RECONSTRUCTION OF ČEJVAN – ĆEHAJIN HAMMAM IN MOSTAR

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Fig. 1. Čejvan – Ćehajin Hammam today

Abstract:

After the Old Bridge complex, reconstruction of Čejvan – Ćehajin Hammam in Mostar was the biggest reconstruction project after the war in 1992 -1995. It was an international project funded out of local, French and Turkish assets. As the Hamam was not in function for at least 100 Years, and that some parts of it were irreplaceably gone, it was impossible to reclaim it's original function, so it was reconstructed as an exhibitioner facility. Nevertheless, all original elements such as hypocaust floor with heating channels were preserved. In this reconstruction we used only materials that were found in situ –

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stone blocks of same quality, mortars of same components, hand made bricks identical as the ones found in the vault, glass and lead. The condition of Čejvan – Ćehajin Hamam was very poor in the moment when the reconstruction started. Years of neglect, new surrounding structures ignorant towards Hamam and severe war damage left huge wounds on this beautiful monument. As this project started in autumn 2003 and it had to be finished until the opening of the Old Bridge on 23.07.2004, it was a hard task to do.

Key words: Hammam, Mostar, reconstruction, Cejvan-Cehajin,

1. Hammam in Bosnia and Herzegovina

Hammam as a building type and custom was brought to Bosnia and Herzegovina by the Ottomans. This was not the first bath-type structure in B&H – during the Roman period, as the country was rich in thermal wells of the highest quality, one of the settlement types was in vicinity of the Baths. From that period we have several big and important locations: Dolmavium in Srebrenica, Aqua S in Ilidža, Fojnica and many others.



Fig. 2. Arial view to Hammam and surrounding area from 1993.

The location, form and layout of Bosnian Hammams was similar as many throughout the Ottoman Empire, and although it had close connection to obligatory Islamic rituals of washing, it was also a place for social interaction. It was free for everyone, male, female, young, old, rich and poor. There were two types of Hammams: "tek-hamam" (single) and "čifte-hamam" (double). The "tek-hamam" women were allowed to come in during daylight hours, and men early in the morning or evening. In "čifte-hamam" parts for women and accessories for men were completely separate. Some baths in Bosnia and Herzegovina were complex, but in addition to the male and female parts, had a part for non-Muslims.

Hammams were paved with large stone slabs, domed or coved with barrel vaults made of tufa stone or brick, with lead cladding. On the vaults and domes there were small openings, usually hexagonal, octagonal or star-cutted and arranged in rows or circles, covered with massive, rounded, convex glass lid (an elephant's eye).



Fig. 3. Čejvan – Ćehajin Hammam in 2002, South façade

The main materials for the construction of the Hammam were limestone, travertine, brick and lime mortar mixed with keče (especially processed hair scraped from bovine skin) served as mortar. The walls were 70-155 cm thick, outside always somewhat thicker than in the interior.

Each hamam had at least three rooms: Šadrvan - Fountain (Apodyterium) that served as a waiting room and dressing room and there one could usually get tea or coffee, Kapaluk (Tepidarium) where the body is wash with soap and water, massaged and rubbed, hot room Halvat (Caldarium), in which the body was exposed to steam. In addition to these, each Hammam had three additional rooms: Hazna or water tank, and Ćulhan for heating and toilet. Bigger Hammams also consisted of Mejdan – big squared room for massage, depilation or resting.



Fig. 4. Čejvan – Ćehajin Hammam in 2002: a) main room; b) dome

2. Background of Čejvan – Čehajin Hammam Reconstruction

Full view to Čejvan Čehajin hammam was possible after the demolition of residential building from Austro-Hungarian period which was almost completely destroyed in the last war (1992-1995). It was not a rare example that large scale buildings from Austro-Hungarian period were interpolated into the small-scale fabric of Ottoman settlement throw-out the Bosnia and Herzegovina cities. That was also a proof that the Hammam was already not in function at that moment.

After the devastating war in 1992-1995, Mostar, especially its Old Town, suffered major destruction. Not just that the Old Bridge, the symbol of Mostar was destroyed, but also the majority of the buildings on both banks of the Neretva River.

