

Study, Conservation and Restoration of “Zvartnots” Historical and Architectural Complex

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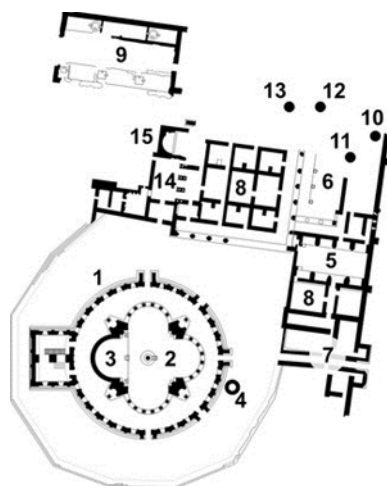
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Abstract. The introductory part of the article presents historical and architectural complex of Zvartnots as one of the important world heritage sites, as well as a sacred place for the Armenian people. The complex is located in the eastern part of Etchmiadzin, a town in the Armavir Province of the Republic of Armenia. The main architectural monuments of the complex, i.e. the Saint Gregory the Illuminator temple, Catholicosate palace, dwellings of the congregation, single-nave church, winery, bath and other adjacent buildings were built during the period from 642 to 661 AD. The first part of the article considers the study and reconstruction of the Saint Gregory the Illuminator temple in 19-th and beginning of 20-th century. In 1904 Toros Toramanyan, the founder of the scientific investigation of Armenian architecture, researched the ruins of the Zvartnots monuments and drew his project for the reconstruction of the temple. The second part of the article presents conservation work of the complex until 1992. The third part of the article presents research and restoration of the complex after 1992. Concluding the article, note that today, the valuable and unique significance of the Zvartnots Historical-Architectural Complex in the Armenian and World culture requires the proper preservation of the monument and a worthy presentation with wide opportunities for further scientific research, with its active involvement in modern social and cultural life.

Introduction

The historical and architectural complex of Zvartnots was built during the Golden Age of Armenian architecture. It is one of the important world heritage sites, as well as a sacred place for the Armenian people. The complex is located in the eastern part of Etchmiadzin, a town in the Armavir Province of the Republic of Armenia. The main architectural monuments of the complex, i.e. the Saint Gregory the Illuminator temple, Catholicosate palace, dwellings of the congregation, single-nave church, winery, bath and other adjacent buildings were built during the period from 642 to 661 AD (Fig.1).



1. Saint Gregory the Illuminator temple
2. Prayer hall
3. Main altar
4. Well
5. Throne hall of the Catholicosate palace
6. Pillared hall of the Catholicosate palace
7. Entrance corridor
8. Congregation dwellings
9. Winery
10. Antique fragments
11. Karases (Large wine jars)
12. Urartian cuneiform obelisk
13. Sundial
14. Bath
15. 5th century single-nave church

Fig. 1. Master plan of the historical and architectural complex of Zvartnots

The historical and architectural site of Zvartnots also contains archaeological artifacts concerning the Urartian, antic and early periods of Christianity. However, it is generally recognized for its unique Early Middle Ages architectural monuments and especially for the splendid Saint Gregory the Illuminator temple. According to tradition, Catholicos Nerses III Tayetsi built the temple in the place where the king of Armenia Trdat (Tridates) III met Saint Gregory the Illuminator who was on his way back to Armenia from Caesarea already as the first Catholicos (Head of the Armenian Church) [1,2]. As a symbol for the adoption of Christianity as the official state religion of Armenia, from the 4th century on there was a standing holy cross. In the 7th century it led Nerses Catholicos to take the cross as the geometrical center of the newly built Saint Gregory temple. The circular design of the temple, which is typical of Christian baptisteries, symbolizes the noble idea and historical significance of the national baptism of the Armenian people [3,4].

Study and reconstruction of the Saint Gregory the Illuminator temple

The fact of the existence of Zvartnots ruins was stated by H. Shakhhatunyants, in 1842 [5] and later by Professor of the Vienna University Josef Strzygowski, who visited Etchmiadzin in 1890. This happened due to the evidence of the historians about the location of the complex, as well as the discovery of capitals with a cryptogram written in Greek letters made by Nerses Catholicos [6]. In 1893 Mesrop Ter-Movsisyan, an archimandrite from congregation of Holy Etchmiadzin, undertook personal excavations in the territory, but the lack of an appropriate permit was the reason for stopping the work. Excavations in the area of the temple were also made by the architect Qristapor Ter-Sargsyan, who presented no hypothesis or suggestion on the form and image design of the structure.

