



An Example of Traditional Architecture in Western Anatolia: Orhaneli Houses

Batı Anadolu'da Geleneksel Mimarlığa Bir Örnek: Orhaneli Evleri

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Abstract

Traditional architecture is an important component of cultural identity. There are many urban and rural settlements in Anatolia. Traditional houses, which form the texture of the settlements, especially rural settlements, have continued to exist until recently. The loss of these houses has accelerated with globalization. Documentation studies are carried out in order to preserve the houses, which are the most important elements of traditional architecture, to transfer them to the future and to provide information about the local culture. This study was carried out within the borders of Bursa's Orhaneli district for the purpose of achieving these goals. It focuses on the vernacular architectural characteristics of traditional Orhaneli houses.

Orhaneli houses are located in the Western Anatolian part of the wide geography where Turkish Houses are spread; this part consists of villages with rural-dominant settlements. The villages are settled in mountainous geography covered with forests. Thus, timber material was used extensively in buildings as much as stone. In terms of plan schema, various types of Turkish Houses are seen. Traditional Orhaneli houses differ from each other in regard to their functions, but they fit within the framework of the Turkish House with their general characteristics.

Keywords

Traditional Architecture, Rural Settlement, Bursa - Orhaneli Houses, Turkish House

Öz

Geleneksel mimari, kültürel kimliğin önemli bir bileşenidir. Anadolu'da çok sayıda kentsel, sayısız da kırsal yerleşim mevcuttur. Özellikle kırsal yerleşimlerde dokuyu oluşturan geleneksel konutlar yakın zamana kadar varlığını sürdürmüştür. Günümüzde küreselleşmeyle beraber söz konusu konutların kaybı hızlanmıştır. Geleneksel mimarinin en önemli parçası olan konutların korunması, geleceğe aktarılması ve geçmişe dair bilgiler sunulması amacıyla belgeleme çalışmaları yürütülmektedir. Bu amaçları gerçekleştirmek üzere Bursa ili Orhaneli ilçesi sınırları içindeki çoğu kırsal nitelikli yerleşimlerde tespit çalışmaları gerçekleştirilmiştir. Bu çalışma geleneksel Orhaneli evlerinin yerel mimari özelliklerine odaklanmaktadır.

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Orhaneli evleri, Türk evinin yayıldığı geniş coğrafyanın Batı Anadolu kısmında yer almakta ve kırsal ağırlıklı yerleşim birimleri olan köylerden oluşmaktadır. Köyler ormanla kaplı dağlık bir coğrafyaya yerleşmiştir. Bu sebeple yapılarda taş kadar ahşap da yoğun şekilde kullanılmıştır. Plan şeması açısından ise Türk evinin çeşitli tiplerine rastlanmaktadır. Geleneksel Orhaneli evleri işlev açısından kendi içinde farklılıklar göstermekte, genel nitelikleri ile Türk evi çerçevesine uymaktadır.

Anahtar Kelimeler

Geleneksel Mimari, Kırsal Yerleşim, Bursa, Orhaneli Evleri, Türk Evi

Genişletilmiş Özet

Anadolu yerleşimlerinde anıtsal yapılar baskın karakterlidir ancak geleneksel dokuyu ve anıtların arka planını çok sayıdaki yerel nitelikli konut oluşturmaktadır. Konutların yerleşimi, biçimlenişi ve malzemesi yerel mimari ile yaşam tarzı hakkında en önemli bilgileri sunmaktadır. Yerel kimliğin somut öğeleri olan bu değerler küreselleşme ile birlikte hızla yok olmaya başlamıştır. Geleneksel mimarinin temel taşı olan konutların korunması ve sahip oldukları bilgi birikiminin geleceğe aktarılması amacıyla öncelikle belgeleme çalışmaları yürütülmelidir. Bu sebeple, geleneksel konut mimarisi üzerine sistematik şekilde çalışılmamış olan Bursa-Orhaneli ilçe merkezi ve bağlı köylerinde bir belgeleme çalışması gerçekleştirilmiştir.

Günümüzdeki Orhaneli, 2. yüzyılda İmparator Hadrianus'un kurduğu ve antik kaynaklarda adı Hadrianoi (ad Olympum) olarak geçen dağlık yerleşimdir. Roma İmparatorluğu'nun dağılmasıyla Doğu Roma İmparatorluğu'na bağlı Adranos Tekfurluğu olarak yönetilmeye devam edilmiş, 1325 yılında Osmanlı Beyliği topraklarına katılmıştır. Orhaneli, kasaba görünümündeki ilçe merkezi ve ilçeye bağlı elli köyden oluşmaktadır. İlçe merkezindeki geleneksel doku, yerini betonarme ve çok katlı yapılardan oluşan kentsel dokuya bırakmıştır. Geleneksel yapı örnekleri yeni kent dokusu içinde, geçmiş yaşamın izlerini yansıtan parçalar olarak kalmıştır. Köylerin büyük kısmı ise ilçe merkezine göre daha az sayıdaki ve gabariyi aşmayan yeni yapılaşma sayesinde kırsal görünümünü koruyabilmiştir. Bir köy meydanı ve köyün yerleştiği alanın eğimine uygun olarak gelişen yol ağı, yerleşim dokusunun temelini oluşturmaktadır. En yoğun yapı grubu, kırma çatılı ve iki katlı geleneksel konutlardır. Yol aksları üzerinde sıralanan ayırık nizam konutlarda yüksek bahçe duvarları yaygın değildir. Genellikle tek katlı olan samanlıklar, konutların ardından köylerdeki bir diğer yoğun yapı grubunu oluşturmaktadır. Köy fırınları, cami, okul, çamaşırhane, çeşme ve su deposu her köyde bulunan önemli ortak kullanım alanlarıdır. Birçok köydeki okul, nüfus azlığı sebebiyle kullanılmamaktadır ancak bayram, köy hayırı, düğün, cenaze gibi özel günlerde, tatillerde ve yaz dönemlerinde yerel halkın büyük kısmı köylere gelerek köy fırınları ve caminin aktif kullanımını sağlamaktadır. Günümüzde özgün işlevini yitiren çamaşırhanelerin bir kısmı terk edilmiş olsa da bazı köylerde farklı işlevler yüklenerek yeni ortak kullanım alanlarına dönüştürülmüştür.