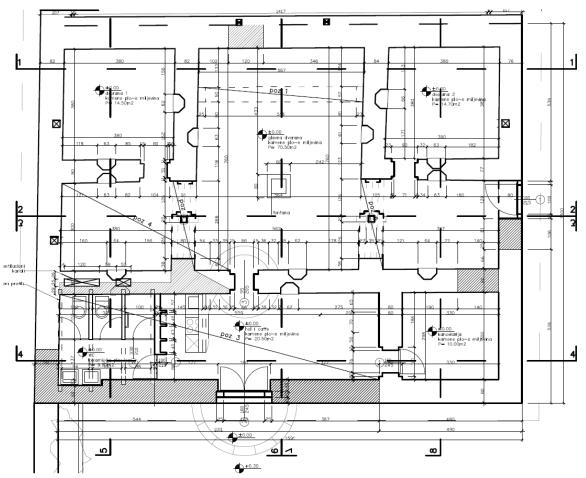


Fig. 5. Čejvan – Ćehajin Hammam - layout

The ruins of valuable historical buildings were outspreaded all around the city waiting for reconstruction. First years of that process comprehended the repair of smaller buildings, mostly by assets of the users and without the consultations with professionals in the field of reconstructions. Available materials were also inadequate, which in combination with lack of knowledge and need to speed up the reconstructions was devastating for many valuable structures. One of the problems was also the ownership – most of these buildings had more than one owner, and City governance and donors were not in the position to invest in that kind of arrangement. Looking from the professional side – the worst problem was the lack of satisfying basic documentation and projects. The archives were mostly lost in shelling and fires, many architects, historians and engineers was depopulated to other countries during the war, so the situation for drafting the proper

projects and deliver quality reconstruction was poor. The time was important so there was no space for proper investigations and archaeological survey in-situ, most of the projects were just an extension of sometimes inadequate interventions from '60, '70, and '80. Moreover, the jurisdiction, competency, and hierarchy was completely unintelligible. Before the war, Bosnia and Herzegovina, within the Federal Yugoslavia had several levels of monument protection institutions, with clear organization and hierarchy. After the '90's war, and Dayton peace agreement and its Annex 8, the Commission to Preserve National Monuments was formed on the state level. Nevertheless, two entities formed had Institutes for Protection of Cultural, Historical and Natural Heritage of Bosnia and Herzegovina. Instead of establishing good relations and distribute the jurisdictions and engagements, these institutions started the conflict that led to many misunderstandings, bad judgments and quarrels, that led to serious problems in the real situations.

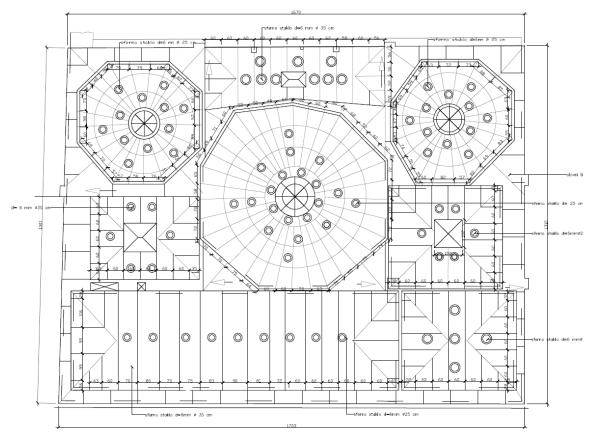


Fig. 6. Čejvan – Ćehajin Hammam – roof plan

Hammam of Mostar was one of the monuments that suffered a lot because of all these problems. Although the reconstruction in 1954 was unsuitable and inadequate for contemporary standards, it managed to consolidate and preserve the remnants of the structure for following years. Archaeological excavation were absent than, but unfortunately they were also not part of the survey before the last reconstruction. That led to many problems due to different theories between the experts: on one side UNESCO (with Mr. Bernard Fonqurnie as engaged expert) and Institute for Protection of Cultural, Historical and Natural Heritage of Bosnia and Herzegovina, and on the other side the Commission to Preserve National Monuments (with Mrs. Zeynep Ahunbay as engaged expert). During the reconstruction, the most challenging part was to balance the relations between these parties and to keep the site functioning. At the end, although the Hammam is one of the most valuable and most important monuments in Bosnia and Herzegovina, it

is not on the list of national monuments, but on the other hand it is a reconstruction performed under strict UNESCO regulation and patronage

.This was obvious example how politics and personal egos unfortunately can counteract professionalism and benefits for the heritage, which is our common human treasure that we all should nominate as first goal in process of protection.

3. Description of Hammam

3.1. Layout

The building of Hammam kept all of its basic layout elements except Hazna and Ćulhan at the north side. These parts were demolished probably during the 19th century and become part of a private estate on the north and west side. They are recognizable only in segments of the stone arch that was made of beautifully carved travertine and whose vertical dimensions was significantly lower than the rest of the building. By comparing with similar structures it was concluded that this space was covered by stone slab on slope roof structure. Due to the devastation of the west wall, ceramic water pipes, functioning on the principle of connected vessels, were visible.

South façade and two rooms on the south west were heavily devastated by the building from Austro-Hungarian period. By the survey of the pipes in the western wall, we could determine that small devastated room on that side was probably toilet with only cold water available. That room was probably covered with groin vault made of tufa stone. Central south room was probably an entrance – no pipes were found in the walls and it was covered by barrel vault also made of tufa stone. From this room it was possible to enter the central space (Šadrvan), through the narrow doors.

