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

Eksploracja i restauracja części fortyfikacji miasta Połtawy podczas wojny północnej oraz elementów fortyfikacji pola bitwy pod Połtawą w roku 1709

Key words: defense structures, Poltava, Poltava Battle, memorialization, musecning

Słowa kluczowe: struktury obronne, Połtawa, bitwa pod Połtawą, upamiętnienie, muzeum

Introduction
Today, the question of using historical fortifications to preserve them and find funds for restoration is urgent for many countries where the rich heritage of the Middle Ages and the Renaissance has been preserved (Poland, Czech Republic, Slovakia, Hungary, Ukraine). The problem is that many fortifications are located in inaccessible places, which complicates their inclusion in tourist networks, while others are in a severe state of disrepair and also cannot be included in tourist routes until major repair and restoration is performed.

The relevance of this topic is evidenced by the emergence of a number of publications, which also analyze the possibility of re-profiling historical fortifications, since in many cases this is the only way to preserve them. In particular, M. Dyomin, Yu. Ivashko and O. Ivashko formulated the criteria that historical fortifications must meet to carry out their re-profiling. However, this approach is possible only if the defense structures (or other historical buildings) are at least partially preserved. If they are not preserved, one of the possible ways to increase the tourist attractiveness of a particular city is to recreate them (more or less reliably). One example of a large-scale reconstruction of a historic building, which has been praised by both professionals and the public, is the reconstruction of the central part of Warsaw after World War II, led by Jan Zachwatowicz. However, quite often the planning structure of a city changes after the destruction of its historical fortifications and the complete restoration of its fortifications or even parts of them is impossible. In such cases, one can resort to rebuilding (according to archival materials or historical reconstructions by individual authors) of the most characteristic elements.
of defensive structures (the Golden Gate in Kyiv),
or to open the preserved elements of fortifications,
sometimes including them in cultural and educational
complexes (as it has been done with the bastion of St.
Andrew of Stanislav fortress in Ivano-Frankivsk)

Historic fortifications in many cities of Ukraine have
long become centers of tourist routes. The castles in
Kamianets-Podilskyi, Lutsk, Khoiny (fig. 1), Pidharsa,
Ostroh, Olesko, Bilhorod-Dnistrovskyi, or the
nineteenth-century fortifications in Kyivo are well-known.

However, there are many cities in Ukraine with an
ancient and rich history that have almost no preserved
historical fortifications. One of these cities is Poltava,
the first written mention of which dates back to 1074.
In 1709, the city and the surrounding area became
an arena of notable events that influenced not only
Ukraine but Europe as a whole. On April 6, 1709, the
siege of Poltava by Swedish troops, led by King Charles
XII, began and lasted until June 27. The Battle of
Poltava, fought between Swedish and Russian troops,
took place on that day, and was a victory that allowed
the Moscow State to reverse the course of the North-
ern War with the Kingdom of Sweden in its favor.

One of the means of increasing the tourist attrac-
tiveness of Poltava is the partial restoration or memori-
alization of its lost historical defensive structures—both
in the historic city center and in the Poltava Battle field.

Main material

The concept of forming the „Poltava Battle Field” Na-
tional Reserve was developed in the years 2002–2007,
under the guidance and at the initiative of Corre-
sponding Member of Ukrainian Academy of Architec-
ture, Ph.D., Associate Professor V.O. Trehubov. The
architects: O. Belaveska, S. Chopivska, T. Divomiak,
A. Shovkopyas, I. Babich, K. Trehubov also took part
in the development of the concept. The historical part
was prepared by historian L. Shendryk. During the
work on the concept, a list of structures that were in
need of repair and restoration, and a list of modern,
newly built structures and the identification of places
and structures for memorialization and musealisation
were prepared.

In 2007, by decree of the President of Ukraine and
the decision of the Executive Committee of the Poltava
City Council, the concept was approved and partially
implemented in the years 2008–2009.

One of the key provisions of the concept was the re-
construction of the city and battlefield defensive struc-
tures from 1709. It was decided to create additional sites
for memorialization at the site of the Podilsky tower
and the bastion next to it in the historic center, and to restore
the partially lost structures (the redoubt of transverse line
at the site of the Battle of Poltava) (fig. 2).

The main problems when rebuilding historical
structures (either fully or partially) include determining
the exact location of the structures, their likely appear-
ance and the possible degree of reconstruction (full,
partial or symbolic). The study of these issues requires
the use of a multidisciplinary approach, in addition to
scientific methods.
First of all, it is necessary to refer to historical sources that describe the defensive structures.