Ulaşım şartları, coğrafi sebepler yüzünden eskiden beri zor olan Orhaneli’de göç ile birlikte köylerdeki nüfus oldukça azalmıştır. Alan çalışması kapsamında belgeleme yapılan Sadağı, Serçeler ve Kusumlar köylerindeki konutların sürekli kullanım durumu sırasıyla %19, %33 ve %36 olarak tespit edilmiştir. Bu köylerdeki konutların çoğu dönemsel kullanımda veya boş durumdadır ancak köylerdeki yapıların strüktürel durumları incelendiğinde ortalama %70 kadarının iyi durumda olduğu görülmektedir. Strüktürel durumun iyi olması, yapıların çoğunun çok az müdahale ile yaşanabilir hâle gelebileceğine işaret etmektedir. Geleneksel yapıların korunmuşlukları ise köy genelindeki tüm yapılar içinde sırasıyla %42, %30 ve %27 oranında orta durumdadır. Bu durum, köylerdeki geleneksel konutların kritik eşikte yer aldığını göstermektedir. Korumaya ve sürekli kullanıma yönelik önlemler alındığı takdirde özgün dokuların çağdaş yaşama kazandırılma ihtimalleri henüz kaybolmamıştır.

İlçe merkezi ve köylerdeki geleneksel evlerin özgün planları, Türk evi plan şemalarıyla benzerlik taşımaktadır. Zemin katlar genellikle dikdörtgendir. Üst katlar da zemin kat duvarlarını takip eden akslara göre inşa edilmiştir. En eski tarihli olduğu düşünülen konutlarda açık sofalara rastlanmaktadır. Kapalı sofalı yapılarda ise yan sofalı, iç sofalı (karniyarık tipi), merkezi sofalı, köşe sofalı ve L sofalı plan tipleri tespit edilmiştir. İlçe merkezinde bulunan geleneksel konutlardaki helalar avlularda yer alırken, köylerde avluların yaygın olmaması sebebiyle üst katlarda cepheye entegre ahşap kutular şeklindedir.

Plan biçimlenişi cephelere açık sofa, sadece odaların çıkma yaptığı yan çıkma, sadece sofanın çıkma yaptığı orta çıkma, tüm cephe boyu çıkma veya orta aksta yer alan bir balkon ile yansımıştır. Çıkmasız cepheye sahip yapılar da bulunmaktadır. Cephelerde bezemelerin olmayışı ve çıkmaların mütevazı boyutlarda olması, cephe tasarımında işlevselliğin ön planda olduğunu düşündürmektedir.

Geleneksel Orhaneli evlerinin iç mekânlarında bezemeler tercih edilmemiştir. Bazı yapılarda ahşap bezemeli tavan göbekleri ve yüklük raflarında motifler mevcuttur. Ahşap bezemelere nadiren rastlanmaktayken cephe ve iç mekânlarda kalemî süslemeler bulunmamaktadır. Türk evi tefrişleri olan ocak, gusulhane, yüklük, sedir ve raflar, geleneksel Orhaneli evlerinde yaygındır. Ocaklar, zemin kattan itibaren üst katta yığma olarak devam eden taşıyıcı duvarların içine yerleşmiştir.

Geleneksel konutların zemin katları, yerel taş malzemeyle hazırlanan temel üzerine genellikle yığma taş veya daha az yaygın olan yığma kerpiç duvarlar ile inşa edilmiştir. Ekonomi tarım, hayvancılık ve bunlardan elde edilen ürünlerin işlenmesine dayanmaktadır. Bu sebeple zemin katlarda ana kapı ve arka kapının dışında ahır ve deponun konumuna göre birkaç havalandırma açıklığı bırakılmaktadır. Köylerde genellikle zemin katlar ahır, depo ve işlik, üst kat ise yaşam alanı olarak tasarlandığı için, pencere açıklıkları da üst katlardadır. Ahır ve depo işlevi olmayan, tamamen

konut işlevli yapıların zemin katlarında da doğramalı pencereler bulunmaktadır. Bu durumda zemin katlardaki tüm duvarlar yığma yapım sistemi ile değil, gerektiğinde bazı cephe duvarları da bölücü duvarlar gibi ahşap iskelet sistem içi kerpiç dolgu olarak inşa edilmektedir. Ocakların yerleştirileceği duvarlar üst katlarda yığma olarak devam ederken diğer cepheler ve bölücü duvarlar da yine ahşap iskelet sistem içi kerpiç dolgudur. Geleneksel konutlarda tüm iç mekân ve cephe duvarları toprak sıvayla sıvanmakta, ancak bağdadi tekniği tercih edilmemektedir. Döşemeler, ahşap kirişler üzerine yerleştirilen taban tahtaları ile oluşturulmaktadır. Taşlık ve üst kat sofa tavanları genellikle kaplanmamakta, çatı strüktürü görünür hâlde bırakılmaktadır. Kullanılan üç ana yapı malzemesi olan taş, toprak ve ahşap yerel kaynaklı olup, ahşap için genellikle çevredeki çam ormanlarından yararlanılmıştır.

