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TITLE: TOTAL RECONSTRUCTION: A CASE STUDY OF ALADZA MOSQUE

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ABSTRACT

Keywords: total reconstruction, authenticity, fragment recomposition

What makes a completely reconstructed building an asset of architectural heritage?

Most certainly it is an immaterial component: the cultural significance of the building, fragments of collective memory or the unwillingness of the people to accept the fact of destruction. UNESCO has pointed out that the intangible component is as important as the physical like in the case of Aladza Mosque in Foca. The research and experience gathered from the destruction of the mosque along with the project of reconstruction, and the rebuilding that will follow will become an essential part of this heritage.

The physical presence of this XVI century building is scarce, it is more like evidence and proof of existence rather than stone pieces that can be recomposed into the reconstructed building. This paper follows the research and recording of the site and its remains, and exposes the emergence of detailed project designs.

1. HISTORICAL BACKGROUND

Aladža Mosque was built in year 1550/51. (957.according to Hidjra)¹ by Ramadan-agma architect from Mimar Sinan s circle. Besides the architecture, its decorations were exceptionally refined and sophisticated, and even its name in origin means The painted Mosque.

The Mosque was completely destroyed by dynamite in 1992, and its stone blocks and remains were **taken** to garbage deposits and the river, where they were exposed to the atmospheric influences and total neglect. **Later these fragments were retrieved and brought to the site or protected in National Museum.**



Fig. 1 Historical photo of Foča and Aladža Mosque ,early XX century,author unknown

¹ One of the first records of Foča was by the traveller Evlija Čelebi in 1664, who also left a note an inscription on a mosque and wrote about the exemplary beauty of the region according to book Alija Bejtović: „History and Art of Foča“ pg. 40,41

2. ARCHITECTURAL FEATURES

The complex consists of the main **object - the Mosque**, fountain, sadrvan, turbe (tomb), tombstones **and** courtyard, all together 1649 m².

The central space of the Mosque (**thickness of the walls 118 cm**) **is** shaped as a nearly perfect cube (11.22x11.30x11.50m) with a dome of total height from ground of 19.85 m. At the right corner was an extremely tall and slender minaret - **39.70 meters tall** (including the alem – the final decorative piece on the top).

It is a single domed mosque with an open portico **with three smaller domes, stone columns and arches**. This mosque is an expression of the classical style of Ottoman architecture in XVI century, although with slightly different proportions to other mosques of this period where vertical dimension is more accented. **Internal delicate and intricate decoration is the most recognizable feature of this object**.

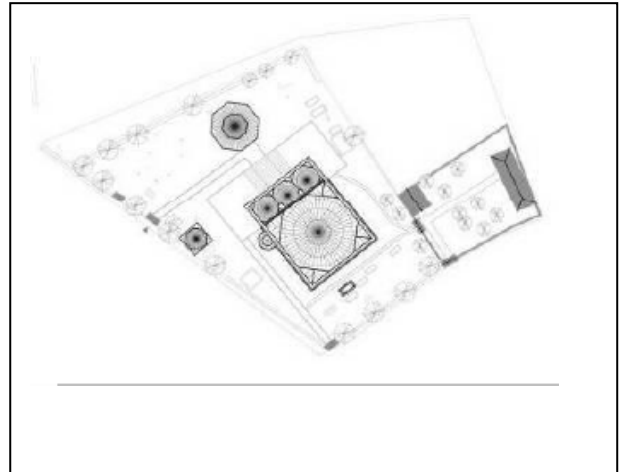


Fig. 2 Drawing showing the composition of the complex

The building was constructed with precisely-cut stone blocks of tuff (travertine stones), portico with a mix of local hard lime stone, and the minaret was made of a local soft lime stone from quarries of Miljevina (**small city near Foca**).

3. THE RESEARCH

The data used in this research was gathered from books and archives of relevant institutions, as well as remains (foundations and **original** stone pieces) found at the site. The object was recorded in detail by Andrej Andrejević who described the architecture but even more the decoration and stone carving. The following documentation has been the most relevant document functioning as a starting point in the project design.

