international documents (Riga Charter on Authenticity and Historical Reconstruction in Relationship to Cultural Legacy, The Nara Document on Authenticity) do not recommend doing so and consider reconstruction with great caution, as authenticity cannot be reproduced.

This paper aims to identify effective approaches to the establishment of the open-air exhibition, in particular, to highlight the possibilities of using symbolic reconstructions to represent lost architectural monuments on the example of open-air museums.

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It is well known that modern society is focused on entertainment and scenography in any socio-cultural process. Therefore, to create open-air exhibitions, method of reproducing and exhibiting lost monuments to future generations through symbolic reconstructions is proposed; different types of such constructions on the example of their possible use in open-air museums are considered. A comparative analysis of examples of lost monuments' reproduction and exhibition in the world was used to illustrate the statements.

During the last 15 years, the amount of theoretical and methodological works on the establishment of museums, which have monuments of architecture and archaeology as key elements, increased. Among the researchers who investigated the methodology of creating open-air museums based on architectural legacy, the summarising works by V. Iievleva [3] & O. Popelnytskyi [4] did not lose their relevance. A. Danyliuk [5] & L. Prybieha [6] offer older and more recent views on the creation and maintenance of ethnographic skansens. D. Kepin & O. Tytova [7] devote their attention to archaeological open-air museums and O. Zhukova [8] focuses on palace ensembles and castle complexes as museums.

The use of cultural landscapes is properly discussed in the papers of foreign researchers (T. Grader, L. Garkovych, Yu. Buchas, D. Gardisti, M. Evans, A. Roberts & P. Nelson [9]), but many of them are culturological and focus on social rather than conservation issues.

Referring to more recent works, paper on modern exhibiting methods by V. Severyn [10] is notable. I. Posokhov examimes historical reenactments and living history [11; 12]. The works of H. Novikova [13], who researches various aspects of environmental open-air museums, are of great importance as well.

In foreign literature for the last 3-5 years, the tendency to analyse modern technologies and their use in museums is evident, but most researchers like I. Giangreco or F. Sousa [14; 15] concentrate their attention on indoor exhibitions and technologies themselves, which are not the subject of this study. There are no papers that scientifically describe the use of exhibition multimedia technology outdoors. This study expands the analysis of outdoor exhibiting methods and searches for effective measures for representing lost monuments, which would be more relevant than common outdated approaches, poorly adapted to function in the open air. The originality consists in starting a scientifically grounded discussion about using multimedia technology for outdoor exhibitions.

# **MATERIALS AND METHODS**

The investigation of symbolic reconstruction implementation in open-air museums involves the use of a set of scientific approaches. Given the specific features of a research field, the study is based on finding ways to exhibit lost architectural monuments, enhancing their semantic and emotional perception. The basis of this study is the analysis of the prerequisites and patterns of modern open-air museums' exhibitions.

The research methodology consists of a comprehensive architectural, typological, and comparative analysis of

exhibiting methods of architectural structures and non-existent objects in the open air in Ukraine and the world. Given the large number and variety of architectural monuments, the research methodology is based on comparative analysis, which includes analytical, systematic, architectural, and stylistic studies. Open-air museums are viewed from two perspectives: the establishment of a historically credible architectural environment and the creation of an attractive tourist facility.

The study can be divided into the following stages:

- 1. Generalisation of the results of previous studies in the field of architecture, museums, protection, and restoration; consideration and comparison of the main legislative provisions that could influence architectural legacy in museums.
- 2. Establishment of the features of museums that influence the choice of exhibition design; analysing methods of cultural legacy actualisation as an exhibit (fixation, interpretation, revitalisation, reconstruction, and modelling).
- 3. Highlighting world trends in the creation of open-air exhibitions; identification of techniques, methods, and means of exhibiting lost objects, which could be used in Ukraine to create an informative, convenient and attractive museum environment.
- 4. Development of recommendations for methods of exhibiting lost architectural monuments open-air.

The material foundation of the study consists of official UNESCO charts, ICOMOS documents, and papers of Ukrainian and foreign researchers, listed in references. It includes information from the official websites of the Ministry of Culture and Information Policy of Ukraine and UNESCO.

