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**THE PROBLEM OF ADOPTING TRADITIONAL HOUSE FOR TODAY: EXAMPLE OF BURSA**

**ABSTRACT**

Traditional houses which has importance for society in historical, cultural and structural means, is worn and vanished through a long-time usage for different reasons. Many scientific researches showed that, traditional houses can not answer to the up-to-date needs and requests which arose from the changes in cultural and living styles, and it is impossible to protect and sustain living for these houses without adopting them for today. The most important problem in this issue is to achieve conservation / renovation balance. This study aims to examine that conservation and renovation applications on traditional house examples of Bursa which is the first capital city of Ottoman Empire, with a critical point of view.

**Keywords:** Traditional House, Adaptation, Conservation, Renovation, Bursa

**GELENEKSEL KONUTUN GÜNE UYARLANMA SORUNU: BURSA ÖRNEĞİ**

**ÖZET**

Geleneksel konutlar toplum için tarihsel, kültürel ve mimari anlamda önem taşımakta ve uzun süreli kullanımda çeşitli nedenler ile zarar görmektedir. Geleneksel konutlar hakkında yapılan çok sayıda bilimsel araştırma söz konusu konutların güne uyarlanmaksızın korunmasının ve yaşatılmasının olanaklı olmadığını göstermektedir. Geleneksel konutların güne uyarlanması konusundaki en önemli sorun ise koruma / yenileme dengesinin sağlanmasıdır. Bu çalışma Osmanlı'nın ilk başkenti olan Bursa'da bulunan geleneksel konut örnekleri üzerinde koruma / yenileme uygulamalarını eleştirel bir bakış açısıyla incelemeyi hedeflemektedir.

**Anahtar Kelimeler:** Geleneksel Konut, Uyarlama, Koruma, Yenileme, Bursa

## **1. INTRODUCTION (GİRİŞ)**

Traditional house seems to be as one of the most important earthly cultural facts which were shaped according to the regional data and local equipmental potentiality and to the principals and conditions and application techniques as well as spiritual cultural elements such as family structure, worldview, norm, tradition and beliefs of society. Traditional houses have values in historical, sociocultural and architectural means and are being handled as a national and global cultural heritage and because of this reason - they have to be protected. From past to the present; in Turkey which is very rich regarding especially traditional building stocks, many academic studies underline that protection cannot be ensured without actualization of today adaptation and the mentioned houses do not meet the requirements and demands due to social changes. According to the common emphasis belonging to academic researches carried out related with the traditional houses, it is known that the traditional houses were abandoned because the users could not make the relevant interventions due to different reasons. Traditional houses lose their original features on a building - structure scale just because the users interfere the houses without consulting a specialist in order to meet their vital requirements. As for the works carried out by a specialist within the re-evaluation content; they were resulted by implementations wide open for critics especially with the point of view of protection / renewal balance. Users' abandoning their houses, residents' losing the distinctive properties or the quantitative majority of applications which are likely to be criticised are all complicating the protection of the traditional houses and their transfer to the future.

## **2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)**

In order to protect and transfer the traditional resident to the future generations; users must not abandon their residents and those residents must respond to today's requirements as for the comfort conditions. The most significant problem while adapting the traditional resident to the present is to set up a protection / renewal balance. It is known that Turkey (which defines a very rich geography as for the quantity and the quality of traditional residents) has been exposed to update adaptation applications of several traditional residents. However the abovementioned operations are open to critics within the context of physical intervention types and approaches of gaining new functions as well as protection / renewal types. To establish the protection /renewal balance has a great significance for the adaptation of the traditional resident to present. Because of that reason it is believed that it has to be analysed in a scientific and critical point of view. This study has a significance because of the mentioned reasons.