Uludağ eteklerindeki dağlık coğrafyaya yayılan Orhaneli evlerinin biçimlenişini, çevresel faktörlerin olanak verdiği ekonomik faaliyetler büyük ölçüde belirlemiştir. Buna rağmen planlama ve malzeme kullanımı bakımından ciddi bir çeşitliliğe rastlanmamıştır. Sonuç olarak Orhaneli evleri; coğrafya, geçim kaynakları ve yerel malzeme kalitesinden kaynaklanan farklılıklar olmasına rağmen, Türk evinin yayıldığı coğrafyanın bir parçası olarak literatüre kazandırılmıştır.

Introduction

A great variety of architecture exists in Anatolia. Monumental structures typically dominate the settlements of Anatolian civilizations. Monumental structures constitute the identity of the settlement, the region, and even the country. Although the monuments of civilizations are dominant, the largest and the most vibrant traditional building stock is houses. Houses form a homogeneous background to monumental structures. It is the residential texture that creates local identity and preserves the sense of belonging. This homogenous residential background is a living organism that is undergoing rapid change. While some residential textures disappear due to the loss of residents, others change their identity over time.

The settlements, which remained preserved in their vernacular architecture until recently, started to lose their traditional texture and change identity rapidly with globalization. Changes in the specific way of life of local communities, and loss or substitution of traditional uses and functions can cause adverse effects in traditional environments. Therefore, this may lead to the disappearance of cultural traditions and the loss of identity and character of settlements¹.

The cultural identity of a society is expressed by historic towns and traditional buildings. The best way to comprehend and sustain the local traditions is the analysis of vernacular houses. To determine the identity and vernacular architectural characteristics of a settlement, the structures of the historical urban texture must be documented. Documentation is required because the residential texture reflects the vernacular architectural characteristics and the usage of local materials and traditional building systems. Additionally, documentation is one of the most vital steps of conservation. Documentation enables the traditional texture to be transferred to the future properly in cases where the structures are not preserved for various reasons. It also forms a basis for the preparation of the road map to be followed in the conservation of buildings and texture. Therefore, a documentation study was carried out in order to record the traditional texture in the Orhaneli district center and its surroundings, because a comprehensive documentation study of traditional houses had not been carried out before in Orhaneli.

Orhaneli is one of the four rural-dominant districts of Bursa. It is in a mountainous region and its surrounding villages are located to the south of the city of Bursa. Orhaneli was founded by the Roman Emperor Hadrian in the 2nd century AD and settled on the mountainside of Uludağ.² The earliest settlement was named Hadrianoi (ad Olympum) after Emperor Hadrianus. Precise information about the establishment of

1 “The Valletta principles for the safeguarding and management of historic cities, towns and urban areas”, *International Council on Monuments and Sites [ICOMOS]*, 2011, Paris.

2 Elmar Schwertheim, “Hadrianoi’nin Tarihi Coğrafyası,” *Bursa ve İlçeleri Arkeolojik Kültür Envanteri – I*, transl. İbrahim Hakan Mert (Bursa: Bursa Büyükşehir Belediyesi Yayınları, 2014), 18.

the villages around Orhaneli has not been obtained. However, it has been understood from early archaeological surveys that the ancient Orhaneli settlement spread to the surrounding villages with various structures and functions. Since archaeological excavations have not started yet, the functions of these structures have not been determined. It is believed that these structures are the remains of a castle, a temple or a church, a gymnasium, and a city palace.³

Orhaneli and its surroundings were conquered by the Ottoman Principality in 1325. After the conquest, many nomadic Turks were settled in the region. The city of Bursa became the first capital city of the Ottoman Empire, in 1326. Bursa was also the capital of the Hudavendigâr Sanjak. Orhaneli was one of the districts of this sanjak under the name Adranos, which was the name at that time. During the First World War, there was a Greek occupation between 1921 and 1922. Since the Greek occupation that ended on September 9, 1922, Orhaneli has been a Turkish Republic settlement in Bursa province. Existing traditional houses are examples of vernacular architecture built in the Late Ottoman Period and Early Republic years and reflecting the architectural conception of that time.

Traditional structures represent the local texture. While there is a lost traditional texture in the center of Orhaneli, the vernacular textures of the villages are mostly preserved (F. 1). The regulations in the current master plan for the town center caused both a significant reduction in the number of historical structures and their replacement with modern structures. Thus, the historical texture of housing, built with traditional construction systems using local materials in Orhaneli, was recently destroyed and taken over by today's conventional apartment buildings. It has been observed that the deterioration has increased in recent times. The traditional texture is still preserved in some of the villages⁴ close to Orhaneli town center, such as Deliballılar Village,⁵ which is officially registered, Kusumlar Village, and Sadağı Village. However only traces of traditional texture are observed in the Orhaneli town center. In this study, the traditional houses of the Orhaneli town center and eighteen of its surrounding villages were examined architecturally.

