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Practices of using Rapid Response Collecting by Ukrainian museums in wartime

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Practices of using Rapid Response Collecting by Ukrainian museums in wartime

Social activity and public involvement in participatory practices, and the creation of civic spaces on the basis of the museum have become relevant for the formation of the concept of a modern museum. Such practices are especially important in times of crisis, when history is being documented online and the Rapid Response Collecting (RRC) method is becoming widespread. Modern war discourse requires the newest forms of archiving and description, because the recording of history is complicated by the volatility of the military situation, the movement of large flows of displaced persons and the departure of citizens abroad. The Ukrainian experience of documenting the war is examined in the article taking the example of the ATO Museum (an acronym for anti-terrorist operation) in Dnipro and the online Museum of Civilian Voices. It is important for us to pay attention to the national peculiarities of the codification of collective memory through individual experience and life stories during the full-scale military aggression against Ukraine, and to show the newest forms of presenting the evidence of war.

Keywords: rapid response collecting, oral history, Russian-Ukrainian war 2022, ATO Museum, Museum of Civilian Voices.

Introduction

War in the twenty-first century in a European country with an open society and a fierce desire for freedom cannot be encapsulated only by official content in the information space. This is the first war that is taking place "live" 24/7, all events being instantly publicised and the facts of war crimes being proven using satellite images, mobile traffic analysis and social

networks. Phone apps, chatbots, specialised websites and open-source information analysis make it possible to create powerful databases of human rights violations and war crimes.¹

Another area of evidence is human experiences and life stories, which have explosively filled social networks, media and the entire information space: thematic programmes on national television ("War Diaries" on 1+1, "War Stories" on Inter, "Good Stories" and "How are you" on STB), regional TV ("Voices of War" on Channel 402, Ivano-Frankivsk), YouTube channels, platforms for collecting memories and stories, public initiatives and foundations. The trend "sharing history" is becoming a national slogan, uniting the community around projects and associations, highlighting individual voices of the war and shaping collective memory through individual experience in front of the world.

Documenting history in the here and now preserves the immediacy of the wartime experience, but also requires operational and mobile methods of recording that are relevant to the rapidly changing times.

In recent years, the Rapid Response Collecting (RRC) method has become widespread, being actively used in museum practice and during the pandemic becoming almost universal. In Ukraine, the RRC method has spread in the information space as the media has become an integral part of the whole process of documenting the war. This is not only the result of the information confrontation that is quite understandable during military operations. The media today are becoming the most powerful factor in the formation of public opinion and an equally influential factor in the formation of national resistance and collective memory in general. Comprehension of these fundamental changes in national self-awareness is still ahead; our task: to record the multi-channel means of broadcasting the war experience, and to bring the Ukrainian discourse into the academic space not as an ad hoc case, but as an opportunity to see the reflection of world trends in our tragic everyday life.

Rapid Response Collecting: History of formation

The history of the origin and spread of the method is associated with the new Rapid Response Collecting strategy adopted at the Victoria and Albert Museum (V&A) in London in 2014, where objects representing the most iconic recent events in the world were presented: pulse oximeter, mobile phones, drones, the first emojis, dolls and stickers, a protester's hat and pants from Primark. Thus, for the first time, it was demonstrated on a global level that museums do not only showcase the past. They are also turning into platforms for discussing high-profile current events. With the public having become more critical of what it sees, museums have the unique advantage that people still trust them as institutions.²

Other researchers associate the spread of the method with New York events of 2001. We refer here to "History Responds", which was launched immediately after 9/11 and which has

¹ Quantitative indicators are updated daily on the website of the Prosecutor General's office (https://www.gp.gov. ua/). As of December 9, 2022 there have been registered: 52,157 crimes of aggression and war crimes; 18,542 crimes against national security; 443 children killed; and 855 children injured. According to the Ministry of Culture and Information Policy, since the beginning of the war, 492 episodes of war crimes have been recorded by Russian troops against Ukrainian cultural heritage sites and cultural institutions. The active position of the International Council of Museums (ICOM) was manifested in the condemnation of the deliberate destruction of Ukrainian cultural heritage by Russia. In addition, ICOM will publish an emergency Red List of Cultural Objects at Risk for Ukraine to combat illicit trafficking after the invasion (ICOM will establish a protocol on respecting the ICOM code of ethics during conflicts; August 19, 2022).

² MILLARD, Alice. Rapid response collecting: Social and political change, accessed December 7, 2022, https://museum-id.com/rapid-response-collecting-social-and-political-change-by-alice-millard/.

already documented Black Lives Matter protests, "Occupy Wall Street", the 2017 Women's March, "March for Our Lives" and the "Climate Strike", among others.³

In September 2016, the Levine Museum of the New South and the city's community began a dialogue around the protests provoked by the shooting of a police officer in Charlotte, North Carolina. The Levine Museum launched the rapid response exhibition "K(NO)W Justice K(NO)W Peace", created in collaboration with activists, scholars, photojournalists, artists, law enforcement, clergy, civic and business leaders, students and many others.⁴ The method of collecting rapid reactions was used during fieldwork at the Pulse club in Orlando, where 50 people died in a shootout on June 12, 2016.⁵ The RRC method specifies categories which are updated as the story unfolds before your eyes. Shared access to the story, cooperation and collective activism (community narrative) was demonstrated by the local initiative of the Gdańsk Museum during the national women's strike (Ogólnopolski Strajk Kobiet), which took place simultaneously in 147 cities of the country: it started with the gathering of banners, flags and photographs associated with the demonstrations and stories of female demonstrators.⁶

The rethinking of the goals and objectives of museums, the recognition of their significant social role in society and the creation of civic spaces on the basis of museums have become decisive for the spread of the method of collecting immediate reactions and recognition of its effectiveness.⁷

Participatory principles of museum activity, with their active involvement in the life of the community, city and country, have become fundamentally new. Actually, the RRC method itself has come to accentuate such modernised narrative, as it proposes an algorithm for collecting collections not of the distant past, but of contemporary events. The combination of attributivity as a factor of the method and the fixation of different opinions and voices has brought new content to the method, which was traditionally limited to the collection of cultural artifacts.

Academic recognition of the rapid response collecting method can be dated to 2018. In the February issue of *The Public Historian* (vol. 40, no. 1), a series of essays was published under the general title "Roundtable: Responding rapidly to our communities". Individual cases of community involvement practices in the creation of relevant collections by a regional historical museum (Museum Levine of the New South), the experience of civil dialogue after the 2016 presidential election ("Evening of Reflection" at President Lincoln's Cottage) and the history of the One Orlando Collection after the Pulse Nightclub massacre (Orange County Regional History Center, Orlando, Florida) were presented.

³ History Responds: Our History Responds initiative collects history as it's unfolding, accessed December 8, 2022, https://www.nyhistory.org/history-responds.

⁴ TINDAL, Brenda. K(NO)W justice K(NO)W peace. In: The Public Historian, 40(1), 2018, 87.

⁵ SCHWARTZ, Pam, BROADAWAY, Whitney, ARNOLD, Emilie S., WARE, Adam M. and DOMINGO, Jessica. Rapid-Response Collecting after the Pulse Nightclub Massacre. In: *The Public Historian*, 40(1), 2018, 113.

⁶ PETELSKA, Michalina. Polskie muzea W czasie pandemii COVID-19: Działalność online I (nie)stosowanie rapid response collecting [Polish museums During the COVID-19 pandemic: Online activities and (in)use of rapid response collection]. In: *Studia Historica Gedanensia*, 12(2), 2021, pp. 405–415 [In Polish].

⁷ ROBINSON, Helena. Debating the "museum": A quantitative content analysis of international proposals for a new ICOM museum definition. In: *International Journal of Heritage Studies*, 27(11), 2021, pp. 1163–1178; FRASER, John. A discomforting definition of Museum. In: *Curator: The Museum Journal*, 62(4), 2019, pp. 501–504; HAYNES, Suyn. Why a Plan to Redefine the Meaning of "Museum" Is Stirring Up Controversy, accessed December 8, 2022, https://time.com/5670807/museums-definition-debate/

In 2020, Daniela Tenenbaum defended the work "Rapid Response Collecting: A Curatorial Strategy for Museums to Promote Notions of Democracy and Social Equality" at Utrecht University (Master's degree of Arts). Among the undoubted advantages of the studied method, the author identified the following.

RRC is increasing the position of the museum as a socially engaged institution as it exposes and helps to commemorate political events that might be reported in the news but will soon be forgotten from public discourse.... RRC puts another spin on the fundamental question about the relevance of museums today – what is the role museums and curators play in society and current political and societal discourses.⁸

The COVID-19 pandemic saw widespread use of the method in the practice of recording everyday quarantine life and documenting experience. A global factor and changes were added to the already existing characteristics of the method (relevance, efficiency, attribution, agonality) even in the classic methods of archiving and collecting evidence through oral history: "Recording oral histories as events are unfolding helps historicize both the act of memory and the act of forgetting". Powerful national and international projects archiving oral histories by a rapid response method were initiated by universities, libraries, international communities and academic associations (The COVID-19 Oral History Project (C19OH), The Journal of the Plague Year: A Covid-19 Archive (JOTPY), Harvard University's COVID-19 Community Archiving Project, History Now: The Pandemic Diaries Project, Queens Memory COVID 19 Project).

The Stony Brook University Libraries rapid response collection practice (Documenting COVID-19: Stony Brook University Experiences, 2020) was based on the understanding of RRC as the one that most met the requirements of the time:

The time-sensitive nature of assembling these collections is driven by an underlying sense of urgency. Crises and traumatic events are representative of the rapid-response genre. Materials are characteristically created, gathered, and processed contemporaneously as events unfold in real-time.¹⁰

The impact of the pandemic on the cultural environment and the identification of new markers of RRC within it still await generalisations. The global nature of well-known art initiatives (#GettyMuseumChallenge; "ICPConcerned: A Forum for All to Document the COVID-19 Pandemic" by the International Center of Photography¹¹) emphasised the role of the audience, which became another actor driving changes in the process of documenting modernity. From a passive viewer of the collections, she turned into an active critic/fan, collector of archival materials and creator of the media field around the museum. The operational recording of

⁸ TENENBAUM, Daniela. Rapid Response Collecting: A Curatorial Strategy for Museums to Promote Notions of Democracy and Social Equality [Unpublished master's thesis]. The Netherlands: Utrecht University, 2020.

⁹ KELLY, Jason M. The COVID-19 Oral History Project: Some Preliminary Notes from the Field. In: *The Oral History Review*, 47(2), 2020, 245.

¹⁰ NYITRAY, Kristen, REIJERKERK Dana and KRETZ Chris. "There will be an end, but we don't know when": Preserving diverse COVID-19 pandemic experiences through oral history. In: Collections: A Journal for Museum and Archives Professionals, 18(2), 2022, 281.

¹¹ As an example the international initiative of photo documentation of the history of the pandemic by the International Center of Photography (March 2020). In 2021, the book #ICP Concerned: Global Images for Global Crisis: Global Images for Global Crisis. This global pandemic diary included 820 photos out of 60,000 submitted. #GettyMuseumChallenge (spring 2020) became a world-famous global digital exhibition, with re-creations. The collection of 100,000 "exhibits" created in a flash on various platforms spread through mass media, blogs and social networks Twitter, Facebook and Instagram.

eyewitness accounts, oral history records and primary materials spread throughout the world during the pandemic, because the loss of details is irreversible.

This audience influence, according to the researcher E. Mubarek, leads to radical changes in the museum paradigm – historical repositories should actively document the present, the stories of ordinary people in the everyday (Recording in the Moment). In admiration, the author even reformulates the meaning of stories as such and suggests the new slogan "history is not just what happened 200 years ago; history is what happened yesterday".¹²

The media sphere also actively contributed to such powerful changes. In the United States, in support of a nationwide campaign to "collect the moment", newspapers offered to store testimonies and artifacts during the pandemic (do-it-yourself face masks, face masks with political messages or other slogans, shop window signs and pharmacy food-delivery menus, apartment-building notices, signs, flyers, posters, banners, or artwork or shopping lists). Journalists of *The Wall Street Journal* called the chronicle of the pandemic documented by museums History in the Moment.¹³ "This Year Will End Eventually. Document It While You Can", in support for colleagues at *The New York Times*, retrospectively described various types of archiving of daily videos from the hospital, small videos from the streets of empty cities, and even a collection of city noises in Los Angeles. In "We Are All Field Collectors", the newspaper summarised numerous documentation initiatives.¹⁴

Gradually, the pandemic revealed the limitations and shortcomings of RRC's traditional museum practices. The algorithm of previous engagements of the method was based on the collection of artifacts of material culture and oral history projects documenting the human experience. New times forced a turn to the online environment and digital materials as a significant factor in the pandemic narrative. If material artifacts, digital materials, "organization charts, online publications and communications, correspondence, meeting materials from various response task forces, digital posters, telebriefing recordings, public service announcements, guidance documents, digital photographs, and materials from dozens of studies" could be quickly identified and collected, the next level – that of the media – turned out to be much more difficult. The authors of the collections called it varied, subjective and wholly ephemeral. As became clear during the pandemic, the huge and unfathomable mass media narrative reproduced the impact of the pandemic: "pandemic has touched nearly every facet of daily life in every community across the U.S.". 16

As a result, many collection and archiving projects opened into an uncertain future, since the methods of evaluating such huge masses of information with BigData technologies and the latest software do not fit into the classical paradigm of linear archiving. Researchers draw attention to another debatable aspect of RRC: when transferred to other media, this form of

¹² MUBAREK, Elizabeth M. The end of passive collecting: The role and responsibility of archivists in the COVID-19 era. In: *Collections: A Journal for Museum and Archives Professionals*, 17(2), 2020, 194.

¹³ PASSY, Charles. History in the Moment: Museums Begin Chronicling Coronavirus Pandemic. *The Wall Street Journal*. April 6, 2020, accessed August 9, 2022, https://www.wsj.com/articles/history-in-the-moment-museums-begin-chronicling-coronavirus-pandemic-11586210478.

¹⁴ BLUME, Lesley M. M. This Year Will End Eventually. Document It While You Can. *The New York Times*. July 14, 2020, accessed August 9, 2022, https://www.nytimes.com/2020/07/14/style/museums-coronavirus-protests-2020. html.

¹⁵ RODRIGUEZ, Heather E. Collecting COVID-19: Documenting the CDC Response. In: *Collections: A Journal for Museum and Archives Professionals*, vol. 17, no. 2, 2021, 105.

¹⁶ RODRIGUEZ, Heather E. Collecting COVID-19: Documenting the CDC Response, 107.

transmission is not just the fixation of information, but rather represents a transformation of the material from the point of view of its meaning.¹⁷

And so, the latest changes in philosophy and museum communication¹⁸ have actualised issues of ethics, social responsibility and the need for digital curation, not just collection and preservation. In the methodology of analysis of Ukrainian wartime museum concepts, we focused on the following components:

- 1. Immediacy of experience, being not just in a contemplative position, but in an active participant position. Activism ensures community participation and diversifies communication channels with visitors, and inclusivity and participatory practices are the institutional foundations of a modern museum.
- 2. Integrity and multi-platform design and, at the same time, openness to new forms of material presentation.
- 3. Attributability and thematic structuring of archival materials and artifacts (object-oriented museum). Therefore, we are talking about the active combination not only of academically fixed collections of memories using oral history methods, but also those forms of immediate reactions that are actively collected today with the help of digital and social media.
- **4.** Mediatisation and digitisation of content.¹⁹ The media have a dual function: as a source of information, thereby a means of replenishing the collection, and as a channel for the distribution of museum information, which technically and technologically enables its discovery by a mass audience.²⁰ In this process, compliance with ethics and the law is difficult both in the general philosophical context and at the level of the protocol for recording testimony and disclosure of materials.²¹

For our analysis, the practices of the creation of the ATO Museum (Dnipro, Ukraine, 2016) and the online Museum of Civilian Voices (2021) were chosen, and the general characteristics of the use of RRC in the information space of Ukraine during the 2022 war were presented. We show various forms in the presenting of the text of the war important not only from the point of view of historical perspective or the accentuation of special national museum concepts. In the extremely saturated and stigmatised space of everyday Ukrainian military life, in the "here and now" chronotope, it is important to see the systemic factors of the formation of national collective memory.

¹⁷ THOR TUREBY, Malin, WAGRELL, Kristin. Crisis Documentation and Oral History: Problematizing Collecting and Preserving Practices in a Digital World. In: *The Oral History Review*, 49(20), 2022, pp. 346–376.

¹⁸ ICOM approves a new Museum definition. International Council of Museums, accessed November 9, 2022, https://icom.museum/en/news/icom-approves-a-new-museum-definition/.

¹⁹ See, for example: HUDOSHNYK, Oksana. Mediatization of oral history: New formats and platforms. In: Demchenko Volodymyr (ed.) *Media sphere: Local and global.* Dnipro: Zhurfond, 2021, pp. 29–45 [in Ukrainian].

²⁰ CAVE, Mark, SLOAN, Stephen M. (eds.) Listening on the Edge: Oral History in the Aftermath of Crisis. New York: Oxford University Press, 2014.

²¹ CRAMER, Jennifer A. First, Do No Harm: Tread Carefully Where Oral History, Trauma, and Current Crises Intersect. In: *The Oral History Review*, 47(2), 2020, pp. 203–213; JOLLY, Margaretta. Oral history, life history, life writing: The logic of convergence. In: DAWSON, Graham (ed.) *Memory, narrative and histories: Critical debates, new trajectories*. Brighton: University of Brighton, 2020, pp. 47–62.; MULVIHILL, Thalia, SWAMINATHAN, Raji. *Oral History and Qualitative Methodologies: Educational Research for Social Justice*. London: Routledge, 2022.; PAVLOVA, Tetiana, ZARUTSKA, Elena, PAVLOV, Roman, KOLOMOICHENKO, Oleksandra. Ethics and law in Kant's views: The principle of complementarity. In: *International Journal of Ethics and Systems*, 35, no. 4, 2019, pp. 651–664.

Museum practices using RRC: ATO Museum

In 2014, the city of Dnipro became an outpost of the country's defence against the "Russian peace", a logistics centre and the centre of a powerful volunteer movement. The first volunteer battalions were formed here, and the city's medical institutions (Mechnikov Dnipropetrovsk Oblast Clinical Hospital, Dnipro military hospital, civilian hospitals) became a powerful hub for receiving the wounded, and founded new approaches to the treatment of combat polytraumas practically "from the ground up".²²

The collective decision of the Dnipro community to create the ATO Museum brought together veterans of the ATO, historians, volunteers, public figures, museum workers, architects, artists and others who care. Andriy Kurlyak, adviser to the head of the Dnipropetrovsk regional state administration, became the curator of the project.

As the co-organiser of the museum, well-known volunteer and film producer Natalya Khazan testifies, the concept of the museum was developed from the outset as a complete multi-platform project. Three months after the decision was made and funds were allocated from the regional budget, the street exhibition "Ways of Donbas" was mounted (January 23, 2016), and already in January 2017, other locations were opened in the diorama building (a branch of the Historical Museum): thematic stands of the main exposition (military, volunteers, doctors, immigrants, chaplains and the press), the Hall of Memory for those killed in the ATO zone, a multimedia hall.²³

According to the general plan, the museum was immediately formed as a place of commemoration, for the purpose of informing and educating young people. This was implemented through the collection of a documentary archive with war chronicles, interviews, memoirs, amateur videos and media stories. During the creation of the Hall of Memory, real stories of heroes were collected, and more than 50 families gave the museum personal belongings of the dead, letters and orders. Individual biographies of the heroes were included in the lecture text of the museum tours.

The task of informing was solved on different planes. The museum visualised the realities of the war in an unusual way for a traditional museum: the concept of the street exhibition combined the *symbolism of the road*, which is symbolic of the national history (as a tragic road of war with models of checkpoints, a broken bus stop in *Pisky*, military equipment from the front line, an ambulance, a mortar and other combat equipment) and a *book of memory*, on the pages of which are photo collages from documentary pictures, quotes from Ukrainian classics and, most importantly, the chronotope of the war reproduced by road signs of Ukrainian cities: Donetsk, Luhansk, Mariupol, Kramatorsk, Shchastya, Ilovaisk and Donetsk airport – the places of the fiercest battles of the Ukrainian resistance.

The chief artist of the museum, Viktor Gukailo, and the members of the creative group implemented the idea of an open concept in the philosophy of the museum, whereby the feeling of involvement and emotional immersion does not leave visitors during the entire excursion, and new ideas can complement the created museum space.

The collection of the internal exposition through the documented space of thematic locations illustrates everyday military life: documents, photographs, samples of weapons and

²² More than 2,500 soldiers were saved in the Dnipro Mechnikov Hospital during 4 years of hostilities, accessed December 9, 2022, https://uain.press/articles/podolaty-smert-yak-u-likarni-mechnykova-ryatuyut-ukrayinskyhvoviniv-797073.

²³ Interview with HAZAN Nataly was held in Dnipro (23/08/2022), with translation by Oleksandra Bolkarova. Authors' archive.

medical instruments, fragments extracted by medics from the wounded, chaplains' clothes, chevrons, orders, photos of military correspondents, children's drawings. For the authors, it was important to collect exhibits with a history, such as, for example, the turret of a destroyed tank or binoculars pierced by a sniper, or the toponymic sign *Donetsk* taken by scouts from the already occupied city; even a stand with SMS "Correspondence with the front" was assembled with historical scrupulousness and displays completely authentic messages of soldiers, volunteers and relatives.²⁴ The museum collection is constantly replenished with new exhibits and, unfortunately, new photographs in the Hall of Memory.

On the other hand, witnesses and participants of military events in this documentary space saw the reality of their combat experience, making it impossible to create false testimonies or so-called fantasies on the subject.

This aspect of the consolidation of the war from personal stories to the global perception of the event was expressed by the unique 360° panoramic film "Dnipro – an outpost of Ukraine". The technical features of broadcasting the film on four screens made it possible to simultaneously unfold a single scripted plot and separate stories. Yevhen Titarenko, himself a member of the ATO, compared the compositional decision of the film director to a puzzle in an interview on the museum's Facebook page: "Little stories are hidden in one history". A separate version of the film was made for the English-speaking audience, which was made freely available on YouTube in 2019 in a virtual reality format. 26

The museum has become "a must-visit" for Dnipro, its business card and a powerful tourist centre, the most popular department of the city's Historical Museum: over five years, it has been visited by about a million guests and 50,000 children. This is the result of the realised philosophy of the museum as an open concept on which new ideas and exhibits can be strung.

A place of celebrations, patriotic education and commemoration, the museum lives the active life of a public centre. It hosts international delegations, conducts thematic lectures and is a meeting place for veterans and families of the dead. Commemorative practices of returning to the events of 2014-2015 in the museum are presented by Days of Remembrance with the publication of photos and memories, meetings with veterans, the broadcasting of documentaries, photo exhibitions and media projects. One of them is "War of the Russian Federation against Ukraine: How it was", dedicated to individual locations of museum expositions and demonstrating the already familiar stylistics of small stories in a big story. Museums have become the centre for patriotic work with young people and the embodiment of the latest practices of returning history to the space of modernity. In 2018, excursions for high school students along the "Paths of Heroes" were launched. In the one-day programme of the patriotic tour - the military unit, the Museum and the Alley of Memory - the guides are military personnel and volunteers. The opportunity to hear about the war from an eyewitness to the events, to see first-hand the daily life of the military and to experience the emotions of touching history in the museum turned out to be a good idea. During the year, 11.5 thousand teenagers passed through the excursion route, and the project of successful commemorative practice was offered to other museums of the country.

