

BAŞKENT ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
İÇ MİMARLIK VE ÇEVRE TASARIMI ANABİLİM DALI
İÇ MİMARLIK VE ÇEVRE TASARIMI TEZLİ YÜKSEK LİSANS
PROGRAMI

REHABILITATION OF ARCHITECTURAL HERITAGE
“A DESIGN ANALYSIS OF A REHABILITATED TRADITIONAL TURKISH MANSION
IN BERAT/ALBANIA AND ONE IN SAFRANBOLU/TURKEY”

SUBMITTED BY
SARA FISHTA

MASTER THESIS

ANKARA-2021

BAŞKENT ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
İÇ MİMARLIK VE ÇEVRE TASARIMI ANABİLİM DALI
İÇ MİMARLIK VE ÇEVRE TASARIMI TEZLİ YÜKSEK LİSANS
PROGRAMI

REHABILITATION OF ARCHITECTURAL HERITAGE
“A DESIGN ANALYSIS OF A REHABILITATED TRADITIONAL TURKISH MANSION
IN BERAT/ALBANIA AND ONE IN SAFRANBOLU/TURKEY”

SUBMITTED BY
SARA FISHTA

MASTER THESIS

THESIS ADVISOR
Prof. Dr GÖZEN GÜNER AKTAŞ
ANKARA-2021

BAŞKENT ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
YÜKSEK LİSANS / DOKTORA TEZ ÇALIŞMASI ORJİNALLİK RAPORU

Tarih: 19 / 08 /2021

Öğrencinin Adı, Soyadı: Sara Fishta

Öğrencinin Numarası: 21710549

Anabilim Dalı: İç Mimarlık ve Çevre Tasarımı Ana Bilim Dalı

Programı: İç Mimarlık ve Çevre Tasarımı Tezli Yüksek Lisans Programı

Danışmanın Unvanı/Adı, Soyadı: Prof. Dr. Gözen Güner Aktaş

Tez Başlığı: Rehabilitation of Architectural Heritage. ‘A Design Analysis of a Rehabilitated Traditional Turkish Mansion in Berat/Albania and One in Safranbolu/Turkey’

Yukarıda başlığı belirtilen Yüksek Lisans/Doktora tez çalışmamın; Giriş, Ana Bölümler ve Sonuç Bölümünden oluşan, toplam 98 sayfalık kısmına ilişkin, 10 / 08 / 2021 tarihinde şahsım/tez danışmanım tarafından Prof. Dr. Gözen Güner Aktaş adlı intihal tespit programından aşağıda belirtilen filtrelemeler uygulanarak alınmış olan orijinallik raporuna göre, tezimin benzerlik oranı % 11’dir. Uygulanan filtrelemeler:

1. Kaynakça hariç
2. Alıntılar hariç
3. Beş (5) kelimeden daha az örtüşme içeren metin kısımları hariç

“Başkent Üniversitesi Enstitüleri Tez Çalışması Orijinallik Raporu Alınması ve Kullanılması Usul ve Esaslarını” inceledim ve bu uygulama esaslarında belirtilen azami benzerlik oranlarına tez çalışmamın herhangi bir intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Öğrenci İmzası:.....

ONAY

Tarih: ... / ... /

Öğrenci Danışmanı Unvan, Ad, Soyad, İmza:

.....

ACKNOWLEDGEMENT

My supervisor who guided me with her master's degrees and experience throughout the thesis process: Prof. Dr. Gözen Güner Aktaş;

To my dear mother Valdet Fishta, my father Sait Fishta, and my precious family members who gave me strength and guidance throughout my life with their financial and moral support;

I would like to thank my dear husband Murat Arda Kerimoğlu, whose presence and support I felt at every moment during this long-term process and made me believe in myself.



