



The Restoration Proposal for Göksel Bey Dwelling in Catalca, Istanbul

Istanbul, Çatalca, Göksel Bey Konutu Restorasyon Önerisi

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Öz

Toplumun tarihi, kültürel ve sosyal niteliklerini gelecek nesillere aktarmak için koruma büyük öneme sahiptir. Yapılan çalışmalar göstermektedir ki, koruma sürdürülebilirlik açısından da gereklidir. Çatalca İlçesinde önemli özellikler içeren kültür varlıkları bulunmakla birlikte ilçe 3 farklı sit alanına ve zengin geleneksel konut stokuna sahiptir. Günümüze kadar doğal ve insan kaynaklı nedenlerden dolayı bozulma sürecinde olan konutlar özellikle mübadele sonucunda değişen nüfus hareketlerine bağlı olarak da değişime uğramıştır. 237 ada 7 parselde bulunan Göksel Bey Evi de özgün halini kısmen korumakla birlikte çeşitli müdahaleler dolayısıyla niteliğini kaybetmeye başlamıştır. Yapının korunması ve yaşatılması önem arz etmekte özgün haline döndürülmesi amaçlanmaktadır. Bu sebeple konut belgelenecek meydana gelen bozulma ve sorunlar tespit edilmiştir. Yapının belgelenmesi optik yöntem olan "total station" ve klasik röleve alma yöntemi ile gerçekleştirilmiştir. Yerinde yapılan incelemeler ve karşılaştırmalı örnekler doğrultusunda özgün haline yönelik restitüsyon önerisi getirilmiştir. Özgün konut işlevi ile kullanılmasına karar verilen yapıya ilişkin, bilimsel geçerlilikler doğrultusunda korunmasına yönelik müdahale kararları alınmış ve restorasyon projesi hazırlanmıştır. Çalışma ilçede bulunan diğer konutların korunması ve yaşatılması için kaynak oluşturmaktadır.

Anahtar Kelimeler: Restorasyon, Restitüsyon, Koruma, Geleneksel Konut, Çatalca

ABSTRACT

Conservation is very important in order to transfer the historical, cultural and social characteristics of the society to future generations. According to studies, protection is also necessary in terms of sustainability. Although there are cultural assets with important features in Catalca District, Turkey, the district has three different sites and rich traditional housing stock. Houses that have been deteriorating due to natural and human-caused reasons until today have also undergone changes due to changing population movements, especially as a result of population exchange. Göksel Bey Dwelling, located on the island no 237 parcel no 7, has also partially preserved its original form but has begun to lose its quality due to various interventions. It is important to conserve and maintain the structure and it is aimed to return the housing to its original state. For this reason, the housing was documented to identify the deterioration and problems that occurred. The documentation of the structure was carried out using the optical method "total station" and the classical building survey method. In accordance with the on-site survey and comparative examples, a restitution proposal was made for its original state. In accordance with the scientific grounds, intervention decisions were made to conserve, and a restoration project was prepared for the housing to be used its original residential function. The study creates resources for the conservation and survival of other houses located in the district.

Keywords: Restoration, Restitution, Conservation, Traditional Dwelling, Catalca

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INTRODUCTION:

The concept of conservation began to develop in Europe in the 19th century. In our country, the first decisions on the concept of conservation were taken in the early 1900s. However, while decisions were taken regarding buildings and the environment in Europe, conservation principles were determined only in the museum area in our country during these dates. Developments related to building and environmental conservation have been experienced since the middle of the 20th century. Especially with the adoption of international regulations, the understanding of protection has advanced. Interest in the conservation of monuments led to the development of the idea of preserving residences at the end of the 20th century. Conservation is very important for transferring cultural values to future generations. However, it is also related to social, economic and sustainability concepts. Due to their large number, residences meet all of these concepts.

Çatalca, located on the northwestern border, is the largest district of Istanbul (General Directorate of Mapping, 2022). As a result of archaeological research, it was found that the first settlement in the district dates back to B.C. 8000, and there are caves from the period when the Thracians lived before the Ancient Rome (Gürçay, 2015). The city was given different names over time, since it was founded around a fork-shaped stream and hill, it began to be called by the name of Çatalca ("Fork-like" in Turkish) in the 17th century. The region ruled by the Macedonian State, the Romans, and the Byzantines was first added to the Ottoman lands in 1371. The lands that were lost later were finally taken by Sultan Mehmet the Conqueror in 1453 (Danışman, 1970).

As a result of the Exchange decided after the Balkan War and carried out in 1924, the Greek population living in the region was sent to Greece, while Muslims from different places (Naselic, Serez, Drama, Langaza, Demirhisar) were resettled here. In 1935, new settlements were established in the region, especially since immigrants from Bulgaria and Romania arrived (KUDEB, 2009).