²⁴ Today, anyone can send letters and drawings to the front by taking part in the programme "Letter to a Soldier", launched by the museum together with the national postal operator Ukrposhta; the box for letters is located next to the exhibition.

 ²⁵Ukraine's first ATOMuseum, accessed December 9, 2022, https://www.facebook.com/watch/?v=302129600805941.
 ²⁶ Dnipro – outpost of Ukraine, accessed December 9, 2022, https://www.youtube.com/watch?v=s54M-JIT18Qs&ab_channel=YevhenTitarenko.

With the start of a full-scale war on February 24, 2022, a collection of cycles of videos, photos and stories created directly during the war was initiated on the museum's website under the title "People, destinies, courage, memory... 2022. Latest history".

So, the method of collecting immediate reactions for museum communication turned out not to be formalised, but a real, working mechanism for archiving evidence and collecting exhibits. The well-formed purpose of the museum (commemoration, information, education) not only turned out to be viable thanks to the enthusiasm of the organisers and employees, but the opportunity to visualise history through living witnesses, to feel its rhythm and emotion, makes the museum not only the first of its kind in Ukraine, but also exceptional in terms of multifunctionality and an organic combination of history and modernity. The war museum was able to become a peacetime museum.

RRC practices: The Museum of Civilian Voices

Another example of the use of the latest methods of organising the museum space, including the use of quick reaction collection techniques, was demonstrated by the authors of the idea of the online Museum of Civilian Voices. The project has the ambitious goal of becoming the world's largest archive of stories of civilians affected by military actions in Ukraine (https://civilvoicesmuseum.org).

The Assemblage Collection was started back in 2014, and at the time of opening, in 2021, the archive of the museum consisted of 2,000 documented oral histories. During the first nine months from the spring 2022 invasion, 50,555 witnesses shared their stories. The explanations for this are obvious: the war radically changed the national media landscape. Short messages and videos, standardised by the requirements of social networks, make the practice of quickly browsing the news feed as well as creating your own text common. This powerful discourse of recorded moments of the war is now being actively structured through author's creative initiatives and public associations. Platforms for collecting personal stories, photos and videos have become especially popular. Quantitative indicators and at least their primary typology are complicated by the short-term "life cycle" of individual resources, the fluidity and changes of content and the oversaturation of the information space with varied storytelling (this especially applies to Telegram channels, social network accounts and amateur video on YouTube channels). We chose the path of the selective analysis of sources that have a clear structure, a clear purpose and established requirements for the presented content.

In this sense, the Museum of Civilian Voices is perhaps the most successful example not only of archiving, but also of powerful promotion and communication with the audience. It is clear that RRC, as a method that is not widespread in the field of national museum practices, does not have official markers of application. This makes it all the more significant to use its logic and meaning in the actual practice of collecting war materials. Among a broader range of characteristics, we have identified the following:

Navigation of the resource is well thought out, with good ease of use and opportunities to post your materials. The main part of the museum's archive is a collection of stories of witnesses to the events of the war. The multi-channel communication system allows you to document the story through the website, by phone to the hotline, through e-mail, through social networks and even via a chatbot on the Telegram channel, which not only simplifies the process of recording memories and stories, but also provides the most comfortable selection of means of self-presentation for a person. This is very important for wartime.

The thematic structure of the site allows you to view already completed projects ("Civilian Voices. One Day"; "Civilian Voices. Children"), and individual interviews that are freely available. The navigation and filter system allows you to easily find the material you need by year of events, town or content type (video, audio, text). The platform's trilingualism offers various types of audiences, both national and international, as the greatest accessibility possible. An end-to-end tagging system, which allows you to find relevant material and evaluate it in the context of other evidence, was a distinct advantage of the online museum.

The tagging system is logical and combines both traditional separations by groups (women, men, youth), year, events or source of information, with new tags dictated by wartime circumstances and the experience of the initial collected materials:

- experience (relocation, destroyed housing, wounded, psychological injury, shelling, loss of loved ones, captivity, etc.);
- vulnerable categories (people with disabilities, single-parent families, the elderly, the poor);
 - impact of conflict (security, education, water, food, health, etc.).

Such sensitivity to the circumstances of the war, scrupulous and careful handling of the provided materials, and a serious system of documentation and search (during the war) commands respect.

In the traditions of collecting materials using the RRC method, the platform presents various categories of documents: in addition to life stories, one can find photos of artefacts (keys from occupied *Horlivka*, a doll, a clock, etc.), children's drawings and essays on the topic "What I felt and understood when the war came to my town/country".

Collections deserve special attention as a structured and thematically described type of museum presentation of materials: "War through the eyes of children – 20 stories about the childhood that did not exist"; "War diaries – a chronicle of survival"; "Immigrants – how to start life anew: a success story". It is not scary, but with the opening of the collection, war diaries are replenished with new stories and memories. All materials are translated into English and Russian, and audio materials are subtitled.

We emphasise the aesthetic integrity of the site design, the intuitive interface filled with infographic statistical inserts, an information strip and the announcement of high-profile materials and events. A general overview of the functionality of the portal and the online archive is presented in the "Management for working with the online archive of the Museum of Civilian Voices". Outside the scope of our research, there are accompanying charitable actions initiated by the Foundation, its active activities in the field of psychological support, and the reference base for receiving assistance.

Media support of the project is based on active advertising activity (labelled *social advertising*), top positions in search engines and cooperation with mass media: individual stories are published on the #Bukva resource, the Telegram channel of the Foundation "Be Safe! Immigrants".

Conclusion

The war raises many questions not only in the national, but also in the global space, and focuses attention on the "narrow cities" of understanding and perception of military reality. Museums with a "new philosophy" of documentation and expositions are integrated into the space of possible answers, making it possible not to lose the memory of the present time. It is clear that the research object and presented museum experiences were deliberately limited.

The Ukrainian information space during the war is colourful and hardly amenable to typology or even primary analytical generalisations. It has an immense scope of author accounts and united thematic communities, consolidated cooperation of former competing television channels, and the space of alternative information flow of social networks, messengers and YouTube. Collections of life stories today in Ukraine have another important aspect – they are a source for the awareness, documentation and investigation of international crimes and crimes against humanity. In this direction, state initiatives to collect evidence²⁷ are complemented by the activities of public organisations (Kharkiv human rights group, Truth Hounds, Breaking the Vicious Circle of Russia's Impunity for Its War Crimes ["Tribunal for Putin" in short], Ukraine War Archive), databases (DATTALION) and platforms for collecting oral testimonies ("#MyWar", "War. Stories from Ukraine", "Voices of Children", YouTube channel "Ukrainian Witness"). Timeliness and efficiency as important factors of the RRC method presented in the work during the war have contributed to the emergence of its new functional feature. Nonlinear in its nature, the method of rapid response collecting reproduces the diversity of the surrounding world; thanks to its multifunctional content, it expands the documented discourse far beyond museum locations or individual archives, uniting and synchronising the social and historical space with the present, individual life memories and collective memory.

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²⁷ The Office of the Prosecutor General, accessed August 30, 2022. https://warcrimes.gov.ua; https://tribunal.in.ua.

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Problems of preservation, protection and restoration of cultural heritage objects and museum collections in the conditions of war

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Problems of preservation, protection and restoration of cultural heritage objects and museum collections in the conditions of war

The article is devoted to the problem of the preservation and restoration of objects of cultural heritage – monuments and museum collections – in the conditions of war. The article's analysis is supplemented by a brief overview of how mankind has approached the protection of its material cultural heritage in historical times. According to data verified by UNESCO, as of November 21, 2022, 218 sites have been damaged in Ukraine since the start of the war on February 24, including 95 religious sites, 17 museums, 78 buildings of historical and/or artistic significance, 18 monuments and 10 libraries. The experience of the ongoing Russian–Ukrainian war has once again proven the insecurity of cultural heritage sites and museums in the face of conflict. The authors analysed the Ukrainian experience of protecting monuments, the effectiveness of these efforts, and various ways of preserving the cultural heritage of

¹ UNESCO. Damaged cultural sites in Ukraine verified by UNESCO, accessed 25 November, 2022 www.unesco. org/en/articles/damaged-cultural-sites-ukraine-verified-unesco.

peoples during wars. The discussion closes with conclusions on possible remedies for the destruction of material cultural objects in Ukraine.

Keywords: monuments, cultural heritage, Russian-Ukrainian war, destruction

Introduction

War damage to buildings and museum collections and their subsequent recovery (or restitution in the case of looted artworks) has been the subject of numerous books, including those by Lynn H. Nicholas,² Robert Bevan³ and Jeanette Greenfield⁴. The damage done to libraries and archives by armed conflict in the twentieth century has been thoroughly documented in a report for UNESCO'S *Memory of the World* project.⁵ The application of international conventions with regard to the protection of cultural property against acts of war has also been studied by Patrick J. Boylan (1993),⁶ Kevin Chamberlain (2004)⁷ and Jacek Dworzecki et al. (2020).⁸

The originality of this article lies in the fact that it is based directly on the events associated with the full-scale phase of the Russian–Ukrainian war. Despite the coverage of the events of this ongoing war in the mass media, scientific sources analysing these events and have not yet appeared. The majority of descriptions during the war tend to be journalistic, and the main topics tend to concentrate on the military and economic spheres. As the experience of history shows, in-depth studies appear much later, after a certain time after the end of military operations, when there is an opportunity to objectively perceive these events in time and assess them properly.

The authors of the presented material provided their vision of only one aspect related to social life during the war – the protection, preservation and restoration of monuments, museums and museum collections, paying only cursory attention towards increasingly negative attitudes towards Russian imperial monuments within Ukraine.⁹

One of the features of the current war is Russia's massive destruction of the historical and cultural heritage of Ukraine, the looting of museums in the occupied territories and the removal of exhibits. Religious buildings are among the most widely destroyed and damaged objects of historical and cultural heritage in this war. The majority of destroyed religious buildings, as of

² NICHOLAS, Lynn H. The rape of Europa: the fate of Europe's treasures in the Third Reich and the Second World War. New York: Knopf, 1994.

³ BEVAN, Robert. The destruction of memory: Architecture at war. London Reaktion Books, 2006.

⁴ GREENFIELD Jeanette. The Return of Cultural Treasures. Cambridge: Cambridge University Press, 2007.

⁵ HOEVEN, Hans, Van Albada, Joan. Memory of the world: lost memory. Libraries and archives destroyed in the twentieth century. Paris UNESCO, 1996.

⁶ BOYLAN, Patrick J. Review of the Convention for the Protection of Cultural Property in the Event of Armed Conflict (The Hague Convention of 1954), [Report CLT-93/WS/12]. Paris: UNESCO, 1993. Accessed November 25, 2022, https://unesdoc.unesco.org/ark:/48223/pf0000100159.

⁷ DWORZECKI, Jacek; NOWICKA, Izabela; URBANEK, Andrzej; KWIATKOWSKI, Adam. Protection of national heritage in the light of the applicable law and the actions provided in this area by police in Poland. In: *Muzeológia a kultúrne dedičstvo*, 8(4), 2020, pp. 177–198.

⁸ CHAMBERLAIN, Kevin. War and cultural heritage: an analysis of the 1954 Convention for the Protection of Cultural Property in the Event of Armed Conflict and its two Protocols. Leicester: Institute of Art and Law, 2004.

⁹ ZIĘBIŃSKA-WITEK, Anna (2020). Musealisation of communism, or how to create national identity in historical museums. In: *Muzeológia a kultúrne dedičstvo*, 8(4), 2020, pp. 59–72.

the end of November 2022, were in the Luhansk, Donetsk, Kyiv, Kharkiv, Chernihiv and Sumy regions. ¹⁰

Thus, the research of the international scientist team focused on the following areas:

- causes and consequences of the Russian–Ukrainian war, including in comparison with the events of the Second World War;
- practical recommendations for the protection of monuments on the territory of Ukraine;
- a historical view of the importance of heritage conservation in relation to different
 - communities in different geographical destinations;
- global experience of the destruction, preservation and restoration of monuments and museums;
- practical recommendations for the protection of monuments on the territory of Ukraine.

Conflicts not only target human lives, but also have profound effects on human values, cultures and religions. Increasingly, modern conflicts target symbols of culture to destroy identities, leading to the intentional destruction of cultural heritage; however, this damage can also be accidental.

The specific topic of this article determined the scientific methods of research – namely, historical analysis, cultural analysis and comparative analysis. Historical analysis offered a way to analyse the causes of the degradation of Russian society, including in terms of culture and universal values, thereby determining the causes of the brutal war in Ukraine and comparing these events with similar events of World War II.

Cultural analysis was used to analyse the problem of society's attitude to monuments that represent the imperial past and today's invaders. ¹¹ Comparative analysis enabled us to compare the events of World War II and the Russian–Ukrainian war, including the protection of monuments and preservation and restoration of museum collections. Methods for restoring monuments and museums in post-war periods globally was also analysed.

The protection and restoration of monuments in the twenty-first century is becoming a global challenge. Post-conflict and post-disaster reconstruction became an increasingly important issue following the destruction of cultural heritage sites in countries such as Afghanistan, Georgia, Kosovo, Iraq, Libya, Mali, Nepal, Nigeria, Syria and Yemen. Many more sites globally are at

¹⁰ UNESCO, Ukraine: over 150 cultural sites partially or totally destroyed. accessed November 25, 2022, www.unes-co.org/en/articles/ukraine-over-150-cultural-sites-partially-or-totally-destroyed.

¹¹ For more on the method of cultural analysis, see: TREHUBOV, Kostiantyn; DMYTRENKO, Andrii; KUZ-MENKO, Tetiana; VILDMAN, Igor. Exploration and restoration of parts of Poltava's town fortifications during the Northern War and elements of field fortifications used in the Battle of Poltava in 1709. In: *Wiadomości Konserwatorskie – Journal of Heritage Conservation*, 61(1), 2020, pp. 91–100, and SPIRIDON, Petronela; SANDU, Ion. Muselife of the life of public. In: *International Journal of Conservation Science*, 7(1), 2016, pp. 87–92; TIŠLIAR, Pavol. K rozvoju muzeológie v kontexte d'alšieho budovania prípravy absolventov na príklade bratislavskej muzeológie. In: *Muzeológia a kultúrne dedičstvo*, 7(2), 2019, pp. 183–194.

risk.¹² The development of cultural heritage frameworks and guidance is key to addressing the multi-faceted challenges of reconstruction.

As early as the post-WWII period, international organisations recognised the need to create conventions or laws to protect cultural sites and artefacts in conflict zones in order that the devastating destruction would not be repeated. In 1954, the Convention for the Protection of Cultural Property in the Event of Armed Conflict was created to ensure the worldwide protection of cultural heritage in times of war. New organisations were also needed to monitor and implement the laws created to protect cultural heritage. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) was established in 1945 in response to the destruction of cultural heritage during World War II.¹³ UNESCO today focuses on the preservation of cultural heritage throughout the world supports countries in preserving their educational and cultural resources. UNESCO collaborates with other international organisations covering various areas of cultural heritage conservation, including the International Federation of Library Associations and Institutions (IFLA), the International Council on Museums (ICOM), the International Committee of the Blue Shield (ICBS) and the International Centre for the Study of Preservation and Restoration of Cultural Property (ICCROM). These organisations work together to protect cultural heritage in conflict zones. The International Council on Monuments and Sites (ICOMOS) is a non-governmental organisation "dedicated to the conservation of the world's monuments and sites"14 and its work focuses on historic architecture. It also assists the World Heritage Committee (WHC) in evaluating the list of cultural heritage sites nominated to be placed under the protection of UNESCO.

It is worth at this point recalling the activities of the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), established during the ninth session of the UNESCO General Conference in 1956 in New Delhi. The centre was established in Rome in 1959 to develop and promote the preservation of cultural heritage through. It encourages, among other things, interdisciplinary cooperation in the field of heritage protection between representatives of various sciences including conservators, archaeologists, museums, architects and urban planners, as well as institutions such as museums, libraries and archives. ICCROM, through its flagship programme on First Aid and Resilience for Cultural Heritage in Times of Crisis (FAR), and in partnership with the Maidan Museum and the Heritage Emergency Response Initiative (HERI), organised a two-day online workshop on developing a collaborative damage and risk assessment methodology for heritage sites damaged or at risk of destruction. The workshop, which took place on 11 and 12 April 2022, was attended by over 77 professionals from museums, art institutions, memorial sites, archives, cultural departments, research institutes and universities, as well as non-governmental and private cultural institutions

¹² For more on the problems of heritage conservation outside Europe, see, for example, PAWŁOWSKA, Aneta. The white man's burden. From colonialism to postcolonialism – discourse on non-European art and its position in the artworld form the perspective of the 2020s. In: *Art Inquiry. Recherches sur les arts*, XXIII, 2021, pp. 143–168; GRYGLEWSKI, Piotr; IVASHKO, Yulia; CHERNYSHEV, Denys; CHANG, Peng; DMYTRENKO, Andri. Art as a message realized through various means of artistic expression. In: *Art Inquiry. Recherches sur les arts*, XXII, 2020, pp. 57–88, 2020.

¹³ UNESCO, The Advisory Bodies, accessed December 5, 2022, whc.unesco.org/en/advisorybodies.

¹⁴ International Council on Monuments and Sites (ICOMOS), accessed December 5, 2022, http://www.icomos.org/en/.

¹⁵ International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), accessed December 5, 2022, www.iccrom.org/about/overview/history.

from 14 regions in Ukraine, including Chernihiv, Kharkiv, Mykolaiv, Donetsk and Crimea.¹⁶

Before proceeding directly to the analysis of the practical experience of protection and restoration of monuments, museums and museum collections, let us briefly analyse the socio-political problems that determined the nature of the Russian–Ukrainian war.

First of all, it is worth analysing the overt and hidden processes that have been going on in Russian society for the last decades. Many of these trends involve the active promotion of a regressive outlook, directed towards an artificially glorified past. For example, we can observe excessive heroization of history, as well as the redirection of culture away from the future and towards the cultural and aesthetic principles of the past. We also see a rise in the deployment of religious sensibilities and aesthetics within a patriotic narrative, through the transformation of religion into a source of political propaganda and the merging of government policy with ideologies of the Russian Orthodox Church. This merging of the religious and the spiritual is expressed through excessive fascination with symbolism and mysticism, which historians and political scientists deploy as allusions to World War II.

Historical approaches to the destruction and preservation of cultural heritage

From earliest times, people have attached significance to certain places or monuments. Among many peoples, such places were considered to possess immaterial power. This reasoning is evident in the concepts ancient Polynesians of *rāhui* and *mana*.¹⁷ Similarly, healing powers were attributed to special places such as caves and springs in many European sites, as we know from traces of offerings to various deities from the Bronze Age onwards – and from those still made today, albeit more commonly under the aegis of Christian mysticism rather than pagan. The same kind of continuity is found in many places around the world. In Latin America churches were built on pre-Hispanic monuments, resulting in a continuity of religious associations in a particular place. Such behaviour ensured the cultural continuity with ancestral beliefs so important for the local community's sense of unity.

Conscious care of historical places is encountered in ancient times. In Greek and Roman temples and other places of worship people were not allowed to remove stones, pick plants from the ground, cut down trees, build, cultivate or dwell. One such example is found in the ancient Greek city of Olympia. The Greek geographer and author of *Periegesis tes Hellados*, Pausanias (second century CE), writes of seeing the last of the original wooden columns of the seventh-century BCE Heraion sanctuary before they were replaced by marble columns. He specifies that this was done because the ancient structures were falling apart and not simply due to changing tastes — on the contrary, people would have stood in religious awe of the ancient temple and been afraid to desecrate it by making changes. The first known decrees concerning the preservation of monuments of the past appeared during the Roman Empire. Emperor Vespasian (1st century CE) might be considered one of the first restorers; he called himself the

¹⁶ Protecting endangered heritage in Ukraine, accessed December 5, 2022, www.iccrom.org/news/protecting-endangered-heritage-ukraine.

¹⁷ HARRISON, Rodney. Reassembling Ethnographic Museum Collections. In: HARRISON, Rodney; BYRNE, Sarah and CLARKE, Anne (eds.), Reassembling the collection: ethnographic museums and indigenous agency. Santa Fe: SAR Press, 2013, pp. 3–37 and BARLOW, Cleve. Tikanga Whakaaro: Key concepts in Māori culture, Oxford: Oxford University Press, 1991, p. 15–17.

¹⁸ POMIAN, Krzysztof. Zbieracze i osobliwości, Warszawa Państwiwy Instytut Wydawniczy, 1996, p. 23.

"protector of the public edifices and a restorer of the private ones", 19 issuing the first known pieces of legislation addressing cultural matters. His particular merits include recommending copies be made of the 3,000 bronze tablets that melted during the fire at the temple of Jupiter on the Capitoline Hill. We also know of the edicts of Emperor Alexander Severus (208–235 CE) in 222 and Constantine the Great (306–337 CE) in 485 forbidding the demolition or removal of decorations from buildings. In the Early Middle Ages a few conservation measures were carried out, less out of historical respect than out of a desire to save monuments that had become objects of veneration. The monuments in question were damaged by earthquakes, natural disasters and wars. They were usually not restored but rebuilt, with the surviving parts preserved only insofar as they could contribute to the new structure.

However, Theodoric (476–526), King of the Goths and Imperial Governor in Italy took action to protect the monuments of the past, entrusting the duties of conservator – *architectus publicorum* – to the courtier Cassiodorus (Flavius Magnus Aurelius Cassiodorus (485–583). Protection was extended to buildings such as the Marcellus Theatre, Circus Maximus and Appia Claudia aqueduct in Rome. The protection and care of the monuments was later taken over by Catholic church and championed by popes. Many ancient temples were saved by adapting them into churches. Two popes – Benedict II (684) and Gregory II (735) oversaw the restoration of the Pantheon. Despite these laws and actions, however, many objects of ancient architecture could not be saved from destruction.

During the Renaissance, a period associated with the discovery and study of the art of antiquity, European societies behaved passively and indifferently towards the protection of historical sites. During this period, the popes did great service in saving monuments, publishing decrees on the protection of monuments of the past by popes such as Pius II Piccolomini (1462), Sixtus IV della Rovere (1474) and Julius II della Rovere (1510). Pope Leo X entrusted Raffaello Sanzio da Urbino, better known as the painter and architect Raphael, with the office of Conservator of Monuments and Antiquities by bull issued in 1515. This office was dissolved with Raphael's death in 1521. Pope Paul III, on the other hand, issued a *Breve* in 1534 in which he ordered the care of ancient monuments and appointed the Latino Giovenale Manetto as curator. Popes Julius III (1556), Pius IV Medici (1562) and Gregory XII also appointed conservators. Monuments in Rome such as the Egyptian obelisks and the columns of Emperor Trajan and Marcus Aurelius were protected.²¹ The Renaissance also saw the development of art collecting and the emergence of museology, based on collections acquired during excavations of ancient ruins.