ÖZET

Miras, bir toplumun geçmiş nesillerden miras aldığı, günümüzde koruduğu ve gelecek nesillerin yararına verdiği mirastır. Miras binaları, bir toplumun kültürünün ve karmaşıklığının hatırlatıcılarıdır. [Silahlı Çatışma Halinde Kültürel Varlıkların Korunması Sözleşmesi] Yıllar geçtikçe ve ekonominin büyüyen toplum için farklı bir sonuç vermesi gerektiğinden, bu mücevherler ne yazık ki yok olma, unutulma ve hatta yıkılma eğilimindedir. . Bu, kültürel ve tarihi değerlerdeki büyük kayıpların talihsiz etkilerini bu şekilde getiren yeni çağdaş yapıların inşa edilmesi için alan olması için olur. Bu binaların rehabilitasyonu, mimarlık, iç mimari, şehir planlama, mühendislik, turizm vb. sektörleri kapsayan çok önemli bir taleptir.

Çoğunlukla tarihi konaklar olarak sınıflandırılan eski yapılar, mimarların ve iç mimarların sürdürme ve koruma taahhüdüdür. Ne zaman ve nerede olduğu önemli değil, tarihi yapıyı tasarlarken ve yenilerken mimarın temel amacı, tarihi yapıların ana özelliklerini ve gücünü minimum yıkımla korumaktır. Miras konakları, bu basit yapıların tarihin belirli dönemlerinde tüm mimarlık anlayışını nasıl etkilediği ve bu yapıların neden korunması gerektiği bu araştırmanın öne çıkanları olacaktır. Bu tür yapıların karakterini ve ana çekirdeğini korumakta güçlük çekilmektedir, bu nedenle bu çalışmada rehabilitasyon ve koruma gibi konulara değinilecektir.

Bu bildirinin odak noktası, miras mimari yapıların önemini, bunların nasıl rehabilite edileceğine dair uygun ve sürdürülebilir yol olarak nelerin belirlenebileceğini, ona farklı bir işlev kazandırır da yapının karakterini korumada en iyi yaklaşımın nasıl olacağını vurgulamaktır. orijinalinden (uyarlanabilir yeniden kullanım) ve son olarak binanın, kişiliğinin ve tarihinin nasıl canlı tutulacağına dair ayrıntılı rehabilitasyon tekniklerini hedef alıyor.

Anahtar Kelimeler: Miras İnşası, Rehabilitasyon, İmar, Koruma, Geleneksel Türk Evi.

ABSTRACT

Heritage is the legacy that a society inherits from past generations, maintains in the present and it's given for the benefit of future generations. Heritage buildings are the reminders of a society's culture and complexity. (The Hague, 14 May 1954) As the years pass and as the economy is in need to deliver a different outcome for the growing society, these gems unfortunately tend to get destroyed, forgotten and even demolished. This happens for the mere reason so that there is space for new contemporary structures to be built up, bringing like this the unfortunate aftereffect of major loss in cultural and historical values. The rehabilitation of these buildings is a crucial demand that covers industries like architecture, interior design, urban planning, engineering, tourism etc.

Old structures, more precisely historical mansions, are an architects' and interior designers' commitment to sustain and protect. It doesn't matter when or where, the main purpose of the architect while designing and renovating an historic building is to conserve the main aspects and strength of the historic structures with minimum demolition. Heritage mansions are going to be the highlight of this research, how these simple structures influenced the whole understanding of architecture during particular periods in history and why these structures should be protected. There is a hardship to overcome the preservation of the character and the main core of such buildings, therefore this study will be referring to subjects such as rehabilitation and preservation.

The focal point of this paper is to highlight the importance of heritage architectural buildings, what can be specified as the interior architects appropriate and sustainable way on how to rehabilitate them, how to have the best approach on saving the building's character even though giving it a different function from its original one (adaptive reuse), and finally targeting the detailed rehabilitation techniques on how to maintain the building, its personality and history alive.

Keywords: Heritage Building, Rehabilitation, Preservation, Adaptive Reuse, Traditional Turkish House.