# **RESULTS AND DISCUSSION**

Despite the problem of exhibiting lost objects of ensembles and complexes representing is poorly covered in the scientific literature, in the last 5-7 years many Ukrainian researchers tried to examine particular monuments to implement their ideas about the museumification of big complexes (for example, O. Zhukova [8] who investigated historical residences - in Baturyn, Sharhorod, Novomalyna, and others) but due to economic problems and war in the country, none of these attempts was fully committed. More mentions can be found in some foreign popular non-scientific journalistic texts, which describe some successfully implemented projects of certain measures applied to represent destroyed or damaged monuments mostly via virtual technologies and virtual reality, or via creating modern constructions (for example, in Carnuntum Archaeological Museum in Austria [16] and Kilkenny Medieval Mile Museum in Ireland [17] respectfully).

The question of monuments' reproduction arises in the case of the loss of individual, especially valuable objects or elements of ensembles. If the monument is woven into the fabric of the city, the choice of the way of transmitting the architectural legacy would be greatly influenced by the surroundings, the environment, the needs of the city, and many other factors that are difficult to reduce to one denominator. On the other hand, in open-air museums created to demonstrate architecture, the situation is



somewhat simpler, as such institutions are designed to preserve the legacy and demonstrate it as effectively as possible. Approaches to the monuments' historical information transmission here can be systematised and generalised, so the possibilities in such museums were considered as an example.

It is important to choose the right way of actualisation of the cultural legacy object as an exhibit. Among many methods highlighted by researchers, fixation, interpretation, revitalisation, reconstruction, and modelling are the most relevant [18, p. 25].

Fixation is about turning a monument into an object of a display without substantial changes. The method is effective if the monument is well preserved (preferably together with the historic environment) and does not require special adjustments to function as an exhibit. The method is most common in eco-museums.

Interpretation includes partial modification of the monument for preservation, museumification, and functional adaptation. It is found in various open-air museums, as most of the monuments are damaged, incomplete, and in need of restoration and adaptation for sightseeing.

In the field of monument protection, revitalisation can be understood as restoring the viability of the monument and its ability to function independently. However, in open-air museums, the term is more widely used referring not only to architectural and urban monuments but also to intangible cultural sites.

Reconstruction is conducted in specific cases if a sufficient amount of comprehensive scientific data is available. If it is possible and expedient to restore or reproduce lost objects, that is great. Unfortunately, there are many reasons and situations, in which the reproduction of lost objects is not the best solution (for example, there are not enough credible documents to know what the lost structure looked like exactly; the cost of its reproduction is too high compared to its value; impossibility to recreate valuable characteristics of this monument; possibility of damaging other objects, etc.). In such cases, museologists are faced with the question of how best to preserve and pass on to the viewer the basic historical information monuments have kept.

The Nara Document on Authenticity states that sources of information about a monument depend on the nature of the cultural legacy, its cultural context, and its



**Figure 1.** Graphical representation of Heathens' Gate in Archaeological open-air museum Carnuntum, Austria **Source:** [20]

evolution through time and includes form and design, materials and substance, use and function, traditions and techniques, location and setting, spirit and feeling, the original state and historical development, and other internal and external factors [19, p. 2].

Thus, if a monument or its element is destroyed, some of its characteristics can be used to transmit historical information. In such cases, modeling is performed – using simulations, stylised installations, or multimedia presentations. Modeling is most common in open-air archeological museums, where cultural monuments are most often in the form of ruins or foundations.

The main approaches to creating exhibitions should be considered to use described above modeling method effectively. Visitors of the museum are involved in three main activities – contemplating the display, exploring the information contained in it, and interacting with the exhibits. Creating symbolic reconstructions can meet all these needs.

Symbolic reconstructions can be divided into the following main types – graphic, physical, virtual, and performative; they were considered in detail.

Graphic symbolic reconstructions differ from graphic reconstructions in the fact of their installation at the site of the lost monument. The author considers this is the easiest way to show the museum visitor what the building looked like and provide information about it. Such graphic reconstructions can be simple, in the form of an image printed on a transparent board, which from a certain angle is perceived as a real object (Fig. 1), or multimedia, which shows the image through a monitor (Fig. 2). The first option is simpler and cheaper, so it can be an initial step and can be followed by more serious and large-scale measures to improve the display of lost monuments. The second combines a set of visual and auditory information, animations, text, and graphics, which in the absence of sufficient information about the appearance of the monument may change and represent different theoretical reconstructions. By installing a small monitor on the site, visitors can be provided with the opportunity to take a virtual tour around and inside the building and complement the activity with informative or entertaining materials. Despite being such a simple method, in Ukraine, it is mostly represented by images on conventional information boards outdoors or on interactive multimedia displays indoors.