During the Baroque period, from the seventeenth to the mid-eighteenth century, a considerable number of monumental ancient buildings were demolished. For example, the Ripetta Bridge over the Tiber was built in 1704 with stones from the Colosseum, while bronze ornaments were taken from the Pantheon and melted down to build St Peter's Confession. The intention was to dismantle the tomb of Cecilia Metella in the Via Appia and use the material for constructing the Di Trevi fountain. Old buildings were eagerly replaced by new contemporary

¹⁹ JORA, Octavian-Dragomir; APĂVĂLOAEI, Matei-Alexandru; IACOB Mihaela. Cultural heritage markets: Are traders traitors? Winners and losers from cross-border shifts of historical artefacts. In: *Management & Marketing. Challenges for the Knowledge Society*, 13(2), 2018, p. 901.

²⁰ GOSZTYŁA, Marek; PÁSZTOR Peter. Konserwacja i ochrona zabytków architektury. Rzeszów: Oficyna Wydawnicza Politechniki Rzeszowskiej, 2013, p. 33.

²¹ KARMON, David. *The Ruin of the Eternal City: Antiquity and Preservation in Renaissance Rome.* Oxford, New York: Oxford University Press, 2011, pp. 47–75.

buildings.²² No attention was paid to the fact that these old buildings bore witness to the achievements of past centuries. Many buildings have undergone numerous transformations in processes referred to in modern times as "Baroqueisation". The rebuilt buildings from the medieval and Renaissance periods were given Baroque facades, new tower shapes and interior decoration. Only ancient art was treated with greater reverence.

In the mid-eighteenth century, a number of significant changes emerged in the perception of the preserved cultural heritage of past generations, related among other things to the discovery of Pompeii and Herculaneum. In the same period, from the second half of the eighteenth century onwards, the concept of art history began to develop. In 1711, during works in Resina near the volcano Vesuvius, a worker unexpectedly came across the remains of a wall from the Roman period. The forgotten Roman city of Herculaneum was thus discovered. Excavations began in 1738, conducted, among others, by Karl Weber, Franscisco la Vega Giuseppe Fiorelli and Antonio Sogliano.

The end of the eighteenth century saw major political upheavals. The Great French Revolution of 1789 caused great damage to historic buildings but also contributed to the development of heritage conservation activities. The authorities of the French Revolution issued decrees that extended protection to works of art. At the same time, increasing numbers of scientific and historical societies were founded concerned with the care and presentation of cultural heritage.

Many scholars qualify the period of the French Revolution and the Napoleonic era as one of pioneering achievements in the formation of modern conservationism.²³ In 1790, Aubin Louis Millin used for the first time the phrase "historical monument" (in French "monument historique") in a report to the Constituent Assembly on the occasion of the demolition of the Bastille. Thus the term "historical monument" became a symbol of the pre-revolutionary period, the Ancien Régime. The idea of preserving a site associated with the Ancien Régime did the rounds and the Assembly, at the instigation of Talleyrand, passed the decree of 13 October 1790 creating the Monuments Commission, whose task was to investigate "the fate of monuments, arts and sciences". In 1791, Alexandre Lenoir was entrusted with the creation of the Museum of French Monuments, opened in 1795, where he collected the fragments of architecture he had saved from destruction in the years before.²⁴ The second very important event from this period was the creation of the Musee Central des Arts in the Louvre in 1793, which included royal and private collections.

The nineteenth century saw a significant growth of interest in preserving outstanding examples of the material heritage of humanity for future generations. There were number of notable historic preservationists from this period. Among the most prominent and influential for many generations were undoubtedly Eugène Emmanuel Viollet-le-Duc (1814–1879), John Ruskin (1819–1900), Camillo Boito (1836–1914) and Alois Riegl (1858–1905).²⁵

²² E. Małachowicz, Konserwacja i rewaloryzacja architektury w zespołach i krajobrazie, Wrocław 1994, pp. 26–28.

²³ SAX, Joseph L (1990). Heritage Preservation as a Public Duty: The Abbé Grégoire and the Origins of an Idea, In: *Michigan Law Review*, 88(5), 1990, pp. 1142–1169.

²⁴ Frédéric Rücker, Les origines de la conservation des monuments historiques en France (1790–1830), Jouve et Cie, Paris, 1913.

²⁵ YAZDANI Mehr Shabnam. Analysis of 19th and 20th Century Conservation Key Theories in Relation to Contemporary Adaptive Reuse of Heritage Buildings. In: *Heritage* 2(1), 2019, pp. 920–937.

The twentieth century and the perception of the need to protect the material heritage of humanity

A key document related to the first half of the second century was the Athens Charter, created in 1931. This document was prepared by the International Museum Bureau, which was established after the First World War to examine issues relating to heritage conservation, the restoration of historic buildings, and even the rebuilding of entire cities that had been destroyed or damaged during the war. It is worth highlighting that Athens Charter was the first international document to encourage modern conservation policies. This document sensitised not only architects and conservators and museologists but also the general public to issues related to the material heritage of humanity. As a result, as the US entered the Second World War, American General Dwight D. Eisenhower warned his soldiers against destroying cultural monuments in Europe. In an eloquent speech to the troops in June 1944, on the eve of the Normandy invasion, Eisenhower assigned the American soldiers a special and extremely important responsibility: they were not only to defeat Nazi Germany but also to protect Europe's cultural heritage. He pointed out the inseparable relationship between civilisation and its productions and impressed upon the troops their responsibility for protecting both.

Shortly we will be fighting our way across the continent of Europe in battles designed to preserve our civilization. Inevitably, in the path of our advance will be found historical monuments and cultural centers that symbolize to the world all that we are fighting to preserve. It is the responsibility of every commander to protect and respect these symbols whenever possible. ²⁶

In this interpretation, it is the duty of every army commander to protect and respect these symbols whenever possible. One country particularly affected by the destruction wrought by World War II was Poland. The country was brutally attacked in September 1939 by Nazi Germany and Soviet Russia.²⁷ Adolf Hitler presented the aggressive military policy of his Third Reich in *Mein Kampf*. One passage particularly relevant to our discussion here proclaimed, "Take away a nation's monuments and within a generation it will cease to be a nation." ²⁸ In this formulation, the road to the destruction and plunder of the Polish national heritage was drawn.

In practice, from the beginning of the occupation titled art historians, as high SS functionaries, indicated which works of art and other cultural assets should be taken in to German collections, and which could or even must be liquidated. As a result of such definitions, Warsaw monuments – among them the homes of the composer Frédéric Chopin and the poet Adam Mickiewicz – were destroyed. In relation to movable monuments and historical buildings, the German occupying forces (in addition to a practical view of their usefulness) were guided by the division into objects which they associated with Germanic or European (e.g., Italian) culture. This is because they considered such objects worthy of preservation, while others, in their view, were of importance only to the 'sub-humans' and therefore not worthy of preservation. A decree by the Nazi Governor Hans Frank dated 6 February 1940, entitled *Die Neue Deutsche Stadt Warschau*

²⁶ Letter from May 26 1944 as quoted in HENSEL, Howard M. (ed.). The Law of Armed Conflict: Constraints on the Contemporary Use of Military Force. Routledge: Bodmin, 2007, p. 58.

²⁷ On September 1, 1939. Poland was attacked by the German Reich, and on September 17, 1939 the Soviet Union joined the attack.

²⁸ Mein Kampf as qtd. in RYMASZEWSKI, Bohdan. Polska ochrona zabytków. Warszawa: Schorlar, 2005, p. 97.

(New German City Warsaw), provided for the liquidation of all Warsaw monuments except for the Royal Łazienki Park in Warsaw²⁹.

Today, we can hear clear resonances of these Nazi strategies and decrees in the false claims of Russian President Vladimir Putin that there is no such thing as a Ukrainian history, language or culture separate from Russia's. And we can see all too clearly Hitler's attempts at cultural obliteration reflected in the deliberate targeting and destruction of Ukraine's monuments of cultural heritage today.

After World War II, international organizations recognised the need to create conventions and laws to help protect cultural sites and materials in conflict zones, so that such devastating destruction could not happen again. In 1954, the Convention for the Protection of Cultural Property in the Event of Armed Conflict was created to assure the protection of cultural heritage around the world in time of war. New organizations were also needed to implement and support laws created to preserve cultural heritage.

The growing perception of the cultural heritage of individual countries as a public good of all humanity is evidenced by the Convention for the Protection of Cultural Property in the Event of Armed Conflict, with Regulations for the Execution of the Convention adopted by the Intergovernmental Conference of States convened by UNESCO in 14 May 1954, the Hague.³⁰

However, these new institutions and conventions have often proved powerless in the face of armed conflicts that have erupted after the Cold War period. A case in point from recent decades is the destruction caused by the war in the Balkans. One of the most famous examples is the 1993 attack on Stari Most, a bridge in Mostar, by the paramilitary Croatian Defence Forces. The Ottoman bridge was interpreted as a symbol of the Bosnian Muslims. Alongside the bridge itself, the surrounding neighbourhood – an almost perfectly preserved vestige of the Ottoman period – was entirely destroyed. Another case from the same period was the destruction of the Orthodox monastery of the Annunciation of Žitomislici in Herzegovina by Croatian forces.³¹ Elsewhere, at the end of the Abkhazian war against Georgia in 1993, armed forces threw grenades at the building that housed the Abkhazian Archive. The documents held there reflected Abkhazian identity, but documents that told the story of Greek, Jewish, Armenian and Russian communities, symbolising the multi-ethnic nature of Abkhazian society before the war, were also destroyed.³²

An infamous example of wartime destruction of world cultural heritage in the Middle East region can be found in Syria, which has been engulfed in a decade-long civil war. The city of Aleppo, Syria's largest city and home to 2 million people, took a heavy toll in 2012–2016. The unique architecture of the old city had led to it being designated a UNESCO World Heritage Site. In 2006, Aleppo held the title of Capital of Muslim Culture. As a result of the war, entire neighbourhoods were devastated, along with UNESCO World Heritage sites. The covered suk (marketplace) of Al-Madina was partially burnt down. The 45 m minaret of the Umayyad mosque, which dates back to the eleventh century, also collapsed during the fighting. Many other instances of destruction were documented in the old city. Another example of destruction

²⁹ RYMASZEWSKI ..., pp. 98–99.

³⁰ UNESCO, Standard-Setting at UNESCO Conventions, Recommendations, Declarations and Charters Adopted by UNESCO (1948 – 2006), Vol. II, Brill, Leiden 2007, p. 44.

³¹ AUWERA, van der Sigrid (2012). Contemporary Conflict, Nationalism, and the Destruction of Cultural Property During Armed Conflict. In: *Journal of Conflict Archaeology*, 7(1), 2012, pp. 49–65.

³² AUWERA ..., p. 56.

in Syria is Palmyra. In 2015, jihadists destroyed a number of unique Palmyra monuments, including several burial towers from 44–103 CE. Moreover, they brutally murdered the famous Syrian archaeologist Khaled el-Asaad, who had been looking after the monuments of Palmyra for more than 50 years. Islamic State (IS) tried to extract information from him about the museum' treasures, which had been hidden from them. In 2017, another IS attack on the city damaged facade of Palmyra's Roman amphitheatre.³³

The safeguarding of cultural property during wars in the twentieth century – selected examples

The twentieth century witnessed massive destruction of material cultural heritage in Europe as a result of two extremely bloody and brutal world wars but also the conflict in the Balkans. The twenty-first century promises to be similar in terms of the destruction of material culture. An interesting summary of how material culture assets are secured during wars was collected in the exhibition entitled "Culture Under Attack", presented from 5 July 2019 to 5 January 2020 at the Imperial War Museum. The creators of this London show asked how we can protect the treasures deposited in the world's museums from armed conflict. One part of this exhibition was Art in Exile, depicting the dramatic decision to evacuate the Imperial War Museum's collection in 1939. Carefully going around all the galleries in the museum, the museum curators assessed and marked each work in the building on a scale of 1 to 4. Marking the numbers on the wall with chalk, they indicated the most valuable works in the collection destined to be deported and secured in the remote country houses of the museum trustees. In the end, 586 works were prioritised for evacuation – less than one per cent of the entire collection. Ultimately, the Imperial War Museum escaped heavy losses during air raids on London by the Luftwaffe (German air force). These operations, which lasted from late April to late June 1942, included deliberate attacks on Britain's historic cities, causing widespread damage, hundreds of deaths and thousands of injuries. Attacks on historical and cultural targets - primarily Exeter, Bath, Norwich, York and Canterbury - were known as the "Baedeker raids", referencing a series of German tourist guidebooks, and were in retaliation for the RAF's bombing of the historic German city of Lübeck two months earlier, on 28-29 March.³⁴

Around the same time the Imperial War Museum was evacuating its collections, during the summer of 1939, the Louvre Museum closed for three days under the pretence of "repair work". In fact more than 4,000 art pieces were moved to Château de Chambord in the Loire Valley (see Figure 1).³⁵

³³ Syria 'finds body of archaeologist Khaled al-Asaad beheaded by IS', accessed November 25, 2022, www.bbc.com/news/world-middle-east-55977964.

³⁴ https://heritagecalling.com/2019/07/04/englands-historic-cities-under-attack-the-baedker-raids-1942/

³⁵ CACHIN, Françoise. Pillages et restitutions: le destin des œuvres d'art sorties de France pendant la Seconde Guerre mondiale : actes du colloque organisé par la Direction des musées de France le 17 novembre 1996 à l'amphithéâtre Rohan de l'école du Louvre sous la présidence deFrançoise Cachin. Paris: La Direction A. Biro, 1997.



Figure 1: The removal of the protected statue of the Winged Victory of Samothrace from the Louvre from the Grande Gallerie of the Louvre September 1939. Photograph by Pierre Jahan, Archives des museés nationaux.

At the heart of the Imperial War Museum's "Culture Under Attack" exhibition was an attempt to answer the question of why some leaders try to erase or exploit culture while others risk everything to protect, celebrate and rebuild it. This is a question that should be asked especially today (this article was written in November–December 2022), as, in the course of the war in Ukraine, the country's precious monuments are being irretrievably destroyed by the Russian aggressors. It seems that the destruction is the result of the criminal actions³⁶ of Russian President Vladimir Putin, who, displaying all the characteristics of a modern despot, seems to believe that the destruction of a nation's material culture will cause its integrity and militant spirit of resistance to atrophy. These conclusions serve as one of the main justifications for waging war on and occupying Ukraine. Since its illegal occupation of Crimea, and parts of

³⁶ Under the terms of the Rome Statute of the International Criminal Court. Accessed November 25, 2022, www. un.org/en/genocideprevention/war-crimes.shtml

Luhansk and Donetsk in 2014, Russia has carried out extensive and coordinated actions to marginalise, undermine and, ultimately, eliminate the tangible and intangible manifestations of Ukrainian culture. President Putin seeks not only to control Ukrainian territory, but also to erase Ukrainian identity and culture and impose the Russian language, along with a manipulated, chauvinistic, militaristic version of Russian culture, history and worldview.

Marjana Varchuk, the director of communications at the Khanenko Museum in Kyiv, which was partially damaged in an airstrike on October 10, 2022, summarises Russia's actions destroying Ukrainian culture as follows:

Destroying our culture is the purpose of everything the Russians are doing. Culture and language strengthen our nation, they remind us of our history. That's why the Russians are shelling our monuments, our museums, and our history. That's what they're fighting with. They want to destroy everything and substitute our history.³⁷

It should be added at this point, that the Declaration of ICOMOS marking the 50th anniversary of the Universal Declaration of Human Rights (Stockholm 1998) also resonates with the events of the Russian–Ukrainian war, as it enshrines the right of every nation to its own heritage, which Russia denies. These include the denial of fundamental rights, including the right to have the authentic testimony of cultural heritage, respected as an expression of one's cultural identity within the human family; the right to better understand one's heritage and that of others; the right to wise and appropriate use of heritage; the right to participate in decisions affecting heritage and the cultural values it embodies; and the right to form associations for the protection and promotion of cultural heritage.³⁸

War in Ukraine – some selected proposals to secure monuments

As the war in Ukraine is still in the acute conflict phase it is difficult to present all the relevant ways of safeguarding the country's material heritage. A noteworthy example is the relocation of movable objects from museums such as the National Art Gallery in Lviv to institutions outside Ukraine. A shipment of support for the National Art Gallery in Lviv set out from the National Museum in Poznan at the beginning of the conflict in March 2022. The items delivered to the gallery included primarily materials for protecting museum objects, as well as interlining, cardboard boxes, filling materials, a roll for winding canvas removed from frames and crates for paintings. The transport also included food and medical supplies collected by the staff of the National Museum in Poznan.

The carefully packed works of art were transported safely to Poland, and from 29 November 2022, the public could view one of the most important collections transported from Lviv – the work of the artist Jacek Malczewski (1854–1929) – at an exhibition entitled "Idę w świat i trwam. Obrazy Jacka Malczewskiego z Lwowskiej Narodowej Galerii Sztuki" [I go into the world and I last. Paintings by Jacek Malczewski from the Lviv National Art Gallery]. Thus, the tragic events unfolding in Ukraine allowed the Polish public in Poznań to come into contact

³⁷ Marjana Varchuk, in-person interview with consultant of PEN America, October 11, 2022, in: Ukrainian Culture Under Attack: Erasure of Ukrainian Culture in Russia's War Against Ukraine, accessed November 25, 2022, https://pen.org/report/ukrainian-culture-under-attack/

³⁸ ICOMOS. *The Stockholm Declaration: Declaration of ICOMOS marking the 50th anniversary of the Universal Declaration of Human Rights*, 1998, accessed November 25, 2022, www.icomos.org/en/what-we-do/focus/human-rights-and-world-heritage/179-articles-en-français/ressources/charters-and-standards/372-the-stockholm-declaration.

with priceless works of art, which were additionally restored and processed for the catalogue accompanying this exhibition.³⁹ The exhibition expresses the fragility of heritage and its value, presented as a story of solidarity; it explores the work of the artist in wartime, the museum employee, questions of what heritage is and how to save it, and what needs to be protected and for what reasons. These questions are all are highlighted even more strongly in the face of war.

The exhibition's title is taken from a poem by Reiner Maria Rilke. It refers to what is movable, fragile and uncertain, but also to what is eternal and important. The second concept that ties the exhibition's narrative together is Wisława Szymborska's poem, *The End and the Beginning*. 40

Po każdej wojnie ktoś musi posprzątać Znośny porządek sam się przecież nie zrobi.

[After every war someone has to clean up. Things won't straighten themselves up, after all.]⁴¹

In this study we barely touch on the impact of the war on Ukrainian society, but we will analyse one aspect related to cultural heritage, in particular monuments, museums and museum collections. During the eight months of occupation, until December 2022, , Russians looted the Kherson Local History Museum and the Art Museum and took away all the exhibits. ⁴² Paintings from the Kherson Museum were seen in the Central Tavrida Museum in Simferopol, Crimea. The occupiers stole almost 100 ancient pieces of jewellery from the Melitopol Museum, among them the golden diadem of the Huns. ⁴³ Before the occupation, the funds of the Kherson Art Museum included 10,000 paintings, among them a collection of icons of the eighteenth and nineteenth centuries and a collection of porcelain, and paintings by Soviet-era artists. Original paintings by Arkhip Kuindzy and Ivan Aivazovsky were taken from the Museum of Local History and the Mariupol Art Museum. Since the invasion, the Russians have looted dozens of museums in the east and south of Ukraine.

As recent events have shown, the Russian army is at war not only with Ukrainians but also with monuments on the territory of Ukraine. For example, in Borodianka the Russians fired at a monument to Taras Shevchenko, shooting it in the temple and forehead, and a monument to Archangel Michael, which was shot in the head.

It is not only buildings and people that suffer from rocket attacks but also monuments. One common means of cultural heritage protection that has been widely implemented in Ukraine is

³⁹ Correspondence between A. Pawłowska of December 8, 2022 and Bartosz Skaldawski, Deputy Director of the National Institute of Museums and Collections Protection in Poland.

⁴⁰ Idę w świat i trwam. Obrazy Jacka Malczewskiego z Lwowskiej Narodowej Galerii Sztuki, accessed November 25, 2022, https://culture.pl/pl/galeria/ide-w-swiat-i-trwam-obrazy-jacka-malczewskiego-z-lwowskiej-narodowej-galerii-sztuki-galeria.

⁴¹ SZYMBORSKA, Wisława (1993). "Koniec i początek", accessed November 25, 2022, https://literatura.wywrota.pl/wiersz-klasyka/40477-wisława-szymborska-koniec-i-poczatek.html. Translated by Joanna Trzeciak.

⁴² Ukraine museum in "shock" after Russian looting spree. Radio France Internationale, accessed December 25, 2022, www.rfi.fr/en/international-news/20221223-ukraine-museum-in-shock-after-russian-looting-spree.

⁴³ Defense of Ukraine, accessed December 25, 2022, https://twitter.com/DefenceU/status/1579224814480343043.

the protection of monuments with sandbags, metal "cases" and protective nets. These means of protecting monuments and other material cultural assets has its roots in the defence of Paris during the First World War. At that time, sandbags began to enter the cityscape of Paris on a large scale. To protect famous monuments from bombardment and shrapnel from shells, the city's inhabitants constructed piles of sandbags, stored important works of art in safe places, and removed stained glass windows from cathedrals and other buildings. Another creative method of protection was to reinforce the windows with grids made of tape, although the efficacy of this method against a blast was never tested. Nevertheless, it provided a kind of psychological protection against the grim backdrop of war.

During the Second World War, a simplified approach to protecting monuments with sandbags was used during Nazi attacks on cities in France or Britain (Figure 2). There are photographs and descriptions, for example, of protective scaffolding and sandbags set up around the base of the Luxor Obelisk on the Place de la Concorde in Paris (May 1940) and sandbag-protected garden sculptures in Versailles.



Figure 2: Structure with bags to protect the Quatre-Parties-du-Monde fountain in the Jardin Marco Polo in Paris from German bombing, 1918.

Returning to 2022 and Ukraine, statues of the Duke de Richelieu (Figure 3), St Princess Olga and St Cyril and Methodius (Figure 4), Hetman Pyotr Konashevich-Sagaidachny, and St Volodymyr on Volodymyr Hill were placed in special cases and covered with a protective cloth. Monuments to Mykola Lysenko, Hetman Bohdan Khmelnytskyi, Hryhoriy Skovoroda, Lesya Ukrainka and Taras Shevchenko were also placed in special cases. The protection of Ukrainian monuments with sandbags began in early March 2022, but more advanced protection

technologies were subsequently developed. A statue of Mykhailo Hrushevskyi was protected using new technology, in the form of a reinforced scaffolding frame in-filled with sandbags and covered with a layer of Bakelite plywood on top of the scaffolding. The walls of the case are separated from the monument by 20 cm, and its sides are painted in neutral colours, although a painted image of the statue and information about Hrushevskyi can be seen on one of the monument's faces. This new system for protecting monuments during military operations was created in response to the current war. It was designed by the architectural firm Balbek, which has responsible for protecting monuments from destruction during the war, together with the Alliance of Monument Conservators of Ukraine and the Department for the Protection of Cultural Heritage of the Kyiv State Municipal Administration.⁴⁴

Another project supporting Ukraine in preserving its historic cultural heritage is the SUM project, coordinated by 4CH (European Centre of Competence for the Preservation of Cultural Heritage). SUM's activities consist of rescuing digital documentation of Ukrainian cultural heritage. These digital texts, images, drawings and 3D models will be extremely useful for restoring and, if necessary, reconstructing damaged cultural property, and for preserving and transmitting Ukrainian culture and history to future generations. Ukrainian datasets have started to be uploaded via the internet and securely stored on servers. Approximately 100 terabytes are currently in pending or have already been transferred, in a project involving a huge range of organisations, from large urban institutions to relatively small museums outside the main centres. The transfer takes time due to the intense difficulties on the Ukrainian side in collecting the datasets and maintaining an internet connection in conditions of war.⁴⁵



Figure 3: Protection of the Duke de Richelieu Monument on the Odessa embankment with sandbags. Photo by Serhiy Belinskyi. March 2022.