TABLE OF CONTENTS

TEŞEKKÜR.....	i
ÖZET.....	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
LIST OF IMAGES	vi
LIST OF DRAWINGS.....	ix
LIST OF TABLES	x
SECTION I: INTRODUCTION	1
1.1 Research background.....	1
1.2 Problem definition	2
1.3 Thesis Scope	2
1.4 Methodology	3
SECTION II: BASIC CONCEPTS OF REHABILITATION AND HERITAGE MAN- SIONS.....	5
2.1 History and importance of rehabilitation	7
2.1.1 International Rehabilitation and Preservation Charters	8
2.1.2 Turkish National Rehabilitation and Preservation Charters	11
2.2 Classification of Heritage Buildings	15
2.2.1 Identifying the <i>overall aspects</i> of a heritage building	20
2.2.2 Identifying the <i>specific aspects</i> of a heritage building	22
SECTION III: THE ROLE OF AN INTERIOR ARCHITECT IN THE REHABILITATION OF HERITAGE MANSIONS	24
3.1 Methods to save/bring to life a Heritage Mansion	25
3.1.1 Reconstruction	27

3.1.2 Rehabilitation	28
3.1.3 Preservation	30
3.1.4 Adaptive Reuse	32
3.2 The interior architects' handbook to rehabilitating a heritage building	35
3.3 Not all heritage Mansions can be saved	37
SECTION IV: BASIC CHARACTERISTICS OF THE KONAK	42
4.1 Construction methods and facades	44
4.2 Plan arrangements.....	48
4.3 Types of Traditional Turkish Houses in Anadolu	55
4.4 Traditional Turkish houses' influence in the Balkans	58
SECTION V: CASE STUDY - ANALYSIS AND DIFFERENCES OF A REHABILI- TATED TRADITIONAL TURKISH MANSION IN BERAT/ALBANIA AND IN SAF- RANBOLU/TURKEY.....	64
5.1 Analysis of the cities	65
5.1.1 Berat City and the Konak of Xheblati	67
5.1.2 Safranbolu City and The Konak of Kaymakamlar	72
5.2 Analysis of the Structures	74
5.2.1 Before & After Plan Arrangements.....	75
5.2.2 Rehabilitation approach	79
5.2.3 Furniture Update	84
SECTION VI: CONCLUSION	89
SECTION VII: SOURCES	94

LIST OF IMAGES

Image 2.1: Canadian Museum of Nature	10
Image 2.2: Türk Alman Kitabevi Café	12
Image 2.3: The Ocaklı Ada Castle	14
Image 2.4: Mosque in Beyoğlu Fındıklı	15
Image 2.5: Konak found in the Turkish village Mengen	16
Image 2.6: Safranbolu/Turkey.....	17
Image 2.7: Afif Pasha Yalı	18
Image 2.8: Arnavutköy	19
Image 2.10: Belgrade Fortress, Serbia	21
Image 2.11: Bayramiç Hadımoğlu Konağı, Çanakkale	22
Image 2.12: Bayramiç Hadımoğlu Konağı	23
Image 3.1: Royal Castle of Warsaw	28
Image 3.2: Büyük Yalı, Istanbul	29
Image 3.3: Mutfak, Büyük Yalı, Istanbul	30
Image 3.4: Pizzo Villa, Lake Como/Italy	31
Image 3.5: The Parchment Works House, UK	33
Image 3.6: The Parchment Works House, UK	34
Image 3.7: The Parchment Works House Interior, UK	35
Image 3.8: Hoyran Wedre Country Houses, Hoyran/Turkey	37
Image 3.9: Traditional House, Elbasan/Albania	38
Image 3.10: Schaefer building in Illinois/USA	39
Image 3.11: Florence Trust Company Building/USA	40
Image 3.12: Florence Trust Company Building/USA	41
Image 3.13: Florence Trust Company Building/USA	42