There are three different sites in the district center of Çatalca, which has rich potential in terms of traditional cultural assets. Some of the important cultural assets of the district include Anastasios Walls, Çatalca Walls, Ferhat Pasha Social Complex, Ali Pasha Mosque, Çatalca Bath, and Topuklu Fountain. In addition to these, there are "The Old Government House and the Ziraat Bank Building", which are Republican-era structures, and numerous examples of civil architecture that were built at the end of the 19th and beginning of the 20th century.

The Göksel Bey Dwelling, which is the subject of the research, is one of the examples of traditional housing that has been partially preserved in its original state, has the characteristic architectural features of the region, but has been subjected to a lot of interventions. Although there are registered buildings in the city center, their number is decreasing gradually. Although the structure has many values, there have been collapses due to the fact that some of it was not used and no maintenance was performed, some spaces became deserted and turned into a garbage area, and some of them lost their nature due to incorrect interventions. For these reasons, it is important to document the structure that has not been studied together with the plan diagram, architectural and material properties, to conserve and maintain it by returning to its original character.

The aim of the study is to document the Göksel Bey Dwelling, analyze the deterioration that has occurred, present a restitution proposal for the original state of the structure, and make conservation decisions and maintain it in a sustainable manner. Therefore, the optical method "total station" and traditional methods were used to document the structure, and data on the structure and its immediate surroundings were collected. As a result of on-site surveys and comparative studies, the unique feature of the structure was revealed. Suggestions were made for solutions to the deterioration and problems that occurred.

1. Features of the Göksel Bey Dwelling

1.1. Dating, Location and Environmental Data

Göksel Bey Dwelling is located on island no:273, parcel no:7 (former island no:49, parcel no:7) of Kaleiçi Neighborhood. According to information of the structure, it is understood that it was built in the first half of the 20th century and was registered by the decision of the Istanbul Council for the Protection of Cultural and Natural Assets No. 1 dated December 24, 2009, and numbered 1094 (KUDEB, 2009).

The housing is located in the area declared a historical and urban site by the decision of the Supreme Council for the Protection of Housing, Cultural and Natural Assets dated January 8, 1983, No. 14541, and approved by the zoning plan for protection dated November 14, 1985, No. 1566. The building plot stretches along the north-south axis, is bordered by Sabir Street to the north and Cambaz Ali Efendi Street to the south. The building is located on the northern border of the plot, and in the southern part, there is a garden. Looking at the surrounding environment of the building, it is understood that there are completely residential buildings other than the school located to the north (Figure 1). Although the houses are usually built in the adjacent order, the formation of the ground + 1 floor is observed in the old ones and the ground + 3 floors formation is observed in the new ones.



Figure 1. Dwelling environment components

1.2. Structure and Plan Features

Göksel Bey Dwelling was built with an adjacent order and a rectangular plan scheme is visible. It has a seating area of 74 m² in a 180 m² parcel approximately 10.75 x 6.15 meters in size. On the southwestern edge of the structure, there is a 3,36 x 2,20 meters add-on. The adjacent order structure is located to the west in a north-south direction and on the northernmost edge of the parcel. Although there is a garden belonging to the structure in the southern part, there are two trees and one poultry structure in the garden. The ground floor of the building, which is built as a ground + 1 floor, is built of masonry stone wall, and the 1st floor is built of brick decking between the wooden framework.

Although the building belongs to a single family, it was built with a double entrance and used as two residences. Although the two entrances are located on the eastern facade, the south block door is wooden, and the north block door is iron. The Entrance, Hall, Room, Kitchen, Restroom-Bathroom are located on the ground floor of the south block, and the Hall and Room spaces are located on the 1st floor. In the northern block, there is a Hall, a Room, a Restroom on the ground floor, and Rooms on the 1st floor (Figure 2).



Figure 2. Photographs of Göksel Bey dwelling

The entrance section of the southern block is 5,45x1,90 meters in size, and the staircase leading to the upper floor is located in this part (Figure 3a). The staircase made of wooden material has 12 risers, and the width of the steps is 25 cm, the average riser height is 21 cm, and the length of the steps is 1,00 meters. The west of the doors located on the southern facade of the space opens to the Hall (Figure 3c), whereas the eastern part opens to the Room (Figure 3b). The Room is 3,05 x 2,35 meters in size and is located in the southeast corner of the structure. A window is visible on the south wall, and a wooden built-in closet is visible in the north corner of the east wall (Figure 3b). The Hall area is about 3,60 x 2,50 meters. There is a niche of 1,00 x 0,70 m in size at the western corner of the northern wall of the place, in such a way that it indents the entrance section. There are no windows in the Hall, and there are two doors on the south wall (Figure 3c). The door on the east opens to the kitchen (Figure 3d), and the door on the west opens to the Restroom-Bathroom (Figure 3e). The kitchen measures 2,20 x 1,90 meters and the Restroom-Bathroom measures 2,40 x 1,05 meters. These two spaces were created by adding them to the original building mass later. There are windows on the southern facades of both the Kitchen and the Bathroom. There is an exit to the garden with a door located to the north of the eastern wall of the kitchen. The wall materials throughout the floor are stone and there is plaster and lime whitewashing application on them. The floor coverings were damaged by making a concrete screed in all places. Ceiling coverings are wooden beaming in other rooms outside the Room. The beams are located in the north-south direction of the Entrance and Bathroom, and in the east-west direction in the Hall and Kitchen. On the ceiling of the Room, a plastic application is observed on the wooden coating.