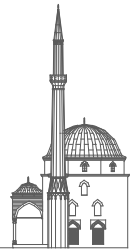

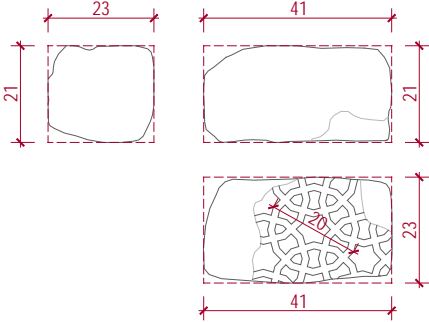
1. Book by Andrej Andrejević – Aladza Mosque in Foča, Belgrade 1972
2. Drawings made by Federal Institute BiH in 1989, especially photogrammetric drawings of elevations
3. As a precise record of existing and together with legislative protection is the Decision of the National Commission to protect Monuments No.06.1-02 1062/03-6 from 6.July 2004
4. Record of the site by Geodetic survey and record and measuring of the stones and producing an ID for each stone.

4. PROCESS OF IDENTIFICATION OF THE STONE REMAINS

In 2005 excavations took place and about 20 **best preserved** decorative stones were taken to the National Museum in Sarajevo for conservation. National Commission protected the site and the remains (foundations) **which are in quite sound condition**. **During** the following year stones were excavated from the **riverbed** and brought to the site where they are preserved today. The most important stones are kept in the temporary wooden **sheds** and others are on the site. The work **on recovering and sorting** and identification of the remains was conducted in Spring 2008. Since most of the stones are quite damaged, they are mostly used as samples or pattern forms (for decoration).

- On the site there is about 3-4 m³ of travertine blocks that were used for walls.
- Stones **M**: Minaret **300** blocks of base, shaft, serefe and above serefe out of which 63 is complete for reuse.
- Stones **L**: Arches from doors and windows which are in good condition about 25.
- Stones **V**: 63 cornice blocks, mostly reusable or partly usable.
- Stones **D**: decorative blocks in total 152 pieces, very damaged but some can be reintegrated in the new reconstructed parts.
- Stones **S**: parts of columns of the porch and tomb, unusable.
- Other important stone was from the top of the dome with a chandelier hook that implies the size of the dome.
- About 20 most important decorative elements are in the National Museum together with the capital of the porch column that is preserved.

Table 1. ID stone 54

ALADŽA DŽAMIJA		Photo:	
	D53		
	Identification Decorative piece of mihrab, the sinan loop decoration that framed the mihrab		
height= 23 cm	CRTEŽ:		
Traces of color visible on the stone, original red			
The Block can be used in the recomposition with skilled craftsmen.			

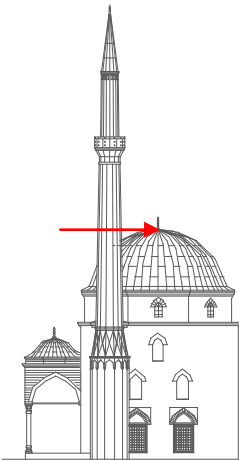

ALADŽA DZAMIJA		FOTO:
	VK	
	<p>Identification of the fragment</p> <p>Top of the dome key stone with an iron hook for the light fixture</p>	

Table 2. ID stone Top of the dome

5. APPROACH TO THE RECONSTRUCTION

Complete or partial reconstruction is not a solution for all cases, but this type of intervention has been inevitable in case of **Bosnia and Herzegovina** due to extensive loss and many inappropriate interventions on historic objects. The **purpose** of the work is to emphasize the existence of many layers and meanings of an object's integrity and authenticity, other than its material presence. Total reconstruction is not an option here, it is the only way to restore its meaning. Extreme destruction circumstances (especially intentional and systematic ones) cause social scars, and rapid loss of memory of place. With carefully executed projects, their reconstruction becomes part of their integrity, accepted in the community, and treated as legitimate heritage with inevitable reminders of the last war.

The reconstruction of the Mosque is important from many different perspectives:

- Foca has lost its urban image, which possessed a typical Ottoman city layout, and all of its mosques.
- The Islamic Community is working to restore some of the monuments, but Aladza Mosque is really the crown of those efforts.
- There is enough documentation about the mosque as well as fragments that allow an authentic reconstruction process.

5.1 Approach and methodology:

The general conclusion is that there is enough documentation and physical evidence (stones) for a genuine facsimile reconstruction of the monument (and typological when needed) and the entire complex (tomb, fountain, graveyard).

- Complete constructive and architectural reconstruction according to the available graphic and photo documentation, as well as the original stone blocks on the site.
- Anastylosis, recomposition of all original stones that can be reused in their original place, and exhibition of all remaining fragments
- Application of authentic materials in the reconstruction, same stone, similar quarries (research on quarries is carried out) wood types etc. Use of construction techniques and tools (hand tools) that will produce the results that are closest to the original methods.
- The clarity of reconstruction: no fake patina on new blocks or cleaning of patina from the old blocks, all known patterns to be repeated, or apply the method of analogy or typological reconstruction when some details are unknown.