Image 4.1: Mudurnu bolu tarihi evler/ Turkey	43
Image 4.2: Sivrihisar/ Turkey	45
Image 4.3: Shiroka Lake/Bulgaria	45
Image 4.4: Example of a Mashrabiya in exterior shot (middle) and in interior shot (right)	48
Image 4.5: Latifoğlu Konağı Müzesi, Yozgat/Turkey	52
Image 4.6: Leyla Hanım Konağı, Safranbolu/Turkey	53
Image 4.7: Van Evi Museum House/Turkey	54
Image 4.8: Harput Evi Örneği/Turkey	55
Image 4.9: Safranbolu/Turkey	56
Image 4.10: Traditional Turkish Houses in Anatolia According To the Regions	57
Image 4.11: Chateau de bonheur, Thessaloniki/Greece	59
Image 4.12: Hafiz Bey Konağı, Thessaloniki/Greece	59
Image 4.13: Paşa's Konak, Vranje/Serbia	60
Image 4.14: Radul Beg's Konak, Zajear/Serbia	60
Image 4.15: Ethnographic Museum Vlore/Albania	60
Image 4.16: Avzi-Paşa in Bardovci /Macedonia	61
Image 4.17: Konak in Gjirokaster /Albania	62
Image 5.1: Berat /Albania	64
Image 5.2: Safranbolu /Turkey	65
Image 5.3: Berat /Albania	66
Image 5.4: Safranbolu /Turkey	67
Image 5.5: Berat /Albania	68
Image 5.6: Xheblati Hotel, Berat /Albania	69
Image 5.7: Xheblati Hotel -1.kat, Berat /Albania	70

Image 5.8: Xheblati Hotel Room Sample, Berat /Albania	71
Image 5.9: Xheblati Hotel Room Sample, Berat /Albania	72
Image 5.10: Kaymakamlar Evi Müzesi, Safranbolu/Turkey	73
Image 5.11: Kaymakamlar Evi Müzesi Sedir Örneği, Safranbolu/Turkey	74
Image 5.12: Xheblati Hotel, Berat /Albania	77
Image 5.13: Kaymakamlar Evi Müzesi Giriş, Safranbolu/Turkey	79
Image 5.14: Xheblati Hotel, Room Sample nr.2, Berat /Albania	80
Image 5.15: Xheblati Hotel, Giriş, Berat /Albania	80
Image 5.16: Xheblati Hotel, Ceiling Sample, Berat /Albania	80
Image 5.17: Xheblati Hotel, Room & Bathroom Sample, Berat /Albania	81
Image 5.18: Kaymakamlar Evi Müzesi Dönme Dolap Örneği, Safranbolu/Turkey	82
Image 5.19: Kaymakamlar Evi Müzesi Oda Örneği, Safranbolu/Turkey	83
Image 5.20: Xheblati Hotel, Furniture Samples, Berat /Albania	84
Image 5.21: Xheblati Hotel, Interior Samples, Berat /Albania	85
Image 5.22: Kaymakamlar Evi Müzesi, Çocuk Odası Örneği, Safranbolu/Turkey	86
Image 5.23: Kaymakamlar Evi Müzesi, Ocak Örneği, Safranbolu/Turkey	87

LIST OF DRAWINGS

Graph 4.1: Rehabilitation analysis	26
Drawing 4.1 Elements of the Turkish house	47
Drawing 4.2 Façade of a Turkish house	48
Drawing 4.3 Sofasiz Plan Tipleri	49
Drawing 4.4 Dis Sofali Plan Tipleri	50
Drawing 4.5 Ic Sofali Plan Tipleri	50
Drawing 4.6 Orta Sofali Plan Tipleri	51
Drawing 4.7 Avzi Pasa Konak in Bardovci.....	61
Drawing 5.1 Xheblati Hotel Before	76
Drawing 5.2 Xheblati Hotel After	76
Drawing 5.3 Kaymakamlar Evi Plan.....	78