Poltava, as a fortified settlement, attracted attention in the seventeenth and early eighteenth centuries. After the Lublin Union in 1669, the Poltava region and Poltava itself came under Polish influence and control. The erection of the Poltava fortress took place in two stages: at the beginning of the seventeenth century, fortifications arose on Ivanova Hill, and in the 1640s they were expanded at the expense of Mazuriščka ravine along with the Poltavka River and parts of Institute Hill. After the expansion, the old part of the fortress was called Old Poltava, and the newly built – New Poltava.

Field Hetman of the Crown Stanisław Żółkiewski (restoration at the first stage in 1669) and the Great Hetman of the Crown Stanisław Koniecpolski (with whom the fortress was almost doubled) played a prominent role in the restoration and expansion of the Poltava fortress.

During the Hetmanate at the end of the seventeenth century a bastion system was introduced here, bastions and crannier defense structures were strengthened, and towers and wooden fortifications were reinforced and erected. Despite the modernization of the fortifications, as of 1709 Poltava remained a weakly fortified regional city, the fortification of which did not correspond to the European models of the time.

On the „Map of the Kiev Voivodeship” by G.L. Beaufort (1656), which is the first cartographic document of the town of Poltava and its borders, the outlines of its defensive structures are clearly visible, albeit in a reduced form. The maps of the period of the battle itself are more detailed and clearly show the types and general outlines of the old and new towns and defensive structures – for example, the manually drafted „Plan of Old and New Poltava” from 1709. However, the lack of detail and the low accuracy of these maps and plans make it impossible to use them to determine the exact location of the town’s fortifications.

The maps drafted shortly after the Battle of Poltava are more suitable for this, given that the rebuilding of the town’s fortifications did not occur during this period. These include, in particular, the plan of engineer Ivan Bishchev from 1722 (fig. 3a) and the plan of engineer Vasilii Kunzov from 1730 (Fig. 3b). These plans identify with their respective signatures the names and types of defensive structures, their size, and the residential and public buildings that surround them. In
Fig. 3. Historical plans of the Poltava fortress with the placement of defensive structures intended for memorialization and partial restoration: a — „Drawing of the town of Poltava” by I. Bishev from 1722/14; b — „Description of the plan of Poltava fortress” by engineer V. Kuzov (1730/15). 1 – location of the Podilska gate; 2 – location of the bastion.
Fig. 4. Plan of the battlefield of the Battle of Pultava. 1 – the second fortified camp of the Russian army; 2 – transverse redoubt; 3 – the third transverse redoubt, which was restored; 4 – longitudinal redoubts.
Fig. 5. Visualisation of the placement of the bastion and the tower (authors V.O. Trehubov, K.Y. Trehubov); the White Arbour is in the center.

Fig. 6. Podil’ska tower and memorial plaque; photo by K.Y. Trehubov.
addition to the bastions and moats with ditches, the town's defensive structures also included towers and gates. "All the towers were wooden, hewn, quadrangular, low, with pyramidal roofs." There were five gates: Podilska, Mazurivska, Kiyvska, Spaska and Ktyivska.

To determine the location of the town's defensive structures, the authors used the results of archaeological research in the territory of the Poltava fortress, during which cultural layers and objects from the seventeenth and eighteenth centuries were discovered and investigated. The main archaeological studies were carried out by I. Lipushkin in the years 1945–1946 at Sobornyi Square; I. Kulatova in 1990, at the site of a former confectionery factory; O. Suprunenko in the years 1997–2007 at the Mazurivska section of the fortress, Mykolaiivska, Institutsks Hills, Sobornyi Square, L. Vinogradovska and in 2005 at Spaskiy Square.

The analysis of studies on the history of the Poltava fortress, particularly the works of V.V. Vecherskyi, V.V. Vecherskyi, S.Ye. Gerbanovskyi, and Yu.G. Ivanuk, was also very important for determining the location, planning structure and appearance of the city fortifications of Poltava.

The bastioned defensive structures used in the Battle of Poltava, the site of which is located north of the city, are much better documented than the city's fortifications. There is a considerable number of plans of the Battle of Poltava, the comparison of which makes it possible to determine the location and appearance of defense structures with sufficient accuracy (as shown, for example, by O. Kovalevskaya).