Thanks to the great interest in the temple, another archimandrite from congregation of Holy Etchmiadzin, Khachik Dadyan was able to receive the corresponding permit from the Russian Imperial Archaeological Commission and started excavations in May 1900 which ended in 1907. In 1904, upon the invitation from archimandrite Khachik Dadyan, Toros Toramanyan, the founder of the scientific investigation of Armenian architecture, devoted himself to the excavation of the ruins of the Zvartnots monuments and drew his project for the reconstruction of the temple built by Nerses Catholicos.

Toramanyan is able to accurately determine the period of construction of the temple, which allows him to make his own version of the reconstruction of the temple, as a result of a detailed examination of historical information about the construction of the temple, preserved written sources, irregularly scattered stone fragments in the area of the monument. To do this he studied information provided by solid facts such as the preserved and/or excavated architectural fragments - walls, bases, pillars, pilasters, columns, capitals, arches, vaults, windows, ornamental belts, fine and beautiful sculptures and signature marks of the masters.

According to the reconstruction plan, St. Gregory's Cathedral is a central dome with a diameter of 35.75m and a height of about 45m, arranged around an axis and descending three steps. This unique proposal for reorganization, as an incredible reference for early medieval Armenian construction, initially provoked controversy [7]. However, the scientist's guesses were confirmed by the excavations of Gagkashen temple (1905-1906), which is a copy of the Zvartnots temple built in the early 11th century [8] (Fig.2).

Parallel to excavation and research of the Zvartnots ancient site, when Archimandrite Khachik was given a lifelong appointment as the Zvartnots vicar (1907-1936), some work was implemented to improve the temple and the ancient site. In 1937, a museum building was constructed as a part of the improvement measures on the initiative of N. Mar, T. Toramanyan and A. Tamanyan, while being supervised by K. Ghafadaryan and the architect Nikoghayos Buniatyan's project. There was also a small exposition held in one hall.



Fig. 2. The Zvartnots temple reconstruction project by Toros Toramanyan

Conservation work of the complex until 1992

In 1945, restoration measures were carried out on the Zvartnots architectural complex under the guidance of the architect L. Sadoyan. At this time, the western part of the temple stage was conserved, and the central steps were renovated. The retaining wall below the floor of the eastern main altar was partially rebuilt (Fig.3-4).



Fig. 3. Conservation of the western exedra, 1945



Fig. 4. Conservation of the stage, 1945

In the early 1960s, the environment around the Zvartnots Complex was improved based on the project of the architect G. Tonoyan, under the supervision of A. Harutyunyan. The demolished stylobate-steps and the remains of the walls were conserved through rebuilding and additions to the upper parts of the walls. The corner of the Catholicosate palace and dormitories of monks were paved, the western wall was raised with a new row of stone, the lower rows of twin columns of the circular hall were partially restored, two columns of basket-weave capitals were restored by the remains of their capitals and one column with an eagle capital was restored (architect A. Harutyunyan) (Fig.5-6).



Fig. 5, 6. Conservation of the southern exedra in the 1960s

During the period from 1962 to 1965, the floor slabs of the throne hall were repaired and large-scale improvement works were carried out on the western side of the temple by the architect Y. Tamanyan. Under his guidance, the square in front of the entrance was asphalted, park benches were installed, the land to the north and east of the temple was leveled, the green zone embracing the monument was expanded and gardens were created. In 1966 to 1967, the south-east and north-east pilasters of the temple were covered, the dwellings and corridors of the congregation were paved, the walls of the bath were conserved, and the winery was repaired.

In 1970 L. Sadoyan made the projects of the entrance part of Zvartnoc site-spring-monuments, displacement of the carved-eagle obelisk and roag leading to the complex from the north. The building repair and expansion project plan of the old Zvartnots museum was drawn up by L. Sadoyan, T. Gevorgyan, A. Stepanyan and G. Mikaelyan in 1980.

Under the supervision of architect L. Sadoyan in the 1980s the general program for the improvement of the complex was partially implemented, measures for the preservation of monuments were started. On the basis of research and design works for the partial restoration of the temple the restoration works of the columns crowned with basket caps were carried out (Fig.7-10).