The entrance of the northern block directly accesses the Hall (Figure 3f). Since there is a difference in elevation between the stairway in front of the entrance and the decking of the space, the space is accessed by two-riser stairs. The staircase leading to the upper floor is also located directly opposite the entrance door, but it has 9 risers, the width of the steps is 25 cm, the riser height is 21 cm, and the length of the steps is 1,00 m. The Hall is 3.30x2.45 m. in size and has been downsized due to a recent addition of a Restroom in the northeast corner. The Restroom section is 1,40 x 0,90 m in size (Figure 3g). There is a window opening without joinery on the north facade of both the Hall and the Restroom. The door opening on the west wall of the Hall allows access to the Room section (Figure 3h). The space is approximately 2,85 x 2,60 m in size. The Bathroom (Figure 3j) is located on the south wall of the section with a large window on the north facade, and there is a narrow Closet (Figure 3i). The Bathroom is 1,40 x 0,90 m in size, while the Closet measures 1,00 x 0,50 meters. As in the southern section, the walls of all the rooms are stone, but there is plaster and paint on them. The

ceiling of the Hall, from the areas whose floors are covered with concrete, is formed in the form of wooden beaming, and the ceilings of other areas are formed in the form of wooden cladding.



Figure 3. Measured drawing of Göksel Bey dwelling

A wooden staircase leading to the 1st floor of the southern block is bounded by a balustrade and provides access to the Hall area (Figure 3k). Although the Hall section extending in the east-west direction was originally arranged as 5,75 x 2,05 meters, it was downsized to 4,00 x 2,05 meters by creating a Closet area of 2,00 x 1,60 meters to the west (Figure 3l). There are two rooms to the south of the Hall, and it protruded from the south facade and the east facade. The room located in the southeastern part (Figure 3m) is 4,00 x 3,50 m in size and there are two windows on the south and east facades. The Room in the southwestern part (Figure 3n) has a size of 4,00 x 2,75 meters. Although there is no opening due to the fact that it is adjacent to the western part, there are two window formations on the southern facade. The formation of a wooden Closet structure is also visible in the western part of the northern wall of the Room. The wall materials of the floor are brick and plastered and painted. In addition, all floor and ceiling coverings are made of wood material.

Access to the 1st floor of the northern block is provided by a door to the north of the landing of the staircase directly to the Room space (Figure 3o). The room has a size of 3,10 x 2,75 meters and has a window on the north facade and a Closet area (Figure 3p) in the southwest corner. In addition, there is a small Built-in closet in the northwest corner. With the door located to the east of the space, a passage is provided to the other Room (Figure 3q). This room measures 3,20 x 2,20 meters and has windows on the north and east facades. On the southern facade of the space, there is a window opening that shows the staircase. Brick material was used on the walls of the floor, with plaster and paint on them, and wooden cladding was made on the floors and ceilings.

1.3. The Construction Technique

The exterior walls of the building, which are built as ground and 1st floor, are rubble stone (Figure 4a), and the interior walls are brick between the wooden framework (Figure 4b). The first-floor walls are rubble stone on the eastern facade of the northern block, while all other walls are brick infilling between wooden frames. A hacking masonry system was used on the stone walls. It is also seen that the timberwork system (bağdadi) is applied in a small part of the building walls (Figure 4d). The facades of the 1st floor of the southern block of the building were formed by making a wooden coating on a brick-infilled wall (Figure 4c). The walls of the spaces, which were recently added to the southern part of the ground floor, were also created with briquette bricks (Figure 4e). The eastern wall of the Cabinet area, which was created by dividing the upper floor Hall of the southern section, was made by drilling boards on the surface of wooden carriers (Figure 4f). Stonewall thicknesses are on average 70 cm. The indoor walls of the ground floor are 20 cm, while the divider walls of the upper floor are 15 cm. The wall thickness of the Cabinet inside the Hall is 6 cm. The wall thickness of the parts made as an addition to the ground floor is on average 14 cm.

Concrete is used as the floor covering material throughout the ground floor (Figure 4g), and wood is used on the upper floors (Figure 4h). When creating the floors of the 1st floor, the wooden cladding technique was used on the wooden beams. The beams are 10 x 10 cm in size, and the covering material has a thickness of 2,5 cm. Therefore, the thickness of the flooring varies in the range of 12,5 cm to 18 cm.