⁴⁴ See Balbek Bureau, RE:UKRAINE MONUMENTS, accessed November 25, 2022, www.balbek.com/reu-krainemonuments-eng#big.

⁴⁵ See Project SUM – Save the Ukraine Monument www.4ch-project.eu/sum/.



Figure 4: Protection of the monument to St Princess Olga and St Cyril and Methodius with sandbags. Photo by Yulia Ivashko. October 2022.

A separate issue, and one generating considerable debate, relates to the fate of monuments of the imperial past, namely, the Russian Empire and the Soviet Union. Today, the events of the Russian–Ukrainian war have exacerbated this issue in Ukrainian society, and in many cases such monuments have been spontaneously dismantled and destroyed, painted with patriotic inscriptions and graffiti, or painted in different colours. Public opinion is divided on this issue: some citizens believe that these monuments should be destroyed altogether; others argue that many were created by prominent sculptors and should be transferred to appropriate exhibitions dedicated to totalitarian art; and yet others believe these monuments, which have long been interpreted as works of art, should be preserved in place.

A typical example of this is the discussions in Poltava regarding the Column of Glory, a monument to Colonel Kelin, Commandant of Poltava Fortress in 1709, and the monument that marks where Peter I rested after the Battle of Poltava that same year. From the moment of their installation, these monuments represented powerful means of imperial propaganda, ⁴⁶ and from the very beginning of the Russian aggression in 2014, local citizens have been attempting to find ways to neutralise their propaganda aspect. In 2014, the yellow and blue national flag and the red and black Ukrainian Insurgent Army flag (which in modern Ukraine is considered a combat variant of the national flag) were installed on the Glory monument, next to the gilded

⁴⁶ TREHUBOV, Kostiantyn, DMYTRENKO, Andrii, KUZMENKO, Tetiana, VILDMAN, Igor. Exploration and restoration of parts of Poltava's town fortifications during the Northern War and elements of field fortifications used in the Battle of Poltava in 1709. In: *Wiadomości Konserwatorskie – Journal of Heritage Conservation*, 61, 2020, pp. 91–100.

eagle at the top of the column symbolising the victory of the Russian army in the Battle of Poltava. Smaller monuments to Colonel Kelin (Figure 5) and at the resting place of Peter I (Figure 6) were simply covered with construction nets in the colours of the Ukrainian flag. (On Colonel Kelin's statue, the sculpted lion sculpture at its base was a popular backdrop for selfies; as can be seen in the picture, the netting has been cut away at the bottom to reveal the lion so that people can still pose with it.) The monument to the nineteenth-century Russian poet Pushkin arguably looks strangest. With the beginning of the large-scale Russian invasion on February 24, 2022, people were reminded of Pushkin's role as an imperial propagandist and quite critical inscriptions, some of them obscene, regularly appeared on the monument until the city authorities wrapped the monument in black cloth (Figure 7).

Conclusions – some recommendations for effective support for the protection of material cultural property during the ongoing conflict on Ukrainian territory

Despite the fact that the Russian–Ukrainian war is in an active phase, calls for the development of a "Marshall Plan" for Ukraine are increasingly being heard around the world. With the support of international partners and UNESCO, as well as private donors, initial measures are being taken to digitise cultural archives threatened with destruction by the conflict. Once archived, copies of the materials can be safely housed abroad so that they are not destroyed. Preserving these cultural artefacts for posterity will hinder and prevent efforts to eradicate Ukrainian culture. In addition, based on the latest experiences of preserving cultural heritage in war zones, it would also make sense to engage international heritage institutions and local heritage professionals as an integral part of humanitarian disaster response. For it is only by ensuring that efforts to save cultural heritage, to analyse its condition on an ongoing basis, and to provide materials to protect sites from collateral damage are coordinated between the various agencies, local authorities, the military and public initiatives that the greatest damage can be effectively contained.

The experience of Poland, whose historical and cultural heritage was damaged on a massive scale during both world wars, can be very useful when it comes to restoring historical and cultural heritage. Examples of the destruction wrought by World War I can be found in Kalisz, Kazimierz on the Vistula, Janowiec, Krasnystav and Horlice. Cities that suffered 50–90% destruction in World War II include Warsaw, Gdynia, Gdańsk, Szczecin, Wrocław, Poznań and many others. One unique aspect of the Polish experience was the authenticity of the reconstruction, achieved using old drawings and photographs for the conservation works. The most famous example of such mass reproduction was the Old Town in Warsaw, but in fact similar works were undertaken throughout Poland, in the historic centres of Poznań, Gdańsk and Wrocław.⁴⁷ In Warsaw's Old Town, comprehensive conservation measures were undertaken, with the reproduction of the original environment based on cartographic documentation of the historical district. The opposite approach was taken in the historic Old Town of Szczecin, where new objects were included in the historical environment, but with respect to the historical

⁴⁷ CHYLIŃSKA, Dagmara, MUSIAKA, Łukasz. Military museums in Poland – between the past and the future. In: *Muzeologia a Kulturne Dedicstvo*, 8(3), 2020, pp. 5–39.

facade lines and scales.48

The tragic impacts of the Russian–Ukrainian war on cultural heritage can be analysed from the point of view of ICOMOS's Dresden Declaration (1982),⁴⁹ based on the materials of the symposium "Reconstruction of Monuments Destroyed by War". From this document, we can identify some key issues that will be relevant in the restoration of Ukraine after the end of the war. It highlights the importance of:

- understanding the need to preserve and restore objects of historical and cultural heritage from the point of view of their intangible, intellectual and spiritual value:
- awareness of the heritage preservation process as a connecting link between the people and their land;
- awareness of measures to restore and restore historical objects and museum collections as evidence of history and preservation of the memory of humanity;
- interpretation of the restoration of the monument for the reasons of its meaning and content, in addition to purely conservation measures;
- observance of special care for the process of restoration of monuments destroyed by the war.

The active inclusion of cultural heritage in the reconstruction agenda after war can be a positive force for both social reconstruction and reconciliation. Therefore, priority should be given to the reopening and accessibility of cultural institutions in liberated areas. It seems equally important to ensure that cultural rehabilitation, vitality and continuity are an integral part of post-war reconstruction and recovery efforts, including through the involvement of cultural practitioners at all stages of reconstruction and restoration. In many post-war situations, there is evidence of a desire among the population to immediately restore the heritage destroyed by the war and to revive traditions that were obsolete before the conflict. This concern corresponds to a strong psychosocial need to restore what is familiar and valued after a period of violent disruption of normal life. It can be summed up in the concept of the "thread of continuity" that people seek when the rhythm of daily life is disrupted.

⁴⁸ KUŚNIERZ-KRUPA, Dominika. Protection issues in selected European historic towns and their contemporary development. In: *E3S Web of Conferences*, 45, 2018, pp. 1–8 and ORLENKO, Mykola, IVASHKO, Yulia, KOBY-LARCZYK, Justyna, KUŚNIERZ-KRUPA, Dominika. The influence of ideology on the preservation, restoration and reconstruction of temples in the urban structure of post-totalitarian states. In: *Wiadomości Konserwatorskie – Journal of Heritage Conservation*, 61, 2020, pp. 67–79.

⁴⁹ ICOMOS. Declaration of Dresden on the 'Reconstruction of Monuments Destroyed by War', 1982, accessed November 25, 2022, www.icomos.org/en/charters-and-texts/179-articles-en-français/ressources/charters-and-standards/184-the-declaration-of-dresden.

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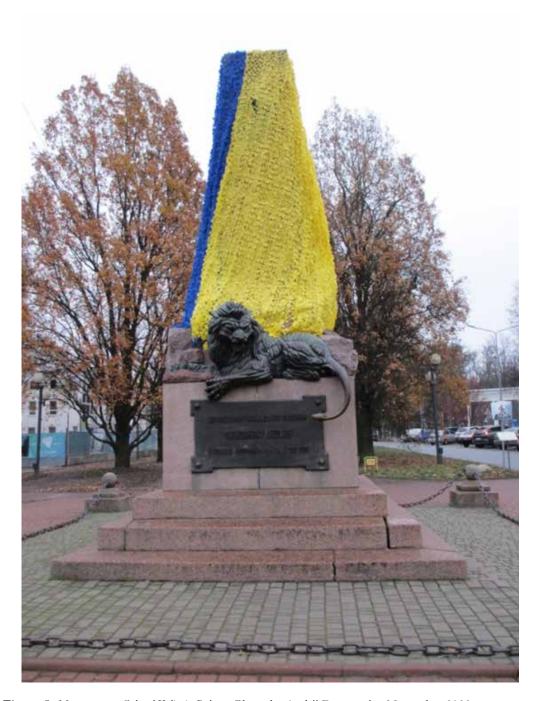


Figure 5: Monument to Colonel Kelin in Poltava. Photo by Andrii Dmytrenko. November 2022.



Figure 6: Monument at the resting place of Peter I in Poltava. Photo by Andrii Dmytrenko. November 2022.



Figure 7: Monument to Pushkin in Poltava. Photograph by Andrii Dmytrenko. November 2022.

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Values as a base for the viable adaptive reuse of fortified heritage in urban contexts

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Values as a base for the viable adaptive reuse of fortified heritage in urban contexts

The last decades have brought a growing interest in fortified heritage research, protection and reuse in Europe as a result of the demilitarisation of numerous historic defence structures occupied by armies in many countries and used as service facilities during the Cold War. There are various approaches to the conservation of fortified heritage and adaptive reuse is one of them. The values associated with a site should constitute the departure and arrival point for any type of intervention. An essential part of the process therefore should be the appropriate identification of these values to base on them contemporary actions. Fortified heritage has values similar to other forms of urban heritage but it also possesses values that are unique to this form of architecture and landscape. This paper sets out the values that should be taken into consideration when carrying out an adaptive reuse project on fortified heritage. Based

on research and on international charters, as well as the writers' own experience, the paper identifies seven values and makes a distinction between two groups of values, namely: intrinsic (history, memory and identity; scientific and technical; territorial and architectural) and extrinsic (landscape and aesthetic; environmental sustainability; social and cultural; economic). While intrinsic values of fortified heritage are usually well described, less explored are the issues of extrinsic values. The paper presents two case studies, Zamość Fortress and Fort St Elmo, and considers how these values were taken into account in the respective projects.

Keywords: fortifications, fortified heritage, adaptive reuse, historical value, cultural value, landscape value

Introduction

In history and across Europe, people living in towns have felt the need to protect themselves from attack by their enemies. They have built walls and other structures around their towns to this end. Fortifications and fortified towns came about because of a long history of tensions and conflict between neighbouring peoples. As the art and science of warfare developed over the centuries, fortification systems became more complex and intricate in accordance with the attacking strategies and the firepower of the tools of war. While medieval castles and walled towns are widely recognised as having high heritage values, newer fortification are not so widely appreciated. This is partly reflected by their representation on the UNESCO World Heritage (WH) List. On a global scale, out of more than 830 objects listed, only 33 are objects belonging to defensive architecture (from various eras - from antiquity to the turn of the nineteenth and twentieth centuries), and only 10 of them are objects of the modern era, i.e., of the past 500 years or so. Fortified sixteenth- and seventeenth-century bastion towns make up the majority of those recognised places. Younger fortifications have been appreciated as part of the Fortress Suomenlinna inscription and Stelling van Amsterdam defence line, which were put on the list in 1991¹ and 1996² respectively. In 1997 the fortified city of Carcassonne was inscribed on the WH List,³ despite being an example of the fascination with medieval city fortification materialised by the creative conservation carried out by Eugene Viollet-le-Duc. The road to the UNESCO World Heritage List of Vauban bastion fortifications was also long. It was only in 2008 when 12 groups of his masterpieces (such as fortified cities, coastal defence fortifications and mountain fortifications dating back to the turn of the seventeenth and eighteenth centuries) were entered on the List.4 It was in 2017 that the fortified Renaissance ideal city of Palmanova was added to the WH List as part of the cross-border entry of Venetian fortifications of the fifteenthseventeenth centuries.5

The last decades have brought however a growing interest in fortified heritage research, protection and reuse in Europe as a result of the demilitarisation of numerous historic defence structures, often those occupied by armies in many countries and used as service facilities during the Cold War. To deal with such issues the ICOMOS brought to life in 2005 a special International Scientific Committee on Fortifications and Military Heritage (ICOFORT).⁶ Nowadays it can be stated that fortified heritage has values similar to other forms of urban

¹ See entry at the UNESCO World Heritage site: https://whc.unesco.org/en/list/583/ (accessed February 24, 2023).

² Entry on Dutch Water Defence Lines: https://whc.unesco.org/en/list/759 (accessed February 24, 2023).

³ See entry at the UNESCO World Heritage site: https://whc.unesco.org/en/list/345/ (accessed February 24, 2023).

⁴ Entry of Fortifications of Vauban: https://whc.unesco.org/en/list/1283 (accessed February 24, 2023).

⁵ The Venetian Works of Defence between the 16th and 17th centuries: *Stato da Terra* – western *Stato da Mar:* https://whc.unesco.org/en/list/1533 (accessed February 24, 2023).

⁶ ICOFORT, https://www.icofort.org/(accessed February 24, 2023).

heritage but it also possesses values that are unique to this form of architecture.⁷ There is a very broad diversity of different fortified landscapes and heritage. In spite of this and whatever the nature of the site, the values associated with the fortified heritage should be given the highest priority in projects of rehabilitation and reuse. An essential part of the process therefore should be the appropriate identification of these values.

That is why this paper develops a conceptual framework of values relevant to fortified heritage. It makes a distinction between what are termed as intrinsic and extrinsic values. While intrinsic values of fortified heritage are usually well described, less explored are the issues of extrinsic values. Three intrinsic values are identified – (1) history, memory and identity; (2) scientific and technical; (3) territorial and architectural – these being relevant to the fortified heritage irrespective of the uses and interventions being proposed. Extrinsic values – (4) landscape and aesthetic; (5) environmental sustainability; (6) social and cultural; (7) economic – come into play if and when major conservation and reuse are being considered for a fortified landscape. They refer to the relevance of the fortified heritage to society.

There are various approaches to the conservation of built heritage and adaptive reuse is one of them.⁸ Adaptive reuse involves any activity that conserves the physical fabric and the historic value of a heritage building while concurrently providing the building with a new use that guarantees its continued upkeep and maintenance over the long term. Since conservation is not just about values, the paper also discusses conservation issues that stem from the specific physical characteristics of the heritage in terms of the size, shape and layout of internal spaces as well as the extent and layout of the external spaces.

The concepts referring to values discussed in this paper are based on a desk study and a review of academic papers and relevant international charters. Reference is also made to the authors' own experience of fortified heritage projects, especially in the presentation of the two case studies. Fortress Zamość in Poland and Fort St Elmo in Malta were chosen because, despite the differences they have, there exhibit some vital features in common that influenced their reuse. The first is their location in a context of and in a strong relation to the historic city. The second is a still-visible structure of bastions, regardless of further modifications and improvements. Also, the choice of contemporary function is similar, although in Zamość a museum is only one of various institutions using the historic fortification. And last but not least, both of these case studies, in spite of different legal regulations and economic circumstances, were guided by the same principles based on values that led to successful and viable reuse projects.

We believe that a clear presentation of the conceptual framework of values will contribute to a better understanding of the complexity of fortification rehabilitation projects and will result in the preparation of better reuse strategies and concepts to the benefit of fortified heritage landscapes and the communities that manage them.

⁷ ICOMOS Guidelines on Fortifications and Military Heritage, Final Draft. 2021, Available at https://www.icomos.org/images/DOCUMENTS/Charters/AGA_202111_6-1_ICOMOS_Guidelines_Fortifications_MilitaryHeritage_2021_EN.pdf (accessed January 31, 2022).

⁸ MISIRLISOY, Damla, GÜNÇE, Kağan. Assessment of the adaptive reuse of castles as museums: Case of Cyprus. In: *International Journal of Sustainable Development and Planning*, Vol. 11, No. 2, 2016, pp. 147–159. Online ISSN: 1743-761X.

Fortifications and fortified landscapes in cities

Fortifications are not typical buildings. Fortifications can range from single structures to complex multi-structure defensive systems developed over long time scales. In this paper fortifications are understood to be a visible outcome of engineering activities – namely buildings, complexes of buildings, structures and other works – shaped for the purpose of active combat as well as for the protection of life and resources, to enable a community to defend itself and survive in war conditions.

Regardless of the era and geographic location, the three main key elements of fortifications have been obstacles, shelters and positions. Their shape and form have changed as warfare has evolved and local conditions have differed. An obstacle is a deliberately selected and/or shaped fragment of the terrain, often equipped with technical devices, which is passively to hinder the access of the opponent. A shelter means a building or an appropriately shaped piece of land, passively protecting defenders and resident civilians from enemy fire. A position is a structure, or part of a structure or a suitably shaped fragment of land ensuring the best, technical possibilities for actively influencing an attacking enemy. The cover provided by fortifications enhance the survivability of defenders and at the same time facilitate actions by the defenders to repel attacker. Different elements of fortifications are linked to enable communication and safe and effective access between the components of the fortifications – the site and the shelter, fortress works and backyard facilities.

The fortification systems that can be observed in historic fortified towns and regions are not equivalent to historic architectural styles or epochs in the history of architecture, although some solutions were more or less common in particular times. They result above all from the combination of the method of defence and the method of defence implementation. Defence also involves influencing the actions of the attacking enemy, and this is achieved by shaping forward structures and obstacles, and those behind them – shelters and communication. It is an elementary system of spatial interconnections between defenders and attackers, obstacles and positions in the act of observation and combat. Methods of defence have been implemented using various architectural and technical solutions. These elements have been so different and characteristic that they have determined individual fortification systems' characteristics and often their technical names. These are, in chronological order: wall, bay, tower, roundel, bastion, tenaille, caponier, fort, fortress spur (combat bunker) and passive bunker with long-range fire and long-range observation posts. Fortification systems take into account functions and are defined by the method of defence used, as well as the form and structure of characteristic defensive elements - components of fortifications. Both have varied depending on the level of technical and military knowledge, economic opportunities and political conditions.¹⁰

Fortifications around and within cities have been constructed according to various fortification systems. In its most basic form, they have consisted of a single building or small group of buildings or a settlement occupying a relatively small area and surrounded by high defensive walls and often a water ditch. This is often referred to as a castle or a walled town and represents the wall fortification system adjusted to frontal defence.

⁹ ICOMOS Guidelines on Fortifications and Military Heritage..., op.cit.

¹⁰ WIELGUS, Krzysztof, ŚRODULSKA-WIELGUS, Jadwiga, STANIEWSKA, Anna (). An outline of restoration of fortifications in Poland: A review with regard to eras and fortification systems. In: N. Urošević, & K. Afrić Rakitovac (eds.). *Models of valorisation of cultural heritage in sustainable tourism*, Juraj Dobrila University of Pula, Pula 2017, pp. 283–328, ISBN: 978-953-7320-49-2.

As the art of warfare developed, areas and regions were defended by more complex fortification systems. Fortification walls were supplemented by towers (enabling flanking defence), curtain walls with roundels (early bastions also called boulevards) and curtain walls with bastions. The areas within and surrounding fortifications were part of their defensive capacities and hence are considered part of the fortification system. Ideal fortified cities such as Palmanova, 11 Valletta 12 and Zamość – were the supreme expressions of the interplay of urban planning and bastion fortification. They are notable for their urban layouts and the complexity of land transformation with their bastions, moats, engineering works, tunnels, earth structures and representative and auxiliary buildings. In some cases, they also include the deliberate lack of any structure or vegetation (apart from grass and couch grass stabilising the ramparts) on the outside of defensive walls such that defending soldiers have full visibility of the surrounding area. In some situations, planting greenery was part of the camouflage to hide the location of artillery or infantry units and important fortified positions. Fortress greenery was then an intrinsic part of the fortification structure, potentially as important as the massive defensive embankments, the reinforced concrete slab roofs or the armoured artillery battlements.¹³ There are various types of human interventions used for defence from enemy attack, such as building architectural structures, constructing earthworks, planting greenery, providing obstacles or introducing manmade changes to a body of water. Regardless whether a permanent fortification or field work, they transform an area of land into what can be termed a "fortified landscape". 14

There is a very broad range of types of fortified landscapes connected with cities. The scale and complexity vary significantly. At one end of the scale are structures consisting of simple walls, walls with recesses, or walls with towers, such as castles or medieval city fortifications. At the other end of the scale are bastion fortresses and tenaille fortress cities and complex polygonal or dispersed ring fortresses. The growing complexity of the obstacle and stand elements was accompanied by the development of shelter and background elements such as barracks for the garrison, warfare magazines and numerous auxiliary buildings which provided food and other supplies or services (such as garrison hospitals and churches).

In some contexts, "castle" could also refer to a sizeable area defended by walls and bastions and occupied by a significant number of buildings. With various additions and interventions, such places evolved into what can be described as citadels. Examples include Edinburgh Castle and Wawel Castle in Krakow. In these two cases, simple fortified structures from the

¹¹ DE LA CROIX, Horst. Palmanova: A study in sixteenth century urbanism. In: *Saggi e Memorie Di Storia Dell'arte*, Vol. 5, 1966, pp. 23–179. http://www.jstor.org/stable/43139898. ISSN: 0392-713X; POLLAK, Martha D. *Cities at war in early modern Europe*, Cambridge University Press, Cambridge 2010. ISBN: 978-0521113441.

¹² CHAPMAN, David W. *Applying macro urban morphology to urban design and development planning: Valletta and Floriana.* In: Urban Morphology, Vol. 10, No.1, 2006, pp. 23–40, DOI:10.51347/jum.v10i1.3925. ISSN 1027-4278.

¹³ ŚRODULSKA-WIELGUS, Jadwiga. The Greenery of the Krakow Fortress as the Focus of a Project on Protected Landscape Zones of Historic Fortifications. *Architektura Krajobrazu (Landscpae architecture)*, Vol. 2, 2014, pp. 4–17. ISSN 1641-5159. Online: http://architekturakrajobrazu.up.wroc.pl/images/%C5%9Arodulska-Wielgus.pdf (accessed May 15, 2022).