6. THE PROJECT

The project design was developed as combination of detailed and abundant documentation prior to destruction, site and typology research as a total reconstruction, with use of new materials as close as possible to original and integration of original fragments is the only way acceptable and appropriate approach. After the research done on the site and documentation, a geo-mechanical and soil investigation was undertaken in order to inspect the structural condition of the foundations since they have been exposed to the atmospheric influences for a long time, to test for water levels since it is quite close to river Čehotina and in general composition of the soil in the site. This was made by Technical Institute for materials in Bijeljina²

The foundation remains, show us the depth and composition of the walls, position of the main interior elements of the mosque, like mimbar and mihrab, and it also contains the minaret base made out of hard lime stone, as a basis for the upper rows, their size, direction and position. Also it shows the exact dimensions of the portico. Upon works on excavation, it was concluded that the foundations made out of hard lime stone are only 50 cm thick and all underneath was made of rubble stone. **The foundations need repair and replacement of some broken and missing stones at the ground level.**

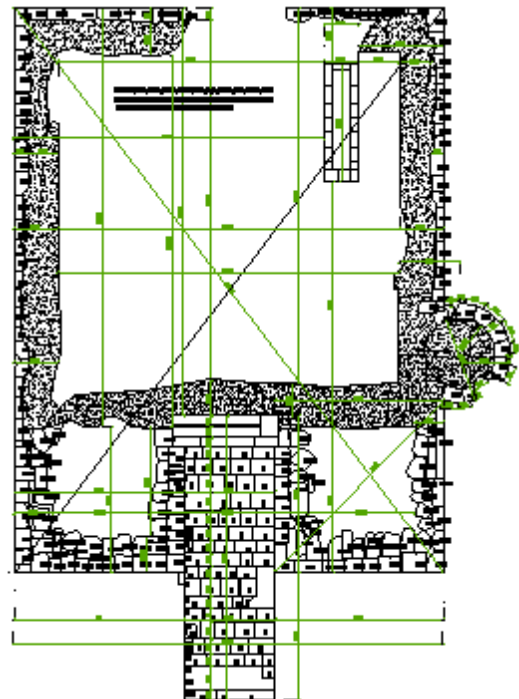


Fig.3 Survey of the Foundations

² Naučno istraživački i tehnički institut Bijeljina, Report made in July 2010, supported by the US ambassador fund and Comission to Protect National Monuments.

The project started as an analytical process but it became a synthesis of all the collected data once it was becoming an actual architectural project. The walls are composed of two layers of tuff stone with rubble in between and they support the drum of the dome with eight windows. The dome is also tuff or else called travertine stone 50 cm thick, with a hard lime block as key stone. Each element is finished off by decorated cornices 20 to 35 cm thick. The domes of the portico are made out of „Turkish bricks“. The reconstruction of the exterior was made according to the existing fragments and their dimensions (like wall stones, main columns, top of the dome) and photogrammetric drawing of the Federal Institute from 1988. The interior has smaller fragment pieces that show us the type and character of the decoration, but not the element as a whole. Mostly the architectural dimensions were according to measurements of remains on the site and the drawings in the book by Andrej Andrević. There are remains of carved relief stones with so called Sinan loops decoration surrounding the mihrab, refined carnation decoration from mahvil. Most of these pieces cannot be integrated into the whole since the fragments are small and broken. They would find their place in an exhibition area close to the mosque in the future.

The structure of the mosque is simple and straightforward, but we must bear in mind that it is a product of rich and long tradition of the Ottoman and earlier the Byzantine Empire. In a way the mosques in BiH, being less elaborate and grand, demonstrate the master craftsmanship and the architectural ideas behind it.