## **3. TRADITIONAL BURSA HOUSES (GELENEKSEL BURSA KONUTLARI)**

Anatolian lands have hosted various cultural formations each of which possesses a different language and tradition for 9000 years. The mentioned cultural formations have created the present character of the Anatolian lands [1]. The most important cultural formations of Anatolia for a long time is the Ottoman Empire (A.D.1299 - A.D.1923). Bursa which became the capital by the establishment of the Ottoman Empire in 1299, is a city that keeps the Ottoman architecture as well as Bitinia - Rome. Turkish resident structure are found in Bursa and its close environment. Bursa, being the first capital of the Ottoman Empire is a city which has a great importance in analysis of the traditional Turkish resident [2]. In the urban and the rural area of Bursa, there are numerous traditional wooden houses. In Orhan Gazi Period; in the antique city area inside Bursa Citadel; the neighbourhoods were set up and in latter period; the Inns Area which was

the central business area and the neighbourhoods around it and the Çekirge - Yeşil - Muradiye and Yıldırım neighbourhoods were set up [3]. The mentioned neighbourhoods are the residential units where the traditional resident structure is rich. In Figure 1 and 2 the samples of traditional residents placed in Bursa urban area [4, 5].



Figure 1. Hisar [5]  
(Şekil 1. Hisar)



Figure 2. Muradiye [5]  
(Şekil 2. Muradiye)

Mudanya, which has been interacting with Bursa since the old times, has the feature of being the most important coast that the city reaches to. Mudanya was joined to Ottoman Empire during the reign of Orhan Gazi and it has a great significance of traditional resident structure. In Mudanya; the urban housing structure shaped up in two ways. One of those structures is the organic urban structure. The other structure is the housing structure along the seashore where Girit immigrants were accommodated in 1877. In the organic area; where traditional wooden (timbered) houses are found; generally there we can see two or three storey buildings whereas there can three or four storey houses be seen [4].

Zeytinbağı (Tirilye) is connected to Mudanya which is 12 km west of the town and which is located on a bay. Formerly; Greek families were living in Zeytinbağı and Turkish immigrant families started to live later on after barter [6]. Zeytinbağı is a residential area which is located in rural side of Bursa and is very rich in traditional housing pattern.

Cumalıkızık, which has a great role in traditional timbered (wooden) housing pattern with a great variety of historical - cultural and constructive features, is located on the northern slopes of Uludağ and 12 km far from Bursa city centre. Cumalıkızık was established in the 1300 A.D. and it is one of the seven villages which was set up by Kızıks from the Turkish Kayı Tribes after the Ottomans captured Bursa. In its constitution; it shelters original traditional houses that are civil architectural models [4].

Misi that is called Gümüştepe District at present was in the village status in the past. Misi is located 15 km west of Bursa city and is on Orhaneli Road - west of the Nilüfer Stream. Misi is overspread on a sloping land and surrounded by forests. Misians who immigrated to Southern Marmara Region from Trakya in 1816 B.C. and who were named Misians set up three residential areas lived there until the Byzantine Period (A.D. the midst of 5th Century). In 1316, Orhangazi gathered Misi to Ottoman lands. During those times Misi was known as the centre of the Christianity. Misi is conditioned in the rural side of Bursa and is very rich with traditional housing pattern [6]. In Figure 3, 4 and 5; some models from traditional houses in the rurals of Bursa [5, 7, 8].



Figure 3. Mudanya [7]      Figure 4. Cumalıkızık [5]      Figure 5. Misi [8]  
(Şekil 3. Mudanya)      (Şekil 4. Cumalıkızık)      (Şekil 5. Misi)

As it is seen, Bursa city urban area and rural area demonstrates a variety and richness in traditional housing structure. In Bursa city urban and rural areas; there having been numerous traditional houses and adaptation issue of these traditional houses to today and the relevant implementations have a great living role in Bursa agenda. Thus; it seems very significant to have a study realating to the adaptation of a traditional house in Bursa. Due to the above mentioned reasons, the researching of traditional house models of the rural and the urban areas of Bursa has gained prominence.

#### 4. AREA STUDY (ALAN ÇALIŞMASI)

In this section; the implementations carried out in Bursa's rural and urban areas are being dealt with. In the implementations of Bursa; in order to define the issues of the adaptation of traditional house, selection of the models from the urban and the rural area was implemented among the housed located in the residential areas that are mentioned in section 3.