The main battle-defensive structures include the second fortified camp of the Russian army and a system of four longitudinal and 6 transverse redoubts (fig. 4). A military engineering field structure – the redoubt is in the form of a 50 x 50 meters square on top of a breastwork. During the Battle of Poltava, redoubts were first used by Peter I in large numbers and in a certain order – in the form of a T-shaped plan. This arrangement made it possible to separate the advancing Swedish troops and deal the maximum amount of damage to them.

The placement of the redoubts is facilitated by the fact that in 1909, during preparations for a commemoration of the two-hundredth anniversary of the Battle of Poltava under the direction of Lieutenant-Colonel G. Lagorio, concrete obelisks (replaced with granite in 1939) were installed at the probable locations of the redoubts (in their imaginary centers).

Initially, design sketches followed by working documentation were developed for structures to be rebuilt and memorialized. V.O. Tregubov and K.Yu. Tregubov were the authors of these projects.

The tower and bastion were proposed as structures that memorialize the Poltava Fortress, and are also used as additional structures of the city's tourism infrastructure (fig. 5). It was decided to restore the bastion granary with the possibility of entering the stairs from the level of the White Arbour and from the level of pedestrian street on the side part of bastion.

The tower, as a memorialization image of the historic Podolsk tower, which was approximately sited in the area of the present-day Ivanova hill slope, has the appearance of a single-space log structure that is 4x4 meters at grade level and consists of two main masses covered with a viewing platform, which can be accessed via an exterior staircase from the ground level. The space beneath it houses a seasonal gift shop.

The observation deck is a gallery, covered with a four-sided roof that imitates wooden shingles and is topped with a small spire top, also made of wood. From this level there is a picturesque view of the old lowland city part and the new residential district of Levada.

On the ground floor there is a hexagonal granular entrance opening to the souvenir shop, on the door of which is a plaque with information about the building and the authors (fig. 6).

The building has additional exterior lighting and landscaping elements in the form of an additional paved walkway and imitation palace wall adjacent to the tower. Construction began in early 2009 and was completed in the same year (fig. 7). Over the course of the project implementation, due to lack of funds, only the structure of the Podilsk tower was built. Part of the works on memorialization of the bastion, as
listed in the project documentation (fig. 8), has not been completed.

Also, within framework of the concept and allocated financing, it was decided to restore one of the battlefield defensive structures of the Battle of Poltava, namely the third redoubt of the transverse line (fig. 9).

During the redoubt's reconstruction, a ditch was dug around the site of the existing obelisk and a shaft with a breastwork was dug up. The inside of the redoubt was reinforced with a covering of wooden piles and poles.

Conclusions

In Poltava, where urban fortifications were demolished in the early nineteenth century and city planning changed accordingly, memorialization is often the only way to reminisce about the historical past and create an attractive structure. This can be performed by building historical defensive structures that do not completely replicate historical models but are primarily intended to remind us of them. Such reminders of historical past have been used before (obelisks on the sites of the redoubts on the battlefield of the Battle of Poltava or White Arbour, which was built in 1909 partly on the site of a former bastion, which became one of the architectural symbols of the city and an extremely attractive place visited by Poltava's residents and tourists). At present, the full restoration of rather significant elements of the city's fortifications is either impossible (in order to accurately recreate the bastion at the Podilska gate, it would be necessary to demolish the White Arbour), or impractical in terms of attracting tourists.

Today, the complete restoration of historical fortifications (such as redoubts) is only possible outside of existing urban development on the former battlefield of the Battle of Poltava.

In addition to the cultural and educational aspect of the restoration of historical fortifications, the commercial aspect should also be considered. It was envisaged that the reconstructed defensive structures (primarily those located on the battlefield of the Battle of Poltava) would become powerful attractors for tourists (especially from Russia) and would significantly increase tourist flow. An analysis of more than ten years of use of the recovered sites shows that these hopes (at least for visitors to the site of the Battle of Poltava) were unsubstantiated. Throughout this period, considerably more people visited a small building on the site of the former Podilska tower in the center of
Poltava than the restored redoubt. At the same time, the reconstruction of the Podil’ska tower has a generic memorial character in terms of the location of the building, and differs significantly in size, massing and planning solutions from its historical prototype. The appearance of the tower is also, in fact, an adaptation of the generalized image of a log defensive tower from the seventeenth and eighteenth centuries, modified to perform modern functions: an attractive function of the observation deck and a commercial function in the form of a souvenir shop.