The ceilings of the structure are made of wooden beams and wooden cladding on the ground floor (Figure 4i), while on the upper floor they are all made of wooden cladding (Figure 4k). The beams on both floors are not made in one direction. The roof of the building was made in the technique of the free-standing roof with a slope of 4 directions in the south block and a slope of 3 directions in the north block. The width of the eaves is not much and varies in the range of 25-50 cm. Turkish-style tile has been used as a roofing material (Figure 4l).

1.4. Architectural Elements

The entrance door of the southern part of the structure is 2,00 x 0,95 meters in size, monoplane and wooden (Figure 4j), and the entrance door of the northern part is 1,90 x 0,80 meters in size, monoplane, and iron (Figure 4o). Both doors are not original and have been recently replaced. The door, which was added in the late period and provides access from the garden, is 1,60 x 0,80 meters, and it's a wooden batten door (Figure 4p). Although the interior doors show a more original formation, they were 1,80 x 0,80 meters in size on the ground floor of the southern block (Figure 4q). In the northern block, there are no door frames, but the passages are 1.90x0.85 meters in size. The upper floor doors are approximately similar in size and are 1,90 x 0,80 m in the south block, while on the north block they are 1.80 x 0.75 m in size. Especially the doors of the southern part are wooden batten doors, and they are original (Figure 4r). The thickness of the doors is 2,5 cm, while the girdles are 6 x 2,5 cm.

The windows are made of wood in the whole structure but have undergone a lot of changes. The ground floor windows of the southern block are located entirely on the southern facade and are 1,40 x 1,20 m in the Room (Figure 4m), 1,00 x 1,00 m in the Kitchen, and 0,50 x 0,40 m in the Restroom. Double-wing joineries are not original. The ground floor windows of the northern block are 1,55 x 0,90 m in the Room, 0,80 x 0,75 m in the Hall and 0,50 x 0,50 m in the Restroom. The upper floor windows are original in the south block and are 1,30 x 0,75 m in size, and they are made in the form of guillotines (Figure 4n). In the northern block, there are double-wing window types, which are 1,35 x 1,10 m in size.

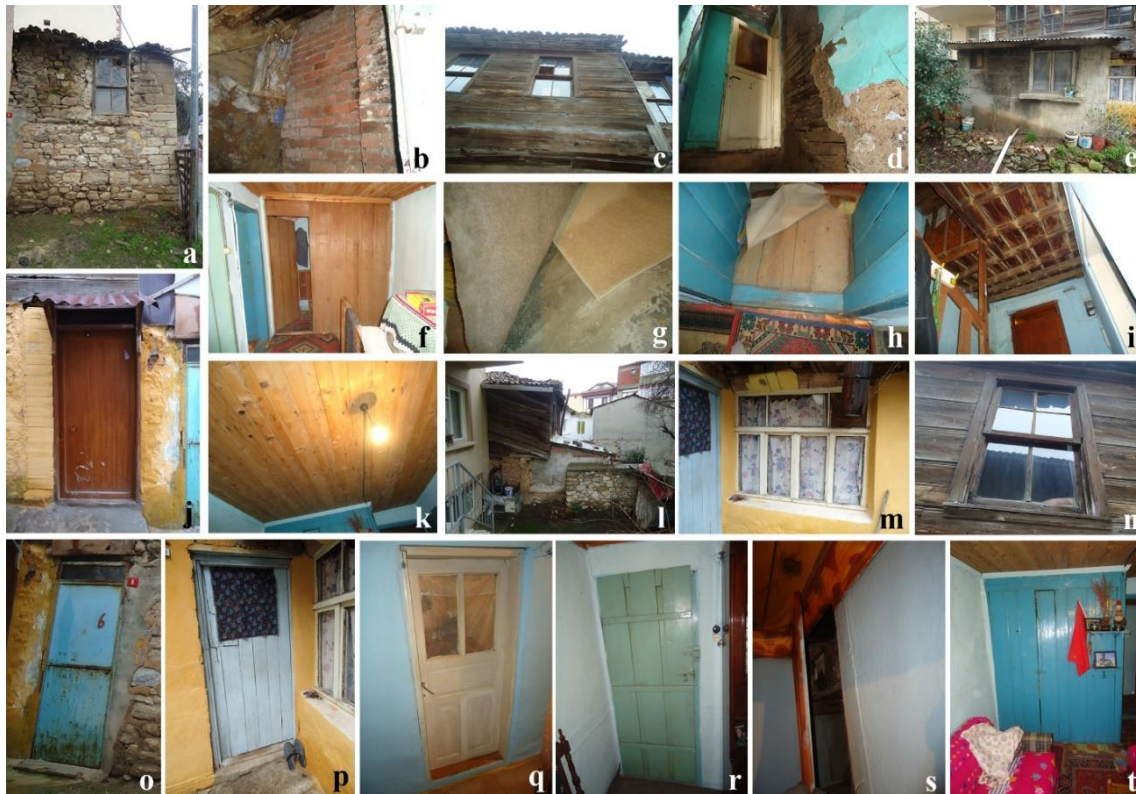


Figure 4. Structural technique, materials and architectural elements

There is a built-in closet on the ground floor in the northeast corner of the Room in the south section and in the northwest corner of the Room in the northern section on the 1st floor (Figure 4s). The cabinets located in the stone wall are 0,50 x 0,40 m, and 0,40 x 0,15 m in size.