It was set out from the rural tarditional housing areas and the historical housing areas of the city for regional researches and from the most effective models regarding typology, constructional materials and the construction system for the housing researches. While selecting a model; the variety of functional, regional and financial issues were taken into consideration in order to create a representation genuinness. For determining the daily approaches of the model houses in the matter of protection and adaptation to present. In Bursa's urban and rural areas; five houses which reply to the criteria of the model selection were determined and those houses were analysed by underlying the structural arrangements actualised during the adaptation implementation and the protection. The structural arrangements mentioned here; include the arrangements intended for meeting the new requirements and protecting the structure element and the original equipment of the traditional Anatolian house [9].

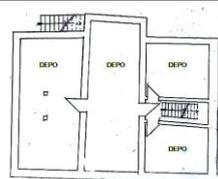
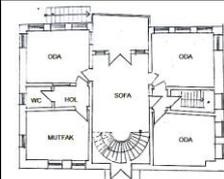
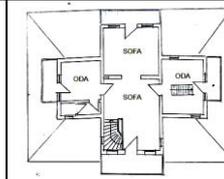
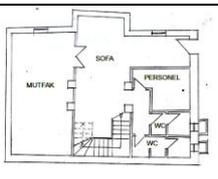
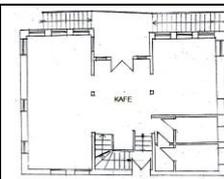
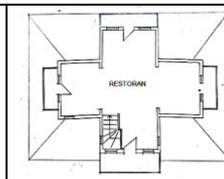
Within the analysis one table was prepared for each house. In this table; there is a section of building tag where you can find information related to the location of the building, the original function of it; general infromation about the building and the structural system and information about its material and a renewal section where there are principles of renewals and the reason of the renewal and the new function of the building and another section composing visual data explaining the situation after the and before the renewal and another section which is related to what the integrated service systems are [9].

##### 4.1. Example 1 (Örnek 1)

A building known as 'Çukur Köşk'; is located on Çekirge Caddesi in Osmangazi Central town. It is one of the civil architectural examples of

the last period of the Ottoman Empire. The building is composed of four storeys including the basement. It is known that on the basement floor; there are service areas and there are living spaces on the other floors in the genuine condition of the house. The walls of the basement floor was formed by a technique of stone cluttering and the top floors were constructed by a plasterboard timbered skeleton with lath bağıdadi). The layings and the ceilings of the roof of the building were formed by wooden material and the roof was covered by Marsilian type of tiles. The inner and the outer wall surfaces of the construction, of which the door and window woodworks are wooden, were plastered. While adapting the building up today, there occurred the functional differences. Within the implementation of adaptation of the construction, which is being used as a restaurant at present, the following changes were counselled. Firstly; the floor, which was formerly planned as a depot, now planned as a restaurant kitchen and a changing room for staff and the lavatories. Secondly; by removing the middle walls; the whole floor was planned as a cafe and furthermore by removing the mid floors of the first and the second floors; the floors were planned as a restaurant. It is known that within the adaptation period, the construction was integrated new clean and fithy water and electricity and heating and air conditioning installation Table 1 [9].

Table 1. The situation of example 1, before and after the renewal [9]  
 (Tablo 1. Örnek 1'in yenileme öncesi ve yenileme sonrası durumu)

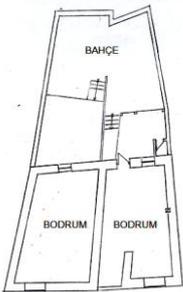
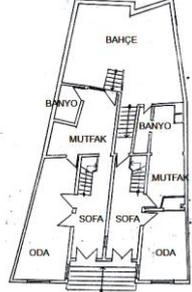
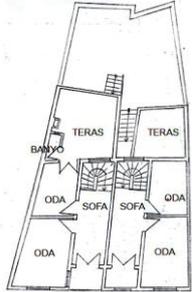
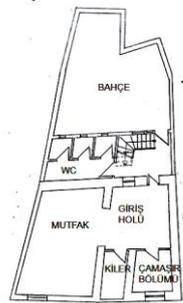
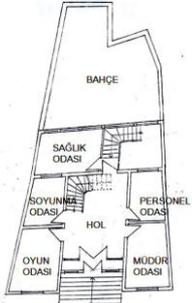
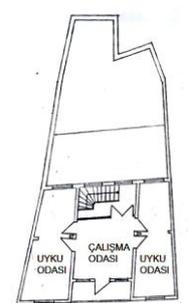
<b>SITUATION BEFORE THE RENEWAL</b>				
				