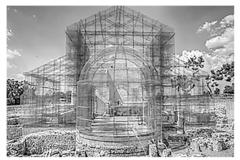


**Figure 2.** Graphical multimedia representation on the Archaeological site of Ename, Belgium

**Source**: [21]



Unlike a flat representation of a graphic symbolic reconstruction, a physical one is three-dimensional. Physical reconstructions consist of the placing of a stylised art installation that imitates certain historical architectural characteristics. Such a "model" should give the viewer an understanding of what the monument looked like, while being reversible, not destroying authentic remains (if any are preserved), and providing an opportunity to view them (Fig. 3).



**Figure 3.** Physical reconstruction of Basilica in Siponto, Italy, using wire mesh by E. Tresoldi

**Source**: [22]

Creating a credible physical installation, demands a great amount of work, cooperation, and funds. In Ukraine few similar projects were proposed, but, unfortunately, up to now, they remain on the stage of being ambiguous ideas (for example, a project of symbolic reconstruction of St. Michael's church near Pidhirtsi castle [23, pp. 93-94]).

If such installations would harm the authentic remains, but it is desired to demonstrate the three-dimensional monument in the historical environment, at the place of its existence, virtual technologies can assist. Specifically, augmented reality (AR) and location-based service (LBS) systems are the basis for creating virtual symbolic reconstructions. Most people nowadays have smartphones or tablets and the appropriate software (Flexreality, Auggd, Skywell Software, Wikitude, etc.) that can be installed on them and allow visitors to see not only the landscape or the remains of lost buildings but also virtual objects that do not exist in reality. The solution of some archaeological openair museums (Archaeological Site of Olympia in Greece [24]; Bostel di Rotzo in Vicenza, Italy [25]), where tourists are given virtual glasses, which show the reconstruction of the lost objects and information about them directly at the place of their original location, is gaining popularity (Fig. 4).



**Figure 3.** Walking tour with virtual glasses in Olympia, Greece

**Source**: [26]

In Ukraine, such examples are only appearing – mostly in popular destinations and as touristic attractions. Well-known is a company "Chameleon Age" which aims to virtually recreate lost monuments of Lviv (Vysoky Zamok, Golden Rose Synagogue, and others) through the mobile app [27].

A serious problem is displaying memorial places (e.g., battlefields), which according to the UNESCO classification are considered associative landscapes [28, pp. 9-10]. Such areas often include objects that are not suitable for any modern functional adaptation or are simply a characteristic element of the historical landscape. In Ukraine, there are many such sites like Poltava Battlefield [29] or Berestechko Battlefield [30] Historical and Cultural reserves that are culturally important but include close to none material monuments compared to their vast territories or Historical and Cultural Reserve "Ancient Plisnesk" in Lviv region [31], which is rich on archaeological artifacts but possesses scant visible remains. The connection with historical events or personalities is of primary importance, and the memorial component is presented in intangible form. Thus, in museums based on such sites, it is necessary to create a material basis for the information environment, where even in the absence of tangible evidence, historical information can be transmitted.

The priority for the establishment of memorial place museums is the discovery, restoration, and reproduction of monuments. Along with the preserved authentic elements to fill the museum environment, memorials are installed. These can include not only monuments, architectural objects, tombstones, exhibitions, and information signs, but also the above-mentioned symbolic reconstructions. Even if they themselves are not of historical value (sometimes they may be of artistic value), their main purpose is to capture information about objects, events, and their participants.

In open-air museums, and especially in museums based on associative landscapes, using performative symbolic reconstructions is advisable. They include a variety of one-time or recurring activities. Two types of such active reconstructions are historical reenactments, which consist of the theatrical reflection of a certain historical event, and artistic performances or shows.

Historical reenactments can be very different both in purpose and in the nature of the reproduced material, as it is possible to highlight the ideological, behavioral, technical, and material reconstructions [11, p. 107]. It is possible to allocate reconstructions of events, reconstructions of objects, and reconstructions of symbolic actions and rituals [12, p. 178].