In the years 2008–2009, due to insufficient funding, the measures outlined in the Concept of the development of the „Poltava Battle Field“ National Reserve were not fully implemented. According to the provisions of the Concept, all redoubts, and subsequently the second protected camp of the Russian troops, should be completely restored. It also envisaged the restoration of the bastion on Ivanova Hill near the Podilsky gate. Considering the experience of using the reconstructed redoubt, the complete restoration of historical defensive structures on the battlefield of the Battle of Poltava currently seems inappropriate. It is unlikely to significantly increase tourist flow, given the current state of Ukrainian-Russian relations and the active use of speculation concerning the historical events of 1709 by modern Russian propaganda. From a cultural and educational point of view, the restored redoubt gives a sufficient idea of the nature of the defensive structures that played a part in the Battle of Poltava. It should also be kept in mind that the locations of all of the main defensive structures of the Battle have already been marked with memorial signs, obelisks, etc.

Instead, the experience of memorializing the individual elements of the Poltava Fortress' fortifications proved to be quite successful. This makes it possible to recommend the partial rebuilding of the bastion near the White Arbour, as well as the continuation of the memorialization of the key elements of the city's fortifications, while taking theoretical foundations and foreign and domestic experience into account.

References / Bibliografia

Ivashko Oleksandr, Moźdżerki użycia sztuki ulicznej we współczesnym dotowowaniu zamków i twierd., „Current issues in research, conservation and restoration of historic fortifications“ 2016, no 8, p. 86–90.
Kuśnierz-Krupa Dominika, Original historical spatial development research methodology on the example of the town of Skawina in Lesser Poland, „Landscape Architecture and Art“ 2019, no 14, p. 18–23.
Дмитрий Микола, Іванко Олександр, Системний підхід в ревалізації історичних формувань і промислових підприємств під арт-класстер, „Current issues in research, conservation and restoration of historic fortifications“ 2018, no 10, p. 30–33.
Падалка Лев, Карта Боярка о заселении Полтавской территории во второй четверти XVII века. Т-во Печатного Дела (Типография быв. И.А. Дохман), Полтава 1914.
План старой и новой Полтавы – ЦДВИА РФ, ф. ВУА, стр. 22368.


Чергіє городя Полтава Павла Бушева, 1722 г. ІЦВІA РФ., ф. 3, оп. 33, спр. 11086.


2 J. Zachwatowicz, Ochrona zdzietwie w Polsce, Poland: Warszawa 1965.


6 О.В. Коваленко, Полтавська битва. Археологічний літопис Любешівської України 2009, по 1, с. 13–24.

7 Л. Падалька, Карта Полтави в оселення Полтавської території во второй четверти XVII века. Т. Плетеничел Делта (Топография и вв. И.А. Доски), Полтва 1914.


10 План старовинної Полтави, оф. спр. 11 C.E. Гербовский, Исторические особенности в обороне Полтавы и об освобождении Полтавского сражения; ур. Д.В. Панов (сост). Из истории русского военно-инженерного искусства: сборник статей. Воениздат, Москва 1952, с. 51–62.


12 Строитель Полтава Ивана Бушева, 1722 г., ІЦВІA РФ., ф. 3, оп. 33, спр. 11086; Л.А. Гольденберг, оф. спр.

13 В. Лоченець, Полтава на гравюрних планах 1730 р., Український археографічний щорічник, 2013, по 18 (21), с. 170.


Ibidem.

Abstract
This article discusses the peculiarities of memorization and musealization of the fortifications of the town of Poltava, which are dated to the beginning of the eighteenth century, and the field fortifications used during the Battle of Poltava in 1709, and including them in the general concept of development of the Poltava Battle Field National Reserve, with a partial restoration of these structures. The authors highlighted the rethinking of the functions of historical fortifications in light of current experience.

Streszczenie
Artykuł dotyczy możliwości upamiętnienia i muzealizacji struktur obronnych miasta Poltawy z początku XVIII wieku oraz okresu bitwy pod Poltawą w roku 1709, będących częścią Narodowego Rezerwu „Poltawa Bitwy w Poltawie”. Koncepcja rozwoju rezerwu zakłada m.in. częściowe przywrócenie historycznych struktur. Autorzy artykułu zwrócili uwagę na potrzebę ponownego przemyslenia funkcji fortyfikacji historycznych w świetle aktualnych doświadczeń.