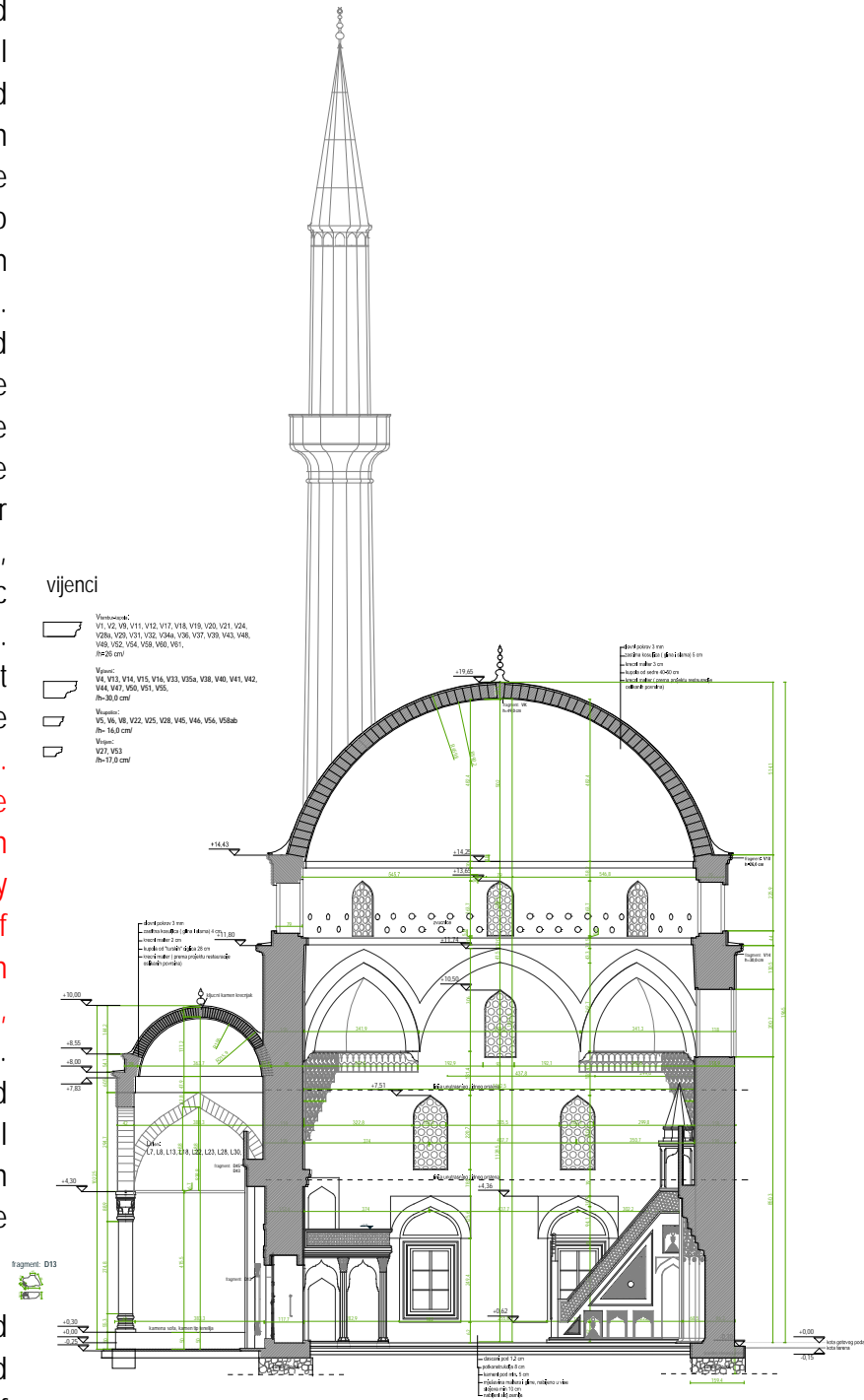


Fig.4 Section, part of the main design project completed in 2009.

7. THE MINARET

The minaret is very tall and the width of the blocks vary between 30 cm to 19 cm at the top. The walls of the minaret are interlaced with a spiral staircase that holds the structure together. It was built from soft lime stone from a local quarry in Miljevina near Foča, but the first few rows were massive hard lime stones. The minaret has intricate and delicate decoration, especially of the shaft with rows of stone at the bottom and at the top of the shaft. Many of them have been recovered and will be reconstituted back into the building.

