

THE ORIGINAL ARCHITECTURE OF THE OSMAN HAMDİ BEY BOATHOUSE

OSMAN HAMDİ BEY KAYIKHANESİ'NİN ÖZGÜN MİMARİSİ

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Abstract

Boathouses where small boats are towed, tied and protected are coastal structures found along seacoasts, rivers and lakes. During the Ottoman period, it is known that there were many boathouse structures belonging to the residences found on the Bosphorus, Golden Horn and coastal settlements of Istanbul. This study aims at revealing the original architecture of the Osman Hamdi Bey boathouse by analyzing its historical, architectural, construction techniques and material properties. This boathouse belonging to the famous painter, archaeologist, museologist and diplomat Osman Hamdi Bey (1842-1910) is a component of the wooden complex of buildings (mansion, painting studio and boathouse) in his vineyard estate located in the Gebze-Eskihisar district which is connected to the sea in Istanbul. It is also one of the few boathouses that has survived to the present day from the Ottoman period. After detailed research of the literature on Ottoman boathouses, *in-situ* examination and analyses of the Osman Hamdi Bey boathouse were made by photographing and taking detailed dimensional measurements. All this gathered information obtained was recorded in architectural drawings and notes. From the architectural traces on the boathouse and by making comparisons with Ottoman period boathouses the original architecture of the boathouse structure was determined. Then drawings of the original Osman Hamdi Bey boathouse were made with the help of the architectural details of the mansion and painting studio found in this complex of the same period. It is hoped that this study about the original architecture of Osman Hamdi Bey boathouse can make a valuable contribution both to the literature of boathouse architecture of the Ottoman period and help in the documentation and conservation of such boathouse structures for future generations.

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Keywords: Boathouse, Ottoman Boathouses, the Osman Hamdi Bey Boathouse, Conservation.**Özet**

Kayıkhaneler kayıkların çekilip bağlandığı ve korunduğu nehir, göl, deniz kenarlarında bulunan kıyı yapılarıdır. Osmanlı döneminde İstanbul Boğazı, Haliç ve kıyı yerleşimlerindeki konutlara ait çok sayıda kayıkhanesi yapılarının olduğu bilinmektedir. Bu çalışma, Osman Hamdi Bey kayıkhanesinin tarihi, mimari, yapı tekniği ve malzeme özelliklerini inceleyerek özgün mimarisini ortaya koymayı amaçlamaktadır. Ünlü ressam, arkeolog, müzeci ve diplomat Osman Hamdi Bey'e (1842-1910) ait bu kayıkhanesi, İstanbul'a denizle bağlı Gebze-Eskihisar bağ arazisindeki ahşap yapı grubunun (konak, resim atölyesi ve kayıkhanesi) bir parçasıdır. Ayrıca Osmanlı döneminden günümüze ulaşan az sayıdaki kayıkhanelerden biridir. Osmanlı kayıkhaneleri ile ilgili detaylı literatür araştırmasının ardından Osman Hamdi Bey kayıkhanesinin yerinde inceleme ve analizleri fotoğraflar ve detaylı ölçümlerle yapılmıştır. Elde edilen tüm bilgiler mimari çizimlere ve notlara kaydedilmiştir. Kayıkhanesi üzerindeki mimari izler ve Osmanlı dönemi kayıkhaneleri ile karşılaştırmalar yapılarak Osman Hamdi Bey kayıkhanesi'nin özgün mimarisini belirlenmiştir. Sonra bu yapı grubunda bulunan aynı döneme ait köşk ve resim atölyesinin mimari detaylarından yararlanılarak özgün kayıkhanenin çizimleri yapılmıştır. Osman Hamdi Bey kayıkhanesi özgün mimarisini ile ilgili bu çalışmanın, Osmanlı dönemi kayıkhanesi mimarisini literatürüne ve bu tür kayıkhanesi yapılarının belgelenip korunarak gelecek nesillere aktarılmasına değerli bir katkı sağlayacağı umulmaktadır.

Anahtar Kelimeler: Kayıkhanesi, Osmanlı Kayıkhaneleri, Osman Hamdi Bey Kayıkhanesi, Koruma.

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Introduction

The maximum use of sea transportation and boathouses can be seen to have occurred historically until road and railway transportation were constructed in these areas. When sea transportation was still more popular than that of land, boathouses were built next to or as a part of main building structures to shelter and protect the boats of the owners of these coastal structures (Sökmen, 2013, 23). During the Ottoman period, especially in the 19th century boathouses were an indispensable part of all kinds of structures on the Golden Horn, Bosphorus and coastal shores, especially of seaside palaces, mansions and summer resorts in and around Istanbul (Sökmen, 2013, 17). These boathouses were open or closed structures, where boats could be pulled and tied after being used for sea transportation or moonlight pleasure trips (Figure 1) (Sökmen, 2013, 23).



