# Conservation of Cultural Heritage and Documentation Techniques

# Bursa Forestry Museum (Saatçi Ali Pavilion) Conservation Problems and Suggetions

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# **Prologue**

Located in Çekirge District of Bursa Province, the structure, which functions as the Bursa Forestry Museum is affiliated to the Ministry of Agriculture and Forestry, was built in the 19<sup>th</sup> century and is a pavilion structure with other examples in its immediate vicinity. Besides the masonry basement floor and two floors built with timber-framed construction technique, the building also has a wooden annex, a wooden gazebo and a recently added lodging building. The structure has been used in different functions in its historical process and after the allocation to the Ministry of Forestry in the middle of the 20<sup>th</sup> century and different functions related to forestry, it has reached the present day with the function of "Forestry Museum" as it has been the one and only forestry museum in Turkey. During this process, it was observed that there were damages in the structure due to natural causes as well as human factors, and it was found that the structure needed protection.

# The Aim of the Study

"Saatçi Ali Pavilion", which is one of the many mansions built in Çekirge region in the middle of the 19<sup>th</sup> century, during the last periods of the Ottoman Empire, is one of the few period structures that have survived to the present day (Özdemir, 2007). Within the scope of the study, historical development of Bursa City was examined and historical mansions in Bursa and Çekirge District were investigated. In 2019, Survey-Restitution-Restoration projects were prepared by Bursa Regional Directorate of Forestry and by U2 Architecture Office. The building survey was taken by laser scanning, photogrammetry and traditional methods (tape measure, spirit level, profile comb, etc.). These projects were examined and the conservation problems were identified with the help of these documents. Suggestions have been developed to solve these problems within the framework of contemporary restoration theory.



#### **Historical Development**

Çekirge District covers the 1st Murad Hüdavendigar Complex and its environs, which are located in the westernmost part of the Old City of Bursa, and its settlements in the east and west directions. It has been an important health and summer vocation district with its underground hot water resources since the Byzantine period (Çinici, 2017). Thanks to the volcanic mountain Uludağ (Olympos), the hot water springs in this region were observed to be curative over time and settlements were made for the use of these springs. The oldest spa known from these settlements is the thermal bath built by the Roman Emperor Trajanus. Later "The Old Bath" was built by the Byzantine Emperor Justinian I. (527–565) (Özdemir, 2007). It has been a resort and cure-health center since the 6<sup>th</sup> century due to its natural areas and hot water springs.

# **Architectural Description of the Building**

Bursa Forestry Museum Building, located in Çekirge Neighborhood of Osmangazi District of Bursa Province, has two floors consisting of brick basement floor and brick filled walls between timber-framed structure. In the same parcel, the timber-framed annex structure and the wooden gazebo structure were built during the first period of the mansion, and the reinforced concrete housing structures were built in the following periods (Yalman, 2011). The building was named after Saatçi Ali Efendi, who built the building, and was used as a residence until 1936. Between 1936 and 1949, it served as the Secondary School of Forestry, which trained engineer assistants. After serving in the Regional Directorate of Forestry until 1983, it served as the state department of this institution. Since March 29, 1989 also operates as Turkey's first Forestry Museum (Özdemir, 2007).

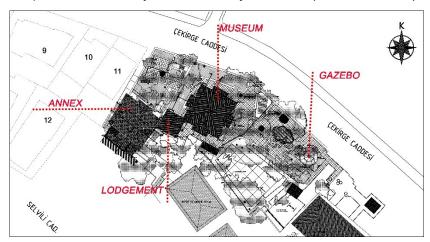


Fig. 1. Bursa Forestry Museum Layout Plan, Bursa, Turkey (© U2 Architecture Office Archive).

The Forestry Museum building can be shown as an example of the plan type with a middle hall. Transitions to the rooms are made from this hall. The structure is rectangular in the east and west direction. The buildings façades are all open. It was observed that the tile cover of the timber-framed roof of the building was recently changed.

### **Conservation Problems**

There was no structural damage and serious damage. There are paint spills and joint opening in the exterior cladding. Wooden windows and doors have paint spills. Time-related wear and moisture have been observed on the floor beams in the basement ceiling. There are many layers of paint on



the walls of the building and they are poured from place to place. Gypsum plaster made on ornaments on the wall caused great damage to these embellishments. The ceiling coverings in the structure and the decorations made in the painting technique on the canvas are original and damages such as contamination and rupture have been observed to a great extent. On the first floor there are unauthentic wooden elements on the walls and ceilings of the rooms in the southeast. It is considered that roof carriers generally do not have structural damages. Corrosion and buckling were observed in the zinc coating on the windowsills of the building facade. Zinc rain downpipes of the structure have been replaced by unauthentic material in some places.



Fig. 2. Southeastern Façade of the Building and the Main Entrance, Bursa, Turkey (© Oğuz Yeke).

#### **Studies and Conservation Suggestions**

After examining the building survey, deteriorations affecting the structure, unauthentic additions and situations that need to be intervened were identified and protection recommendations were made. Repairs in line with these recommendations should be done in a way that will cause minimal damage to the original tissue, attention should be paid to the construction technique and materials, and restoration application should be done without changing the internal order of the structure (Ahunbay, 2004). The existing wooden elements in the structure should be painted with paint scraps, and if there are rotting parts, they should be renewed in their original details and materials. The unauthentic coating on the roof should be removed and the necessary reinforcements should be applied. Necessary arrangements should be made in the creeks and ridge on the roof and the existing roof tiles should be replaced with the traditional Spanish tiles. The wooden shutters on the guillotine windows, which were determined from the old photographs, should be rebuilt with original detail and material and replaced. The original wooden flooring should be repaired. The original ceilings in all spaces should be scraped away from paint and decaying and repairing elements should be identified. After the inspection, protective natural wood varnish should be applied and re-painted and replaced.





Fig. 3. Forestry Museum inner walls and ceiling ornaments. a) Stair Hall; b) Ornament in Stair Hall Wall; c) Room Ceiling Detail (© Oğuz Yeke).

Stone imitation pavements surrounding the facade at the level of the basement of the building should be removed and covered with plaster as determined from the old photographs. After the decaying and needing parts of the zinc surfaces on the upper cornice of the facade and windowsills and the wooden parts that are underneath are determined, they should be treated with protective varnish. The existing lodging structure will be preserved by cleaning the arched chimney from the original fire brick located in the basement. During the survey, the ornaments on the wall, traces of which were found during research scraps, should be designed and renewed during the application.

#### Conclusion

Suggestions developed for the preservation and restoration of the building, which reflects a period of Bursa city architecture, should be carried out in a way that the restoration applications to be made in the future will be integrated with the environment of the building and will not disturb the original design and details. It should be remembered that the museum, which is the present function of the building, is open to the public of all ages, which is the most suitable function for the promotion and survival of the building and the works related to the forestry activity exhibited in it.

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