3 William John Hamilton, *Researches in Asian Minor, Pontus and Armenia; With Some Account Of Their Antiquities And Geology*, vol. I (London: John Murray, Albemarle Street, 1842), 90-91.

4 The villages have been classified as neighborhoods according to law number 6360, which entered into force in 2014. They are referred to as villages in this study, due to their intense rural characteristics.

5 Zahide Sena Güneş, "Bursa Deliballılar Köyü Sit Koruma Projesi: Koruma Çalışmaları için Ön Koşul ve İlkelerin Araştırılması," (Master's thesis, Istanbul Technical University, 2015), 11-46.



F. 1: (Left) The lost traditional texture in the center of Orhaneli (Güneş Kaya, 2017) and (right) the preserved vernacular texture of the Deliballılar village (Güneş Kaya, 2014).

1. Literature Review

The need for shelter is universal. Various needs and environmental conditions come together to establish different vernacular architecture products,⁶ and most vernacular architectural structures are traditional houses. Many researchers have examined and tried to systematize traditional houses; the same effort has been made for Anatolia.⁷ In these studies, the concept of the *Turkish House* has become prominent for the type of housing spread over a wide geography beyond Anatolia. Orhaneli houses are also considered Turkish Houses with their *hımış* structures and configuration. However, the vernacular architecture of Orhaneli was not studied with the same effort until recently,⁸ although it is very close to Bursa, an important city center. Following Güneş's master's thesis, completed in 2015, the documentation of traditional houses in Orhaneli has continued to the present within the scope of this thesis.

2. Characteristics of Traditional Settlements in Orhaneli

Orhaneli district consists of a town center and fifty villages. Although the center has urban characteristics, the remaining settlements are rural in character. Therefore, the villages show similar traditional texture characteristics. There are diversities among

6 Paul Oliver, "Vernacular know-how," *Material Culture* 18 (3) (1986), 113.

7 Ayda Arel, *Osmanlı Konut Geleneğinde Tarihsel Sorunlar* (İzmir: Ege Üniversitesi Güzel Sanatlar Fakültesi Yayınları, 1982), 36-75; Cengiz Bektaş, *Türk Evi* (İstanbul: YEM Yayın, 2016), 127; Sedat Hakkı Eldem, *Türk Evi Plan Tipleri* (İstanbul: İstanbul Teknik Üniversitesi Mimarlık Fakültesi Yayınları, 1954), 11-25; Reha Günay, *Geleneksel Safranbolu Evleri ve Oluşumu* (Ankara: Kültür Bakanlığı Yayınları, 1981), 20-21, 78-80; Doğan Kuban, *Türk Ahşap Konut Mimarisi 17. - 19. Yüzyıllar* (İstanbul: Türkiye İş Bankası Kültür Yayınları, 2018), 39-52; Doğan Kuban, *Türk "Hayat"lı Evi* (İstanbul: Ziraat Bankası Yayınları, 1995); Önder Küçükerman, *Kendi Mekanının Arayışı İçinde Türk Evi/Turkish House In Search Of Spatial Identity* (İstanbul: Türkiye Turing ve Otomobil Kurumu, 1988), 87-103; Önder Küçükerman and Şemsi Güner, *Anadolu Mirasında Türk Evleri* (İstanbul: Kültür Bakanlığı Yayınları, 1995), 39-62, 195-227; Leman Tomsu, *Bursa Evleri* (İstanbul: İstanbul Teknik Üniversitesi Mimarlık Fakültesi Yayınları, 1950), 10-17; Hülya Yürekli and Ferhan Yürekli, *Türk Evi Gözlemler-Yorumlar* (İstanbul: YEM Yayın, 2007), 16-36.

8 Güneş, "Bursa Deliballılar Köyü Sit Koruma Projesi: Koruma Çalışmaları için Ön Koşul ve İlkelerin Araştırılması," 14-30.

them due to differences in geography and economic activities. The main sources of livelihood are agriculture and husbandry. The rate and forms of agriculture and husbandry reveal the differences in living spaces. Since almost all the locals are Yuruks, cultural differences played a lesser role in the formation of the villages.

Orhaneli town center and a total of 18 villages out of 50 were visited. These included Ağaçhisar, Akalan, Başköy, Belenoluk, Çınarcık, Dağgüney, Deliballılar, Demirci, Erenler, Eskidanışment, Fadıl, Koçuköy, Kusumlar, Ortaköy, Osmaniye (Çatak), Sadağı, Serçeler and Süleymanbey. Although each settlement has similar characteristics in general, there are also features that individuate each one from the others. Orhaneli town center is the most urban-like settlement. Only traces of the traditional settlement can be followed. The Conservation Development Plan for the historical town center, which is a small area that has preserved its texture, was completed in 2019. Delibalılar village, the only registered village, is one of the settlements that has completely preserved its originality. Dağgüney village, which was remarkable for its grapes and other products, has also preserved its originality. However, the local government has not continued registration activities due to conservation difficulties. Sadağı Canyon, on the other hand, is a registered natural asset. There are the remains of a bath built in the Roman period at the springs in the canyon.