Figure 1. Photograph of various boathouses in Kandilli bay of Istanbul (National Geographic archive, 2013)

In the Ottoman period although they varied in size and may have been owned either by a foundation, a pier or the owner of a waterfront structure, boathouses were all similar in their working principles. The section associated with the sea side where the boat was towed, consisted of a lower part where two-winged doors with iron bars were located. From the basement door to the end of this space, boards were nailed, spaced around 34 cm. apart, in the shape of steps, called “felek”, which were coated with a mixture of wax and olive oil to allow the boat to slide easily while being pulled. As a boat was being pulled inside, wooden slides were transversely driven under it. Small boats were pulled in by three or four running boat rowers, while large boats were pulled in by ropes hooked unto one end of the boat while the other ends of the ropes were wound around revolving wheels located above. As the ropes wound around the wheels they pulled the boat into the boathouse. The tops of the boats pulled inside

were covered with protective thick cloths, while tools such as fishing baskets, fishing rods and harpoons were hung and stored in special sections (Figure 2) (Abdulaziz Bey, 2000; Sökmen, 2013, 24).



Figure 2. The waterpool and stepped ‘felek’ inside a boathouse (Sökmen, 2013, 24)

In examining the plan of a boathouse, as to be expected, it is rectangular in shape to fit the dimensions of the particular period boat it housed. In a boathouse plan, there are two entrances, one opening to the sea and the other to the land. The entrance on the land side connects the boathouse to a stone-floored warehouse and garden, while the entrance on the waterfront is arched. However, a few open (garden) boathouses were built utilizing low quay walls. At the waterfront entrance, there is a waterpool where the water entering is maintained at a certain level. The floor of the waterpool is sloped upwards so that the boat can easily be pulled unto it and brought into the boathouse. Along the edges of the longer walls of the boathouse, there are walking paths made of large stone blocks on which a boat rower can walk while pulling in the boat from the waterpool with one hand using a rope attached to the boat. Passengers would not enter the boathouse and had to be previously dropped off at the small drop-off docks built with the wave heights in mind (Sökmen, 2013, 27-30). The identification and conservation approach to the Osman Hamdi Bey boathouse was evaluated in light of the general plan features of those 19th century boathouses which have been preserved to the present day.

Location and History of the Osman Hamdi Bey Boathouse

The Osman Hamdi Bey vineyard boathouse of the Eskihisar village is an important part of a complex of wooden structures which includes a mansion, painting studio and boathouse located in the Kocaeli Municipality of the Gebze district.

This wooden structure complex of the Osman Hamdi Bey vineyard estate is located 50 km. from the city center of Istanbul and can be accessed by water transportation via the Eskihişar-Topçular Ferry Connection Road which branches from the Gebze town center (Figure 3).



Figure 3. The Site Plan of Osman Hamdi Bey's summer vineyard estate (Google Maps, 2022)

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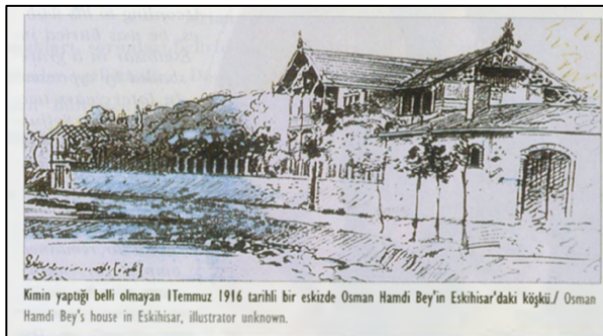


Figure 4. Osman Bey's Eskihişar Summer Home-sketch by unkown illustrator in 1916 and old photograph (Çentınor, 1993, 39; 1986, 9)

Osman Hamdi Bey¹, whose father owned a mansion in Gebze, had been familiar with this area since childhood. In 1884 he designed and built a summer vineyard home for himself consisting of a mansion, painting studio and boathouse on the west coast of the Gebze-Eskihişar village (Figure 4). For 26 years of his life (until 1910) he spent his summer months here, where he painted some of his most beautiful works (Çentınor, 1986, 12-13). Osman Hamdi Bey's

¹ For more detailed information about Osman Hamdi Bey and his estate refer to Z, Tanrıverdi, 2022 paper.

mansion was used by İsmet Pasha (İnönü) for a few days during the War of Independence and it was visited by Atatürk in 1933 (Çetinoğlu, 1993, 39-42).

Osman Hamdi Bey's home was registered in 1966 and expropriated in 1982 by the General Directorate of Antiquities and Museums of the Ministry of Culture and Tourism. Osman Hamdi Bey's mansion was restored in accordance to its original structure between 1985 and 1987 and was converted into a museum in which Osman Hamdi Bey's personal belongings, family pictures and various selections of his paintings were exhibited (MUSEUMS ORG, 2021). During the 1999 İzmit earthquake this wooden mansion was damaged and it was abandoned for 6 years after which time its ownership was transferred from the Municipality of İzmit to the Municipality of Kocaeli. However since this transfer process was not realized legally, many official and administrative problems were experienced. Finally, in 2007 the mansion and painting studio buildings were restored by the Kocaeli Metropolitan Municipality (Şenel et al., 2008). However, the boathouse structure which had been neglected since the 19th century, was never restored during all these restorations and it continued to undergo serious deterioration. In 2014 the Kocaeli Metropolitan Municipality opened a tender for the restoration of the boathouse structure. This restoration which was quickly and meticulously carried out was completed in 2016 giving the boathouse new cultural and social functional purposes (AA CULTUR, 2016). However, these new functions of the restoration design have never materialized (Tanrıverdi, 2022).