"Living history" has long outgrown the usual theatrical action and has become a method of transmitting information typical for modern museums, including openair ones. Historical reenactments (Fig. 5) as one of the manifestations of "living history" is an active symbolic reconstruction, which is best used in places where few preserved physical monuments remained, and it is impractical to restore them. Although reenactments are non-material reconstructions, they also carry information and historical data – not only about events and people but also about monuments that may appear in performance as stylised scenery or authentic ruins.



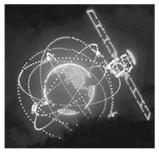


**Figure 5.** Battle of Waterloo reenactment near Hougoumont museum, Belgium

**Source:** [32]

In Ukraine, the historical reenactment community is still small, but it rapidly developed before the full-scale Russian-Ukrainian war. One of the most famous clubs, represented in Western Ukraine that takes part in many cultural festivals is "Chorna Halych". Their most popular activities are reenactments at the annual festival "Tu!Stan" near Urych, where the lost fortress was once flourishing. They aim to popularize and promote Ukrainian Medieval history and legacy, including architecture [33].

Artistic reproduction of lost objects can also be an attraction of the museum. Modern multimedia technologies are becoming more flexible and provide more opportunities. They are increasingly used outdoors for various shows and cultural events, such as 3D mapping or the creation of three-dimensional images with a swarm of drones with flashlights (Fig. 6).



**Figure 6.** Fragment of the light show using a swarm of drones by Unmanned Aerial Vehicles, China **Source:** [34]

Although in open-air museums monuments and their characteristics are the main elements of the exhibition, authentic exhibits should be supplemented with artistic and technical additions that can enhance the emotional impact and interactive component of exhibitions. The museum exhibitions are based on original objects but should be diversified by including symbolic reconstructions.

Ultimately, this study focuses not only on the entertaining approach to the establishment of popular exhibitions in large open-air museums, as this theme prevails in the works of H. Novikova [13], but also on the importance of a scientific and educational basis for the interpretation of architectural exhibits. The importance of forming an exhibition space with the involvement of images and remnants

of authentic buildings, instead of simple modeling of a popular space, is emphasised. In contrast to I. Posokhov's studies [11; 12], which describe the variety of tourist attraction types, in this work they are considered within the bounds of the historical environment and architectural context, even a lost one. Numerous studies of the use of modern technologies in museums focused on their use indoors [10]. On the contrary, the possibilities of their use outside were considered in this study. Foreign studies by scholars such as F. Sousa & M. Vairinhos [15], I. Giangreco & L. Sauter [14] often focus on the entertainment and educational component, neglecting historical context and references. They analyse different types of virtual and augmented reality systems as they can be used inside museums and on their websites. Thus, this study is at the junction of various spheres and explores the possibilities of forming a modern, interesting, tourist-attractive open-air exposition, which simultaneously would be based on scientific and educational data and allow preserving the remains of destroyed monuments or their image within historical sites, which is especially relevant in the conditions of large-scale destruction as a result of the Russian-Ukrainian war.

## **CONCLUSIONS**

Open-air museums include a variety of objects, from well-preserved to those that are not suited to further functional adaptation. However, they remain a full-fledged element of the exhibition. Lost and destroyed objects are not always expedient and feasible to be reproduced; if they are an important part of the whole museum complex, it is necessary to look for other ways to use them.

It would be effective to create symbolic reconstructions to develop informative and enjoyable open-air exhibitions based on lost monuments, – graphic, physical, virtual, and performative. If such reconstructions are scientifically substantiated and thought out in detail, meet the requirements of credibility and have an attractive element, they have the potential to become not only an important educational element but a touristic attraction as well.

The exhibition space of museums increasingly combines material and virtual environments. The use of modern multimedia exhibition technologies allows expanding the information component of the exhibition, showing even the lost monuments in the context of the historical landscape, in the atmosphere of the relevant time. Multimedia technologies attract the visitor to actively take part in the display and demonstrate phenomena and processes that are impossible or difficult to observe in real life.

This study discusses the use of symbolic reconstructions within open-air museums, but they can also be used outside museums. Depending on the situation, certain types of reconstructions – permanent, temporary, or one-time – can be used for individual monuments. In particular, on the background of the Ukrainian cities' destruction as a result of the Russian invasion, symbolic reconstructions can become a powerful means of displaying and transmitting information about the price Ukraine has paid for peace to descendants.