There is one Closet in the original structure, and it is located on the northwest wall of the Room located on the upper floor of the southern block. The cabinet, which is 1,76 m in width and 0,70 m in depth, the cargo, is made in two compartments (Figure 4t). In addition, a cabinet area was added by creating a partition in the Hall area.

2. Structural Deteriorations and Corruptions

Although there is no collapse in the structure in general, there are different deteriorations depending on different effects. Although these deteriorations are generally due to environmental, natural, and atmospheric effects, they can also be of human origin. For this reason, deteriorations were studied as deteriorations of natural origin and human origin (Yılmaz & Sağıroğlu, 2016) (Figure 5).

2.1. Deteriorations Caused by Nature

Deteriorations of natural origin occur spontaneously, seen both in the structure and material. Natural deteriorations that have occurred in the Göksel Bey Dwelling include structural cracks that occur in the stone wall, deflection occurred on the ceiling and floor, cracks in interior plaster, plaster loss, staining on exterior materials, deflections in wood material in stairs, beams, cabinets and wood wall cladding, tile problems, and drainage problems (Figure 5).

2.2. Deteriorations Caused by Human

Distortions made consciously or unconsciously by people can also be seen in structures. These distortions in the Göksel Bey Dwelling were as follows: elements added or changed (ground floor restroom and kitchen spaces, the cabinet section, north wall cladding), deposits of debris and

concrete (ground floor coating), and cement applications (north facade plaster) and paint application on the wooden material (the doors) (Figure 5).



Figure 5. Deteriorations and corruptions

3. Restitution Approach

As a result of on-site examinations and resource research, 4 different reliability ratings were determined in the restitution proposal to be made as a result (Şenocak & Sağıroğlu, 2016). 1st-degree sources are data from the structure itself, detected in the building survey, with available traces (ceiling coverings, stairs-top cabinets). 2nd-degree sources include comparative data obtained from comparative examinations of the structure itself (floor coverings on the ground floor, doors on the ground and 1st floors, windows on the northern facade). 3rd-degree sources are data obtained from comparative studies with similar structures that have or do not have traces in the structure (roof coverings, entrance doors, south facade window). 4th-degree sources are the data that should exist due to architectural necessity, despite the lack of traces in the structure (ground floor coverings, stairs, north block roof construction, and eaves plate) (Figure 6). Written source was not used due to the absence of any printed or electronic source related to the structure, and verbal source was not used due to the absence of a person who knew the structure.