2. Research, recording, investigation and analysis of the Osman Hamdi Bey Boathouse in 2011

Characteristics of the Boathouse Plan and Facade

The boathouse was designed as an independent two-storey building with these functions in mind: the parking, maintenance and protection of Osman Hamdi Bey's boat, the sheltering of the boatman responsible for this work and a waiting space for waiting boat passengers. The main entrance to this two-storey building located on the northeast facade, was accessed from a side garden and was reached by 5 steps leading from the southeast road facade built of stone walls. To the northwest of the boathouse, in the garden backyard, was located a brick-made tandoor oven and stone set walls as well as a brick wall which had been added on later.

The boathouse structure had a rectangular plan and consists of a basement and a ground floor. The basement floor had a single space (B-01), slightly higher than sea level (Figure 5).



Figure 5. Basement Floor Plan and photo B-01 Room (Tanriverdi, 2011)

There were 4 rooms (Z-01, Z-02, Z-04, Z-05), an entrance hall (Z-03) and a toilet (Z-06) on the ground floor (Figure 6). Room Z-01 and room Z-02 were parts of the original boathouse structure, (Figure 7) while the other rooms had been added on later to the original boathouse (Figure 8). The building was entered by a door located on the northeast facade which opened unto the entrance hall (Z-03). Connection to the back garden was made from a door located in the northwest facade through room Z-01.

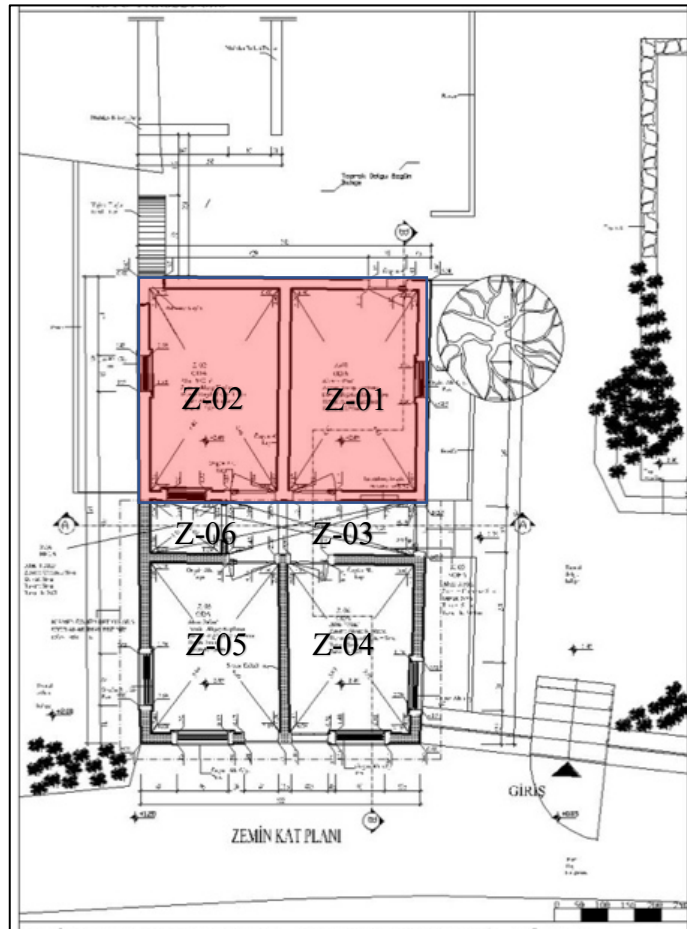


Figure 6. Ground Floor Plan (Tanrıverdi, 2011)



Figure 7. Photos of the original Z01 and Z02 rooms (Tanrıverdi, 2011)



Figure 8. Photos of the added rooms Z-03, Z-04, Z-05 (Tanrıverdi, 2011)

The basement floor on the front southeast facade of the boathouse was originally built parallel to the beach. However, in the first half of the 20th century a road was constructed on the beach in front of the boathouse causing both access to the sea and the boathouse entrance to become cut off as the entrance had now become located below road level. On the visible southeast basement facade of 2011, only a broken double opening door and two arched windows, one of which had been later filled-in with bricks, could be seen. On the southeast ground floor facade there were two guillotine windows and a double opening door. Part of the roof of this facade had been damaged to a large extent (Figure 9).

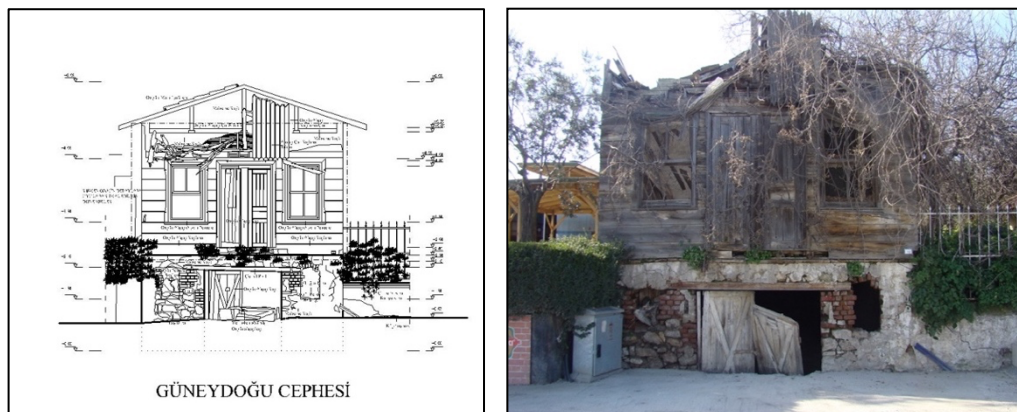


Figure 9. Drawing and photo of Southeast Facade (Tanrıverdi, 2011)

On the northwestern back facade of the boathouse there was a door connecting it to the garden. Roof damage could also be seen in this facade and onduline roofing was used to solve the problem (Figure 10).