For future studies, an interesting area would be the determination of ways of involving the destroyed monuments in cultural life, considering the possibility of not just rebuilding the structure, but interpreting it while preserving the main features. Although there are discussions on this subject worldwide, in Ukraine the matter of

using modern installations in the context of legacy preservation is still too limited by outdated approaches. In addition, with the rapid development of technologies, including ones for exhibitions, the investigation of virtual and augmented reality use in architecture will become more and more relevant.

#### **REFERENCES**

- [1] Damaged cultural sites in Ukraine verified by UNESCO. (2022). Retrieved from https://www.unesco.org/en/studies/damaged-cultural-sites-ukraine-verified-unesco.
- [2] MCIP continues to record Russian war crimes against cultural legacy. (2022). Retrieved from https://mkip.gov.ua/news/7195.html.
- [3] Iievleva, V.P. (2008). Guidelines for the museumification of immovable monuments of science and technology. *Proceedings of the SRI of Monument Protection Research*, 2, 14-28.
- [4] Popelnytskyi, O.O. (2010). Draft guidelines for the museumification of historical monuments. *Proceedings of the SRI of Monument Protection Research*, 5, 325-331.
- [5] Danyliuk, A.H. (2006). Open-air museums or skansens in the world and in Ukraine. *Local history. Geography. Tourism*, 7(444), 20-23.
- [6] Prybieha, L.V. (2015). *Architectural legacy of Ukraine: Monument protection aspect*. Kyiv: Institute of Cultural Studies of the NAA of Ukraine.
- [7] Kepin, D.V., & Tytova, O.M. (2015). *Protection of paleonatural and archaeological legacy*. Kyiv: Center for Historical Studies of the NAS of Ukraine and USPMHC.
- [8] Zhukova, O.V. (2015). Creation of ensemble museums based on fortifications in Ukraine as a method of their museumification. *In Archeology and fortification of Ukraine: Materials of V All-Ukrainian science and practice conference.* Kamianets-Podilskyi: Kamianets-Podilskyi State History Reserve Museum Founding.
- [9] Martinenaite, L. (2011). Landscape and its theoretical interpretations. Folk Art and Ethnology, 3, 91-95
- [10] Severyn, V.D. (2015). *Design of a modern museum exhibition in the context of the development of innovative technologies* (Doctoral thesis, Kharkiv State Academy of Design and Arts, Kharkiv, Ukraine).
- [11] Posokhov, I.S. (2014). "Historical reenactment" as a form of cultural and cognitive tourism: Theoretical aspects. *Geography and Tourism*, 28, 103-112.
- [12] Posokhov, I.S. (2016). Historical reenactment as a perspective direction in eventive tourism in Ukraine. *Bulletin of Lviv University. International Relations Series*, 40, 178-186.
- [13] Novikova, H.Yu. (2017). Environmental Museum as a phenomenon of new museology. Culture of Ukraine, 55, 127-136.
- [14] Giangreco, I., Sauter, L., Gasser, R., Parian-Scherb, M., Heller, S., Rossetto, L., & Schuldt, H. (2019). VIRTUE: A virtual reality museum Experience. In 24th International Conference: Materials of ACM Intelligent User Interfaces. (pp. 119-120). California: University of California.
- [15] Sousa, F., Nunes, J., Santos, C., Magalhães, J., Moreira, J., & Vairinhos, M. (2021). Musa: A gamified virtual reality museum. In *Materials of GAME ON 2021 international conference* (pp. 120-123). Aveiro: University of Aveiro.
- [16] Watch the reconstruction of the ancient Roman town of Carnuntum via virtual archaeology. (2017). Retrieved from https://www.realmofhistory.com/2017/04/07/reconstruction-ancient-roman-town-carnuntum.
- [17] St. Mary's church/Medieval Mile Museum, Kilkenny. (2017). Retrieved from https://www.carrig.ie/st-marys-kilkenny.html.
- [18] Brych, M.T. (2021). Free space as an element of open-air museums' exhibition. *Modern Problems of Architecture and Urban Planning*, 60, 23-35.
- [19] The Nara document on authenticity. (2022). Retrieved from https://www.icomos.org/charters/nara-e.pdf.
- [20] Heathen's gate: Ingenious overlay reveals history of ancient roman. (2022). Retrieved from https://weburbanist. com/2017/06/01/heathens-gate-ingenious-overlay-shows-history-of-roman-ruin\.
- [21] Visualisation of the Benedictine abbey of Ename. (2014). Retrieved from https://enameabbey.wordpress. com/2014/06/09/virtual-reconstruction/amp\.
- [22] Basilica di rete metallica di Siponto: Cos'è e dove si trova. (2018). Retrieved from https://www.viaggiamo.it/basilica-di-siponto-rete-metallica/.
- [23] Remeshylo-Rybchynska, O.I., & Brych, M.T. (2019). The concept of a complex open air museum creation based on the territories of Pidhirtsi and Plisnesk. *Bulletin of the Lviv Polytechnic National University*, 2, 90-97.
- [24] Olympia in virtual reality (2022). Retrieved from https://www.olympiabackintime.com.
- [25] Augmented reality project "Re-building the past". (2020). Retrieved from https://www.bosteldirotzo.it/le-nostre-attivita/realta-aumentata/.
- [26] Olympia walking tour with virtual reality glasses. (2019). Retrieved from https://evendo.com/gr/en/product/olympia-walking-tour-with-virtual-reality-glasses/246057-659272.