Basement Floor Plan	Ground Floor Plan	1.st Floor Plan	2nd Floor Plan	General View [10]
<b>SITUATION AFTER THE RENEWAL</b>				
				
Basement Floor Plan	Ground Floor Plan	1.st Floor Plan	2.Nd Floor Plan	General View [5]

#### 4.2. Example 2 (Örnek 2)

The building, which is known as 'Gurabahane - i Laklakan', is located next to the İRGandı Bridge in Osmangazi Centre town of Bursa. The construction; that is one of the Ottoman Period examples and was opened as the first stork hospital of the world, is composed of three storeys. After the construction; the building was divided into two and there occurred some space and structure changes. It is known that in the original situation of the building; there were service spaces on the basement floor and there were living spaces on the other floors. The basement floor walls were constructed by cluttered stone with mud plaster technique and the ground floor and the top floors were constructed with timbered skeleton technique (filled with adobe and brick). The layers and the ceilings were formed with wooden materials. The wooden roof construction of the building is covered with tiles and the doors and the windows are all wooden [9].

Today; the function of this building was transformed to a day care centre for kids. The main goal of this renewal is to protect and open it as a day care centre. Within this; a new entrance hole, a cellar a kitchen and a laundry space were designed for the basement floor and three toilets were added to the building. On the ground floor; a new room was added from the outer side and the vertical separation was removed. On the first floor; the vertical separation was also removed and two new spacious rooms were acquired by uniting the two rooms of each of the two directions. Some actual service systems were integrated to the building. It is seen that within the adaptation period, the construction was integrated new clean and fithy water and electricity and heating and air conditioning installation Table 2 [9].

Table 2. The situtation of example 2, before and after the renewal [9]  
 (Tablo 2. Örnek 2'nin yenileme öncesi ve yenileme sonrası durumu)

<b>SITUATION BEFORE THE RENEWAL</b>			
			
Basement Floor Plan	Ground Floor Plan	1st Floor Plan	General View[11]
<b>SITUATION AFTER THE RENEWAL</b>			
			
Basement Floor Plan	Ground Floor Plan	1st Floor Plan	General View [12]

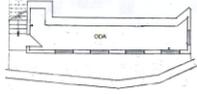
#### 4.3. Example 3 (Örnek 3)

The building is located in Misi. Because of the slope that the building is on; one part was built as two storey and the other part was built as one storey. It is known that some space and structural changes were made by the users after a while it was constructed. The wall of the basement, which is going down the ground, was constructed with a mud plaster and cluttered stone and the other walls were constructed with a timbered skeleton technique filled with adobe). The roof system of the building was formed with Turkish style on wooden construction and the layers and the ceilings and the window elements are all wooden.

At present, the protection of the building appropriate with its origin and opening of the building as a public training centre is the main goal of the renewal. Within this renewal; the following ways were recommended; using the space in the basement as a cafeteria and division of the roon inthe basement into two and functioning all the rooms as

workshops and forming of two toilets by making a dividing wall inside the kitchen. Some daily service systems were integrated to the construction. It is seen that within the adaptation period, the construction was integrated new clean and fithy water and electricity and heating and air conditioning installation Table 3 [9].

Table 3. The situtation of example 3, before and after the Renewal [9]  
 (Tablo 3. Örnek 3'ün yenileme öncesi ve yenileme sonrası durumu)

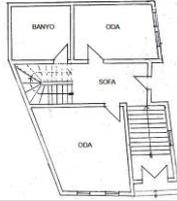
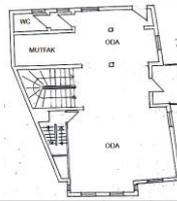
<b>SITUATION BEFORE THE RENEWAL</b>		
		
Basement Floor Plan	Ground Floor Plan	General View [13]
<b>SITUATION AFTER THE RENEWAL</b>		
		
Basement Floor Plan	Ground Floor Plan	General View [13]

#### 4.4. Example 4 (Örnek 4)

The building is located in Mudanya, Bursa. It was used for a while with its genuine form and it was divided into two parts horizontally by the user and this division formed space and structural changes on the building. The basement floor of the building, which is a three storey house, was built with stone cluttering and the top floors were built as wooden skeleton and the roof of the building is wooden carrier.