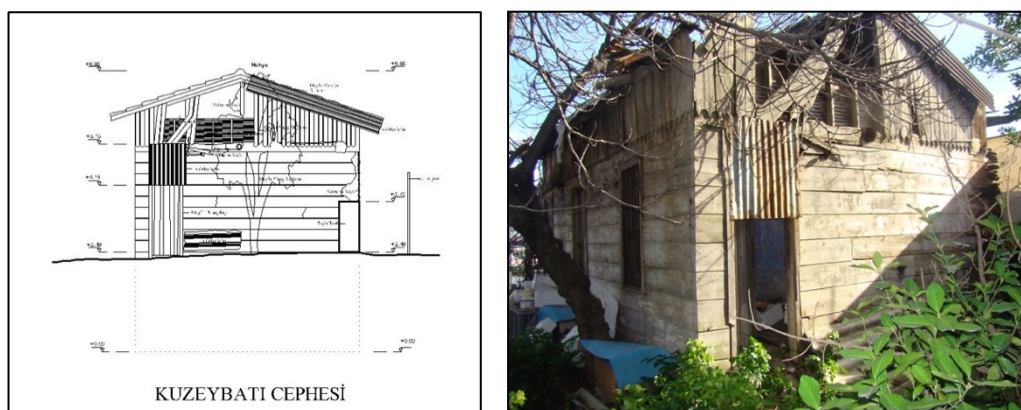


Figure 10. Drawing and Photo of Northwest Facade (Tanrıverdi, 2011)

On the northeastern facade of the boathouse there were two guillotine windows in the middle of which was the main entrance door which could be reached by two steps. The original wooden and Marseille tile roof construction on this facade had largely disappeared. In the continuation of the northeastern facade, there was a brick tandoor oven, which was considered to have been added on later (Figure 11).



Figure 11. Drawing and Photo of Northeast Facade (Tanrıverdi, 2011)

The southwest facade of the boathouse could only be seen to a certain extent, due to its close relationship to the adjacent parcel. Two guillotine windows and original wooden ornamental details could be observed on this facade. Roof damage could be seen throughout the rest of the building (Figure 12).

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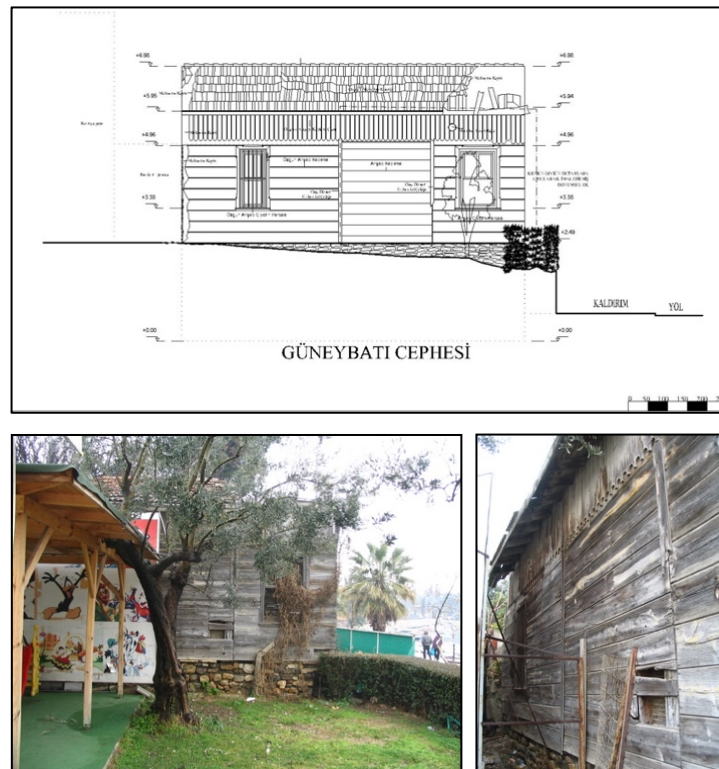


Figure 12. (1) Drawing of the Southwest Facade (2) Photos of the Southwest Facade (Tanrıverdi, 2011)

Properties of the Boathouse Structure and Materials

The original building materials of the boathouse were wood, stone, brick and iron. The basement floor walls were constructed with rubble stone, while its ceiling was made of a 'Jack arch' consisting of brick and iron beams (Figure 14). The floor of the basement was covered with natural earth material. The sub-basement level of the boathouse was constructed using rubble stone material of approximately 75 cm. in height, on which the ground floor spaces were constructed with wood. The inner surfaces of the ground floor walls were built using a wooden frame system covered with wooden lathes, which were then plastered and painted while the outer facades were completely covered with wood. However, in the first evaluation of the boathouse in 2011, the connecting wall between the entrance hall Z-03 and rooms Z-06, Z-01 and Z-02 was actually found to be an unplastered exterior wooden-covered facade showing traces of the first original building period. On the remains of this original wall were two guillotine windows, one of which had rusted iron bars (in the toilet section) while the other (opening unto space Z-01) was covered with wood (Figure 13).



