

# A REVIEW ON THE POSITION OF NURUOSMANIYE MOSQUE IN OTTOMAN ARCHITECTURE AND ITS LAST RESTORATION

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## Abstract

*The mankind improved itself through many necessities and sheltering is the most important of them. The development of sheltering is the foundation of architectural practice and it is evolved in many ways, constituted from social and technological advancements. In that sense they lead to many architectural styles during different periods. At the beginning of 17<sup>th</sup> century, Baroque appeared as a new style in Italy. While in France and Germany it was applied as a strong ecote, Ottoman Empire adapted itself.*

*In the Ottoman Empire, Baroque mainly affected the architectural products with its peculiar decorative elements. However -in regard to plan layout - very few exceptional examples have been produced by Ottoman architects in Istanbul. Nuruosmaniye Mosque on the Historical Peninsula is the most specific example in this context. Therefore the significance of the Nuruosmaniye Mosque comes from not only the ornaments in a mixed Ottoman-Baroque style but also its layout and constructional system.*

*After many applied restoration process the building, which lately appreciated regard to its heritage value, had its last conservation between 2010 - 2012. During this last restoration and conservation process, several infrequent deteriorations and several unknown details, spaces, techniques were discovered. In this context; this article focuses on the place of Nuruosmaniye Mosque in Ottoman Architecture and the quality of its last restoration.*

**Keywords:** Ottoman, Baroque, mosque, restoration.

## Introduction

The mankind has many necessities to stay alive and to improve itself. Three of these necessities are the basic ones: eating, dressing and sheltering. The foundation of architectural practice started with the development of sheltering. During time, architectural practice evolved in many ways and constituted from social and technological advancements by leading new architectural styles.

At the beginning of the 17th century Baroque appeared in Italy as a new architectural style. The ideas of Baroque were extension and movement of a new dynamic and vital interpretation. Baroque architecture which is a reflection of the great systems of the 17th and the 18th centuries (esp. The Roman Catholic Church and the political system of the centralized French state) appears as a synthesis of dynamism and systematization. Baroque buildings are characterized by plastic vitality, spatial richness and systematic organization.

Baroque architecture is an architecture of inclusion that doesn't exclude any element of the architectural experience by aiming to reach a great synthesis. The systematic organization of Renaissance space, the dynamism of Mannerism, quality of the Middle Ages and the anthropomorphic presence of Antiquity are all mixed.

Baroque buildings were produced in Italy, Spain, Germany and France frequently. Than Baroque-inspired Rokoko style appeared in France as a transition style between Baroque and Enlightenment periods. Thus Rokoko was admitted as the last version of Baroque by Germans and as a French effect by Italian, Greek and Armenian architects.

## Understanding of Baroque in Ottoman

Architectural styles were changed into vernacular when they were incorporated by another country or region. In this context Ottoman adapted Baroque to itself. Visual impressions were used as decorative elements and structuring stayed with the Classic Ottoman architecture, even though the crowd of European (Baroque) motives.

Short struts and c-shaped helix ornaments are the specific characteristics of the decoration of Baroque style. Similar motives can be seen in some public fountains in Ottoman Empire. It is not certain that if the importance of the usage of European motives in Ottoman architecture were only about the foreign effect or the new decoration style was the manifestation of an inner and a long-term alteration request.

There are several opinions about the starters of Baroque and Rokoko in Ottoman Empire. Italian artists and the French engineers are potential candidates as pioneers. The beginning of the effects of European art depended on the presents from Europe (France mostly) which effected the motives of the decoration of buildings. However, Ottoman Baroque has not started at the Tulip Period (Lale Devri, 1718-1730) indeed, even though this period paved the way to merge Ottoman architecture with Baroque.

In the Ottoman Empire, Baroque mainly affected the architectural products with its peculiar decorative elements. The characteristics and the elements of Europe-inspired Ottoman architecture was analysed for the first time by Doğan Kuban. Doğan Kuban claims that the effects of foreign arts on the national arts of Ottoman Empire started with end of the time of Sultan Ahmet III (1703-1730) and continued during the Sultan Mahmut I period (1730-1754) with Baroque. The time of Sultan Osman III (1754 -1757) could be described as an era which buildings were produced in Baroque style rather than Rokoko style. By the time of Sultan Mustafa III (1757-1774), Ottoman architecture returned back to its previous applications. The Russian war and other priorities, created less proper atmosphere for Baroque.

The difference between Baroque and Rokoko is, the first one is a structural style while the latter one describes a decoration style. On this basis, Doğan Kuban claims that Rokoko contains most of the Ottoman Baroque buildings but not Nuruosmaniye Mosque. Nuruosmaniye Mosque has not completely but partially have structural elements of Baroque.

Because of the prejudice of Ottoman people against European effects, Nuruosmaniye experiment was only tried once, excepting the small buildings (most of them are public fountains and wooden mansions) and excepting the decoration elements of palaces as Baroque products. While public fountains were built in Baroque motives, other buildings have seem to be still connected with traditional regulations and districts.