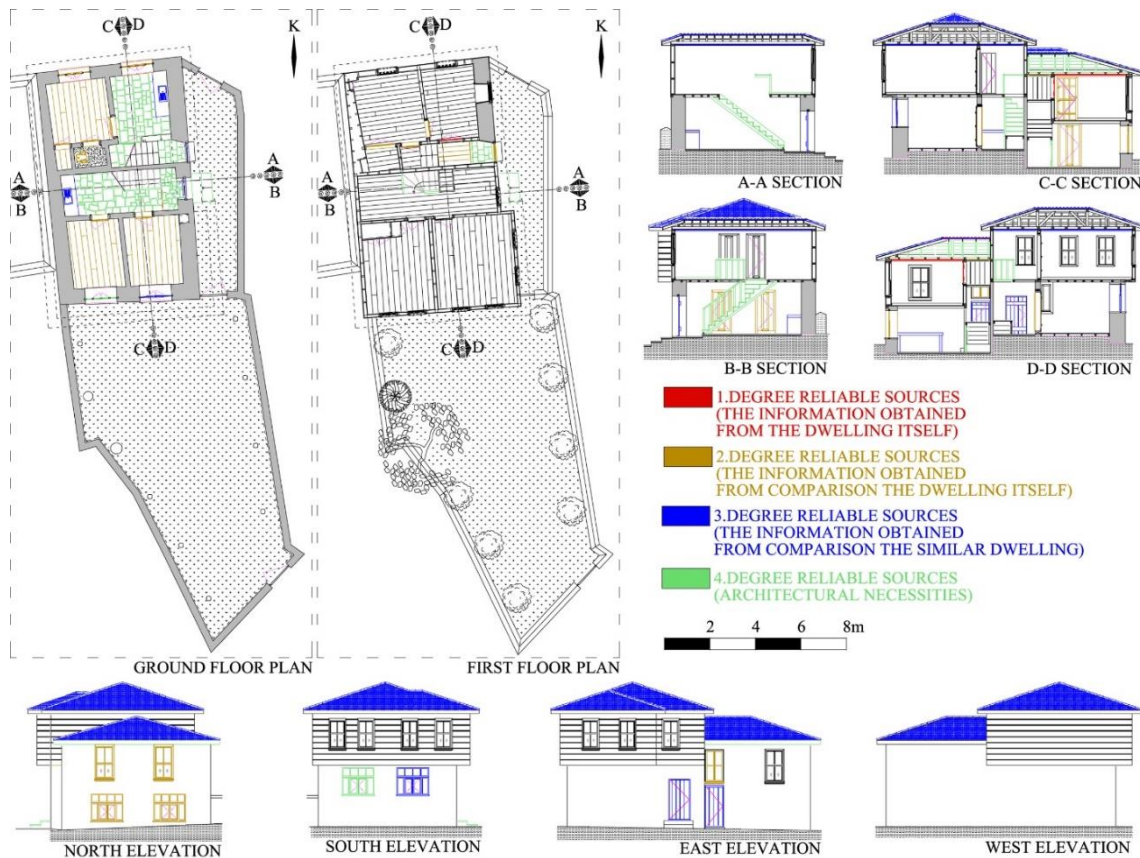


Figure 6. Using sources in restitution



Figure 7. Photographs of elements with deteriorations and corruptions

It is important to conduct a comparative study in order to obtain resources in the restitution study (Karakurt & Sağıroğlu, 2016). Therefore, comparative studies were carried out with the houses located in Çatalca, and comments were made accordingly (Figure 8). In addition, although there are excessive interventions in the structure, it is possible to detect them with traces from the structure. Kitchen and Toilet spaces were made with briquette material on the west wing of the southern facade of the ground floor (Figure 7a). This also caused the deterioration of the Room wall of the structure, which should be composed of two rooms, and the filling of the windows, which were probably the same as the ones in other rooms (Figure 7b). In addition, the niche part, which was made in the northwestern corner of the same room, formed an anomaly (Figure 7d), and since the Room's door was removed, the space has become a corridor (Figure 7c). Compared to the buildings in the same region, it is understood that the floor coverings should have stonework in the living space and wood in the rooms. However, the floors were changed with concrete (Figure 7e). On the

upper floor, it is understood that the Hall section with a smooth rectangular line is divided to create a cabinet (Figure 7f). The small window on the north facade has recently been made due to the recently added Restroom (Figure 7g), and the other ones are not in their original dimensions according to the data from the building (Figure 7h).

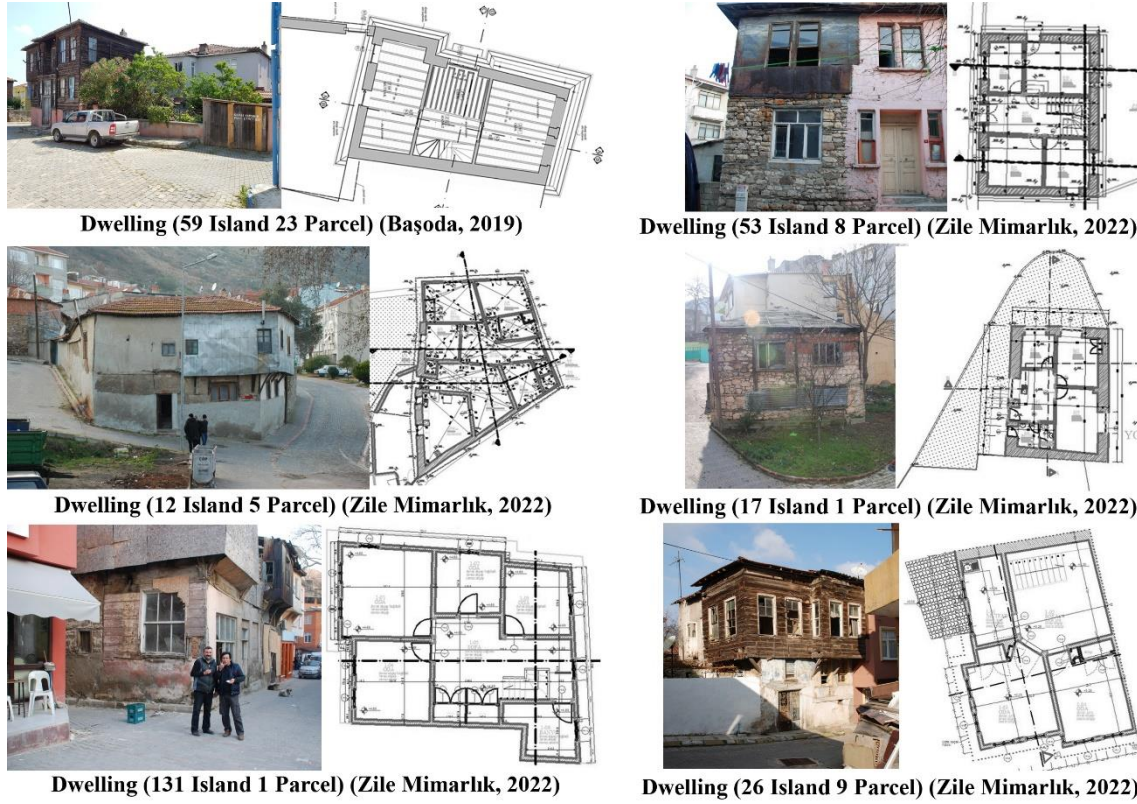


Figure 8. Comparative study chart (Çatalca traditional dwellings)