Figure 13. Traces of the first original building period: iron-barred guillotine window and wooden covered guillotine window (Tanrıverdi, 2011)

The ceiling of the surviving original Z-02 room in the building, was covered with wooden lathes. With the exception of the entrance hall (Z-03) and Z-06 (the WC area) which had floors made of compressed earth floors, all the other rooms had wooden floors. (Figure 14).



Figure 14. Wooden lathed ceiling of room Z-02 and the wooden decorations around the guillotine window (Tanriverdi, 2011)

Damage Analysis of the Boathouse

As a result of the road being constructed in front of the boathouse building, the basement floor which was now located below road level could not get proper ventilation thus causing deterioration in the building materials due to moisture. When the damage analysis of the basement floor of the boathouse structure was examined, loss of materials, cracks and salinization were found in the rubble stone walls. Rusting had taken place in the iron beams of the Jack arched ceiling and cracks as well as loss of broken off pieces were found in the bricks (Figure 15).



Figure 15. Deterioration of the metallic elements (Tanriverdi, 2011)

Wood rot, insect infestation, invasion of vegetation and the entrance of water through the damaged roof had caused loss in the wooden structure of the ground floor and the collapse of the roof. In addition to this, material loss, cracks and stains were also observed on the interior wall lathes and plaster. On all the facades of the building and the brick tandoor oven in the backyard biological deterioration, vegetation, and stains caused by the surfaces being washed by rain could be discerned (Figure 16).



Figure 16. Woden roof and biological deterioration (Tanriverdi, 2011)

3. The Osman Hamdi Bey Boathouse Restitution

In the restitution project, the Osman Hamdi Bey Boathouse site plan was drawn using previous maps (DAB, 2011) (TKGM, 2021) and investigations in the area. In this study, it was determined that the boathouse's structural boundaries are still the same as today (Figure 17).

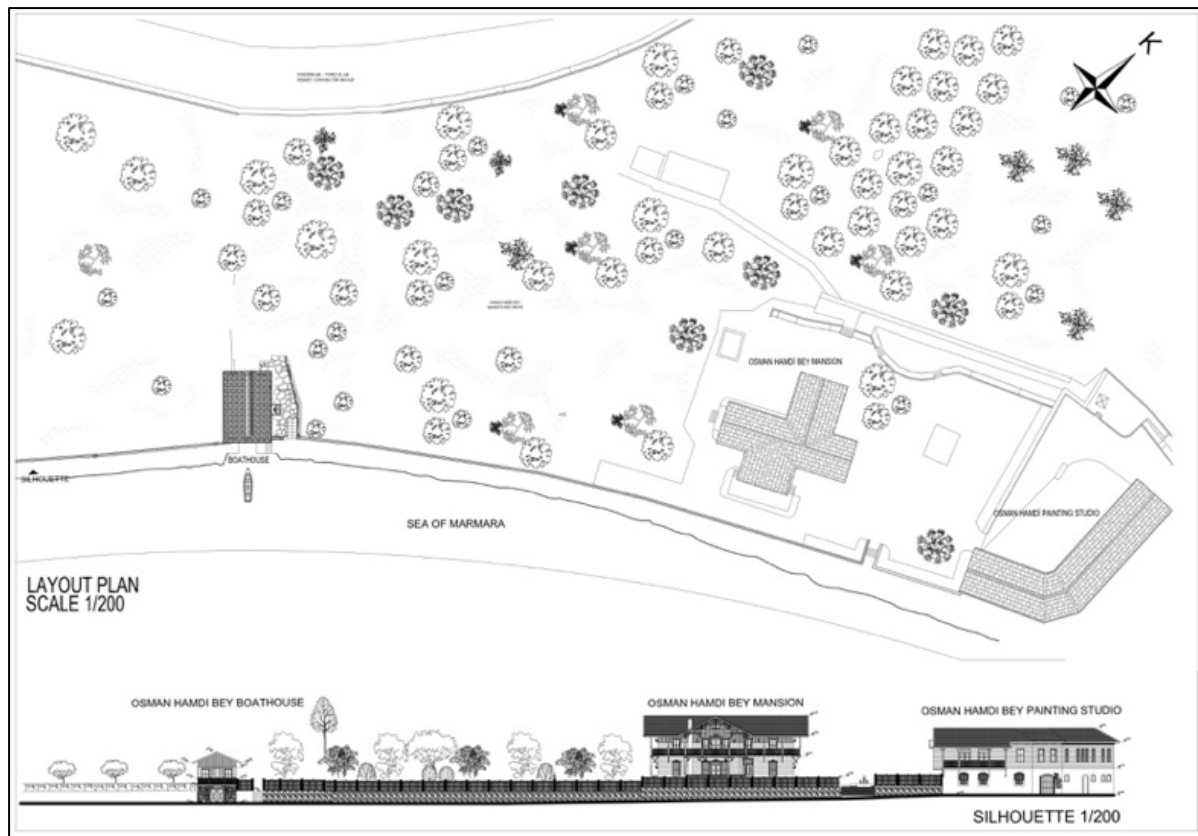


Figure 17. 1/100 Restitution Site plan (Tanriverdi, 2011)

While the floor plans of the boathouse building were prepared from traces on the building and comparison with other Ottoman boathouses of the same period, data from the other wooden buildings in the complex -the mansion and painting studio- was used in designing the boathouse's facade.