¹⁴ BOGDANOWSKI, Janusz. Krajobraz warowny XIX/XX m.: Dzieje i rewaloryzacja, Kraków1993. Wydawnictwo Politechniki Krakowskiej, BOGDANOWSKI, Janusz. Architektura obronna w krajobrazie Polski: Od Biskupina do Westerplatte. Warszawa – Kraków 1996. PWN. ISBN 978-8-30112-223-2; GRUSZECKI, Andrzej. Specyfika zasobów architektury obronnej w Polsce, ich ochrony i zagospodarowania. In: Ochrona zabytków architektury obronnej. Giżycko 1994. Wydawnictwo Towarzystwa Przyjaciół Fortyfikacji. [In Polish]; STANIEWSKA, Anna. Translating fortified landscape heritage to the public: Dilemmas on rehabilitation, popularization and conservation methods. In: R. Kusek & J. Purchla (Eds), Heritage and Society. Krakow2019, International Cultural Centre. pp. 189–204, ISBN: 9788363463861.

early Middle Ages were modified many times to adjust to changing methods of attack and defence, while the buildings and spaces were expanded and rebuilt and adapted over time not only for military purposes but also for administrative, religious and finally tourism uses. Their adaptation, rather than abandonment, was inevitable due to their close location to the city centre, their function as a seat of power, their military significance and their social and cultural relevance to the city and the whole country.

Cities with historic fabric have to constantly deal with the pressure of contemporary development. In free-market economies there is a constant tension between general public interest such as for heritage protection and the desire to build without restriction on private property. Such tensions are also evident when a heritage structure is adapted to contemporary needs. In many towns and cities, fortified landscapes have been partially or completely lost either through neglect or, more frequently, because they were removed to make way for the much-needed development of houses and roads. In many towns are development of houses and roads.

The values of fortified heritage

The values associated with a site should constitute the departure and arrival points for any type of intervention. Fortified heritage should be no exception. It is associated however with some unique values that are particular to this form of architecture. An essential part of the process therefore should be the appropriate identification of these values – a process that necessitates the engagement of the right expertise. It is essential for designers, architects, engineers and historians to understand and appreciate the values of the heritage when drawing up proposals for the conservation and adaptive reuse of a fortified heritage site. The recognition of the fortified heritage's values determines the extent to which these aspects condition their conservation and adaptive reuse, as is clearly stated in the ICOMOS Guidelines on Fortifications and Military Heritage issued in 2021.

The following is a discussion of the values that are relevant to fortified heritage. It is based in part on guidelines for fortified heritage recently issued by Polish state conservation authorities.²¹ The analysis offers a coherent approach that could be applied in any adaptive reuse project in Europe or elsewhere. In the discussion a distinction is made between intrinsic and extrinsic

¹⁵ STANIEWSKA, Anna. Recovering memory of landscape: The role of NGOs in the rehabilitation of fortified landscapes. In: *Fort: The international journal of fortification and military architecture.* Vol. 45, 2017, pp. 70–85. ISSN: 0261-586X.

¹⁶ BUCHER, Barbara, KOLBITSCH, Andreas. Coming to Terms with Value: Heritage Policy in Vienna. In: Heritage & Society, 12(1), 2019, pp. 41–56, DOI: 10.1080/2159032X.2021.1878990.

¹⁷ EBEJER, John. Tourism in European Cities: The visitor experience of architecture, urban spaces and city attractions. Rowman and Littlefield. 2021, ISBN: 9781538160541.

¹⁸ ICOMOS Guidelines...

¹⁹ JAIN, Sikha, HOOJA, Rima (Eds). Conserving Fortified Heritage: The Proceedings of the 1st International Conference on Fortifications and World Heritage, New Delhi, 2015. Cambridge Scholars Publishing. ISBN: 1-4438-9453-2.

²⁰ https://www.icomos.org/images/DOCUMENTS/Charters/AGA_202111_6-1_ICOMOS_Guidelines_Fortifications_MilitaryHeritage_2021_EN.pdf (accessed January 31, 2022).

²¹ MOLSKI Piotr, GŁUSZEK Cezary, KLUPSZ Lidia, NARĘBSKI Lech, PAŁUBSKA Katarzyna, ŚRODULSKA-WIELGUS, Jadwiga, WIELGUS, Krzysztof Wytyczne generalnego konserwatora zabytków dotyczące ochrony zabytkowych dzieł budownictwa obronnego - fortyfikacji wzniesionych od poł. XVIII w. do końca I wojny światowej (Guidelines of the general conservator of monuments concerning the protection of historic works and defensive construction: Fortifications built from the mid-eighteenth century to the end of World War I), 2021, online: https://nid.pl/wp-content/uploads/2021/12/Dziela-budownictwa-obronnego-wytyczne.pdf (accessed January 15, 2023).

values. The first three sets of values listed below (history, memory and identity; scientific and technical; territorial and architectural) are relevant to fortified heritage irrespective of whether any reuse of the heritage is being proposed. Hence they are referred to as intrinsic values. Fortified heritage requires maintenance and upkeep to prevent deterioration. Upkeep is also required of the external spaces within and around a fortified landscape. Over many years a lack of maintenance will eventually lead to buildings and structures falling into ruin. State authorities have the responsibility to allocate funds and resources at the very least to prevent the deterioration of heritage structures. Such responsibility stems from the need to safeguard the intrinsic values of the fortified heritage.

A second set of values (landscape and aesthetic; environmental sustainability; social and cultural; economic) comes into play if and when major conservation and reuse are being considered for a fortified landscape. These values, referred to in this paper as extrinsic, are about the relevance of the fortified heritage to society once the new uses come into being following conservation. Apart from to society at large, extrinsic values are also relevant to the city and region where the fortified heritage is located. Although we categorise values under different headings, in practice there is often a strong interrelationship between different values, as well as overlaps.

The values of history, memory and identity

A fortified landscape tells a story: this is a town or area that was attacked or that was liable to be attacked. It is indicative of geopolitical transformations of past and present states and the various alliances, conflicts and border changes that have taken place historically. It is a reflection of the science of warfare which prevailed at the time it was built,²² and shows the evolution of the art of fortification and defence structures as an element of civilisational change, the development of science and technology and inventiveness.

Fortifications are symbolic and impressive images of power in historical and geographical contexts of aggression or defence.²³ They are a historical reflection of the will of people to be politically, economically, socially and culturally independent. They are also documents of the impact on landscapes of historical figures: rulers, strategists and military engineers related to the design, construction and modernisation of defence works. In many countries, castles and fortifications have played a role in nation-building, such as in the case of the fortifications designed and built by Vauban.²⁴

Fortifications can play a role in the memory of a community as they are reminders of events, often involving conflict that may be part of the shared history of that community. They belong to the collective memory and therefore have educational value as they provide a stimulating and nurturing environment related to the cultural experience of military heritage (ICOMOS, 2021). In some instances the historical and meaning significance of fortified heritage is so strong that it becomes intrinsic to the identity of a city or region. Can one imagine Helsinki without

²² EBEJER, John, DIMELLI, D. Conservation issues of two fortified historic towns and World Heritage Sites: Rhodes and Valletta. In: Wąsowska-Pawlik, A. & Purchla, J. (Eds), *Heritage and Environment*, Krakow 2021, International Cultural Centre, pp. 205–236, ISBN: 978-83-66419-28-5.

²³ JAIN, Sikha, HOOJA, Rima (Eds.) Conserving Fortified Heritage: The Proceedings of the 1st International Conference on Fortifications and World Heritage...

²⁴ SAHLINS, Peter. Natural Frontiers Revisited: France's Boundaries since the Seventeenth Century. In: *The American Historical Review*, Vol. 95, No. 5, 1990, pp. 1423–1451 (Oxford University Press on behalf of the American Historical Association), http://www.jstor.org/stable/216269.

Soumenlinna? Or Malta without Fort St Elmo and Fort St Angelo? Namur without a Citadel? Or Krakow without Wawel Castle? Or Budapest without the Gellert Hill Citadel?

An essential value of a historic site is its authenticity. This should constitute an unbreachable boundary for any kind of intervention. The sustainability of a monument cannot be seen only from an economic point of view. It also has to be viewed for its cultural standpoint value, thus requiring the preserving and enhancing of these values that are themselves the core of the attractiveness of cultural tourism.²⁵

Scientific and technical values

Fortifications represent a group of values connected with their scientific meaning reaching beyond historical defence strategies and European fortification defence systems. Such strategies and systems were developed in parallel with developments in means of attack, such as the types, range and accuracy of weapons and artillery, communications, military transport and observation. Fortifications testify to the ingenuity and technical skills of builders and engineers and provide interesting insights into the construction techniques of their times, as well as into the building solutions and construction technologies to ensure the structures' resilience to attack. An interesting case is the Renaissance fortifications of Stato da Mar, in Venice's overseas territories in Zadar and Šibenik, where Michele Sanmicheli introduced several innovations and adapted defensive models to the local context as described by Šverko.²⁶ Defence structures also show the impact on the dynamics or limitations of socio-economic development in the surrounding areas, understood as the spatial structure of settlement, networks of communication, crafts, building materials and food production.

Territorial and architectural values

While some fortified structures may be stand-alone isolated elements constructed according to the rules of defence and particular architectural styles, others may form part of a larger system of buildings, structures, walls and ground remodelling. The value of the whole is greater than the specific value of each of its parts, all of which require protection irrespective of how modest they may seem. Shaping the fortified landscape for direct combat purposes as well as for representative occasions was also the result to some extent of using artistic means known from garden art, landscape architecture, painting and scenography.²⁷ Today they are examples of historical, large-scale composed complexes. Territorial value also refers to the location of the fortification system in relation to the urban settlement and to geographic features such as rivers, hills and surrounding terrain.

Some fortified landscapes contain pockets of land with little or no human intervention. Such land sometimes develops into habitats for protected species of plants and animals. The ecology is also a value that merits safeguarding.

²⁵ JAIN, Sikha, HOOJA, Rima (Eds). Conserving Fortified Heritage: The Proceedings of the 1st International Conference on Fortifications and World Heritage...

²⁶ ŠVERKO, Ana. Chapter 2 Peripheral or Central? The Fortification Architecture of the Sanmichelis in Dalmatia. In: *The Land between Two Seas*, Leiden 2022, The Netherlands, Brill, doi: https://doi.org/10.1163/9789004515468_004 (accessed January 4, 2023)

²⁷ CRAWLEY, Greer. Strategic scenography staging the landscape of war, PhD dissertation, Universität Wien, Philologisch-Kulturwissenschaftliche Fakultät, Wien 2010, DOI:10.25365/thesis.13644, URN: urn:nbn:at:at-ubw:1-29268.59783.221554-7, online: u:theses | Detailansicht (12261) (univie.ac.at).

Landscape and aesthetic value

More than many other types of architecture, fortifications have an integral relationship with their surrounding landscapes (ICOMOS, 2021). It is not uncommon for a fortified landscape to have stretches of wall that offer panoramic outward views over the countryside or over adjoining urban areas. One example is the scenic view of the historic centre of Tallinn from the fortified hill of Toompea. It is also often the case that the fortifications can be seen from surrounding areas, and in some cases this offers spectacular views of the fortified heritage. Such is the case with Festung Königstein in Saxony and Mdina in Malta. For people engaging in leisure and tourism, such views enhance the visitor experience. The aesthetic value should be carefully protected if and when any intervention on the fortified heritage is being considered or where new development is being proposed in the vicinity.

Environmental sustainability

Discussions on the adaptive reuse of fortified heritage should also take into account issues relating to climate change and sustainability. The appropriate reuse of fortified heritage provides facilities that would otherwise require new buildings, energy-intensive construction and the take-up of precious land resources. Many former military defence systems occupied significant land areas. The end of military use leaves behind many derelict buildings and spaces over a relatively large area. From a sustainability point of view, the extent of the abandoned fortified heritage makes it all the more urgent for action to be taken to bring the land and the buildings into use. Projects for fortified heritage are normally justified by other values, such as history and identity, but climate change and sustainability arguments provide additional justification for action and investment in abandoned fortified heritage.

The same argument is often made for built heritage in general. For example, the European Cultural Heritage Green Paper published by Europa Nostra²⁸ argues that the sensitive adaptive reuse of historic buildings avoids new construction and land use, reduces waste and preserves the energy that is embodied in the building while generating additional positive economic, environmental, social and cultural benefits.

In considering what uses to make of a fortified landscape, environmental sustainability is a vital consideration. Whereas some level of commercial activity may be considered (at the very least to generate some revenue for upkeep), excessive commercialisation should be avoided at all cost as this is likely to compromise the heritage value of the place. For the open spaces of fortified landscapes, encouraging biodiversity and ecology to flourish is a use worth considering, not least because of its environmental sustainability. The same can be said about tree planting provided that other heritage values are not compromised. While nature and excessive vegetation is often identified as a threat to built heritage, in the face of current challenges linked with climate change, more and more opportunities to incorporate green elements into cultural heritage conservation and management practice in cities have to be identified. Unlocking the potential of adopting nature-based solutions in heritage contexts

²⁸ POTTS, Andrew (Lead Author). European Cultural Heritage Green Paper: Putting Europe's shared heritage at the heart of the European Green Deal. The Hague & Brussels: Europa Nostra, 2021. Available online: https://openarchive.icomos.org/id/eprint/2552/1/2021_European%20Heritage%20Green%20Paper_full%20paper.pdf (accessed May 15, 2022).

seems to be a key to a successful and more sustainable management of heritage sites.²⁹ Recent research also suggests that accepting vegetation around and in fortifications is among one of the social benefits linked to the contemporary use of these sites. A positive public response to vegetation in fortification systems is dependent on proper maintenance and the extent to which the vegetation preserves the legibility of the structures.³⁰

Social and cultural values

The adaptive reuse of fortified heritage can and should seek to reinforce the identity of a community, as this can be a significant benefit to the community in a world of increasing globalisation and loss of social identity. The historicity of the heritage plays a central role in reinforcing identity. For heritage sites, ICOMOS, Australia³¹ refers to social value which it describes as "the associations that a place has for a particular community or cultural group and the social or cultural meanings that it holds for them".

Social values are also reflected in the use of the fortified heritage. Uses such as for recreational activities and as community centres and venues for cultural events bring social and cultural benefits to the local community and should therefore be actively considered in developing project concepts for fortified heritage.

Economic values

Financial sustainability is a vital consideration in the adaptive reuse of fortified heritage. In the long term, the physical condition of the heritage is best maintained if sufficient revenue is generated to sustain its regular upkeep and maintenance, without having to rely on external sources of funds.³² This is also necessary to permanently safeguard the various intrinsic values of the fortified heritage.

For any fortified heritage this is not easy to achieve for two main reasons. Maintaining historic buildings and structures in a pristine condition is expensive. Moreover, there are limits to how much revenue can be generated from adaptive reuse of the fortified heritage.

Adaptive reuse as an approach to the conservation of built heritage and its relation to values

The intention to preserve valuable remnants of the past for posterity was a foundation of the modern understanding of monument protection which gradually evolved into heritage science. The early twentieth century brought issues of values attached to particular buildings as a motivation to protect and keep them even though they were losing their primary function. A debate on values has been the core foundation of modern thinking about monuments.

²⁹ COOMBES, Martin A., VILES, Heather A. Integrating nature-based solutions and the conservation of urban built heritage: Challenges, opportunities, and prospects. In: *Urban Forestry & Urban Greening*, Vol. 63, 2021, 127192. ISSN 1618-8667, https://doi.org/10.1016/j.ufug.2021.127192.

³⁰ PARDELA, Łukasz, LIS, Aleksandra, IWANKOWSKI, Pawel, WILKANIEC, Agnieszka, THEILE, Markus. The importance of seeking a win-win solution in shaping the vegetation of military heritage landscapes: The role of legibility, naturalness and user preference. In: *Landscape and Urban Planning* 221, 2022, 104377. https://doi.org/10.1016/j.landurbplan.2022.104377.

³¹ ICOMOS, Australia. *Understanding and assessing cultural significance*. Practice Note, Version, 1. 2013, Available at: https://australia.icomos.org/publications/burra-charter-practice-notes (accessed February 5, 2022).

³² EBEJER, John. Using fortifications for tourism: Can conservation objectives be reconciled with financial sustainability? In: Kusek, R. & Purchla, J. (Eds). *Heritage and Society*. Krakow 2019, Poland, International Cultural Centre, pp. 353–366. ISBN: 9788363463861.

Hence prior to considering the adaptive reuse of fortified heritage, it is useful to provide some background on the conservation and reuse of built heritage in general with relation to values at stake. The recently observed increase in the number of heritage designations, which include also fortified heritage sites, can be explained by an ongoing heritage loss³³ and growing awareness of the values which form the base for policy making.

In 1903, Alois Riegl wrote "The Modern Cult of Monuments: Its Character and Origin", which was the first systematic analysis of heritage values and of a theory of restoration.³⁴ The manuscript was intended as a framework for the understanding and formulating of opinions that underpin various choices of solutions in the treatment of historic buildings and artifacts. Riegl focused on two main types of values associated with monuments by "the modern society" and artistic, in which the first was considered to be dominant.

International charters and standards are essential guides in the process of the conservation of heritage buildings, including fortified heritage. They point out international criteria for the preservation of built cultural heritage indicating the essential role of the values. Riegl's values and concepts, still vital today,³⁶ eventually became fundamental principles of the Venice Charter (1964),³⁷ which is one of the most significant charters. The UNESCO World Heritage Convention (1972)³⁸ aims at protecting heritage "for all mankind" and selects sites on the basis of their unique and irreplaceable properties and defining their outstanding universal value (OUV) from the point of view of history, art or science. The Burra Charter (1979),³⁹ which resulted from going beyond a solely European perspective, pointed out the need to assess the significance of place, suggesting that the values of a place are not limited to its utilitarian value.⁴⁰ Barbara Bucher and Andreas Kolbitsch, referring to a complex case study of the protection and contemporary use of the Vienna city centre, 41 analysed thoroughly whether the origin of the values indicated as a basis for particular international heritage documents is intrinsic or extrinsic. Most of the international charters represent the approach that values of heritage are "inherent to the material fabric and recognised by a society that uses it". However, there is also an approach which emphasises that heritage value can be disconnected

³³ LIPP, Wilfried. Kultur Des Bewahrens: Schrägansichten Zur Denkmalpflege. Böhlau, Verlag, Wien 2008, ISBN 978-3-205-77663-5, p. 42.

³⁴ RIEGL, Aloïs *Moderne Denkmalkultus : sein Wesen und seine Entstehung*, Wien 1903, K. K. Zentral-Kommission für Kunst- und Historische Denkmale : Braumüller, English translation: RIEGL, Aloïs. The Modern Cult of Monuments: Its Character and Its Origin, trans. FORSTER, K. W. & GHIRARDO, D. *Oppositions*. 25, Princeton 1982, pp. 21–51.

³⁵ AHMER, Carolyn. Riegl's "Modern Cult of Monuments" as a theory underpinning practical conservation and restoration work. In: *Journal of Architectural Conservation*, Vol. 26, No. 2, 2020, pp. 150–165. https://doi.org/10.1080/13556207.2020.1738727. Online ISSN: 2326-6384.

³⁶ HARRER, Alexandra A. The Legacy of Alois Riegl: Material Authenticity of the Monument in the Digital Age. In: *Built Heritage*, Vol. 1, 2017, pp. 29–40. https://doi.org/10.1186/BF03545661. Online ISSN: 2662-6802.

³⁷ ICOMOS. Venice Charter, International Charter for the Conservation and Restoration of Monuments and Sites. 1964 Available at: http://www.icomos.org/charters/venice_e.pdf (accessed February 4, 2022).

³⁸ UNESCO World Heritage Convention, Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972, online: https://whc.unesco.org/en/conventiontext/ (accessed January 31, 2022).

³⁹ ICOMOS, Australia. *Understanding and assessing cultural significance*. Practice Note, Version, 1, 2013. Available at: https://australia.icomos.org/publications/burra-charter-practice-notes (accessed February 5, 2022).

⁴⁰ DÍAZ-ANDREU, Margarita. Heritage Values and the Public. In: Journal of Community Archaeology & Heritage, 4(1), 2017, pp. 2–6, DOI: 10.1080/20518196.2016.1228213.

⁴¹ BUCHER, Barbara, KOLBITSCH, Andreas. Coming to Terms with Value..., p. 43.

from material substance and only created by the society that uses it.⁴² The importance of intangible expressions of cultures and societies that can contribute to human development and the collective memory of humanity is stressed by the ICOMOS Nara Document (1994).⁴³ Also, the European Faro Convention (2005) focuses on an approach that states that heritage "reflects and expresses constantly evolving values, beliefs, knowledge and traditions aspects, derived from the experience gained through progress and past conflicts". And this reference to past conflicts and wars is particularly relevant to fortified heritage.

There are various approaches that assume in dealing with built heritage that it should be safeguarded, and adaptive reuse is one of them.⁴⁴ Adaptive reuse involves any activity that conserves the physical fabric and the historic value of a heritage building while concurrently providing the building with a new use that guarantees its continued upkeep and maintenance over the long term. Very often this requires design creativity to transform internal spaces for a use for which they were not intended. The issue of the reuse of heritage buildings, structures and landscapes remains a vital one in the context of the values attached to the achievements of the past in the fields of arts, architecture, technology and construction. There is the need to keep the heritage alive even if it loses its primary function. However, Article 5 of the Venice Charter states:

The conservation of monuments is always facilitated by making use of them for some socially useful purpose. Such use is, therefore, desirable but it must not change the lay-out or decoration of the building. It is within these limits only that modifications demanded by a change of function should be envisaged and may be permitted.

Interventions on historic buildings may be considered necessary in particular for the adaptive reuse to adhere to modern standards and requirements, such as internal vertical circulation, accessibility and fire safety. In accordance to the Charter of Venice, such interventions should bear a contemporary stamp. The interventions' distinctiveness should not, however, be so imposing in scale, materials and aesthetic characteristics as to conflict with the rest of the site or somehow put the fortification itself into the background. The interventions should not destroy historic materials that characterise the property. Moreover, the new work should be differentiated from the old and should be compatible with the massing, size, scale and architectural features such that the historic integrity of the property is safeguarded. The Vienna Memorandum (2005)⁴⁶ puts an emphasis on improving quality of life without compromising values, indicating that the limits of adaptation should be defined by preserving the authenticity and integrity of heritage.

⁴² JOKILEHTO, Jukka World Heritage: Defining the Outstanding Universal Value. In: City & Time, 2(2), 2006, pp. 1–10.

⁴³ ICOMOS. The NARA document on authenticity. 1994. Available at: https://www.icomos.org/en/charters-and-texts/179-articles-en-francais/ressources/charters-and-standards/386-the-nara-document-on-authenticity-1994 (accessed January 31, 2022).

⁴⁴ MISIRLISOY, Damla, GÜNÇE, Kağan. Assessment of the adaptive reuse...

⁴⁵ JAIN, Sikha, HOOJA, Rima (Eds). Conserving Fortified Heritage...

⁴⁶ UNESCO. Vienna Memorandum on World Heritage and Contemporary Architecture: Managing the Historic Urban Landscape. 2005. Online: https://whc.unesco.org/en/documents/5965 (accessed January 31, 2022).

Adaptive reuse has implications not only for a building itself but also for the surrounding area. The Recommendation on the Historic Urban Landscape 2010⁴⁷ indicates that cultural heritage may represent a social, cultural and economic asset and that historic layering of values has a wider impact. While the economic value of heritage can be measured to some extent, cultural values cannot be fully expressed in monetary terms.⁴⁸ The new uses combined with the historic value of the building generate new interest in an area, and this often brings new investments in adjoining buildings and spaces.