The original texture of the examined settlements consists of organic streets and the squares that they reach. Detached buildings are located around the streets and squares (F. 2). The number and size of the squares vary depending on the size of the location and the geographical data. In the villages, the main square is called the village square, and the mosque exists in this square. Mosques are monumental structures located in each settlement. In the center of the Orhaneli district, many squares are encountered along with the mosques, but the mosque in the bazaar square is considered the main mosque.



F. 2: The general views of main street and historic town center of Orhaneli (Güneş Kaya, 2017)

Other building types are stone stoves, laundry areas, water tanks, schools, haylofts and residences. Especially in villages, common spaces are essential parts of daily life.

Laundry areas and stone stoves are modest masonry structures with important functions, and they are open to public use (F. 3). There are many stoves still in use today, both in the town center and in the villages. However, due to developing technology and the decreasing population, laundries were demolished, and many schools were abandoned. The water tanks built in the upper part of the villages are structures that provide drinking water from natural water sources to the village fountains. Haylofts are the second common building type in villages, but not in the town center (F. 4). On the other hand, houses are the most common building type both in the center and in the villages, and they form the textures of the settlements.



F. 3: A public stove in Osmaniye village and laundry washing area with stoves after renovation in Serçeler village (Güneş Kaya, 2020)



F. 4: The abandoned school of Deliballılar village (Güneş, 2013) and an example of a hayloft from Sadağı village (Güneş Kaya, 2017)

2.1. Settlement Analysis

Analyses were carried out in order to document the architectural condition of the settlements. The number of floors, functional distribution, structural condition, conservation status, condition of use, building materials and construction systems were examined in these analyses.

The traditional texture of the villages is preserved by houses, which are rarely three stories and mostly two stories. There are single-story haylofts numbering as much as half the number of houses (F. 5). The most common building function is housing, in addition to mosques, schools, stone stoves, fountains, laundries and haylofts. In rural areas, 60%-70% of the building stock is in residential use. Ground floors of houses were built as barns and storages, and the upper floors as residences. Some of the houses were built as only residential without barns and storages. Due to the decrease in population and husbandry, many structures are now used as residential rather than for their original functions.



F. 5: A two-story house from Süleymanbey village (Güneş Kaya, 2019) and a three-story house from Dağgüney village (Güneş Kaya, 2017).

Traditional structures (F. 6) are built with natural materials in the surrounding area: stone (various types of limestone), soil and wood (mostly pine wood) (F. 7). Most of the single-story buildings are stone masonry (F. 8). There are also haylofts with wood masonry or adobe masonry constructions. Construction system and material diversification increases with variations of houses. The foundation of the houses is built of local stone. The ground floors are masonry structures (F. 9). There are also examples where ground floors are built with adobe masonry over a stone foundation or a wooden-frame skeleton system with adobe infill above the foundation level. The wooden-frame skeleton system with adobe infill is often preferred for the upper floors. However, the entire upper floor is not a wooden-frame system unless the entire ground floor is built of a wooden-frame system, because the exterior walls with fireplaces and cabinets are of stone masonry (F. 10).

There are a small number of examples where the upper floor is completely stone masonry, adobe masonry or a wooden-frame skeleton system. Since the upper floors are built with a timber frame system, it is common for fireplaces to be found within wooden-framed walls. However, it is preferred to place the fireplaces inside the stone masonry walls that continue on the upper floor in Western Anatolia⁹ and Orhaneli.

9 Kuban, *Türk Ahşap Konut Mimarisi 17. - 19. Yüzyıllar*, 125.

While all the walls are completely plastered with earth material, the Baghdadi technique is not utilized (F. 11).



F. 6: General view and street view of Dağgüney village (Güneş Kaya, 2020)



F. 7: Examples of traditional structures built with stone, soil and wood in Dağgüney and Süleymanbey villages (Güneş Kaya, 2019)



F. 8: Single-story hayloft and young man's room in Serçeler village (Güneş Kaya, 2018)



F. 9: An adobe masonry ground floor in Kusumlar village (Güneş Kaya, 2019) and a stone masonry ground floor in Sadağı village (Güneş Kaya, 2018)