According to the investigations carried out on the building it was discovered that rooms Z-01 and Z02 still carried both traces of interior lathed ceilings and wooden coverings (Figure 14) as well as traces of the front exterior facade covering of the first period (Figure 13). From this data it was determined that in the original building's first period, when the building was being used primarily as a boathouse, these rooms must have been used as spaces where the boatman lived, the boat passengers waited and fishing nets were stored. It was concluded that the rooms Z-03, Z-04, Z-05 and Z-06 must have been added on much later and were in fact originally a covered terrace as in other independent Ottoman boathouses. Also with respect to the data gathered from the elevations of the land and the ground level of the boathouse it was concluded that the sea used to enter the boathouse building at the basement floor (B-01). Thus it was understood that whenever the boatman used to bring a boat into the boathouse, anyone living in the mansion could reach the garden by means of the outer stairs built from the setwall. The basement and ground floor plans of the original boathouse were then drawn according to these conclusions (Figures 18).

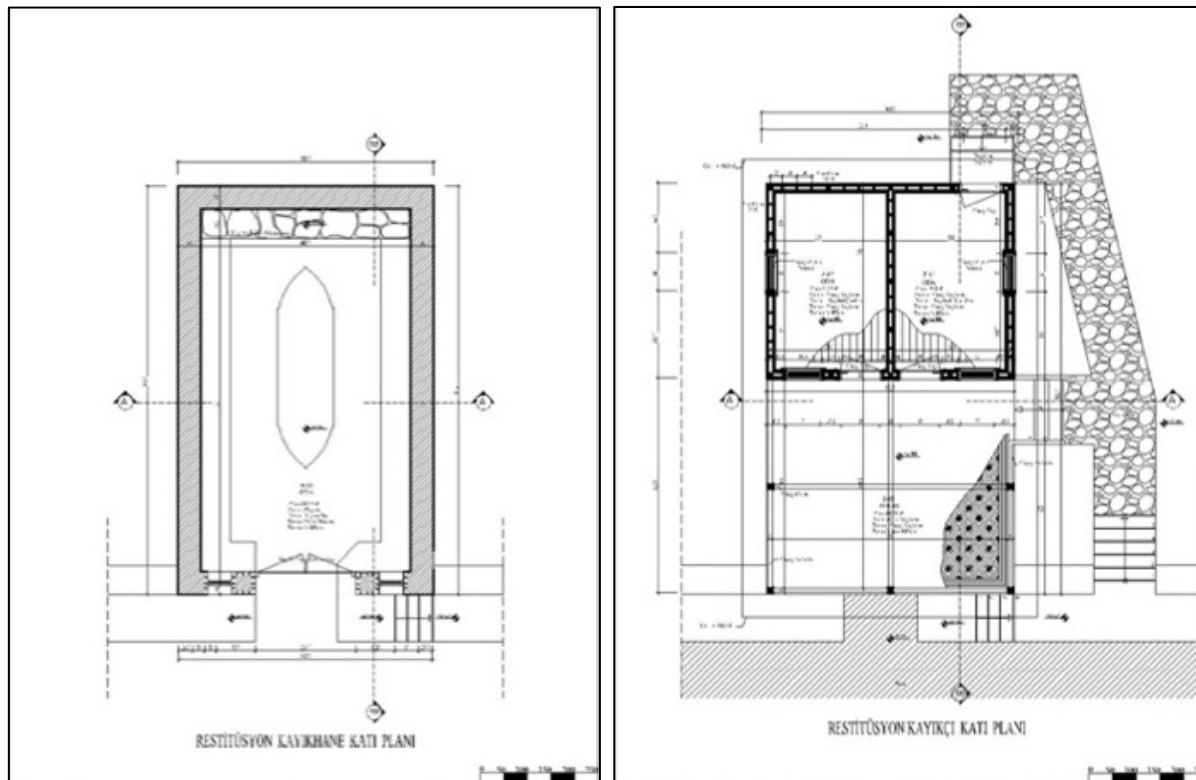


Figure 18. Restitution Plans of the Basement and Ground Floors (Tanrıverdi, 2011)

It was discerned from the old archival photographs of the mansion building that this two-floored wooden structure had preserved the size and proportional ratios of its original facade (Figure 19). In accordance to this, the wooden facade, window, door, balustrade and ornamental details