One aspect in this debate is the value that the general public attaches to specific sites.⁴⁹ It determines the willingness or otherwise of the local community and the local authorities to undertake adaptation efforts. In the latter half of the twentieth century, there was increased awareness of the social and monetary values of heritage buildings. This brought with it greater pressures on the public authorities for the retention and conservation of built heritage. A European Heritage Label introduced in 2011⁵⁰ appreciates heritage sites that represent symbolic European values and promote understanding and esteem while focusing on providing site access.

Adaptive reuse of fortified landscapes

As the art of warfare evolved, many fortified buildings and structures became outdated and ineffective for defence purposes and were therefore usually restructured. As means of war dramatically changed over the last 70 years, many fortification buildings and landscapes lost their military function and were abandoned. Although many fortified landscapes have been restored and brought back into civil use, derelict military defensive structures and buildings are plentiful and widespread across Europe. These are not only restricted to buildings and earthworks. They sometimes also include natural elements such as water and technical infrastructure, as was the case of the New Dutch Waterline.⁵¹

Over the last three decades, there has been an ongoing academic debate concerning the adaptability of fortifications and their landscapes for current needs, the nature and scale of the intervention, and the recommended conservation methods. Also subject to discussion have been strategies to make these sites accessible to the public.⁵² International organisations have sought to establish advisory bodies with scientific expertise to provide guidance for fortified heritage projects. For example, in 2005, ICOMOS established the International Scientific

⁴⁷ UNESCO. Recommendation on the Historic Urban Landscape. 2010. Online: https://whc.unesco.org/en/hul/(accessed January 31, 2022).

⁴⁸ THROSBY, David. The Economics of Cultural Policy. Cambridge: Cambridge University Press, 2010.

⁴⁹ SIÂN, Jones. Wrestling with the Social Value of Heritage: Problems, Dilemmas and Opportunities. In: *Journal of Community Archaeology & Heritage*, Vol.4, No.1, 2017, pp. 21–37, DOI: 10.1080/20518196.2016.1193996. Online ISSN: 2051-820X.

⁵⁰ https://culture.ec.europa.eu/cultural-heritage/initiatives-and-success-stories/european-heritage-label (accessed January 31, 2022).

⁵¹ VERSCHUURE-STUIP, Gerdy. Hold the line: The transformation of the New Dutch Waterline and the future possibilities of heritage. In: Hein. C. (ed), *Adaptive Strategies for Water Heritage*, Springer: Cham 2020, Switzerland, pp. 251–269, ISBN: 978-3-030-00267-1.

⁵² BREBBIA, Carlos. A., CLARK, Celia. Defence Sites I: Heritage and Future. WIT Transactions on The Built Environment, Vol. 123, 2012, Wessex Institute of Technology, UK, ISBN: 978-1-84564-590-8; BREBBIA, Carlos. A., CLARK, Celia. Defence Sites II: Heritage and Future. WIT Transactions on The Built Environment, Vol. 143, 2014, Wessex Institute of Technology, UK. ISBN: 978-1-84564-833-6; BREBBIA, Carlos. A., ECHARRI, Víctor, CLARK, Celia, GONZÁLEZ AVILÉS, Ángel. Defence Sites III: Heritage and Future. WIT Transactions on The Built Environment, Vol. 158, 2016, Wessex Institute of Technology, UK. ISBN: 978-1-78466-081-9.

Committee on Fortifications and Military Heritage (ICOFORT).⁵³ Apart from numerous non-governmental organisations at all levels (international, national and local), several networks promoting the rehabilitation and re-use of fortifications have emerged across Europe. The two most prominent are Forte Cultura (European Culture Route and World of Experience Fortified Monuments⁵⁴) and EFFORTS (European Federation of Fortified Sites: The European network for fortified cities, forts and defence lines⁵⁵).

Efforts to renovate and preserve fortified heritage should seek to comply with heritage restoration principles. The principles are laid down in various international charters and are embodied by good practice developed over many years. Original structures and their various features should be respected, although reconstruction is also an option in justified cases. The design team requires talent and sensitivity to the genius loci as they restore the past and create the present of a fortified landscape. Misguided decisions on the scale, materials and function of the contemporary elements may cause them to overwhelm the original structure and detract from its values.⁵⁶

In the above section, this paper argues that the safeguarding of the values of fortified heritage should be an overriding consideration when taking decisions on conservation and adaptive reuse. Another consideration is the physical characteristics of the fortified heritage. This is inevitable because ultimately it is the physical buildings, structures and spaces that will have to be conserved and adapted to make them appropriate for a new use.

In particular, the size, shape and layout of internal spaces within the fortified heritage are a vital consideration and will require careful assessment before final decisions on adaptive reuse are taken. The physical attributes of internal spaces are dependent on a wide variety of factors, including the time they were built, the specific circumstances of the time and the nature of the terrain. Providing some kind of typology of internal spaces is therefore problematic. There are however some observations that can be made.

A fortified landscape normally includes internal spaces located within or atop fortified walls and defensive structures. These were related to combat features and provisional shelters and the communications of the fortress crew. These were typically dug or carved out of rock and/or built with massive walls and thick roofs to protect them from enemy fire. Such spaces are normally relatively small and may have a single point of access to the outside. There are instances where a series of interconnected spaces are provided within fortification walls, normally serving as combat chambers where the crew was quartered.

The internal spaces of former combat structures are the most difficult to adapt to modern day use for a number of reasons. Single or otherwise limited access points and the lengths of corridors or tunnels that connect them create difficulties in terms of fire safety. Differences in levels and stairs create problems for people with mobility difficulties. The lack of or small-sized windows necessitate the use of artificial lighting and means for air exchange, necessitating the use of space for mechanical equipment. Particular building construction and specific structures require numerous special solutions with regard to other modern installations and technical devices such as water and sewarage, energy, heating, fire/ventilation, etc. Physical

⁵³ ICOFORT. https://www.icofort.org (accessed February 24, 2023).

⁵⁴ Forte Cultura (European Culture Route and World of Experience Fortified Monuments: https://www.forte-cultura.eu (accessed February 24, 2023).

⁵⁵ EFFORTS (European Federation of Fortified Sites: The European network for fortified cities, forts and defence lines). https://www.efforts-europe.eu (accessed February 24, 2023).

⁵⁶ STANIEWSKA, Anna. Translating fortified landscape heritage to the public...

interventions are unlikely to be acceptable as these would diminish the historic and scientific values of the original fortification structures. This naturally means that many spaces and rooms may be treated rather like exhibits themselves rather than be adopted extensively for the new functions, since they should be intended for short term stay or just the passing-through of visitors. These also are the places where relics or elements of original equipment could be conserved and presented on site. Preserving the functional compatibility of those spaces goes along the "Utilitas" principle whereby characteristic elements of a fortification should preserve their functional design.

Another type of internal spaces is those located within the various buildings that form part of the fortified landscape and that were background facilities or representative buildings not used directly for combat. This refers to the administrative buildings, soldiers' barracks, hospitals and magazines. These internal spaces may not be too dissimilar to the internal spaces that would be found in other historic buildings in the city. Their adaptation to modern day use would involve issues that are normally encountered in historic buildings that are not part of fortified heritage. Some level of intervention may be required to provide for vertical circulation, including passenger lifts as well as for fire safety and hygienic facilities.

There are numerous fortified heritage sites across Europe and the contexts and surroundings of these various sites are very diverse. The most common can be broadly categorised into urban inland, urban coastal and rural. Some fortified landscapes are located on elevated ground, at or near the historic centre of a city. The original purpose of the fortifications was to protect an urban settlement. As the geopolitical context of the city and region changed, the defensive role of the fortifications become redundant. The settlement grew into a city leaving the fortifications as a dominant feature of the city skyline. This is what happened at Hohensalzburg Fortress, Königstein Fortress in Saxony and Fortress Klodzko in Poland. Coastal fortified landscapes normally overlook a seaport and were intended to protect both the port and the city from enemy attack. The fortifications were designed mainly to protect against a sea attack and the configuration of the walls and structures were located accordingly. Main features of coastal fortifications are the maritime ambience and the relationship of the fortified landscape to the sea.

Whether located inland or on the coast, there are several factors that make fortified landscapes in urban settings suitable for tourism use. Since the protection of the settlements, mountain passes, ports and river gorges or important service areas required appropriate observation of the foreground and distance, fortified landscapes nowadays offer breathtaking views and panoramas which can attract visitors. Being located close to a historic city centre, a fortified landscape will be within walking distance of other visitor attractions. It would then be fairly straightforward to include it in the walking itinerary of the city centre. Almost inevitably, the fortified landscape had a prominent role in the history of the city and therefore the city narrative would not be complete if it did not include the role of the fortifications in that narrative. Converting the fortifications to tourism use would greatly facilitate the communication of the city narrative to visitors, as the buildings, structures and spaces would constitute tangible evidence of the stories that are being narrated.

An alternative situation is where the fortified landscape is in a rural setting at some distance from any town or city. As with fortifications in urban settings, the fortified landscape would be located on elevated ground, normally at the top of a hill. The views offered by such a location would likely be of unspoilt countryside and possibly also of a nearby river. Compared to an urban setting, the views would likely be much more pleasant, and this could be an asset that could be used to encourage visitors. On the other hand, the distance from established tourism locations makes the rural fortified landscape less amenable for tourism use. Of course, it would be an attractive place to visit for walkers and other users of the countryside, but the number of visitors that could possibly be generated is not likely to be sufficient to make the attraction commercially viable. An additional promotional effort or appealing function would be required to justify a longer journey by potential visitors. A remote location makes the site reliant on means of access, including the availability of public transport and the ease of car access from nearby towns and main road networks. There are many purposes that former fortifications could serve today. Those that first come to mind are usually associated with tourism. Fortified landscapes have features that make them suitable for commodification into tourism products. Cultural tourism uses in particular are most appropriate because of the opportunities for education and narration that fortifications offer.

Many fortified heritage sites are converted into museums. This brings into play another aspect in adaptive reuse, namely museography. The design of contemporary museums is a challenging, complex and creative activity. It is an activity of collaboration between many areas of professional expertise, from curatorship to design and from architecture to theatre and film.⁵⁷ In the case studies, we put particular emphasis on how the values are related to this function.

Because of the significant meaning of the visual landscape context of fortifications, they offer unique scenic experiences to the visitor and often are particularly suitable to be turned into open-air museums. Furthermore, fortified landscapes that occupy large areas of land make an ideal setting for walking trails. Such trails normally lead across the scenic landscape, with beautiful panoramic views being a main feature of the trail's attractiveness. The scenic value of fortress trails is not coincidental. When in use for defence, forts were required to have clear lines of sight for observation and rapid warning, and subsequently for the effective shelling of enemy positions. Another vital aspect of a walking trail is that it enables the visitor to understand the complexity and defensive layout of the fortified landscape and appreciate it as a coherent heritage object. The fortified landscape may include stretches of wall (or possibly even the entire surrounding defensive wall) that may be capable of being walked upon. A walk along the fortifications provides a flexible product that can be enjoyed at the pace and duration determined by the visitor. The elevated walkway often offers spectacular outward views of the surrounding countryside or of the adjoining urban areas. The scenery may include pleasant views of rivers, plains, mountains or ports areas.

Obsolete and outdated fortifications such as medieval town walls or more complex bastion defences around old towns were often the subject of major urban redevelopment projects. This was the case of many town walls or more complex bastion defences around old towns of rapidly developing European cities in the nineteenth century. Numerous cities established city

⁵⁷ MACLEOD, Suzanne, HOURSTON HANKS, Laura, HALE, Jonathan A. (Eds). *Museum making: Narratives, architectures, exhibitions.* London, New York: Routledge, 2012, ISBN 978-0-415-67603-8; MISIRLISOY, Damla, GÜNÇE, Kağan. Assessment of the adaptive reuse of castles...

⁵⁸ VON ROHRSCHEIDT, Armin Mikos. Poland: The Largest Fortified Open-Air Museum Under the Aspect of Culture and Tourism Development. In: H. Röder, H-R. Neumann (Eds) Fortress-Monuments for Peace, Culture, Tourism and Integration. Wyd. Viadrina University, Frankfurt/O 2008, pp. 104–127.

⁵⁹ STANIEWSKA, Anna. Translating fortified landscape heritage to the public..., pp. 195–196.

⁶⁰ EBEJER, John. Tourism in European Cities...

promenades and public gardens along the outline of the former town walls and water ditches. These are nowadays places used by local residents and tourists for walking, jogging or just relaxing. Examples of this include Lucca, Luxembourg, Kraków, Wrocław and Poznań, while others consumed these spaces not only for parks but also for public buildings, such as Vienna at its Ringstrasse. Examples of the such as Vienna at its Ringstrasse.

For a fortified landscape, the provision of an enjoyable and meaningful experience to the visitor should be one that is in tune with the spirit and the values of the place. It should not be confused with the supply of pleasant environments and visitor services that may be obtained from non-historic contexts. Some fortified landscapes – especially those connected with violent war circumstances and death, such as battlefields or frontlines – would require respect and quiet from the visitor. They will be defined as landscapes of memory, following the definition of "lieux de memoire" or memory places. Chylińska and Musiaka analysed various aspects of military museums as collections linked with historic war circumstances and artifacts. They discuss not only the shift in the museum paradigm – from preserving the remains of the past to focusing on telling a story and education pacifist meanings. They also discuss the controversial notions of dissonant heritage and the problem of the aestheticisation of war. Similarly, relating fortified heritage to tourism raises an issue of dissonance.

Fortifications were always an active element of war, offering protection as well as enabling counter-attack. They also discouraged the enemy. The design and layout of fortified landscapes had a specific purpose – to render the infliction of human suffering more efficient. Many fortresses or forts are often described as "war machines" or "defence machines".

When converted to tourism and leisure use, fortified heritage is now used to distract and entertain visitors. They voluntarily spend their discretionary time and money on pleasurable consumption. For this reason, fortified heritage is inherently dissonant in that it can evoke

⁶¹ CASTAGNOLI, Donata. City wall parks in Italy: An opportunity to strengthen the city's identity; Placetelling. In: *Collana di Studi Geografici sui luoghi e sulle loro rappresentazioni*, Vol. 3, 2021, pp. 303–308. https://dx.doi.org/10.1285/i26121581n3. ISBN: 978-8-88305-178-4.

NIERHAUS, A. (Ed.). Der Ring: Pionierjahre einer Prachtstrasse. Wien: Rezidenz Verlag, 2015. ISBN: 9783701733675.
 JAIN, Sikha, HOOJA, Rima (Eds). Conserving Fortified Heritage: The Proceedings of the 1st International Conference on Fortifications and World Heritage, New Delhi, 2015. Cambridge Scholars Publishing, 2016. ISBN: 1-4438-9453-2.

⁶⁴ STICHELBAUT, Birger. Traces of War: The Archaeology of the First World War. Lanham: Cannibal Publishing, 2018. ISBN: 978-9492677518.

⁶⁵ NORA, Pierre. Between Memory and History: Les Lieux de Mémoire. Representations, No. 26, Special Issue: Memory and Counter-Memory, Spring, 1989, pp. 7–24. https://doi.org/10.2307/2928520 SSN: 0734-6018, 1533-855X.

⁶⁶ CHYLIŃSKA, Dagmara, MUSIAKA Łukasz. Military museums in Poland: Between the past and the future. In: Muzeológia a kultúrne dedičstvo, 8(3), 2020, pp. 5–39. ISSN: 2453-9759 (Online). DOI: 10.46284/mkd.2020.8.3.1.

⁶⁷ GÜNAY, Burcu. Museum concept from past to present and importance of museums as centers of art education. In: *Procedia – Social and Behavioral Sciences*, 55, 2012, pp. 1250–1258.

⁶⁸ TUNBRIDGE, John, ASHWORTH, Gregory. Dissonant Heritage: The Management of the Past as a Resource in Conflict. Chichester: Wiley, 1996.

⁶⁹ JARECKA, Urszula. Turystyka patetyczna? Groza wojny jako atrakcja turystyczna. [Pompous tourism? The terror of war as an attraction in tourist experience]. In: *Kultura W spółczesna*, 3, 2010, pp. 75–91. [In Polish].

⁷⁰ SAUNDERS, Nicholas J., CORNISH, Paul. *Conflict Landscapes: Materiality and Meaning in Contested Places.* London, New York: Routledge/Taylor & Francis Group, 2021. ISBN 9780367690199.

feelings ranging from "vague disquiet through distress to a complete cognitive alienation and rejection". 71

Case Study: Zamość



Figure 1: Contemporary plan of Zamość with its fortification (Map created on Inkatlas.com, Copyright OpenStreetMap contributors (openstreetmap.org), on the right: aerial view of the Fortress Zamość after renovation, photo: M. Jawor, source: City of Zamość, zamosc.pl.

The first case study describes the project of the rehabilitation and consolidation of the torn ring of the fortified Renaissance town Zamość in Poland. We present the extent of work undertaken and indicate how the values presented above in this paper were put forward. Two of the co-authors of this paper were involved in the research and design process at the stage of both the application for EU funding and the implementation of the project on site. The description of this case study is based entirely on the direct experience of the project.

The bastion fortifications of Zamość were built as a private town-fortress of the Great Crown Chancellor Jan Zamoyski in 1579–1618. They were rebuilt many times over the years according to the designs of numerous famous military engineers. This town fortress was called the "pearl of the Renaissance", the "town of arcades" and the "Padua of the north". In its history the fortress of Zamość has been besieged five times: it was defended against the Cossack and Tartar armies during the Chmielnicki Uprising in 1648, Swedish troops in 1656, troops of the Duchy of Warsaw and Russian troops in 1813. The last time Zamość defended itself was during the November Uprising in autumn 1831. The fortress was conquered once, by Polish troops in 1809, and liquidated in 1866.⁷²

The Old Town complex including the area of the former fortifications was listed as a monument in 1936. It was the point at which historical and conservation research of the fortress had begun. Conservation works began in 1976.

In 1992 the Old Town in Zamość together with its fortifications were listed as the UNESCO World Heritage Site as an excellent example of a late sixteenth century Renaissance town that preserved its original plan, fortifications and numerous buildings, combining Italian and Central European architectural traditions. In 1994, the historic city complex within the range

⁷¹ ASHWORTH, Gregory, BRUCE, David M. Town walls, walled towns and tourism: Paradoxes and paradigms. In: *Journal of Heritage Tourism*, 4(4), 2009, pp. 299–313. https://doi.org/10.1080/17438730903118097. Online ISSN: 1747-6631, p. 301.

⁷² HERBST, Jan, ZACHWATOWICZ, Jan. Twierdza Zamość. Warszawa: Wydawnictwo Zakładu Architektury Polskiej i Historji Sztuki Politechniki Warszawskiej, 1936. [In Polish]; KOPRUKOWNIK, Albin, WITUSIK Andrzej A.(Eds). Zamość. Z przeszłości twierdzy i miasta. Lublin: Wydawnictwo Lubelskie, 1980. [In Polish], ISBN: 978-83-222-0046-2.

of the nineteenth-century fortifications was also declared a Monument of History which is the highest form of heritage protection in Poland. In 2011 the Zamość project received financial support from the European Union.⁷³

Intrinsic values: History, memory and identity; scientific and technical; territorial and architectural

The values of history and memory

The town of Zamość was founded by a nobleman, Jan Zamoyski, educated at the Strasbourg Academy and one of the most powerful politicians of his time. The Paduan architect Bernard Morando drew plans of Zamość as a Renaissance "citta ideale". The town was immediately surrounded by modern bastion fortifications – initially built according to the principles of the Old Italian school (completed in 1618), but soon replaced by New Italian fortifications. These fortifications were modernised several times.

Zamość is a unique example of a complete Renaissance ideal town where the fortifications protected the regular grid of the urban inner core of the city with its rectangular market square and important public buildings such as the town hall and the first Polish private university. Its particular historic value lies in the completeness of the ensemble, and the persistence of a structure that has become a monument to the rational and far-reaching policies of a politician from a time considered to be the golden age of the Polish state.

Scientific and technical values

The initial defences of Zamość were soon rebuilt to follow the newest changes in warfare doctrine: first in the first half of the seventeenth century and then at the end of that century. In the eighteenth century, the field fortifications were extended with a belt of tick-bar earth fortifications in the eastern foreground. Undoubtedly, most important for the development of the Zamość Fortress was the modernisation of the fortifications during the times of the Duchy of Warsaw (1809), which was completed in the 1820s. At that time, the setbacks behind the oryllions of the bastions were built, a shooting gallery was introduced along the entire perimeter of the walls, and additionally, a Carnot wall was built in their foreground. In the years 1825–1827, in the neck parts of bastions VI and VII (on the eastern side), huge, three-storey high bulwarks were built, reinforcing the firepower of the fortress artillery from the direction of the greatest danger. On the marshes, in the place of the former "great lagoon", a round gun emplacement, the so-called Rotunda, was placed to the south. It was linked with the main circuit of the fortifications by a covered road. However, ten years later, as a result of a change in military doctrine ordered by Tsar Alexander II, the fortress ceased to exist: the fortifications were almost completely blown up; only the bulwarks on bastions VI and VII, as well as the Rotunda, survived, and the relics of the other destroyed fortifications were covered with earth.

The project to rehabilitate and open up the Zamość Fortress is the only one in Poland, and one of the few in Europe, which has led to the revalorisation of the silhouette of the fortified Renaissance town without relying on a total reconstruction. This was achieved by means of minor additions and authentications and small-scale reconstruction activities. In doctrinal terms, these actions should be counted as reintegration – i.e., integrating the monument, and

⁷³ The total value of the project was PLN 69,581,728.89 with EU co-funding of PLN 53,261,113.09. Source: Zamość - miasto idealne (Zamość the ideal city), project website: http://twierdza.zamosc.pl/en/ (accessed February 24, 2023).

supplementing it with lost elements, which increases its value and facilitates its understanding by visitors. The project has consolidated the features thanks to which Zamość was inscribed on the UNESCO World Heritage List and has consistently met the obligations resulting from this fact.

Territorial and architectural qualities

The implementation of the project allowed for the first consolidation of the torn ring of fortifications since 1868. It was a modern interpretation of the ideas of architecture historians and researchers who investigated Zamość before World War II and their followers who undertook studies and projects in the late 1970s and early 1980s, and the first conservation and reconstruction works which were to expose the unique qualities of this fortress-city as described by Kadluczka in 2020.⁷⁴

Extrinsic values: Landscape and aesthetic; environmental sustainability; social and cultural; economic

Landscape and aesthetic value

The subject of the project was not only the architectural substance of the fortification elements but the historical fortified landscape of the Zamość Fortress from the sixteenth to the nineteenth century, as a phenomenon of the large-scale organisation of space for defence purposes. It was based on long term interdisciplinary research.⁷⁵ The scope of the project covered the whole post-fortification area of the former fortress, i.e., not only the existing and non-existing defensive works but also all the elements that were once subordinated to defensive functions and are today conducive to their identification.

The scenic axes overlooking the Zamość Old Town have been consolidated and the fortress foreground, which was open in its historical form, has been recovered. The designed promenade now allows the panorama of Zamość to be finally perceived, and the use of the rampart allowed for the hiding from view of contemporary buildings.