The protection of the construction appropriate to its origin and development of the physical situation of it are the main goals of this renewal. Within this renewal; the horizontal division of the house was removed and the space. Which was used as a kitchen, was transformed into a room on the first floor, one of the spaces used as a room was recommended to be used as a bathroom, the toilet space was removed and stairs were recommended for vertical circulation. On the second floor; the stairs on the side surface and the toilet were cancelled, the wall inside the room facing the front facade and a room was obtained. The construction was integrated new clean and fithy water and electricity and heating and installation Table 4 [9].

Table 4. The situation of example 4, before and after the renewal [9]  
(Tablo 4. Örnek 4'ün yenileme öncesi ve yenileme sonrası durumu)

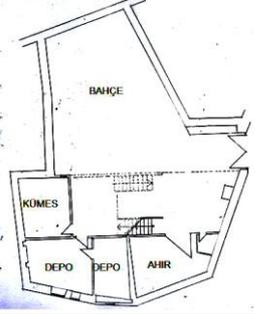
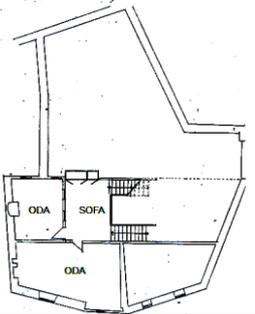
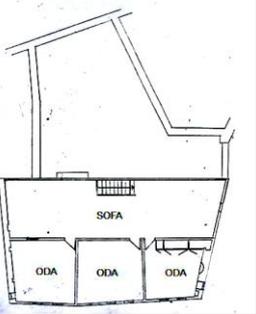
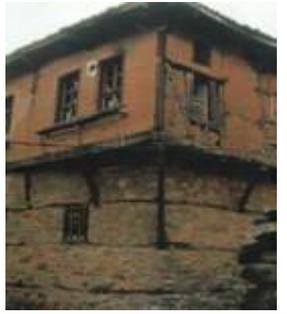
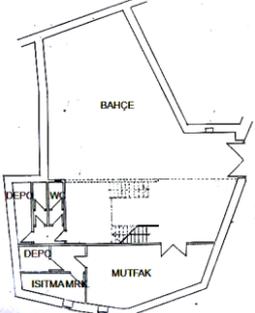
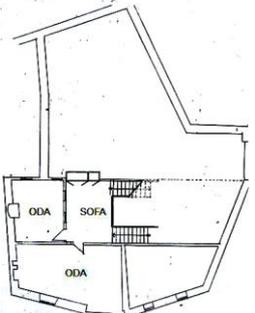
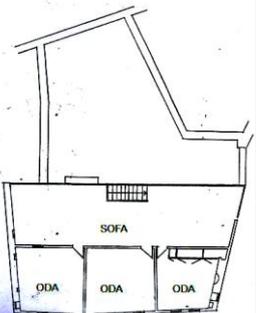
<b>SITUATION BEFORE THE RENEWAL</b>			
			
Basement Floor Plan	1st Floor Plan	2nd Floor Plan	General Review [14]
<b>SITUATION AFTER THE RENEWAL</b>			
			
Basement Floor Plan	1st Floor Plan	2nd Floor Plan	General Review [5]

#### 4.5. Example 5 (Örnek 5)

The building, which is one the rural architecture examples of the Ottoman Empire Period, is located in Cumalıkızık district of Bursa. This is a three-storey house having service spaces on the basement floor and living areas on the top floors. The base and mid-floor walls were constructed with a technique of mud plastered stone cluttering and the topfloor walls were constructed with adobe filled wooden skeleton technique. The layers and the ceilings and window/door elements are all wooden. The roof system of the building was formed with Turkish style on wooden construction and covered with tiles.