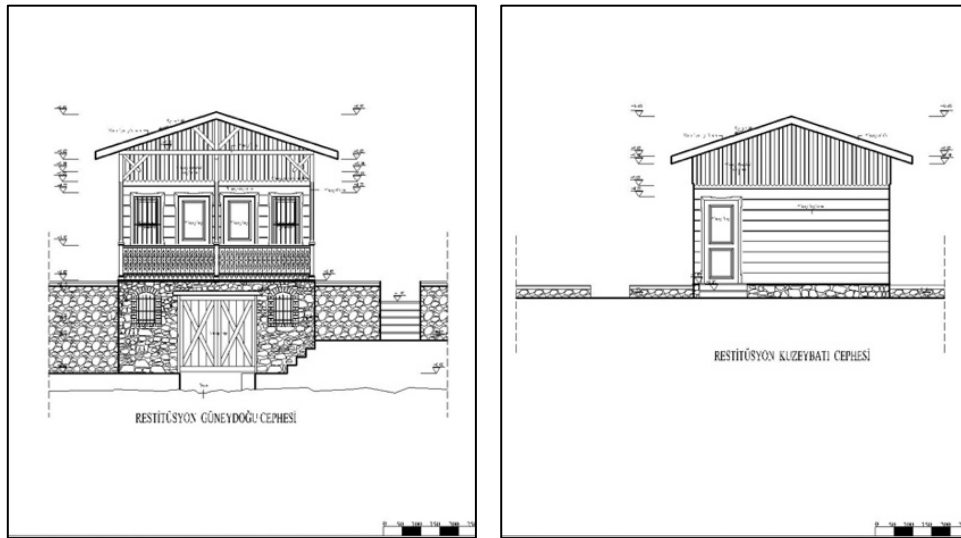
and mosaic decorations of the boathouse's ground floor terrace were determined using the original wooden facade, balcony and floor data of that of the mansion. Old photographs and literature survey showed, that the painting studio located on the same plot had also preserved its authentic facade proportions and materials (Figure 20). Therefore the stone wall, brick arched windows and wooden door details of the basement floor facade of the boathouse were drawn according to these details of the original painting studio (Figures 21 (1)-(2)-(3)-(4)).



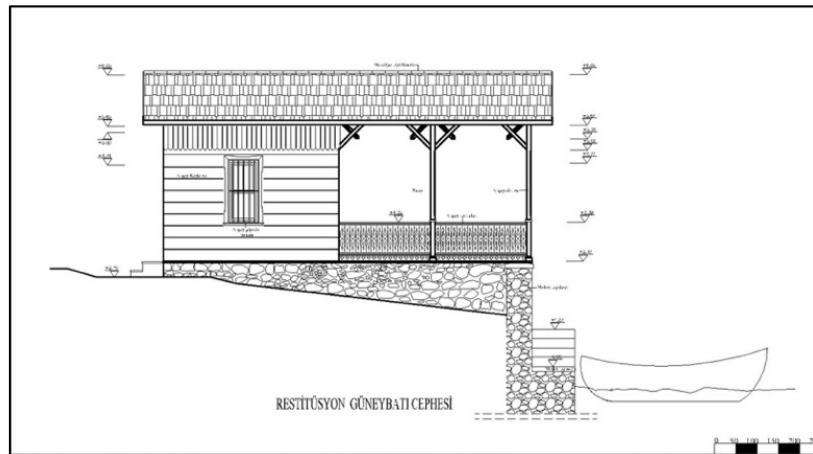
Figure 19. Osman Hamdi Bey's Mansion Building (Çetinor, 1993, 14) (Tanrıverdi, 2011)



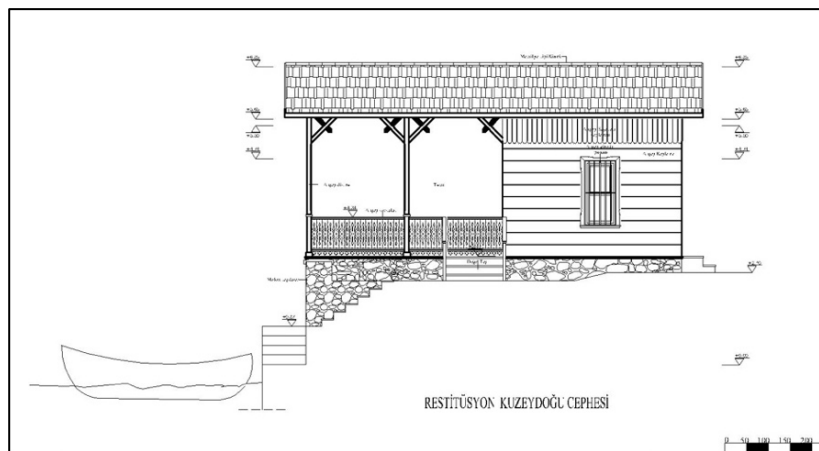
Figure 20. Osman Hamdi Bey's Painting Studio Building (Çetinor, 1986, 10) (Tanrıverdi, 2011)