### Nuruosmaniye Mosque

Nuruosmaniye Mosque is a part of a complex (Nuruosmaniye Külliyesi) which includes a madrasa, a library, a public fountain, an imaret and shops. The mosque built between 1748 and 1755 on the second hill of Historical Peninsula of Istanbul on the place of Forum Constantinus by the time of Sultan Osman III. It constructed on a high pedestal with a square shaped plan while the courtyard is planned as a semi-elliptic form with fourteen-domed arcade around. Semi-elliptical shaped cloister and the desing of the fountain-less courtyard created a unique example for the Ottoman architecture.

The outward mihrab, the stone spire of minarets applied for the first time here in Ottoman Baroque style and the external ramp of Sultan's lodge is a characteristic of late Ottoman style. The ornaments of revzen windows have more curvilinear forms related to European effects rather than the previous Classical Ottoman mosques. Also both the interior and exterior non-structural curvilinear cornice lines emphasize the Baroque style.



Figure 1: Nuruosmaniye Complex overall photo (url-1).



Figure 2: Mosque (Kargopoulo, 1875)

Likewise the structure of the mosque is a unique structure for Ottoman architecture. The structural system designed with marble – known as a soft stone – and inner iron bars to support masonry system. The iron parts of Nuruosmaniye Mosque is not an independent structure itself. However this creates a complex masonry desing. In this regard, the significance of the Nuruosmaniye Mosque comes from not only the ornaments in a mixed Ottoman-Baroque style but also its layout and constructional system.

## Restoration Process

After many applied restoration processes the building had its last restoration between 2010 - 2012. During this process, several infrequent deteriorations and several unknown details, spaces, techniques were discovered.

The architectural survey, restitution and restoration projects were drawn by FOM Grup Mimarlık. However, from beginning to end of the restoration process, the projects were overhauled in the light of the new findings. Some of the problems were caused from wrong details, mistaken techniques and usages of incorrect material.

The most significant must-solve issue of deteriorations of the monument was about water. Cover coating of the building had a water leakage problem. New lead coating of domes applicated with traditional techniques and similar to original materials. Because of disrepair, damaging of water drenaige system and rubble filling; there was water problem on the basement too. Proper cleaning and consolidation techniques were used to solve problems such as clearing off the rubble, mud and other unwanted materials, replacing damaged metal elements with new ones and cleaning walls by sandblasting.

The building consists of marble and iron. Effects of upper level and lower level humidity caused deteriorations on and in this building materials. Because of corrosion of inner iron materials, deep cracks were occured on the stones of the walls. Managing this cracks included both iron and stone (marble mostly) applications. Interventions for iron applied in two ways: changing the material with new one or conserving the existing. Combining cracked stone parts was not possible thus cracked stones were removed by a decay method and replaced with stones which had similar characteristics with original.



Figure 3: Corrosion based marble crack (Güneş, 2011).



Figure 4: Revzen window renovation (Güneş, 2011).

Environmental pollution caused blackening on the facades. The facades of the mosque were cleaned with two methods: sandblasting and cleaning with water. Sandblasting technique were used for most of the surfaces with proper pressure and diluted solutions were used for dirtier surfaces such as minarets. Dry cleaning was preferred rather than wet cleaning for the high density of iron materials within the structure. Also environmental factors have negative mechanical effects on revzen windows. Unless the revzen windows could be repaired, reproducing method was chosen with the original decoration, shape and material as possible as the first day.



Figure 5: Sandblasting of facade (Güneş, 2011).



Figure 6: Interior sandblasting (Güneş, 2011).

The original door wings and original window shutters were made of walnut tree. This building elements were original. As a wrong conservation application, the timber elements were painted with oil-paint which cleaned by chemical techniques. After cleaning, only the highly deteriorated parts of timber elements were cut and integrated with original material. Fumigation applied to prevent timber elements from insects and as the last step shellac polish (which is a traditional polish with organic contend) was used for a long-term conservation.



Figure 7: Integration of timber elements (Güneş, 2011).



Figure 8: Applying shellac polish (Güneş, 2011).

Nuruosmaniye Mosque has laminar hand-drawn ornaments. However, the ratio of hand-drawn ornaments were low according to Classical Ottoman mosques. Besides, the belt of verse (Fetih Sura) which is written with gold on black surface is rare and was deteriorated by humidity. While the belt was repairing, the scraping of hand-drawn ornaments were continuing. During the scraping process of ornaments, earlier ornaments were found. Scientific council of the Nuruosmaniye Mosque decided to display the authentic hand-drawn ornaments and leave a segment of latter ornaments to give reference to guests.



Figure 9: Restoration of ornaments (Güneş, 2011).



Figure 10: Scraping and foundings (Güneş, 2011).

### Conclusion

This paper explains the basic elements of Baroque and the reflection of Baroque over Ottoman architecture. With the European effect, an Ottoman Baroque, which named recently, style occurred. Afterwards Nuruosmaniye Mosque appeared as the most significant example of Ottoman Baroque. Thereby the paper continues with the explanations of why Nuruosmaniye Mosque is so important.

Later on, the paper mentions steps of the last restoration application which was held between 2010-2012. From beginning to end, every single findings or changes were documented. Every decisions about the intervention were decided by science council. During process, integration techniques were applied to most of the building elements. Cracked stones, corroded irons, decayed timber and broken plaster and glass elements were all integrated if it was possible. Renovation was the second option for this reconstruction project. In this respect, the last restoration of Nuruosmaniye Mosque can be attributable as a successful example.

### Biography

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