⁷⁴ KADŁUCZKA, Andrzej. Zamość—an Ideal City: The European Character of the Urban Planning Solutions of a Commonwealth of Both Nations Citta Di Fortezza. In: *Wiadomości Konserwatorskie – Journal of Heritage Conservation*, Vol. 63, 2020, pp. 7–16, doi: 10.48234/WK63ZAMOSC.

⁷⁵ MYCZKOWSKI, Zbigniew, WIELGUS, Krzysztof, ŚRODULSKA-WIELGUS, Jadwiga, et al. Studium kształtowania terenów pofortecznych twierdzy Zamość za szczególnym uwzględnieniem ksztaltowania zieleni, Kraków 2006. Typescript of an expert project report in the collection of the Chair of Landscape Architecture of the Cracow University of Technology. [In Polish]; MYCZKOWSKI, Zbigniew, WIELGUS, Krzysztof, ŚRODULSKA--WIELGUS, Jadwiga, et al. Koncepcja architektoniczno-krajobrazowa terenów pofortecznych frontu południowego Twierdzy Zamość. Kraków 2007. Typescript of an expert project report in the collection of the Chair of Landscape Architecture of the Cracow University of Technology. [In Polish]; MYCZKOWSKI, Zbigniew, ŚRODULSKA--WIELGUS, Jadwiga, WIELGUS, Krzysztof PIEKŁO, Joanna, et al. Koncepcja zagospodarowania i udostępnienia turystycznego Twierdzy Zamość. Kraków 2008. Typescript of an expert project report in the collection of the Chair of Landscape Architecture of the Cracow University of Technology. [In Polish]; MYCZKOWSKI, Zbigniew, ŚRODULSKA-WIELGUS, Jadwiga, WIELGUS, Krzysztof Konsultacje naukowo – badawcze dotyczące projektu realizowanego przez zamawiającego: utworzenie muzeum fortyfikacji i broni w obrębie bastionu iii i arsenalu w Zamościu "program operacyjny infrastruktura i środowisko", Zlecający: Urząd Miasta Zamościa, Finansowanie: Europejski Program Operacyjny Infrastruktura i Środowisko', Zamość 2011. Typescript of an expert project report in the collection of the Chair of Landscape Architecture of the Cracow University of Technology. [In Polish]; MYCZKOWSKI, Zbigniew, WIELGUS, Krzysztof, MIREK, Zbigniew, et al. Koncepcja zagospodarowania południowego przedpola Zamościa – miasta UNESCO: terenów otoczenia zalewu z uwzględnieniem rotundy i zamczyska o powierzchni ok. 316 ha + 25%. Kraków 2012. Typescript of an expert project report in the collection of the Chair of Landscape Architecture of the Cracow University of Technology. [In Polish].

Environmental sustainability

The revitalisation of Zamość Fortress has enriched the city not only with new cultural spaces in adopted historic buildings (by reusing old architectural substance) but also with newly regained public green areas. In the foreground of the fortress a promenade was restored, along with the surroundings of the Rotunda and the areas of the restored historic City Park. The park was created on the post-fortress areas - including the remains of Bastion IV and fragments of the fortifications, along with a moat, a counterguard, a nearby ravelin and a caponier. The first design of the park was selected in a competition in 1917. The park gained recognition and was listed in 1982 in the register of historical monuments, including a number of veteran tree specimens. The park was the subject of a municipal investment project between 2011 and 2014 which, among other things, included the reconstruction and fortification of selected defensive structures, the alteration of existing pavements and the demarcation of new ones, and the insertion of new benches and lanterns, unifying the entire project. In addition, a third footbridge across the pond was created and a section of the island, which had been inaccessible to walkers for many years, was opened. Information points relating to the history of the Zamość Fortress were put on site. As part of the project, the park was integrated into the system of greenery and paths for visiting the Fortress.

Social and cultural values

The fortified landscape of the Zamość Fortress, that recovered thanks to the EU-funded project, consisted of original elements combined with applications of more or less literal reconstructions, recompositions and additions. Despite the predominance of contemporary elements, this landscape as a whole is a rare example of a recovered fortified landscape of a major bastion fortress in Poland. It provides a setting, a foreground for looking at the unique silhouette of the Renaissance city, underpinned by bastion fortifications demonstrating the achievements of the entire modern fortification – from the sixteenth-century debut of the bastion fortification to its twilight in the second half of the nineteenth century.

Making Zamość Fortress accessible to tourists is therefore not just an architectural and conservation project, but rather a landscape setting for a peculiar performance. Its spectator – repeatedly surprised, skilfully guided and educated – is to be immersed in a friendly, attractive, "cunningly didactic" historical space. This all engages a visitor according to the principle that every culture in the process of education also passes on to the next generation knowledge of its own space, which has a symbolic meaning. Renovated and adapted and integrated relics of the fortifications became a defined, vast space, a large, screened, fortress park – a boulevard with distant insights and bands of greenery, laced with thematic educational paths and info posts, with educational boards including panoramic and 3D mock-ups enriched with elements for the visually impaired.

Several individual buildings included in the project gained new functions. In the north-eastern foreground, the two barracks buildings were converted into an information centre and a museum of sculptures. In Bastion II an exhibition of historical costumes was set up. The eastern casemate of Bastion I is the seat of the "Wszystko Gra" association, the organiser of the cultural festival of the same name. The Zamość Fortress area is the venue of many open-air events with the participation of re-enactment groups, the best example of which is "Storming the Zamość Fortress".

The existing Museum of Fortifications and Weapons was expanded, and until the new museum was established, its collections were located in the historic Arsenal building (since 1980). In addition to the Arsenal, the new museum included the nearby historic Powder House and a new facility in the shaft of the reconstructed Curtain II-III. The Museum of Fortifications and Weapons is unique in that it can trace the development of the art of war from the sixteenth century to the post-war era through an exhibition of weapons and soldiers' equipment.

Economic values

Creating a unique tourist product including describing and making the Zamość Fortress available led to changing the image of places already known but poorly exposed and to the "discovering" of places hitherto not accessible and unpredictable as tourist attractions. Zamość is now considered an exemplary model of exposing the fortifications from the sixteenth-century ideal city to the polygonal fortifications. These activities have been appreciated and have received various awards related to tourism. Following project implementation, the number of visitors has increased steadily over the years, reaching 300,000 in 2018. Zamość has become one of the most important centres for historic military engineering and construction education in Poland and Europe. A survey monitoring the satisfaction of users and tourists carried out on the website of the Zamość Fortress indicates a high rating for the attractiveness of the fortifications compared to other monuments of the city. Fortifications and City Gates lead the ranking of the most interesting tourist attractions (37%), leaving other monuments far behind.

Case Study: The rehabilitation and adaptive reuse of Fort St Elmo

This case study considers the project of the rehabilitation and reuse of Fort St Elmo in Malta. We explain the thought process in the development of the project concept and in particular demonstrate how the values discussed in this paper were taken into account, even if implicitly. One of the co-authors of this paper led the project team, particularly in its initial phases when the project concept was being developed and the application for EU funding prepared. The description of this case study is based mostly on direct experience of the project.

Fort St Elmo is an extensive fortification system occupying a large area at the end of the Valletta peninsula. It is strategically located overlooking the entrances of the Grand Harbour and Marsamxett Harbour. Within the fort and the bastions are many buildings, mostly small in size, many of which were used as barracks. After the end of the British military base in Malta in 1979, parts of Fort St Elmo were used as a police academy but most of the site was abandoned. With decades of neglect, buildings and spaces suffered significant deterioration, though some buildings received some basic maintenance as they were being used as a police academy.

Around 2006, the Maltese authorities decided to embark on the Fort St Elmo project. The intention was to restore an important historic site and bring it back to viable use; however, at the time, there was no clear idea as to what the eventual uses would be. A project team was set up and it was up to the project team to come up with doable proposals and carry them forward.

⁷⁶ Source: A summary of regional tourist activity in 2018 Roztocze region: https://roztocze.net/pl/693_turysty-ka/315877_zamosc-podsumowanie-sezonu-turystycznego-2018-statystyki-.html (accessed January 31, 2022).

⁷⁷ FURLEPA, Ewa Zamość – twierdza przyjazna. In: Narębski, L.(Ed.) *Dawne fortyfikacje – dla turystyki, rekreacji i kultury*. Toruń: Towarzystwo Opieki nad Zabytkami Oddział w Toruniu, 2018, pp. 103–114. [In Polish]. ISBN: 978-83-946377-1-2.

⁷⁸ http://twierdza.zamosc.pl/pl/poll





Figure 2: On the left: Drawing showing the entire Fort St Elmo complex as it appeared during the Second World War. Copyright: Stephen Spiteri. On the right: Porta del Soccorso as seen from an outer Fort St Elmo bastion. Photo: J. Ebejer.

The professional skills included in the team were project management, heritage conservation, architectural design, history and museology.

The project site presented many challenges. It consisted of numerous buildings, cavaliers, fortification walls, bastions and other structures spread out over a relatively large area of four hectares. All of the site merited Grade 1 listing because of its historicity. The poor condition of the site and the buildings made the task all the more difficult.

It was decided to have two primary uses for the site, namely, a military history museum and a ramparts walk. The project was completed in 2015. The new museum is housed in various buildings within the fort, with each building having a particular theme. The museum has a total indoor display area of 3,000 square metres. The ramparts walk is along parts of the bastions, enabling walkers to enjoy outward views of the harbours, whilst appreciating the historic heritage of the fort. Moreover, the central parade ground and other external spaces in between the various buildings and structures operate as open-air venues for concerts, theatre, receptions, fairs and exhibitions. The rehabilitated buildings provide a unique heritage backdrop thus enhancing the event experience. Facilities for performers, including changing rooms, toilets and storage, are provided in one of the fort buildings.

The project transformed the site from one that was poorly kept and closed to visitors to one with a pleasant ambience where the historic relevance of the site can be appreciated by Maltese and tourists alike. The project resulted in the better utilisation, conservation, enhancement and presentation of a fortification system that is a key component of Valletta's and Malta's cultural heritage.

In a previous section of this paper, we spoke about seven values that very often guide the restoration and adaptive reuse of fortified heritage. The following is an explanation of how each of the seven values helped guide the decisions taken on the reuse and interventions at Fort St Elmo.

Intrinsic values: History, memory and identity; scientific and technical; territorial and architectural

The values of history and memory

Because of its position at the centre of the Mediterranean, Malta has played an important role throughout history as superpowers have vied for supremacy in the Mediterranean and in southern Europe. Fort St Elmo has a unique geographical location at the tip of a peninsula separating two natural harbours. It protects the entrance to the harbours and it is for this

reason that the Knights of St John invested so heavily in its development and defence, as did the British forces after 1800.

A detailed historical account is beyond the purpose of this paper but it suffices to say that Fort St Elmo is Malta's most important historic site because of its role in two important events in the history of Malta and of the Mediterranean, namely the Great Siege of 1565 and the island's defence during World War II (1940–1944).

Scientific and technical values

Fort St Elmo started its existence as a solitary tower in the early 1500s and eventually became a complex system of cavaliers, fortified walls, barracks, ammunition stores, bastions and gun emplacements. It was a "war machine" that evolved and was constantly adapted in accordance to the warfare technology of the time and to the then-current construction techniques. Most of the buildings and structures were built by the Knights of St John (1530–1798), intended primarily to resist seaborne attacks. The evolution of the fort continued with further structures and alterations by the British forces (1800–1979). In the early part of the twentieth century the British introduced a new material into the fort, namely concrete in the construction of gun emplacements and pillboxes. These were intended to defend the harbours from both seaborne and air attacks and subsequently had a pivotal role in Malta's defence during the Second World War.

The fort and its many buildings and structures displayed construction techniques spanning hundreds of years. Moreover, the fort displayed a narrative of military history with the buildings and structures being tangible evidence of that narrative.

In the development of the project concept therefore it was considered essential to retain and restore all the buildings and spaces into their original state so that the many different construction techniques would be conserved and presented to current and future generations. A clear decision was taken by the project team not to demolish any structure, no matter how insignificant it may have seemed. It was also decided not to build any new structures in the open spaces to safeguard the spirit of the historic spaces. The only exceptions were minor additions to facilitate accessibility for people with mobility difficulties.

The restoration process of each building and structure was guided by restoration method statements to ensure that the correct techniques were used throughout.

Territorial and architectural values

The project was not seen in isolation but considered as part of a wider urban area. The project site adjoins residential areas of lower Valletta and is within walking distance of the centre of Valletta, Malta's capital. The adaptive reuse of Fort St Elmo was considered to be a catalyst for the regeneration of the lower end of Valletta, which had seen many years of under investment. Increased activity in the area was a means for encouraging investment by the private sector in the restoration and reuse of historic buildings.

Because of its military use, Fort St Elmo had never previously been accessible to the public. Even after the end of its military use in 1979, the public was not allowed in. Residents living in lower Valletta would have never stepped into the fort in spite of living just a few metres away. In their minds the fort was not considered to be part of the city they cherish. The project concept wanted to encourage the perception that the fort is part of the city of Valletta and

not something distinct from it. The intention was for the area, or at least part of it, to become accessible without restrictions to the general public.

In terms of architectural interventions within the site, its historic nature meant that modern alterations and additions could compromise the cultural value. Moreover, the internal spaces within the buildings were small. So, although the total internal space was quite substantial, this was fragmented across a large number of buildings. This made it difficult to identify uses that were suitable for the site while at the same time making it financially viable.

Extrinsic values: Landscape and aesthetic; environmental sustainability; social and cultural; economic

Landscape and aesthetic value

In terms of landscape, the site offers many opportunities, with exceptional views of both the Grand Harbour and Marsamxett Harbour. All buildings and structures within it are historic, so it provides numerous attractive open spaces with a heritage backdrop. The project team sought to make the best possible use of the aesthetic outward and inward views.

Environmental sustainability

The project brought back into sustainable use buildings that were unused or underutilised. If the same uses and facilities had had to be provided in a new construction, the carbon impact would have been significantly higher. Restoration prevented the further decay and eventual collapse of many historic buildings and structures within the fort. More than just being restored, however, the buildings and area were brought into a sustainable use.

Social and cultural values

Fort St Elmo has immense cultural value, not only because of its historical significance to Valletta and Malta but also because it is part of a larger World Heritage Site, namely Valletta. The project sought to safeguard and reinforce the cultural value of the site. The new uses for the site, namely the museum and ramparts walk, are compatible with the cultural value of the site. Moreover, the use of the spaces for cultural events such as concerts further reinforces the fort's cultural significance. The use of the open spaces for activities, especially in the summer, provides an added facility for use by residents of Valletta and beyond.

The original project concept was to provide interpretation throughout the fort especially along the ramparts walk and thus make the fort a place for education and the awareness of heritage for Maltese and tourists. Although initial investments were made for the interpretation of the various historic features, regrettably this was not followed up by the operator and the education and heritage awareness aspect of the place is greatly diminished. The operator treats the fort just as a fee-paying museum and there is little effort to encourage appreciation of the historicity of the place.

Economic values

The economic value of the project was considered at two levels. At the level of the national economy, the newly refurbished Fort St Elmo provides a new experience for visitors thus resulting in the enhancement of the tourism product. The fortifications surrounding Valletta are an essential feature of the city's attractiveness, and the adaptive reuse of Fort St Elmo enhances

that attractiveness. This makes Valletta and Malta more attractive for international visitors. The project was in line with the strategy of rebranding Malta's tourism towards heritage and culture.

At the level of the site itself, the financial feasibility was a foremost consideration. In the long term, the conservation value of a historic site is best maintained if the adaptive reuse generates sufficient income for the upkeep of the buildings and the spaces. Making Fort St Elmo financially feasible was not an easy task because of the extensive area involved and because the internal spaces were fragmented across a number of relatively small buildings. A cost-benefit analysis was carried out and it was established that the operation of the museum and of the various facilities would generate enough revenue for the ongoing maintenance and upkeep of the facilities and of the buildings. Long-term financial viability was also one of the criteria EU authorities referred to when assessing the application for funding. In essence the capital costs for the project were covered by EU and national funds whereas the ongoing running costs are derived from the operation of the facilities.

The primary objective for the project was to restore and bring back to life historic buildings and structures and to do so in a manner that is financially sustainable. In effect, the project converted what was previously a war machine into a machine for tourism, leisure, education and the appreciation of heritage.

Conclusion

This paper seeks to promote a better understanding of fortified heritage and also of the values that require consideration when a project on fortified heritage is being carried out.

Central and Eastern Europe has an abundance of such heritage which, in recent years, has come under increasing pressure to adapt. It is being pushed forward by many cities and regions for it to become their most interesting tourist attractions (e.g., European Fortress Summer). It is therefore necessary to develop a framework of values, the application of which will allow for the introduction of a new function in a sustainable manner – reconciling the preservation of heritage while making it accessible to the wider public.

It considers two projects carried out in Poland and in Malta to develop insights into these values. Seven values have been identified, possibly of different levels of priority but all requiring careful attention. They are based on doctrinal documents and the work of expert teams in ICOMOS and are an attempt to identify values that should form a universal basis for the making of decisions about the new functions of fortifications. Taking them into account makes it possible to establish the objective value of an object and to take into account the wealth of local social, cultural and economic conditions.

This research is subject to two limitations in particular. There is a very broad range of features of fortifications, depending mostly on the time they were built, the surrounding geography and also the culture of the region. An attempt of developing a coherent description for all these different types would probably result in a discussion of the priority values, and the scale of the uniqueness of particular structures and objects.

Another limitation is that the paper is based on two case studies which, like all other fortified heritage, are very particular and which have their own distinctive features. They were also subject to their own distinct circumstances when the adaptive reuse projects were being carried out. There are risks in developing theories on adaptive reuse on the basis of just two case studies.

In the case of fortifications, the priority was usually their defensive function and utilitarian values. The functional values were often systematically updated. Usually, the facilities were often modernised, rebuilt and adapted so that they could still perform a defensive function. Even after the loss of combat value, many fortification objects became passive elements of defence (warehouses, back-up buildings, etc.). General demilitarisation in the second half of the twentieth century brought further changes in usage. While many objects have been abandoned, there are defensive objects and landscapes whose historic value has been appreciated and has been successfully adapted and made available. Among the particularly spectacular adaptations, the use of objects for tourist and museum functions is dominant. Against this background, however, the conflict of values mentioned by Ashworth is often visible - between the value of the object itself (intrinsic) and social values related to usability and adaptation to modern functions and detaching them from the material substance (the whole palette of extrinsic values). Too much emphasis on adaptation and economic viability of reuse is often detrimental to the historic substance and authenticity. Furthermore, the cost of and difficulties in the adaptation of structures not suitable for public-use functions are also major challenges linked with the issues of the viable reuse of fortified buildings and landscapes. That is why identifying and balancing the values should be at the core of each fortified landscape and building reuse strategy.

This paper provides a general framework referring to a set of seven values related to fortified heritage and is a useful basis for further study. The analysis of other case studies is needed to reaffirm or challenge the framework of values that is presented in this paper.

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Protection of museum collections in emergency situations: Solutions used in the state of Vermont (USA)

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Protection of museum collections in emergency situations: Solutions used in the state of Vermont (USA) The article presents organisational solutions for the protection of museum collections and cultural heritage sites using the example of the state of Vermont (USA). Also described are the solutions adopted by US nationwide agencies established to respond to natural disasters. In addition, the article introduces the mechanisms and organisational and legal solutions for managing information in connection with an emergency situation, taking into account the needs for protecting museum collections and objects important to the culture and history of the residents of the state of Vermont. The article in question was prepared on the basis of expert interviews, analysis of the literature and current laws and regulations.

Keywords: museum collections, protection, state of Vermont (USA), crisis situation

Introduction

Cultural heritage, tangible and intangible, is recognised by the international community as a pro-development stimulator of increasing importance to modern societies. The human community has recognised the protection of its heritage as extremely important and thus also requiring a specific strategy, both locally and globally. This protection is shaped through the prism of legal and organisational structures in both peacetime and wartime dimensions. There is no doubt that the state of threat to cultural heritage posed by armed conflict regardless of its scope is enormous. To ensure physical protection when relocating museum or cultural heritage collections, it is necessary to develop proper handling procedures and implement effective organisational and technical solutions. They will reduce the risk of losing, for example, exhibits during floods, fires, snowstorms or an attack by the armed forces of an aggressor state that does not abide by any international conventions and agreements.

The subject of analysis within the framework of this article is the information obtained in the framework of expert interviews and concerning the applied organisational and legal solutions and the procedure of information management by entities obliged to protect museum collections and objects classified as cultural heritage in the event of a crisis situation in the example of selected museum facilities of the state of Vermont (USA).

Information from experts from the State of Vermont Historic Preservation Office and from the Federal Emergency Management Agency (hereafter: FEMA) shows that efforts to protect cultural heritage in emergency preparedness and response cover prevention efforts, evacuation procedures, emergency response staff responsibilities, salvage operations and post-disaster assessments. This type of action is the foundation for protecting the cultural heritage of the United States of America in the event of an emergency.

The issue that was analysed during the interviews conducted by the authors of the article with American experts representing selected institutions of the state of Vermont concerned the problem of the protection of museum collections and cultural heritage objects and the correlation occurring between the subjects – employees of, for example, a given museum (who in the event of an emergency situation would face the evacuation of museum collections in their possession) and regional and national emergency management entities responsible for the implementation of comprehensive/systemic protection with regard to US cultural heritage.

Experts from around the world on the issue of practical cultural heritage preservation emphasise that every cultural repository needs two management structures: the day-to-day, business-as-usual hierarchy, and a "supercharged" management structure that takes over temporarily during a crisis or whenever events threaten to overwhelm normal business routines.

¹ DWORZECKI, Jacek, NOWICKA, Izabela, URBANEK, Andrzej, SZKURŁAT, Izabela. Legal protection and safety of works of art and other objects with historical or scientific value borrowed from other countries for the purpose of temporary exhibitions organised within the territory of Poland. In: *Muzeológia a kultúrne dedičstvo/Museology and Cultural Heritage*, vol. 10(2), 2022, p. 81. ISSN 1339-2204.

² ALEXANDER, Edward P., ALEXANDER, Mary, DECKER, Juilee. *Museums in motion: An introduction to the history and functions of museums* (3rd ed.). Lanham: Rowman & Littlefield, 2017, p. 43.

In meetings with J. T. Hart, Jr.³ and Amber Wingerson,⁴ representing The Sullivan Museum and History Center, and also Megan Liptak (Norwich University),⁵ Albie Lewis (FEMA),⁶ Katelynn Averyt (Smithsonian Institution),⁷ Jess Robinson (Division for Historic Preservation)⁸ and Laura Trieschmann and Jamie Duggan (Vermont Archaeology Heritage Center)⁹ the authors of the article based the interviews around issues such as:

- What types of potential natural hazards, disasters, and civilisation events are the collections collected in Vermont state museums most vulnerable to?
- In the case of the Sullivan Museum and History Center, who is responsible for creating crisis response plans and taking the first actions to protect the museum collections?
- What role does FEMA play in activities aimed at protecting cultural heritage and museum collections in connection with the occurrence of a crisis situation?