LIST OF TABLES

Table 5.1: Old Function vs New Function	78
Table 5.2: Xheblati Hotel vs Kaymakamlar Evi/ Elements	84
Table 6.1: Xheblati Hotel vs Kaymakamlar Evi	89
Table 6.2: Xheblati Hotel vs Kaymakamlar Evi/ Historic Chategories	90
Table 6.3: Xheblati Hotel vs Kaymakamlar Evi/ Plan Layout	92
Table 6.4: Xheblati Hotel vs Kaymakamlar Evi/ Floor Layout	92
Table 6.5: Xheblati Hotel vs Kaymakamlar Evi/ Subdividing Areas	92
Table 6.6: Xheblati Hotel vs Kaymakamlar Evi/ Interior Elements	93
Table 6.7: Xheblati Hotel vs Kaymakamlar Evi / Staircase.....	93

SECTION I: INTROUCTION

Heritage buildings are unique structures with each of them having their own identity, their own distinctive character and their very own different and complex physical functioning due to the design structure, thing that indicates the visual aspects and physical features that comprise the appearance of these buildings and their significance. Character-defining elements include the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment. The concept of rehabilitation is *preserving the authenticity of the heritage based on the original historic evidence* (Lee H. Nelson, FAIA, 1988)

1.1 Research background (Yontem)

Heritage buildings are defined as buildings built with a distinct character in their structure, buildings that have had significant importance throughout the years and those buildings constructed before 1945 having an historic, monumental or iconic importance for the city (Heritage Canada Foundation, 2003). The cultural heritage sector is among the most important attractions and economic drivers. It generates millions of jobs and is essential to the 3 economic sectors which contribute most to the GDP; the Cultural and Creative industries, the Real Estate activities and the Tourism industry (Nypan, 2009). The heritage preservation topic is a major one in the architectural field. Many books, thesis and articles are concerned with the protection of the architectural history. The rehabilitation and preservation of heritage buildings is so important that throughout the years there have been several international charters held for the purpose on how to identify, reconstruct and preserve these characteristic structures (ICOMOS 1964). With the lectures held these last few years the architects have tried to teach the on-growing society on how to live a smart sustainable life and the rehabilitation of already existing buildings were used as a manifesto on how to do so, but how do we turn an already existing building with historical values into a more sustainable one while protecting its character? This research will be focused in one of the geographical positions that not only had the most fascinating history throughout the centuries, but also had a great impact in the revolution of architectural approaches and techniques: Turkey. Even though the examples have been taken from Turkish cities, the research that has been gathered has been abstracted from analysis done in European, Asian and American research. While researching about the valuable structures of the Turkish architecture, a typical design and construction method is seen throughout history and is that of the Ottoman House, also known as *The Turkish House or Konak*.

1.2 Problem definition

The questions this paper arises are related with the acknowledgment of the historic architectural frameworks and when did the importance of these buildings started being recognized, which steps have been followed to allow the character protection of these buildings and why it is necessary to save a heritage structure when it is in danger of demolition. Which rehabilitation techniques are available and suitable for heritage buildings? What are the main factors to take into account while aiming at rehabilitating these buildings? Many buildings have been destroyed because they were “old”, opening a big gap in the society’s heritage value, thus the analysis and the proposals of the correct methods on how to properly rehabilitate a heritage building will be thoroughly evaluated in this paper.

1.3 Thesis scope

The reason why I chose this topic is because, as an interior architect, it’s disturbing and aggravating seeing how some heritage buildings have been reconstructed, deconstructed or even demolished without even taking in consideration the values this specific building once may have had. The importance that heritage buildings have for the culture of any particular city and society must be acknowledged and how important it is to save most of the historical values they possess should be manifested. *Rehabilitation*, being a mixture of reconstructions’ sustainable reach and the retrofit of a specific building, is one of the leading solutions for the protection and preservation of these architectural gems, bringing the outcome of them having a long lasting life filled with cultural values. The renovation of an existing building without actually erasing the historical character it may possess is possible by this approach. The Turkish house, being the type of architecture which was heritagionised only in the 1970s, has a great valuable character which one can learn from.