4. Restoration Approach

It is suggested that Göksel Bey Dwelling be used with its current function for sustainable conservation. The main reason for this is that the housing that is currently in use is desired to be used by the owner with the same function (Figure 9). The dwelling function is widespread in the surrounding area. In this context, the conservation of the building as a dwelling will be a sustainable practice. In addition, it is not recommended to give different functions in accordance with the “Çatalca Kaleiçi Urban Site 1/5000 Scale Land Use Plan for the Conservation Purposes” Article (İBB, 2019), titled “Ensuring that the characteristics of the regions where the registered works are concentrated are protected within the framework of their main functions by emphasizing the location of the structure”. Therefore, the article in the Carta Del Restauro “the occupation of buildings, which ensures the continuity of their life, should be maintained but that they should be used for a purpose which respects their historic or artistic character” (Carta Del Restauro, 1931), the article “It is essential to the conservation of monuments that they be maintained on a permanent basis” (Venice Charter, 1964), of the Venice Charter, and “The characteristics of materials used in restoration work (in particular new materials) and their compatibility with existing materials should be fully established, this must include long-term impacts so that undesirable side-effects are avoided” article of the ICOMOS Charter (Charter on the Built Vernacular Heritage, 1999) were taken into account, and the decisions about the restoration of the housing with its original function in order to transfer its heritage to future generations are listed as follows.

- The existing roof of the structures will be completely dismantled and a wooden roof with a free-standing roof will be made. The eaves plate and under-eaves covering of the roofs will be rebuilt due to their decay.
- Depending on the hipped roof solution, epoxy painted metal rain gutter and epoxy painted metal rain downpipe will be made to the eaves in the direction of rain flow to prevent rainwater damage.
- The existing wooden entrance doors to the east of the building will be removed and replaced with new wooden doors. The door frame wall in the southern block will be completed with a stone wall mesh system and will be plastered with brick dust mortar and painted with lime whitewash.
- The entrances to the building will be arranged as a “Taşlık” area in accordance with the elevation, the floor covering of these parts will be covered with natural stones.
- The wooden staircase, added later, located in the entrance part of the building to the south will be removed, and a new wooden staircase will be made. In the same way, a new wooden staircase will be built due to the fact that the existing staircase of the northern structure is unusable.
- The niches, Kitchen and Restroom-Bathroom spaces on the ground floor of the south block will be removed. In order to return it to its original state, the northern wall of the area will be made with a brick decking wall system between the framing to create a Kitchen space.
- The new Restroom space of the northern block will be removed, and the “Hayat” space will be restored to its original state. After plastering the wall surfaces, they will be painted with lime whitewash.
- In order to meet the current needs, a restroom space will be made with a drywall divider wall in the southern section. The floor will be covered with ceramics, and the walls will be covered with tiles on plaster.
- An original floor survey will be carried out in the Rooms on the ground floor of the structure, and if there is an original floor, improvements will be made according to the floor condition. If there is no original floor, it will be brought to the appropriate heights and the floor of wet volumes will be covered with ceramic tiles, and the floor of other places will be covered with wood. On the floor of the 1st floor, the level will be corrected and covered with wood.
- All wooden door and window joinery of the structure will be dismantled, the original ones will be restored, and the old ones will be replaced with new wooden doors and guillotine windows with double heat glazing.
- Wooden beams will be made by correcting the level in the wooden ceilings of the ground floor. The later-period ceiling coverings of the 1st floor will be removed, the lower layer will be reviewed and the beams that need to be changed will be replaced with new ones. A slatted wood veneer will be made by correcting the leveling defects.
- Plastering will be scraped on the interior walls of all existing rooms. If surface abrasions are more than 5 cm, then stones or bricks will be replaced. For surface abrasions less than 5 cm, the stone or brick will be protected and plastered with brick dust mortar and lime whitewash will be applied on it. The timberwork slats will be replaced with new timberwork by protecting the wall. The outer walls will be covered with wood in accordance with their original state.
- The cupboard section on the 1st floor of the southern block will be removed together with the chimney inside and a Bathroom-Restroom space will be built in accordance with the housing needs. The floor will be covered with ceramics, the walls will be plastered, and the tiles will be covered.
- The concrete screed and stone sections in the building garden will be removed, the walkways will be covered with travertine stone by performing landscaping as specified.
- The garden walls will be renovated, and a rubble stone wall will be made, and a stone coping will be placed on the wall. In addition, wrought iron garden doors will be made and anti-rust and paint will be applied to them.
- Drainage will be carried out around the structure.
- Electrical installation of structures will be carried out by means of underground cable channels in a fire-resistant pipe.
- The heating needs of the structures will be met by using the existing natural gas line in the region using a central heating boiler.