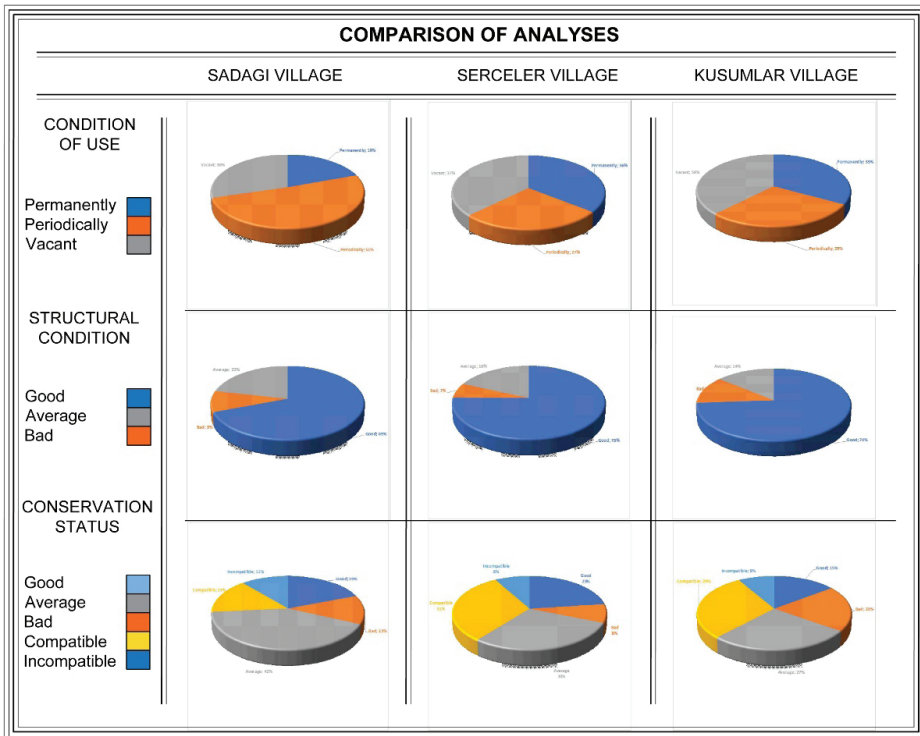


F. 10: Stone masonry walls that continue on the upper floor in Serçeler village (Güneş Kaya, 2018 and 2020) and detail of a continuous stone masonry wall (Güneş Kaya, 2018)



F. 11: Plastered façade of Demirciler House in Sadağı village and the interior plaster of Ali Osman Gezgin House in Orhaneli (Güneş Kaya, 2019)

The percentages of permanently used, periodically used and vacant buildings are generally close to each other according to analyses of condition of use (F. 12). However, while most of the buildings that are used permanently are new, most of the buildings that are used periodically are traditional. In addition, all the vacant houses are traditional. Analyses of conservation status show that there is about 40% new construction in many villages, such as Serçeler and Kusumlar. The new construction rate in Sadağı village, which is another village close to the town center, is only around 25% (F. 12). Conservation status of traditional buildings is generally average. Around 70-75% of the bearing structures are in good condition in the villages that have preserved their traditional texture. Whether these houses are preserved for the future and rehabilitated or left to their fate and destroyed depends on the actions taken now.



F. 12: Comparison of condition of use, structural condition and conservation status between Sadağı, Serçeler and Kusumlar villages (Güneş Kaya, 2022)

2.2. Traditional Houses

Housing is the most important building type for human life because sheltering, protection and production take place in houses. The most accepted assessment on Anatolian traditional houses is Eldem's¹⁰ definition of the Turkish House. The Turkish House describes a type of housing that is common in a wide geography. The

¹⁰ Eldem, *Türk Evi Plan Tipleri*, 12.

concept of the Turkish House spreads from the Balkans to the Eastern Black Sea. The classification of the traditional housing in Eldem's work is based on the formation of *rooms* and *sofas*. Ground floor plans were not utilized, as they had to be produced in harmony with the land, and only the upper floor plans were considered in this classification technique.¹¹ During the transition from nomadic culture to settled life, each nomad tent turned into a full-fledged room. Fireplaces for heating and cooking, the diwan for sitting, closets and shelves for storage and bathing cubicles (*gusulhane*) for personal cleaning became the main elements of rooms of the Turkish House (F. 13).



F. 13: Examples of traditional Turkish room furnishings and setup from Serçeler-Ahmet Uyar House, Kusumlar-Paşalar House (Güneş Kaya, 2019); Dağgüney -Hatipoğulları House (A. Engin Vardar Archive, 2020) and Sadağı -Demirciler House (Güneş Kaya, 2020)

The construction system is described in Eldem's study as a stone foundation or basement floor and a wooden-frame system built on it. While the ground floors were built with wooden-frame with adobe filling or (rarely) with stone masonry, the upper floors were built with only the wooden-frame system without filling. The interiors were usually plastered with the Baghdadi technique.

The traditional Orhaneli houses are often two-story and sorted discretely along the streets and are the main building group of the traditional texture. The houses are classified into two groups in terms of their use: fully residential use and houses with

¹¹ Eldem, *Türk Evi Plan Tipleri*, 14.

barns and storages on the ground floor, and residential on the upper floor. The houses in the first group are fewer in number since the economy depends heavily on agriculture and husbandry. Even though the traditional houses in Orhaneli town center are surrounded by a perimeter wall, the houses in villages such as Deliballılar, Sadağı, Serçeler, Kusumlar, Çınarcık and Dağgüney are usually located in a garden without perimeter walls (F. 14). Daily work takes place in the courtyards in the houses in Orhaneli town center. The products are generated according to the agricultural activities of the family and also determine the courtyard function. There could be a molasses pool, shepherd's room, barn, storage or a carding workshop in some courtyards (F. 15). The garden takes the place of the courtyard in the villages.