The interviews used a standardised expert interview script, which was approved in advance by the interviewes. During the interviews, the experts had unlimited opportunities to speak, and the scope of the problems of preserving museum collections, which were initially assumed for discussion, was significantly expanded thanks to the openness of the experts and their willingness to share their knowledge and experiences acquired over many years of performing their professional duties.

This article will present only selected issues raised during the interviews conducted during the authors' study visit to the United States. The full results of the research will be published at a later date, after a comprehensive analysis of the obtained survey results, which is still ongoing. The text of the article also includes information on the organisation and functioning of American institutions whose representatives participated in the research.

The Sullivan museum and history center in Norwich

The Sullivan Museum and History Center is the official museum of Norwich University, named for General Gordon R. Sullivan (US Army, retired), a 1959 Norwich graduate. It is located in Northfield, Vermont, and opened in 2002. The 16,000-square-foot facility contains both permanent and changing exhibits depicting items and exploring themes from the school's 200-year history and broader American military history.

The Sullivan Museum and History Center has a long-standing partnership with the Smithsonian Institution. This partnership brings many opportunities for growth for both institutions and for Norwich University. Through this collaboration, the Sullivan Museum and

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⁶ Albie Lewis - Col. (Ret.), Vermont National Guard and FEMA, Hyattsville, Maryland 20782-8055, USA

⁷ Katelynn Averyt – Disaster Response Coordinator, Smithsonian Cultural Rescue Initiative, Smithsonian Institution, 600 Maryland Ave SW, Washington, DC 20002, USA.

⁸ Jess Robinson – Vermont State Archaeologist, Division for Historic Preservation, One National Life Drive Deane C. Davis Building, Montpelier, Vermont 05620, USA.

⁹ Laura Trieschmann – Vermont State Historic Preservation Officer; Jamie Duggan – Director of Preservation, State of Vermont, State of Vermont Cultural Heritage Protection, Vermont Archaeology Heritage Center, 60 Washington Street, Barre, Vermont 05641, USA.

History Center has permanent access to collections held in the national collection housed in the 19 Smithsonian museums located across the US. On loan, exhibits from collections related to the history of Norwich University, the state of Vermont and the history of the region's contribution to the evolution of American history and the development of North American society are regularly presented in the form of thematic temporary exhibitions.¹⁰

The Sullivan Museum and History Center is named in honour of General Gordon R Sullivan, the highest-ranking graduate of Norwich University, who served as the 32nd Chief of Staff of the United States Army. The full-time staff serving the museum consists of the positions of: Director, three curators of permanent exhibitions and temporary displays, a curator of thematic collections, a curator of education and public programmes and a museum administrative officer. The museum's collection contains more than fifteen thousand artefacts including textiles, insignia, war trophies, weapons, jewellery, paintings, drawings, prints, sculptures, maps, scientific paraphernalia, architectural plans and furniture. The Sullivan Museum and History Center operates under the guidelines established by the American Association of Museums for the management of collections and also addresses ethical standards for professionals and best practices for museum facilities. For many years in developed countries around the world, the highest ethical standards in museology have been the working foundation for every modern professional manager who manages museum objects and collections. Lach year, the museum's collection is fuelled by new exhibits from private collectors, local donors and individuals with ties to the state of Vermont and US military history.

The museum hosts several thousand visitors annually and its funding comes from visitor fees, earmarked grants from the state government, a subsidy from Norwich University and donations.

Division for historic preservation in Montpelier, Vermont

The preservation of the state of Vermont's historic resources and cultural assets is the primary responsibility of the Vermont Division for Historic Preservation (hereafter: VDHP). The State Historic Preservation Office (hereafter: SHPO), part of the Agency of Commerce and Community Development, is responsible for executive implementation in this area. The VDHP plays a pivotal role in guiding the state's historic preservation programme, including the maintenance of hundreds of sites that relate to the rich cultural heritage of the state of Vermont. The Vermont Division for Historic Preservation operates under regulation 22 V.S.A. § 723(10) concerning the principles and implementation of the purposes embodied in the Vermont Historic Preservation Act¹² and The National Historic Preservation Act,¹³ which is legislation concerning the preservation of America's historic and archaeological cultural

¹⁰ Source: Interview with Amber Wingerson (Curator of Exhibits and Collections, Sullivan Museum and History Center). The interview was conducted on November 8, 2022 in Northfield (Vermont) by the article's authors.

¹¹ EDSON Gary (ed.). Museum Ethics: Theory and Practice.. London: Routledge, 1997, pp. 91–94.

¹² The Vermont Historic Preservation Act was established in 1975 by the Vermont Legislature with the passage of Title 22 V.S.A. Chapter 14: Historic Preservation. The Act requires that state agencies take measures to preserve any historic resources under its ownership. A state agency, department, division or commission must consult the Vermont Advisory Council on Historic Preservation before demolishing, altering or transferring any property that is of historical, architectural, archaeological and/or cultural significance, including any property listed in the State and/or National Registers of Historic Places. It is the responsibility of the state agency to initiate consultation with the Division for Historic Preservation and fulfill the requirements of 22 V.S.A. Chapter 14. Source: State of Vermont, Agency of Commerce and Community Development.

¹³ The National Historic Preservation Act of October 15, 1966 (Public Law 89-665 U.S.C. 300101, pp. 915–919).

heritage. The Act created the National Register of Historic Places, the National Historic Landmarks Program and the State and Tribal Historic Preservation Offices.¹⁴

Vermont Archaeology heritage center

The Vermont Archaeological Heritage Center, which was established in 2006 (hereafter: VAHC) is located in two facilities. The centre has facilities in the historic Spaulding Graded School in Barre and in the Mount Independence State Historic Site in Orwell. The VAHC serves as a central repository for artefacts and archival collections relating to the past of the lands of the state of Vermont and the northeast of North America. The centre hosts exhibitions, workshops and lectures and its collection is based on over 750 archaeological sites. The VAHC is funded by the state of Vermont's own resources, government earmarked grants and donations from individuals and public institutions.

Smithsonian institution

The Smithsonian Institution was established by an act of Congress in 1846 as an independent federal trust fund whose mission is to expand and disseminate knowledge of American culture, customs, traditions and heritage. Responsibility for the administration of the Smithsonian Institution rests with the Board of Regents, which consists of the Chief Justice of the United States, the Vice President of the United States, three members of the United States Senate, three members of the United States House of Representatives and nine citizens. The executive body of the Smithsonian Institution is the Secretary, who is appointed by the Board of Regents. The Smithsonian Institution currently manages 21 museums, 21 libraries, the National Zoo, research centres and several educational units and centres. The Smithsonian Institution manages the largest number of museum facilities in the world, employing several thousand people in facilities located around the globe. The Smithsonian Institute's Cultural Rescue Initiative Division is tasked with responding to emergencies that directly threaten the objects that make up North America's cultural heritage and world heritage sites. The division manages SCRI's research data related to cultural heritage at risk, and coordinates fieldwork for emergency response and the deployment of state or government resources for national and international missions related to the protection of museum collections and cultural heritage sites. In recent years, the Cultural Rescue Initiative Division has carried out assignments in Haiti, Syria, Iraq, Egypt, Mali, Nepal and the United States.

Federal emergency management agency

The Federal Emergency Management Agency is a government agency that has been under the US Department of Homeland Security since 2003 and is responsible for emergency management. FEMA is an agency focused on hazard reporting, planning and the management of disaster prevention and mitigation activities. In its activities, FEMA cooperates with many other federal agencies and non-governmental organisations. Currently, FEMA has more than 15,000 employees and is supported by a 4,000-strong volunteer corps. As part of its activities, FEMA personnel are also engaged in analysing threats and developing legal, organisational and technical solutions aimed at protecting museum collections and cultural heritage sites

¹⁴ Source: Interview with Jamie Duggan (Director of Preservation, State of Vermont). The interview was conducted on November 10, 2022 in Barre (Vermont) by the article's authors.

threatened by the effects of natural disasters and other emergencies of both military and non-military nature.

Opinions of experts involved in the protection of museum collections and cultural heritage sites of the state of Vermont (USA) on potential threats and solutions used to prevent and neutralise the effects of emergencies caused by natural forces or caused by human factors

Experts who participated in the series of interviews indicated that in the actions taken by the state of Vermont institutions established to protect museum collections and cultural heritage sites, the basic breakdown of potential threats includes those caused by nature – i.e. flood, drought, fire, earthquake, hurricane, tornado, avalanche or landslide, volcanic eruption, extreme cold or heat – and threats whose main causal factor is human, i.e., disruptive individual, explosion, fire, hazardous materials spill, gas leak, medical emergency, mould outbreak, power outage, severe weather, suspicious package or item, suspicious person and vandalism, active shooter and other threats (e.g., threatening call or bomb threat). Experts pointed out that the state of Vermont is most often threatened by natural phenomena in the form of flooding and the occurrence of hurricanes and tropical storms.

Another question in the interviews concerned the responsibilities of the staff of the state of Vermont museums in the protection of museum collections, with a special focus on the situation in which there is a threat of natural disaster. Information was obtained on the responsibilities of the superintendent of museum collections, the custodial officer (responsible for individual collections), the facility manager and the interdisciplinary teams set up to respond to crisis situations and emergencies.

The superintendent has overall responsibility for preserving and protecting the park's museum collection. The superintendent is responsible for park-wide emergency planning and preparedness. The superintendent may delegate responsibilities for emergency operations coordination to the chief ranger, park safety officer, facility manager or other staff as appropriate. This delegation is made in writing and filed in the park central files and/or the superintendent's Orders.

The custodial officer, is responsible for preserving and protecting the museum collection, including museum emergency planning and preparedness. The custodian officer is responsible for developing and completing:

- risk assessments including:
- NPS Checklist for Preservation and Protection of Museum Collections;
- Risk Assessment Worksheet;
- Museum Mitigation Action Plan;
- Museum Collections Emergency Operations Plan (MCEOP) in collaboration with the emergency operations coordinator and facility manager; and
- the prioritisation of objects for relocation and salvage using the First Priority Criteria for Object Relocation and Salvage.¹⁵

¹⁵ Source: Interview with Laura Trieschmann (Vermont State Historic Preservation Officer). The interview was conducted on 10 November 2022 in Barre (Vermont) by the article's authors.

The custodian officer collaborates with the emergency operations coordinator to coordinate museum emergency response and salvage activities and training and with the facility manager to develop and implement the Museum Mitigation Action Plan.

The facility manager works with the custodian officer and emergency operations coordinator to:

- ensure regular inspection, testing and maintenance of the structure and building envelope, utilities, equipment and systems in structures and spaces housing collections in accordance with nationally-recognised codes, manufacturer's specifications and NPS policies and guidance;
- complete a comprehensive condition assessment of the building envelope, utilities, equipment and systems for structures housing collections; and
 - generate information.

The interdisciplinary team, coordinated by the curator, participates in planning and preparedness for museum emergencies. The team should include the emergency operations coordinator, facility manager, safety officer, chief of cultural and/or natural resources and regional curator. It should additionally include the historical architect advisor, cultural landscape specialist, conservator and other specialists as needed. The team should meet regularly to discuss emergency planning and mitigation projects.

In the case of the Sullivan Museum and History Center, the creation of emergency response plans and initial actions to protect the museum's collections are the responsibility of the facility's director, who works closely with Norwich University authorities and the state FEMA office in this regard. The plans are updated once every three years. Once a year, drills are conducted in cooperation with Norwich University and local emergency services and FEMA during which actions are taken to assess the effectiveness of the procedures in place for the protection of museum collections in the event of an emergency situation caused by natural factors as well as those triggered by human factors. Museum employees are responsible for preparing a catalogued list of the museum's holdings and selecting them in terms of, among other things, the level of difficulty in the context of their evacuation in the event of an emergency. In the event of a need to evacuate museum collections, the university delegates military student cadets to assist, who, together with museum staff, use technical means (containers, lifts, trucks, etc.) belonging to local firefighting units, the National Guard and equipment contracted by FEMA for rescue operations. Museum collections can be transported to one of the many museums in the country that are affiliated with the Smithsonian Institution.

A management mechanism called the Incident Command System is used as part of the ongoing response to an emergency situation directly threatening museum collections and cultural heritage sites. The Incident Command System is a highly standardised, top-down, military-based management structure that supersedes the management structure of every other agency that responds to an event.¹⁸ This management tool is used to meet the demands of small or large emergency and nonemergency situations. It represents best practices and has

¹⁶ Source: Interview with J. T. Hart, Jr. (Director Sullivan Museum and History Center). The interview was conducted on November 8, 2022 in Northfield (Vermont) by the article's authors.

¹⁷ Source: Interview with Megan Liptak (Assistant Director-Research Centers). The interview was conducted on November 10, 2022 in Norwich University (Vermont) by the article's authors.

¹⁸ CARMICHAEL, David. W. Implementing the Incident Command System at the Institutional Level: A Handbook for Libraries, Archives, Museums, and Other Cultural Institutions. Washington: Heritage Preservation, 2010, p. 27.

become the standard for emergency management across the United States.¹⁹

The task of the superintendent of museum collections within the Incident Command System mechanism-based activities is to:

- ensure that collections and structures housing collections are included in ICS planning documents, including the Business Continuity Plan;
- liaise with the head of the ICS Operations Section and attend planning meetings to represent the needs of the collections and coordinate activities that affect the collections and structures housing the collections; and
 - organise regular ICS training for all museum staff.

Participants in the interviews were also asked to provide a definitional snapshot relating to the concept of emergency planning, which is commonly used in museum facilities in the state of Vermont. The existing approach in this regard indicates that emergency planning includes risk assessment, removal or reduction of hazards and vulnerabilities and the implementation of emergency operations plans, Emergency Response Steps and salvage procedures.

The issue of the cooperation of museums and other institutions involved in promoting the cultural heritage of the state of Vermont with companies and external institutions within the framework of the Incident Command System was also raised in the interviews conducted. The creation of the currently used ICS solutions has its origins in 2002 when the U.S. Department of Homeland Security prepared two extremely important documents harmonising the scope of actions taken by government agencies in the event of a national emergency. There was the creation of a document called the National Response Plan (U.S. DHS 2004a), which defines the responsibility for implementing actions in the event of a major crisis of a non-military nature, and the creation of a regulation called the National Incident Management System (U.S. DHS 2004b), which indicates the use of specific crisis policy tools, primarily the ICS.²⁰ The NIMS describes the characteristics of ICS creation (U.S. DHS 2004b, 9-12) and the mechanisms and rules for its use (Combining Structural Forms in the Search for Policy Tools: Incident Command Systems in U.S.).

The ICS is a solution that standardises, among other things, the scopes of responsibilities and assigned positions for those participating in rescue operations, the responsibilities of the various components of the system, and the terminology used in operations. The ICS also includes a very clear division of tasks and responsibilities for those carrying out direct rescue operations and those performing activities of an auxiliary nature.

The ICS establishes common planning and resource management processes and allows for the integration of facilities, equipment, personnel, procedures and communications operating under a common organisational structure. Operations related to a regional or nationwide emergency are conducted using the ICS as part of the National Incident Management System (NIMS). The Unified Command System is used when other agencies are involved. Under the ICS, the Incident Commander (IC) has overall responsibility for managing emergency response activities. After the ICS is activated, emergency response activities, including those related to the museum programme, fall under the authority of the IC.

¹⁹ JONES, Jefferson P., NIMS Incident Command System Field Guide 2nd Edition, 2012, pub. Jones & Bartlett Learning, p. 9.

²⁰ FEMA National Incident Management System Third Edition, October 2017, by United States Government FEMA, pub. Independently published, pp. 17-28.

The Incident Commander is assisted in his operations by a three-level information management system. Information is passed through the various levels of command, whose task is to verify and filter the information reaching the Incident Commander. This is intended to eliminate the situation whereby the Incident Commander receives too much information or is burdened with making marginal decisions of a technical nature. Such action is intended to help the Incident Commander focus on the overall response to the emergency situation. The three-level emergency information management system includes: a Public Information Officer position (PIO), a Security Officer position and a Liaison Officer position.

The Public Information Officer:

- advises the Incident Commander on information dissemination and media relations (note that the Incident Commander approves information that the PIO releases);
- obtains information from and provides information to the Planning Section;
- obtains information from and provides information to the community and media.

The Safety Officer:

- advises the Incident Commander on issues regarding incident safety;
- works with the Operations Section to ensure the safety of field personnel; and
- ensures the safety of all incident personnel.

The Liaison Officer:

- assists the Incident Commander by serving as a point of contact for representatives from other response organisations; and
 - briefs and answers questions from supporting organisations.

From the local level, the emergency response process moves to a higher level of decision-making as follows:

- Local first responders use the ICS to manage the incident. If additional assistance is needed, the local Emergency Operations Center (EOC) will assist. Larger communities or counties may have a permanent, staffed EOC directed by a full-time emergency manager; in smaller communities or counties an EOC may be established as needed during an emergency.
- If local resources are overwhelmed by the extent of the emergency, the community requests state assistance. Emergency operations are coordinated from the state EOC. Every state maintains an EOC that can expand as necessary to accommodate incidents. Larger states may have one or more intermediate organisational levels with regional EOCs that are activated when a particular region or district is affected.
- If more resources than the state has available are required, it can request assistance from other states through interstate mutual aid and assistance agreements such as the Emergency Management Assistance Compact (EMAC).
- If local, in-state regional, state and mutual aid resources are inadequate to deal with the event, the governor requests federal assistance via an emergency declaration (for a limited emergency) or a presidential major disaster declaration in a more catastrophic situation. This request is made through FEMA.

An expert representing the Smithsonian Institution who participated in the interviews indicated that her institution holds several training sessions on the implementation of ICS mechanisms each year. These training sessions are addressed to those involved in the preservation of museum collections and cultural heritage sites. According to the expert, the most interesting programme dedicated to the protection of museum collections and cultural heritage sites that the Smithsonian Institution conducts every year is a programme called Heritage Emergency and Response Training DC. During the five-day residential course for 25 heritage and emergency management professionals from across the country, there are thematic workshops, lectures and practical exercises conducted by the staff of the Smithsonian Cultural Rescue Initiative, as well as with the participation of representatives of the Heritage Emergency National Task Force and other subject matter experts from the Smithsonian Institution.²¹ As part of the conducted classes, practical field exercises are also carried out based on scenarios of emergencies, such as natural disasters, the effects of which threaten museum collections or cultural heritage sites. Participants in the exercises become familiar with modern technical and organisational solutions, as well as legal regulations, which make it possible to increase the effectiveness of rescue operations aimed at protecting museum collections.

As another of the experts participating in the interviews pointed out, slightly different organisational arrangements are in place for the operation of state archives located in the United States. While the Smithsonian follows the Incident Command System (ICS) to coordinate operations and recovery, the National Archives has its own Emergency Response Team for collections recovery that consists of staff members who assume alternate roles during an emergency.²² The team consists of an Emergency Coordinator, Recovery Coordinator, Conservator and Emergency Registrar. The Emergency Coordinator decides whether an emergency should be declared and then decides what actions to take and delegates responsibilities as they arise. The Recovery Coordinator leads the recovery effort within the archives, making treatment decisions and actively training staff and volunteers in recovery roles. The Conservator works closely with the Recovery Coordinator to triage collections and complete appropriate treatments. The Emergency Registrar records the details of the emergency response and recovery, including all communications and collection movement.

An expert representing FEMA indicated that FEMA and the federal government have also significantly increased funding for disaster relief and preparedness. FEMA's public assistance programme, for example, was 24 percent larger in 2010–19 than in the previous decade (2000–09). From 2017 to 2020, FEMA allocated \$45 billion in disaster relief and financial assistance to communities across the country. Additionally, since 2002, FEMA has provided more than \$52 billion in grants to support state and local preparedness investments. Included in this amount are funds dedicated to museum facilities, which have been used to develop mechanisms (organisational and technical) that will effectively support emergency operations in the context of protecting museum collections and cultural heritage sites in the event of an emergency that realistically threatens the protected facilities.²³

²¹ Source: Interview with Katelynn Averyt (Disaster Response Coordinator, Smithsonian Cultural Rescue Initiative, Smithsonian Institution). The interview was conducted on November 10, 2022 in Northfield (Vermont) by the article's authors.

²² Source: Interview with Jess Robinson (Vermont State Archaeologist, Division for Historic Preservation). The interview was conducted on November 9, 2022 in Montpelier (Vermont) by the article's authors.

²³ Source: Interview with Albie Lewis (Col. Ret. Vermont National Guard and FEMA). The interview was conducted on November 11, 2022 in Hyattsville (Maryland) by the article's authors.

However, FEMA is not the only key player in emergency management at the federal level. An expert, relying on a report by the Pew Charitable Trusts, pointed out that FEMA's Disaster Relief Fund, which is the institution's key source of funding for emergency response, accounted for less than half (44 percent) of all federal funds spent on responses by government agencies and institutions related to disasters that occurred between 2005 and 2014. The remaining 56 percent came from the budgets of 17 major federal departments and agencies, including the Department of Agriculture, the Department of Housing and Urban Development, the Department of Defense, the Department of Transportation and the Department of Health and Human Services.

Conclusion

A number of activities undertaken by institutions responsible for the protection of museum collections and cultural heritage sites in the state of Vermont are carried out on the basis of the Incident Command System and emergency response plans prepared jointly with the government and local authorities. An important issue is to have personnel and technical resources ready for immediate use, which is helped by local authorities, state authorities and organisations with a national character. Exercises initiated by state authorities and nationwide organisations are also constantly being carried out, which affect the level of preparedness of museum institutions in the event of a natural disaster the effects of which pose a real threat to museum collections and cultural heritage sites. ²⁵

The state of Vermont is most often exposed to the occurrence of floods and hurricanes.²⁶ According to experts, adequate preparation and synergistic cooperation between institutions, authorities and residents of the state has allowed, for the past three decades, effective responses to natural disasters. After 1973, there has been no recorded situation in the state of Vermont in which museum collections or large-scale cultural heritage sites were destroyed as a result of a natural disaster.²⁷

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²⁷ SHINN, Peggy. *Deluge: Tropical Storm Irene, Vermont's Flash Floods, and How One Small State Saved Itself.* Lebanon (New Hampshire, USA): University Press of New England, 2013, p. 85.

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Interview with J. T. Hart, Jr. (Director Sullivan, Museum and History Center). The interview was conducted on November 8, 2022 in Northfield (Vermont) by the article's authors.

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Interview with Jamie Duggan (Director of Preservation, State of Vermont). The interview was conducted on November 10, 2022 in Barre (Vermont) by the article's authors.

Interview with Laura Trieschmann (Vermont State Historic Preservation Officer). The interview was conducted on November 10, 2022 in Barre (Vermont) by the article's authors.

Interview with Megan Liptak (Assistant Director-Research Centers). The interview was conducted on November 10, 2022 in Norwich University (Vermont) by the article's authors.

Interview with Katelynn Averyt (Disaster Response Coordinator, Smithsonian Cultural Rescue Initiative, Smithsonian Institution). The interview was conducted on November 10, 2022 in Northfield (Vermont) by the article's authors.

Interview with Albie Lewis (Col. Ret. Vermont National Guard and FEMA). The interview was conducted on November 11, 2022 in Hyattsville (Maryland) by the article's authors.