- All existing wooden building elements and new woods used during the repair will be impregnated against water and fungus damage, and a fire-resistant, UV-resistant, dark-colored wood protector will be applied to them.

CONCLUSION:

Çatalca District is especially diverse in terms of its changing population structure after the population exchange. Therefore, it is understood that there are different characteristics in traditional residences. In addition, although the traditional housing stock is quite large in the district, it is also observed that there are a lot of disruptions caused by both users and natural factors. For this reason, it is necessary to intervene and protect the residences in order to keep them alive and to transfer their cultural properties to the next generations.

Although Göksel Bey Dwelling retains some of its original features, it is about to lose them as a result of interventions carried out in different periods. Despite the fact that the housing was in use, no maintenance was carried out and it was damaged by incorrect interventions. Due to the fact that it does not meet today's needs and comfort conditions, it is difficult to live in this house. However, the owner of the property wants to use the structure as a residence after the restoration of the structure. In addition, taking into account the location and characteristics of the structure and in accordance with the "Land Use Plan for Conservation Purposes", it was determined that the change of function will not be appropriate. For this reason, it is recommended that the use of housing should continue by not allowing a different function for protection and survival. In this regard, proposals were made to intervene in the structure in such a way as to meet today's needs and not to impair the nature of the structure. The fundamental approach of the study was to ensure the sustainability of the structure with minimal intervention on its original parts.

The conservation and survival of traditional houses is important in terms of cultural continuity when group values are taken into account. It is a more appropriate approach to use the houses that meet today's needs with the same function. Houses that do not meet the needs should be used as houses if they can be changed with simple interventions that will not harm the originality. Functional change should be considered in dwellings that will not be able to fulfill their primary duties. This approach would be more appropriate both environmentally and structurally.

Compliance with Ethical Standard

Conflict of Interests: *The authors declare that for this article they have no actual, potential or perceived conflict of interests.*

Ethics Committee Approval: *Ethics committee approval is not required for this study.*

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REFERENCES:

- Başoda, A. (2019). Restoration Proposal in the 59 Island 23 Parcel in Avsar Street - Bahar Street Interrupt in Çatalca District of Istanbul. Gazi University Institute of Natural and Applied Sciences (MSc. Thesis). Ankara.
- Danışman, Z. (1970). Evliyâ Çelebi Seyahatnâmesi. Zuhuri Danışman Yayınevi, İstanbul.
- General Directorate of Mapping. (2022). Acreage of Province and District. Retrieved from: <https://www.harita.gov.tr/urun/il-ve-ilce-yuz-olcumleri/176>. (Accessed in 10.03.2022).
- Gürçay, S. (2015). A Folkloristic Investigation About Çatalca, A District of Istanbul. Yıldız Technical University Graduate School of Social Sciences (MSc. Thesis). İstanbul.
- ICOMOS. (2022). Carta Del Restauo. Retrieved from: http://www.icomos.org.tr/Dosyalar/ICOMOSTR_tr0660878001536681682.pdf. (Accessed in 12.03.2022).
- ICOMOS. (2022). Charter on the Built Vernacular Heritage. Retrieved from: http://www.icomos.org.tr/Dosyalar/ICOMOSTR_tr0464062001536913566.pdf. (Accessed in 12.03.2022).
- ICOMOS. (2022). Venice Charter. Retrieved from: http://www.icomos.org.tr/Dosyalar/ICOMOSTR_tr0243603001536681730.pdf. (Accessed in 12.03.2022).
- İBB. (2019). İmar ve Şehircilik Daire Başkanlığı Şehir Planlama Müdürlüğü, Çatalca İlçesi Kaleiçi Kentsel Sit Alanı 1/5000 Ölçekli Koruma Amaçlı İmar Planı Raporu. İstanbul.
- Karakurt, P., & Sağıroğlu, Ö. (2016). A Proposal for the Restoration of the Satici Dwelling in Corum. Gazi University Journal of Science, 29(1), 59-67.
- KUDEB. (2009). İstanbul Çatalca İlçesi Kültür ve Tabiat Varlıkları Envanteri. İBB Kudeb Yayınları, İstanbul.
- Şenocak, M., & Sağıroğlu, Ö. (2016). The Restoration Proposal for Mehmet Duruk Rural Dwelling in Akseki, Bucakalan Village. Gazi University Journal of Science, 29(2), 391-401.
- Yılmaz, Ö., & Sağıroğlu, Ö. (2016). The Documentation and Restoration Proposal for Zaimzade Kamil Efendi Mansion Located in Eskişehir Province Sivrihisar District. Gazi University Journal of Science, 29(4), 731-740.
- Zile Aktif Mimarlık. (2022). Traditional Dwellings of Çatalca District. Retrieved from: <http://aktifrestorasyon.com.tr/giris.asp?>. (Accessed in 12.01.2022)