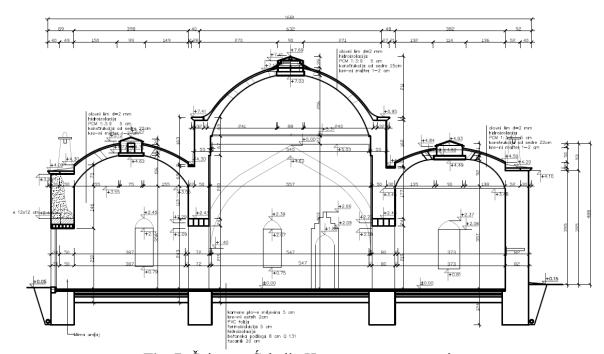


Fig. 7. Čejvan – Ćehajin Hammam – cross-section

Central space of Šadrvan was divided by the pointed arch to two separate ceilings dome on bigger span, and small barrel vault on the north side. Entire structure of the dome

is based on four pointed arches made of beautifully chiseled limestone. On three sides the arches were within the massive walls.

The layout of the Hammam was symmetrical – on the western and eastern side from Šadrvan we have two rooms with groin waults, from where we can enter two separate rooms on the north-west and north-east corners covered with domes.



Fig. 8. Hammam in 2002: a) north-east dome; b) ceramic pipes

3.2. Construction and Materials

Foundations of the Hammam were made of big limestone blocks and their depth is approximately 130cm and width 100.110cm. They are well preserved except under demolished parts of Hazna and Ćulhan.

The base of the entire structure is stone wall, 80cm thick made of chiseled blocks on both sides with filling of crushed stone. As the stone blocks on the outside face of the walls were not representative, it is most probable that it was plastered with lime mortar. All original mortars were lime mortars, cement mortar was used to consolidate and build elements from 1954 reconstruction.

Big dome and all barrel and groin vaults were made of tufa stone, and two small domes were made of thin brick blocks. North-east small dome was reconstructed in 1954 and was made from contemporary brick in cement mortar. Under all domes and vaults there is one row of thin brick that was placed on top of the stone walls.

The entire structure was originally covered with lead coat with convex openings, but the lead eventually disappeared and in 1954 they covered the domes and the vault with cement mortar.

The interior of the Hammam was plastered with lime mortar except pointed arches that were made of quality limestone, painted white.

The floor of the Hammam was heavily destroyed. The survey showed that it had system of hypocaust heating with channels for hot air. The floor was paved with 8cm thick limestone pavement blocks.

4. The Reconstruction

The project for the Reconstruction of the Čejvan – Ćehajin Hammam took into consideration archeological survey and current layout of the building. As it was impossible to reconstruct the two missing parts important for the functioning of Hammam (Hazna and Ćulhan), it was decided that the building is going to be reconstructed as multi-purpose facility. The main entrance to the building was from the south façade. Entrance hall was equipped with the installation for possible bar on the west part (water and sewage). The toilet was positioned in south-west room where it probably was originally. Other rooms were multi-functional, equipped with electrical installations and lighting. Because of the new allocation, the building was equipped with air-conditioning system, with distribution of air through the hypocaust channels. The main unit was installed above the toilettes.

The works on the Hammam started with careful cleaning of the demolished parts and removal of remnants of Austro-Hungarian structures within the body of the walls.

First it was important to consolidate the foundations on the south side. After that it was possible to start with masonry works on the south wall. Clear distinction of the new and old wall was made by performing the line between them in form of wider joint. After the wall was finished, the layer of thin bricks was laid as the base for the barrel vault made of tufa stone. With that, the Hamam was ready for the winter – the works inside of the Hammam could start. As the walls inside of the Hammam were partially unstable and some of the arches needed serious repair and change of the blocks, it was necessary to build the scaffolding and centering for the arches.





Fig. 9. Hammam in 2004: a) repaired pointed arch in main room; b) entrance barell vault

The domes and vaults were repaired and covered with thin lime mortar coat under the lead shroud. Special convex glass elements were ordered for the openings on the roof, and above the central dome we installed the skylight similar to the ones on same structures.

The important issue was also the capillary moisture we noticed in all the walls, but as the Hammam is now surrounded with other structures, it was possible to install the drainage pipes only on small part of the west walls. That is why it was decided to plaster the bottom part of the walls with lime mortar with addition of bauxite earth – in order to make waterproof layer at least from the inside. The entire interior of the Hammam was plastered in traditional way by the thin layer of lime mortar. The floors were paved with 8cm thick slabs of tenelija limestone (same as the one used for the Old Bridge).

5. Conclusion

Instead of being one of the most popular reconstructions in post-war Mostar and Bosnia and Herzegovina, the Reconstruction of Čejvan – Ćehajin Hammam was put to margins because of unsolved relations between two institutions. That is why the Hammam, twelve years after the reconstruction, still did not make its way to the List of National Monuments in B&H.

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