F. 14: Pekmezciler House in Orhaneli town center (Güneş Kaya, 2016) and Şerif Mehmet Altınışık House in Sadağı village (Güneş Kaya, 2019)



F. 15: The carding machine in the workshop of Tarakçılar House and shepherd's room in the courtyard of Pekmezciler House (Güneş Kaya, 2020)

The buildings of Orhaneli classified according to their sofas are shown in F. 16 below. Examined houses are categorized as the exterior sofa, inner sofa, side sofa, central sofa, corner sofa and L shaped sofa. The logic of Kuban's Turkish House's evolution morphology explains the development of the rooms around the hall.¹² En-

12 Kuban, *Türk Ahşap Konut Mimarisi 17. - 19. Yüzyıllar*, 104.

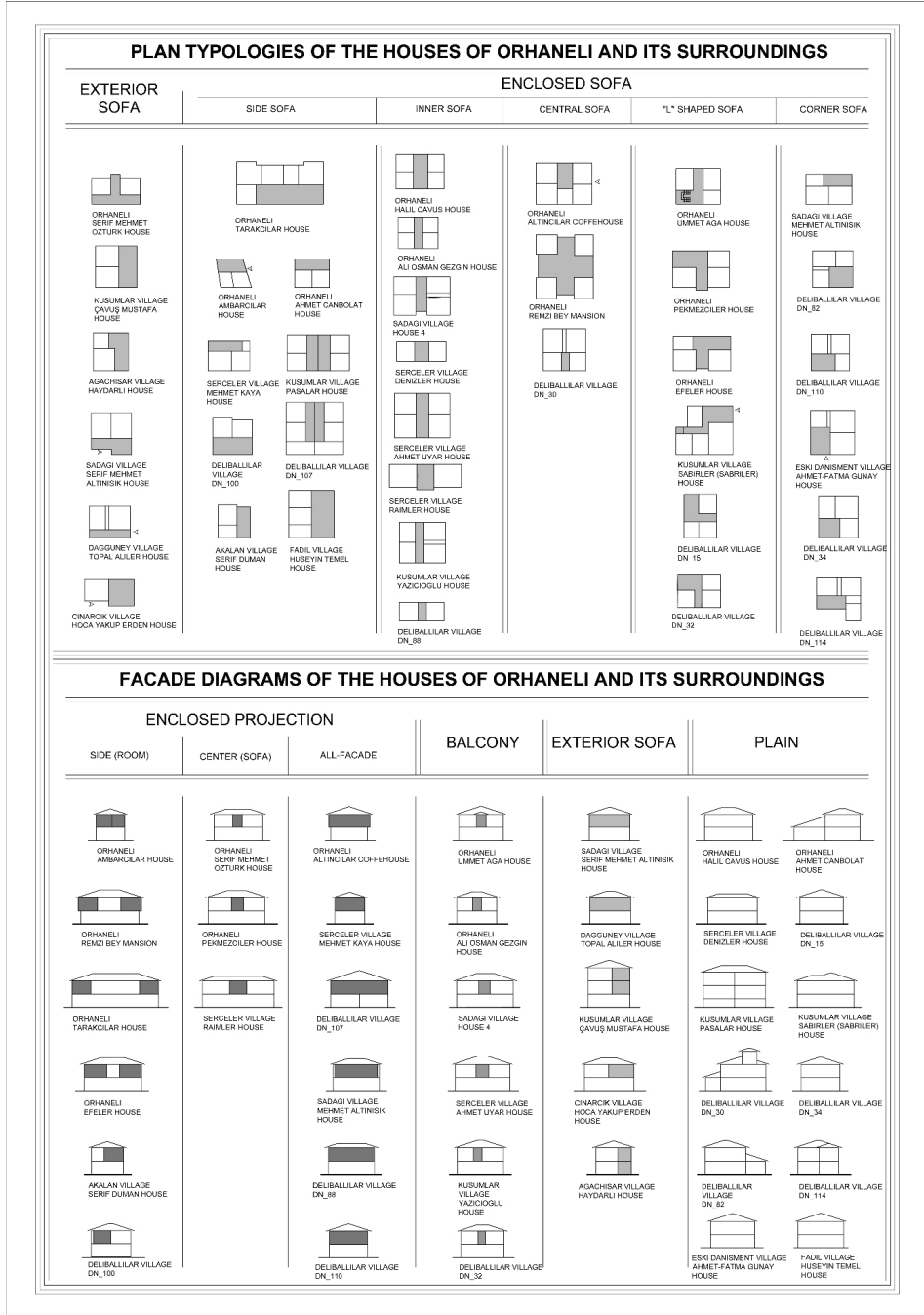
vironmental factors and living conditions cause the rooms to be shaped around the sofas.¹³ The logic behind the housing plan scheme is obvious: a main living area (sofa) and rooms accessed from the *sofa* in Orhaneli houses as well (F. 17).

The exact construction dates of the structures could not be accessed. However, it has been concluded that the houses with exterior sofa in their original state are older. There is a good example of this situation in Sadağı village. The house, which belongs to Şerif Mehmet Altınışik (father), has been abandoned and has an exterior sofa with a fireplace in it. The house belonging to Mehmet Altınışik (son), located right next to his father's house, is a building with a corner sofa with a projection along its façade. It is also concluded that the economic condition affects the size of the building, but not the sofa type. The comparison between Tarakçılar House and Remzi Bey Mansion¹⁴ is an example of this argument. Tarakçılar House has much larger dimensions than Remzi Bey Mansion, which has a more complicated sofa shape. Despite the corner sofa measuring 9 m by 15 m, its plan is simpler than that of Remzi Bey Mansion. The same comparison can be made between Door No: 100 and Door No: 15 in Deliballılar Village. DN: 100 house has a side sofa with larger dimensions than DN: 15 house, while DN: 15 house has an L-shaped sofa which is a more complicated sofa type than the other.