Left-behind houses can be found in many corners around Turkey, one may only get lost in any street of any city and they would be encountered with marvelous heritage architectural structures. If these houses were to be used as per bringing a helping hand to the society, they would also have a voice to be heard.

There are many abandoned Turkish houses which are now only holding some space in the ur-

banistic architecture, especially in small towns and villages, and this is seen as a great opportunity to come in help to the culture of the country. The semi-demolished or left behind structures are possible to be salvaged by the rehabilitation approach, approach which helps identify and use the opportunities a building may possess. As the society keeps on growing, the need for usable spaces arises and the best solution is to use the already-existing structures and bring them back to life, thus giving hope not only to the society or to the structure but also the generations to come, teaching them about the values Turkey and the Turkish society possess.

This research highlights the importance of heritage mansions, how to help the owner or the architect identify the features and elements that give these buildings their visual characters and what should be taken into account in order to preserve the building itself to the maximum extent possible when rehabilitated. The purpose of this paper is to acknowledge and bring out the importance of the *heritage mansions*, the value they have for the society and what's the healthiest approach towards the adaptive reuse of heritage buildings. This paper will discuss in detail what should be taken in consideration when changing the original purpose of the house and how to highlight its heritage aspects.

1.4 Methodology

The three main sections of the paper include the identification, assimilation and salvation of particular heritage mansions. The fundamental reasons on why it is important to save an historic building, should every historic mansion be saved and the detailed techniques required for the protection of these structures will be discussed, gathered up with the case study focusing on the Traditional Turkish house.

The first section starts with a brief information about rehabilitation and its importance, continuing with the steps taken towards the identification of the heritage buildings, the charters held through the years such as: The Athens Reconstruction Charter held after WWI and The Venice Reconstruction Charter held after the WWII, each of which were held to identify the best approach to reconstruct the damaged buildings after the war. The section continues with the recognition of the overall and specific aspects of which buildings are classified as historic ones and which elements do they have to possess to be analyzed as such.

The second section abides the essential design criteria on the vital methods needed to be used to save a building, the methods an interior architect should follow to bring an historic building

back to life, methods which include the preservation, rehabilitation, and in extreme cases reconstruction of a designated building. The last part of the section arises the questions if every single heritage building should be saved and brought back to life, if yes, what happens if a heritage building is impossible to bring back?

The third section is the one that will explain the approaches the interior architect needs to follow in order to rehabilitate the heritage building without losing the character the building has. This starts by evaluating the main four approaches required when taking in hand the rehabilitation of a heritage structure. This starts with the reconstruction methods, continues with the rehabilitation methods and which is the right way on how to rehabilitate an old structure, then the adaptive reuse approach has been taken as an example and as a suggestion on how to bring back to life an old building whose function is not necessary anymore, and finally the preservation methods have been written thoroughly. Attaching a handbook on how to ethically rehabilitate was necessary. Nevertheless, there are two main questions when it comes to the revitalization of a heritage building? 1-Should every single heritage building be saved? And 2- What happens if the heritage building is irreparable?

The fourth section will be analyzing the Turkish house, starting with the acknowledgement of the history of the construction methods and facades of the Turkish domestic architecture, continuing with the plan arrangements of the typical Turkish house as well as its different types located in Turkey and in the Balkans. This section exposes the architectural value this typical structure has and how it affected the architecture understanding of the Balkanic architecture.

