

## **Stated Destruction of Austro-Hungarian Fortification around the City of Sarajevo with a Focus on the Objects „Polygon“, „Pašin brdo“ und „Vra[t]ca“.**

The aim of this report is to give an overview about the very negative development regarding the state of preservation of Austro-Hungarian fortification around the city of Sarajevo. The site inspection of the forts Polygon, Pasin brdo and Vratca on the 11th respectively 12th of October this year and the discover of evident loss of substance lead the author to write this report. The survey of fort Vraca was done during an excursion that was part of the symposium „Civil-military Cooperation regarding Cultural Property Protection in Crisis Response and its aftermath“.

All the mentioned objects have been surveyed by the author in the year 2011, some of them in 2013 as well. Further on, documentations done by fortification experts from Germany (2018), Slovenia (2014) and the Netherlands (2009/10) could be analysed for this report.

Among those three objects only fort Vratca – as part of the „Spomen-Park Vraca“ - is listed as national monument (BiH).

### **[former] Fort N° IV „Pasin brdo“**

Mountain fort partly with armor of a type designed especially for the protection of the capital Sarajevo. In fact this type of forts was realized only around this city. It was built between 1888 and 1889 as the first of the four "major girdle-forts" and formed the northeastern cornerstone of the defensive belt. It is an early example of an armored fortification built by the former Habsburg Monarchy and one of only five forts in Bosnia and Herzegovina, which included an armored battery. The general design came from the pen of the then general inspector of fortification engineers Daniel Baron of Salis-Soglio. As the first realized example Pašin brdo formed the prototypical scheme for the four main forts around Sarajevo.

This fortification was partially rebuilt in the years 1897-1898. E.g. the two rotatable observation cupolas were installed above the existing caponiers on the lateral sides. Fort Pašin brdo hasn't been involved in fighting during the First World War. The Second World War and the siege of Sarajevo (during the Bosnian War) survived it largely undamaged.

#### Importance:

1. It is, despite the loss of substance during the past ten years, one of the best preserved fortifications from Austro-Hungarian times in Bosnia and Herzegovina.

2. In contrast to the forts Vratca and Polygon, no structural changes were made to Pašin brdo. That means it is preserved in an authentic way. Thus, in addition to the two armored cupolas of the mortar battery, all the ceiling constructions (including the steel elements) from the construction period are preserved, or at least recognizable.
3. Pašin brdo is located in a scenic location. From Sarajevo it is within walking distance or easily accessible by car. Thus, it has great tourist potential. In the immediate vicinity the former guardhouse Gradonj can be reached. This object was renovated about ten years ago and a tourist-museum use was fed.



Fig. 1: Tin roof on the battery block, May 2011



Fig. 2: Completely removed in October 2018



Fig. 3: Inside right caponier, May 2011



Fig. 4: The same in October 2018: Destruction on masonry and missing armor plates

#### Destruction:

At fort Pašin brdo, two developments can be identified, each aiming to get the recoverable metal (iron or steel):

1. Most visible is the removal of the sheet metal covering. This was almost complete above the central part (battery block) of the accommodation building (see Fig. 1) and

partially preserved in the area of the two flanking elements. As can be seen in Fig. 2, the tin roof is now completely missing. In addition to the historical value - this tin roof was one of the last surviving all over Bosnia and Herzegovina - the lack of water-bearing layer leads to an accelerated deterioration of the fort.

2. Destruction of the masonry to obtain the high-quality steel armor. In the area of the right flank of the accommodation building (access corridor) and the right caponier, stones were broken out of the masonry (see Fig. 4), in order to subsequently win the steel plates. These were quite well preserved during the documentation in 2011 (see Fig. 3). In addition to the loss of these essential armor, these "artificially induced" damages to the masonry also force further decay. Conversely, subsequent consolidations of such damage are associated with high effort and costs.

In addition to the active destruction by the people, the object also suffers from the unrestrained proliferating vegetation. Above all, birch trees, which have settled on the walls or grow out of the gargoyles, are destroying the masonry, which in turn means that more moisture can penetrate.