The purpose of this renewal is to preserve the building similar to its origin and to open itto service as a restaurant. Within the extent of this renewal it was proposed that a part of the space - used as a depot or stable - on the basement floor would be used as the kitchen of a restaurant. The other part of that space could be used as the heating system centre and depot. Two toilets were added to the basement and the rooms on the first and second floors and the hole of the second floor were suggested to be used as restaurants. The construction was integrated new clean and fithy water and electricity and heating and installation within the extent of this adaptation. Table 5 [9].

Table 5. The situation of example 5, before and after the renewal [9]  
 (Tablo 5. Örnek 5'in yenileme öncesi ve yenileme sonrası durumu)

<b>SITUATION BEFORE THE RENEWAL</b>			
			
Basement Floor Plan	1st Floor Plan	2.nd Floor Plan	General View 15]
<b>SITUATION AFTER THE RENEWAL</b>			
			
Basement Floor Plan	1st Floor Plan	2nd Floor Plan	General View [5]

## 5. CONCLUSION (SONUÇ)

When a critical evaluation is made on the abovementioned application of the handled and analysed examples within the extent of adaptation process in this study; it can be mentioned that there is an existence of positiv and negative aspects.

As it is known very well, traditional houses were designed regarding to earlier social and cultural conditions rather than today and they do not possess a kitchen, toilet and a bathroom like today's houses. In order to protect the genuine features of the traditional house, it is needed not to harm the physical form and the locality. Yet, from the point of today's users' comfort conditions, the wet spaces should be changed into healthful conditions in a physical way. Accordingly; it is very glad that the wet space problem was handled with the aspect of the comfort conditions. Besides, all the analysis show that great effort is being endeavoured on the integration of actual service systems to the traditional house such as airconditioning and clean and filthy water, electricity and heating systems' installations just in order to meet the requirements of what today's life bring about, which is a quite significant pursuance. Additionally; actual installation systems were hidden inside the present elements of the building during the implementation of the abovementioned integration, which implies a very positive occasion for the sustainability of a genuine perspective of the traditional house.

Within the extent of this research; some of the practice implementation were supported by local administrations and some were assumed by private enterprise economically. The applications carried out

by local administrations with the purpose of protecting traditional residents are both very significant with the aspect of the rescue of the house handled physically and with the aspect of being a model for the society about protection. Furthermore; the local administration implementations have a special purpose of giving a functional service (public training centre - day care centre for kids). In this regard, the mentioned applications have been the opportunity of all parts of the society being inside a traditional resident protected with the purpose of taking service. The point that issue is also prominent with the extent of providing the generalization of a positive point of view intended for traditional house protection. It is usually observed that functional changes have been made on traditional houses where the up-to-date adaptation process is made with the private sector financially. When the close relation of protection of the house and the financial structure is considered, it means that the cost of maintenance and repair are compensated; in other words it means providing the sustainability of the building. Yet, there are some problems brought by functional changes. Especially; since the new function is far beyond the capacity of the traditional building, it is observed that the protection of the house is getting difficult with the aspects of space organization, structural form and the authentic equipment. Generally; due to the functional changes; such as wet spaces and clean and filthy water, electricity and heating and airconditioning systems, the building is overloaded with installations and as for the aspect of the view, there can be applications which will prevent the perception of the mentioned house's space and structure organization and equipment. Among the observed examples; the mentioned problems at a certain extent were faced with of which were functionally changed. The change of the function also changes the actions which were going to be actualised in the house. It is natural that the new actions create a requirement of a new space and equipment. Merely; it is also experienced that the authentic view of resident has changed partly or wholly during the process of meeting the requirements of space and equipment.

Consequently; this study exposes that traditional houses should meet the requirements occurred related with the communal change, yet the present implementations have both positive and negative sides and they include some kinds of problems as well. The analysis and the introduction of the problems mentioned through this study composes a prominent base for improving solution proposals. With this study; with this study it is believed that it is being contributed for creating the abovementioned base.

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