Plan types can be seen from the outside with the façade organizations. Only the sofa and the rooms, or even all the façade, can be seen as projections in traditional houses. In addition, facade organization with no projections is also common in villages, but not in town center (F. 16). The main doors are usually wide and double-winged in houses that usually have a symmetrical façade organization (F. 18). Some of the symmetrical houses were built as twin houses (e.g. Paşalar House). Some of them are designed symmetrically so that they can be divided into two in the future (e.g. Halil Çavuş House). Apart from these examples, although plan schemes are not symmetrical, houses with the same façade layout are common. There are usually two doors on the ground floors, one at the front and the other one at the back, depending on their intended use. Some houses also have balconies on the upper floors. It is popular to open new windows on the ground floors that are incompatible with the upper windows today, due to a change in function.

13 Küçükerman, *Kendi Mekanının Arayışı İçinde Türk Evi - Turkish House In Search Of Spatial Identity*, 191, 197.













14 Zahide Sena Güneş Kaya and Elif Özlem Aydın, "Conservation Problems of Traditional Architectural Heritage in Terms of Life of a Mansion; Remzi Bey Mansion in Bursa-Orhaneli," *GRID Architecture, Planning and Design Journal* 3 (2), 186, accessed March 8, 2022, <https://doi.org/10.37246/grid.721930>.



F. 16: Diagrams of plan and façade examples of Orhaneli houses (Güneş Kaya, 2022)

PLAN EXAMPLES OF ORHANELI AND ITS SURROUNDINGS			
EXTERIOR SOFA		<p>KUSUMLAR VILLAGE CAVUS MUSTAFA HOUSE</p> 	
	SIDE SOFA		<p>ORHANELI TARAKCILAR HOUSE</p> 
INNER SOFA			<p>ORHANELI ALI OSMAN GEZGIN HOUSE</p> 
	ENCLOSED SOFA		<p>ORHANELI REMZI BEY MANSION</p> 
1,1 SHAPED SOFA			<p>ORHANELI PEKMEZCILER HOUSE</p> 
	CORNER SOFA		<p>SADAGI VILLAGE MEHMET ALTINISIK HOUSE</p> 

F. 17: Plan examples of Orhaneli houses (Güneş Kaya, 2022)

FACADE EXAMPLES OF THE HOUSES OF ORHANELI AND ITS SURROUNDINGS			
SIDE (ROOM)		ORHANELI REMZI BEY MANSION	
		ORHANELI EFELER HOUSE	
PROJECTION CENTER (SOFA)		ORHANELI PEKMEZCILER HOUSE	
		SERCELER VILLAGE RAIMLER HOUSE	
ALL-FACADE		ORHANELI ALTINCILAR COFFEHOUSE	
		SERCELER VILLAGE MEHMET KAYA HOUSE	
BALCONY		ORHANELI UMMET AGA HOUSE	
		SERCELER VILLAGE AHMET UYAR HOUSE	
EXTERIOR SOFA		KUSUMLAR VILLAGE CAVUS MUSTAFA HOUSE	
		SADAGI VILLAGE SERIF MEHMET ALTINIŞIK HOUSE	
PLAIN		ORHANELI HALIL CAVUS HOUSE	
		KUSUMLAR VILLAGE SABIRLER (SABRILER) HOUSE	

F. 18: Façade examples of Orhaneli houses (Güneş Kaya, 2022)

The façades are quite plain and undecorated both in the town center of Orhaneli and in its surroundings (F. 16). However, on some houses there are decorative ornaments such as balcony railings (F. 19). Neither exterior nor interior decorations are prevalent in Orhaneli and its surroundings, just as the wooden furnishings of the traditional Turkish room are common but the room's decoration is not. It is seen that functionality has formed the traditional environment and the houses of Orhaneli.



F. 19: Examples of railing decorations from Dağgüney Village (Güneş Kaya, 2020), Orhaneli town center (Güneş Kaya, 2016) and Serçeler Village (Güneş Kaya, 2018)

Conclusions

Orhaneli is a mountainous district in Bursa province. Most of the villages have a rural-dominant character and vernacular architecture due to this geographic feature. Traditional Orhaneli houses were documented and examined with the goal of preservation. In terms of plan, Orhaneli houses are similar to the Turkish House plan in their sofa types. The types of enclosed sofa (inner sofa, side sofa, central sofa, corner sofa and L shaped sofa) and exterior sofa plan type, which is the most basic configuration, were applied. There is even an example of one of the most sophisticated types of sofa schemes, a central sofa with four diwans.

Nonetheless, Orhaneli houses differ from the typologies of the Turkish House indicated by Eldem in some features. In terms of building materials and construction systems, the prevalence of the use of adobe filling in upper floor construction systems distinguishes Orhaneli houses. The reason that may cause material differences is that the materials are locally sourced. For example, adobe plasters of the traditional houses of Anatolia need to be renewed frequently. Fortunately, the adobe plasters of Orhaneli houses maintain their durability for many years without the need for renewal. Moreover, no traditional building with the baghdadi technique has been found throughout Orhaneli. Rooms in Turkish Houses are heated with a fireplace or brazier. It is preferred to place the fireplaces inside the stone masonry walls that continue on the upper floor in Western Anatolia. Orhaneli houses differ from general Turkish Houses by presenting this Western Anatolian feature.

Consequently, Orhaneli houses are a part of the whole, although the Turkish House typology shows slight differences in terms of geography, livelihoods and local material qualities.

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