All vegetation within the perimeter walls should be removed immediately. Locking the object, which is only accessible through a gate, would at least make further destruction more difficult.

### **[former] Interval fort „Polygon“**

Polygon was built in the years 1888-1889, so parallel to the fort IV Pašin brdo. On this object again, general Salis-Soglio took significant influence on the draft.

In contrast to the other fortifications around Sarajevo, Polygon is an example of the so-called platform forts, which were mainly built as part of the fortresses Bileća, Trebinje and Mostar. It is the best preserved and also in its appearance largely unchanged fortification object both around Sarajevo as well as in Bosnia and Herzegovina. The only change that is even difficult to recognize from the outside is the covering of the courtyard and the entrance gate. In the area of the right flank and the gorge caponier, damage to the masonry can be detected, which may be due to a shelling in the Second World War or the time of the Bosnian war.



Fig. 5: Entrance of the fort and gorge caponier, May 2011



Fig. 6: Growing vegetation, October 2018



### Importance:

1. Polygon is the best preserved among all the fortifications built under the administration of the Hapsburg Monarchy between 1878 and 1914 in Bosnia and Herzegovina. This concerns both authenticity, the well-preserved building structure, as well as the many preserved details (outer and inner entrance gate, tin roof, lightning protection system, etc.).
2. This fortification, together with Pašin brdo, was the first fortification to be completed in Sarajevo in 1889. It is the last realized example of the so-called platform fort type in Bosnia and Herzegovina.
3. Like the "Bijela Tabija", Polygon was situated above remains of the Ottoman city walls. It can therefore be assumed that – especially under the platform - older structures have been preserved.

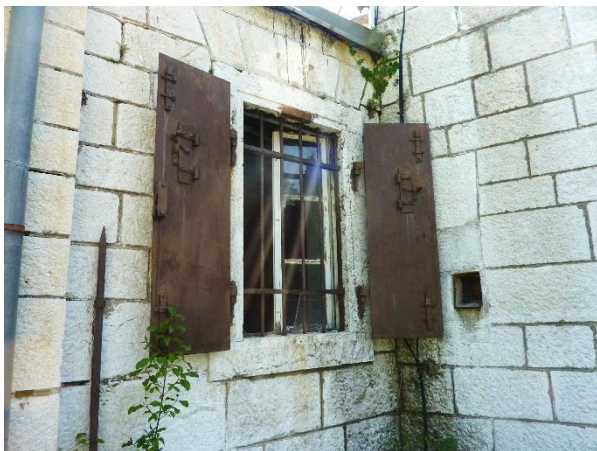


Fig. 7: A window with preserved steel shutters, May 2011



Fig. 8: The same window in October 2018

### Destruction:

Comparable to Pašin brdo fort, Polygon also looks abandoned. The object is more overgrown compared to the first ascent in 2011 (see Figures 5 and 6). Since Polygon is still in military possession, the loss of substance here is not so evident, in comparison to Vraca and Pašin brdo. However, the loss of the two bullet-proof steel shutters (see Fig. 7 and 8) close to the main entrance is particularly painful. These elements were, to the knowledge of the author, the last around Sarajevo and probably the last surviving examples of this kind in Bosnia and Herzegovina!

## **[former] Fort N°II „Vratca“**

The fort number II “Vratca” or Vraca formed the southwestern stronghold in the defensive line around Sarajevo. It was built in the years 1897-1898 under the responsibility of the captain (of fortification engineers) Erwin Suchanek. The pattern of the fort is the same as Pašin brdo, which was built ten years earlier. However, Vratca features an asymmetrical floor plan adapted to the tactical function and topography of the site.



Fig. 9: The main entrance gate, May 2011 Fig. 10: The reconstructed wall and the new steel gate, October 2018

This fortification has been structurally altered since its construction. Presumably in connection with the realization of the "Spomen-Park Vraca" almost all ceilings were replaced by reinforced concrete ceilings.<sup>1</sup> At the same time the subdivision of the ground and upper floor was changed. In order to improve the (natural) lighting of the rooms upstairs, openings for four skylights were cut out in the top ceiling. Finally, a new entrance door was cut out of the free standing defensible walls of the front battery. Despite these massive interventions within the building structure, the external appearance was only slightly changed. Like Pašino brdo, Vratca has little (visible) damage from the time of the Bosnian war.