Fig. 7. Restored colonnade of the northern exedra, 1987



Fig. 8. Restored colonnade of the western exedra, 1987



Fig. 9. Restored north-eastern eagle pillar, 1987



Fig. 10. Architectural fragments since the 1980s

Research and restoration of the complex after 1992

During the period from 1992 to 1995, under the guidance of the author of the present paper, research and scientific-project restoration work of the Zvartnots Saint Gregory the Illuminator Temple had been carried out. In developing the project of conservation and partial restoration, we tried to stay as close as possible to the restoration principles of the ruined monument - preserving the historical-archaeological authenticity of the monument with as little intervention as possible, emphasizing its historical-architectural value:

1. To fix and unharmed transfer the preserved whole material artifacts (conservation),
2. With possible justification to install the architectural fragments in their original positions (method of anestheloz),
3. From the completely ruin to create one level higher-crumbling ruins, this will at least partially reflect the original composition of the monument, architectural fragments, scale, outline, etc. The ruins will show the three-store original composition of the whole temple, the outer walls by 2-3m, the colonnade of crosses wings by 4-5m and the domed pillars by 5-7m heights. But these characters are not widespread throughout the perimeter, but will increase gradually descending from north to south and from south to north. As result it will create rhythmic steps behind background of Mount Ararat [9] (Fig.11-12).



Fig.11. Restoration sketch project, arch. G.Nalbandyan, 1995



Fig.12. Current view of the temple from the north

Under the direction of the architect T. Gevorgian, restoration works were carried out during the period from 1995 to 1998 on the circular wall of first floor of the temple, pilasters and lower parts of the western, southwestern and southern portals.

Since 1995, with partial assistance from the UNESCO, restoration of the Zvartnots museum had commenced by the architect A. Hovsepyan, and in 2000 the complex and other churches of Etchmiadzin were included in the UNESCO World Heritage List as a valuable historical and cultural site.

During the period from 2002 to 2003 with the support of the LINS Foundation, a program for the study, conservation, partial restoration and improvement of the Zvartnots Historical and Cultural Complex was carried out. During that time, the restoration design and construction works of the western entrance of the temple, the arcade of the southern exedra, the external paving were carried out /architect G. Nalbandyan/ (Fig. 13-14).



Fig. 13. Restoration of the western portal, 2002



Fig. 14. Restoration of the southern altar arcade, 2002

In 2002-2003 within the framework of the cultural programs of the same foundation, the construction of a visitor service hall was carried out, the house of the artist-museum of the reserve-museum was renovated, as well as the exhibition of the expanded museum was organized /architect M. Danielyan/.

Today, one of the priority tasks of the large-scale preservation and restoration program of the Zvartnots complex remains the organization of protection, conservation, partial restoration Saint Gregory's temple, Catholicos' Palace, Congregation's dwellings, single-nave church, winery, bath and other adjacent buildings and especially respectable protection and exposition of architectural fragments (Fig.15).



Fig. 15. Aerial view of the Complex from the East

In 2011, the exhibition halls of the Zvartnots Museum were renovated, a new, more extensive, and substantial exhibition was organized with a detailed and appropriate presentation of archeological and architectural materials, historians, researchers, authors of the reconstruction of the complex, as well as the benefactors (Fig.16,17,18).

The monument has been under night service since the spring of 2012 and the monument is presented to visitors with a beautiful combination of artistic lighting and sound effects (Fig.19).

In 2014, in order to conservation of the walls, structures and maintenance of Zvartnots temple master classes were organized with the involvement of experienced Italian restoration specialists (Fig.20). In 2019, with the support of the Volkswagen Foundation on the preservation of the temple building materials, summer courses entitled "STONE IN ARMENIAN ARCHITECTURE" were organized under the guidance of experienced German specialists (Fig.21).

The valuable and unique significance of the Zvartnots Historical-Architectural Complex in the Armenian and World culture requires the proper preservation of the monument and a worthy presentation with wide opportunities for further scientific research, with its active involvement in modern social and cultural life.



Fig. 16, 17, 18. Museum exhibition of architectural fragments, 2011



Fig. 19. Artistic lighting of the temple, 2012



Fig. 20. Master classes delivered by Italian restorers within the temple conservation program, 2014



Fig. 21. "Stones in Armenian Architecture" 1st International Summer School, 2019

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