- [27] An interactive augmented reality tour of lost sights was presented in Lviv. (2022). Retrieved from https://spadshchyna. lviv.ua/u-lvovi-prezentuvaly-interaktyvnyj-tur-dopovnenoyi-realnosti-pro-vtracheni-pamyatky/?fbclid=IwAR0r8xB 5qRxb61cTE48cJezP ERHnMdr-gl j8JWoLzY3OtQBmxzsBOFeAo.
- [28] Operational guidelines for the implementation of the world legacy convention. (2022). Retrieved from https://whc.unesco.org/archive/opguide99.pdf.
- [29] State historical and cultural reserve "Poltava Battlefield" (2022). Retrieved from https://kultura-poltava.gov.ua/zakladi/muzej-zapovidnik-pole-poltavskoi/
- [30] Berestechko battlefield. (2022). Retrieved from https://berestechko.org/.
- [31] Municipal institution of the Lviv Regional Council "Administration of the historical and cultural reserve: Ancient Plisnesk" (2021). Retrieved from https://plisnesk.com.ua/.
- [32] Thousands reenact battle of Waterloo on 200<sup>th</sup> Anniversary. (2022). Retrieved from https://abcnews.go.com/Photos/photos/thousands-reenact-battle-waterloo-200th-anniversary-31900236/image-31900421.
- [33] Chorna Halych. (2021). Retrieved from https://www.chornagalych.org.ua/.
- [34] 3.051 drones create spectacular record-breaking light show in China. (2022). Retrieved from http://surl.li/defif.

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# Використання символічних реконструкцій у музеях під відкритим небом

Анотація. Російсько-Українська війна, яка у лютому 2022 року набула повномасштабного характеру, стала трагедією та поставила перед нами питання відновлення втрачених пам'яткових об'єктів з новою силою. Саме тому публікація, метою якої є виявлення особливостей використання символічних реконструкцій для репрезентації втрачених архітектурних пам'яток, набуває особливої актуальності. На основі здійсненого комплексного архітектурнотипологічного та порівняльного аналізу, методів актуалізації та експонування архітектурних споруд і неіснуючих об'єктів просто неба в Україні та світі (фіксація, інтерпретація, ревіталізація, реконструкція та моделювання), автор роздумує над можливостями зберегти історію знищених пам'яток. Музеї під відкритим небом пропонують широкий спектр заходів, які дозволяють залучити до експозицій пам'ятки, які не підлягають подальшому функціональному пристосуванню. У статті запропоновано використання символічних реконструкцій для відтворення та експонування втрачених пам'яток. Детально розглянуто графічні (найбільш прості та універсальні, полягають у демонстрації двовимірного зображення), фізичні (більш масштабні, перманентні, тривимірні стилізовані інсталяції, що несуть інформацію про характер втраченої пам'ятки), віртуальні (найгнучкіші та найперспективніші, не вимагають впливу безпосередньо на експонат, включають використання технологій доповненої реальності) та перформативні (одноразові або тимчасові активні заходи, найчастіше використовуються на територіях асоціативних ландшафтів) символічні реконструкції на прикладі використання їх в музеях та експозиціях під відкритим небом. Розглянуто ефективність використання зазначених заходів у музеях просто неба та сформульовано рекомендації щодо їх застосування, що може стати підґрунтям для подальшого впровадження на практиці в українських виставкових закладах

Ключові слова: втрачена пам'ятка, експозиція, символ, інсталяція, віртуальні технології