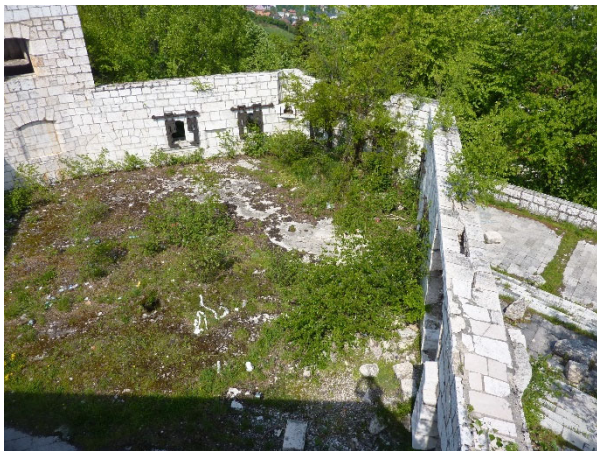


Fig. 11: Courtyard with gorge battery, May 2011

Fig. 12: The same in October 2018

Noteworthy in this object were the numerous, until about 2014 received details. In addition to the two armored cupolas for each a 15cm mortar / mark 1880 were the two rotatable observation posts (see Fig. 13), the steel shutters for the gun embrasures both in the front and gorge battery (see Fig. 11) and many original gates on the ground floor of the barracks building and the front-side caponier. The steel shutters and the wooden gates studded with sheet metal (see Fig. 15) were the last in Bosnia and Herzegovina to be preserved. The two stolen observation turrets were among the last four (!) Surviving of the entire Habsburg monarchy, leaving 50% of this type irretrievably lost.

Vratca is the only fortification around Sarajevo, which dates back to the time of the Austro-Hungarian Monarchy and - as part of the memorial site - is a listed building.

<sup>1</sup> Maybe the ceilings were damaged or destroyed and had to be replaced.





Fig. 13: Rotatable observation post on the left caponier, May 2011



Fig. 14: Cupola is missing since 2014



Fig. 15: Entrance to the barracks, May 2011



Fig. 16: The same in October 2018

#### Importance:

1. Vratca is one of two preserved main forts of the former "Fortress Sarajevo". A special feature is the asymmetric layout. Only here the ground section of the fort had a, due to the tactical task and the topography of the site adapted floor plan.
2. Despite the structural changes and the loss of substance in recent years, Vratca is a very well-preserved fortification of the 19th century, in which two of the last armored cupolas of this type are yet (!) preserved.

#### Destruction:

Although the former fort Vratca is on the list of listed buildings in Bosnia and Herzegovina, this one suffered the most serious destruction and loss of substance. Until, at least, 2013 many historic, i.e. from the time of construction before 1900 (!), details were preserved. The loss of substance can be divided into three groups:

1. The **two-winged doors** from the construction period of the ground floor of the accommodation building (see Fig. 15) and the door leading to the front side caponier. They were among the last preserved elements of this kind!

2. The **steel sliding shutters** protecting the gun embrasures represent a significant loss. Fort Vratca was the last object in which these were still present in situ!
3. At least as painful is the theft of the two **rotatable observation turrets**, which were built in 1897 by the company Emil Skoda in Pilsen [Plzeň]. In 2011, a total of five examples were preserved. Since the two turrets of Vratca have been discontinued, only two have survived worldwide.

It should be noted that obviously the public authorities have responded to the theft of observation domes, steel sliding shutters, etc., and the fort is closed for the public now. That is, Vratca fort can only be entered by occasion of a guided tour. In this context, the gorge wall (main entrance) was reconstructed. These safeguards are to be seen as a positive development. In terms of international conventions on monument preservation, however, the reconstructed sections (see Fig. 10, right in the picture) should differ both from the original masonry and from the reconstructed of to the 1980s (also recognizable to the laity).

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