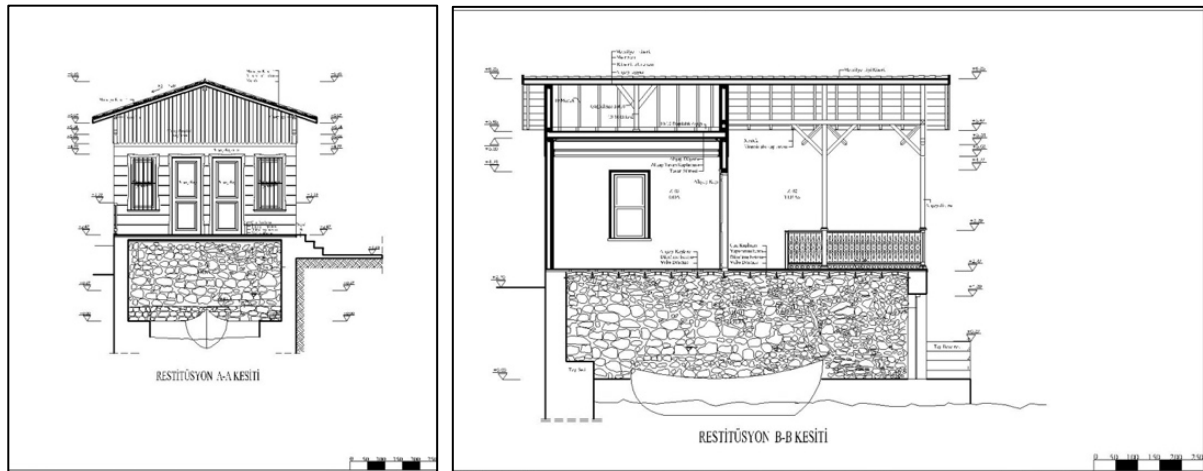
Resim 21. (1) Restitution Drawings of the Boathouse's Northwest and Southeast Facades (Tanrıverdi, 2011)



Resim 21. (2) Restitution Drawing of the Boathouse's Southwest Facade (Tanrıverdi, 2011)



Resim 21. (3) Restitution Drawing of the Boathouse's Northeast Facade (Tanrıverdi, 2011)



Resim 21. (4) Restitution Drawings of the A-A Cross and B-B Cross Sections of the Boathouse (Tanrıverdi, 2011)

4. The Osman Hamdi Bey Boathouse Restoration

In the restoration project, the final function and application decisions could not be made by just considering the boathouse alone, but by considering the complex as a whole together with the historical characteristics of the Osman Hamdi Bey mansion and painting studio located in the vicinity of the boathouse. Considering the fact that the original building was built as a boathouse which was later converted into a residence where rooms (Z-03, Z-04, Z-05, Z-06) were added on to the building during later periods, in the restoration project, intervention decisions and new functional suggestions were made according to its restitution.

The basement floor was cleared of rubble and left in its original dimensions and form for public display. The empty wall-joints were filled-in with their appropriate original mortar material and the damaged volta bricks in the ceiling were replaced with new volta bricks. After mechanically and chemically cleaning the metal beams, anticorrosion paint was applied. Since this section was to be used as a temporary exhibition space and because it was now located below road level access was provided by designing new stairs and a ramp. The bricks and stones on the exterior of the basement floor facade were renewed according to their condition and the necessary joint fillings were made. The windows were repaired in accordance with the available data and information obtained from that of the window of the masonry ground floor of the painting studio room.

The ground floor rooms Z01 and Z02 were preserved, whereas the other rooms (Z-03, Z-04, Z-05, Z-06) were removed and these spaces were turned into a terrace. First the damaged roof which had caused major damage to the whole building was repaired using the same wooden material. The wooden doors, windows, etc. of the exterior facade and interior spaces were repaired or replaced with new ones according to their condition. Rooms Z01 and Z02 were accepted as a part of the Osman Hamdi Bey Museum and a decision was made to use them for exhibition purposes. The terrace whose flooring, wooden railings, eave frontal boards were designed by looking at these same details in the mansion (a building structure of the same period), was to be used as an open exhibition space (Demirkol-Oğuz, 2014)² (Figure 22).

² I would like to thank architects, Ahmet Fuat Demirkol and Cihat Oğuz for the information and help they provided about the restoration of the Osman Hamdi Bey boathouse.



Figure 22. (1) Southeast-Northwest (2) Southwest-Northeast Facades after restoration (Tanriverdi, 2022)

Conclusion

The Osman Hamdi Bey boathouse is an important part of the wooden complex structures (mansion, painting studio and boathouse) which constituted the vineyard estate where the famous Ottoman intellectual Osman Hamdi Bey spent his summers between 1884 and 1910. The boathouse which included boat parking, staff accommodation, guest waiting area and storage units played an important role in connecting the vineyard mansion to the sea. During the historical process, the boathouse had become enlarged with additions for the accommodation needs of the staff workers and the construction of a road passing in front of it had caused it to become lowered below ground level.

Although the mansion and painting studio were restored several times between 1985 and 2007 in the 20th century, the boathouse had been neglected and left in ruins until the 21st century. In 2011 this study was carried out to examine the transformation process of the original architecture of this Osman Hamdi Bey boathouse, which is one of the few boathouses that has survived from the Ottoman period. The process of the study consisted of research, recording,

investigation, analysis and lastly synthesizing all this information to arrive at the architectural, structural and material properties of the original Osman Hamdi Bey boathouse.

This study to discover the original architecture of the Osman Hamdi Bey boathouse can make valuable contributions both to the literature of original boathouse architecture of this period as well as to the documentation and conservation of such boathouse structures for future generations.

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