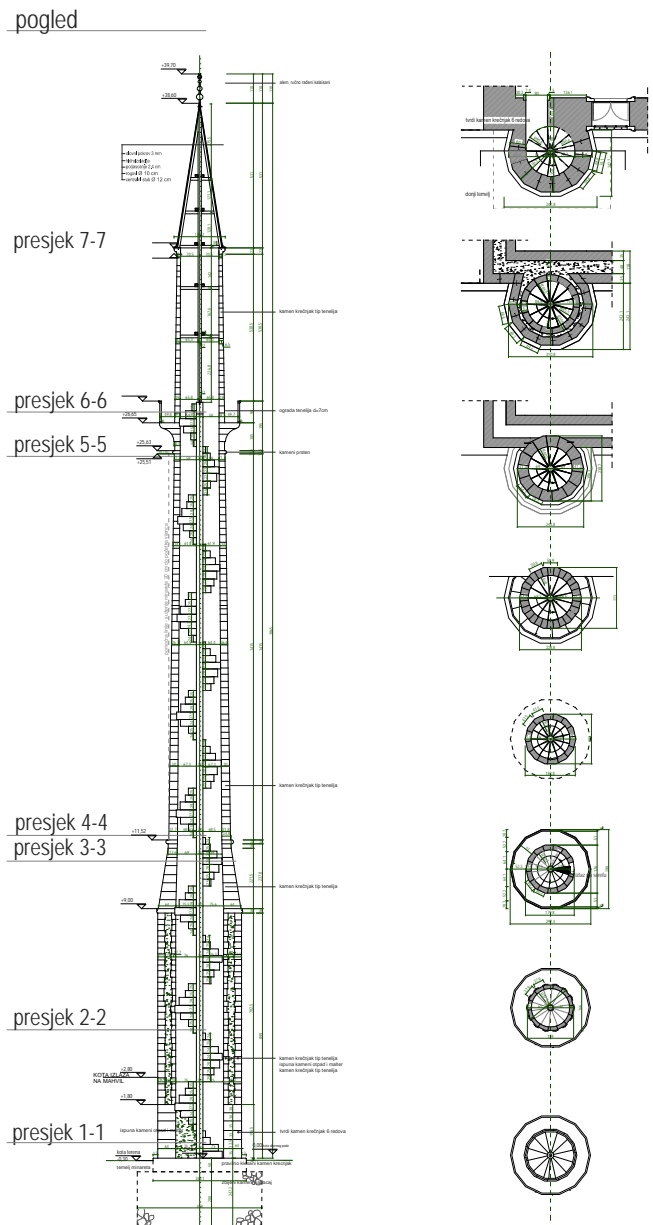
Minaret project was made according to the measurement of the photogrammetry from 1988, and the details were **in filled** by the original stones found at the site, so it was possible to exactly calculate the thickness and inclination of the minaret. All stones are interconnected with clamps fixed with molten lead. The top of the minaret and its serefe are not decorated which is not usual for such types of mosques and especially for a decorated mosque like Aladža, and some repairs are visible on the top, so it is possible to assume that there was an earthquake or lightning damage to the upper part sometimes during the history.

The minaret will be reconstructed mainly of new stones from a similar quarry, but a number of original stones will be recomposed back into the structure.

Photo on the left shows the first decorated row of the shaft, floral motives that are so typical for this mosque and for the region.

Fig.5 Section and plans of the minaret drawing from 2009

Fig.6 The first decorated stone row of the minaret



8. CONCLUSION

We realize that a reconstructed building is not the same as the object that existed for centuries, it can never be. What is most valuable is the lesson it teaches us, that destruction does not get the last word, but also about the resilience and persistence of memory of place and people. The technical details must be absolutely scientific and there is no room for sentimentality there. The craftsmanship however is not at the level of skill of the first builders since they carried the knowledge accumulated through generations.

Realization of the project will inevitably be a mix of contemporaneity (site building organization, scaffoldings, transportation) and traditional knowledge and materials. Through other projects in BiH the knowledge has been rediscovered again and in this sense it is a new added value into a building that will be a monument again, with all appropriate attributes.

In this respect, the reconstruction of the Aladza Mosque in Foca signifies the rebuilding of place identity and common memory which is essential after massive destruction. Furthermore, the realization of the project plays an important role by means of education and technical expertise since the whole process involving data collection, analysis, site documentation, conservation project preparation, operation and implementation were employed. Hence, this reconstruction practice has become a pioneering example for later projects.

1. *Nara Conference on Authenticity* , UNESCO World Heritage Centre, Agency for Cultural Affairs Japan, ICCROM, ICOMOS
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3. Decision of the National Commission to protect Monuments No.06.1-02 1062/03-6 from 6.July 2004 – Aladza Mosque
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5. Price, Nicholas (2009) "The reconstruction of ruins" From: *Conservation: Principles, Dilemmas and Uncomfortable Truths* Edited by Alison Richmond and Alison Bracker, Publisher: Elsevier

Aladža Project: Project Manager: Prof. Amir Pasic, Consultant: Prof.dr. Zeynep Ahunbay, **Project design - the author Aida Idrizbegovic Zgonic with Delta-Z Infinitinet, Supported by ISAR WAQF.**

Drawings and photos by author **for a project** property of ISAR WAQF and Islamic Community of Foca