Finally, two historic vernacular Turkish house will be the approach as the main case study. The first one will be the Museum house of the Kaymaklar located in Safranbolu/Turkey, and the second one will be the rehabilitated hotel of Xheblati located in Berat/Albania. The cities will be taken in comparison as well as the rehabilitation approach that was done to these two Traditional Turkish houses. Data is gathered from the documentary reviews of the literature study and of related organizations and administrations.

SECTION II: Basic concepts of Rehabilitation and Heritage Mansions.

“The concept of modern conservation philosophy and practice is the outcome of the 18th century Enlightenment. During this period the importance of national, regional and local identity emerged. As a consequence, this commenced and highlighted the interest in historical buildings rehabilitation.”
(Jakilehto, 2011)

Architecture has a relationship with the history and the identity of a particular *era* and *area*, thus when studying the past, the first samples taken into examination are the architectural ruins left behind. Being one of the long-lasting sources, the ruins reflect not only the beauty and enigma they possess but also speak about the civilization, the people that once lived and their habits, and it also performs the characterization of particular time periods. Architecture is an identity towards the multi-millennial history and sometimes the local identity of even the humblest areas in the globe should be protected (Lahoud. 2008). Heritage buildings are a percentage of these ruins, they are those structures that give the most value to the architecture of a city or country and add values to the heritage of a society.

Among the construction sector towards the heritage buildings, rehabilitation is the method that grabs most attention. The rehabilitation these buildings go through also shows the value the society gives to their own culture and history. Unfortunately, the protection and conservation of the heritage buildings authenticity and cultural significance is not acknowledged as much as it should and the importance that a building may have had in a particular time in history or the architectural value that its character may have had, is usually left unknown. (ICOMOS, 2013) It has been over two centuries since the knowledge about historical preservation has come to the interests' of architects, archeologists etc. yet the society is the one that is ignoring the importance of their historic homes or mansions. (Patrick Hogan, November 2020) The construction industry is one of the cannonading industries of this period and it has a great impact on the economy of any nation; this may be the reason why the construction of any new building is preferred over the rehabilitation of the existing ones. Nevertheless, the value of these buildings must be protected and highlighted, not demolished and destroyed.

There is a critical need to develop standards for vernacular architecture planning and design decisions that are sustainable and appear in a traditional architectural context, preserving its history and maintaining its character. Social needs must be met while urban character is preserved in modern cities. (Kabila Faris Hmood, May 6th 2019) Heritage is both a moral and a

material entity. As a result, maintaining it is a need in urban redevelopment strategies in all nations across the world, particularly in cities with a long and rich history, in order to ensure historical sustainability.

Documentation, gathering of sufficient data and information on each legacy, documentation through pictures, architectural plans, tables, and other means are all part of the process of preserving heritage, particularly architectural heritage. This section will be explaining why the rehabilitation of heritage mansions is important, its history and the steps needed to be taken for the classification of these structures, when did the society start to understand the values of these buildings and what was done to rehabilitate and protect them.

2.1 History and importance of rehabilitation

“When the past doesn’t illuminate the future, the mind of man turns in the dark”

Purchla, 2005

After the 1980’s, a “heritage boom” has happened and spread the monumental gaze to include vernacular architecture into the everyday culture and making popular the concerns regarding the preservation of history as a part of the everyday life-style. (Burman, 2009)

With the fast growing number of the society there is a demand in many parts of the world for new buildings and residences. Even though millions of aged structures already exist, despite their historic character and environmental features, these buildings are not even being considered to be used, and especially not in the least to their full potential. (Mollie Claypool, 2019) The rehabilitation of existing heritage buildings is what is considered a sustainable concept that worries about their conservation and respects their special patterns and historical character. The acknowledgment of this approach is what has brought back to life some of the most historical and damaged structures. (Binda, A Anzani.1998)

Initially, rehabilitation was considered a methodology that was being practiced only upon monumental buildings so that their values were not lost over time, but this meant that the other buildings, that at the time were *not* significant enough to be considered as heritage or monumental ones, were demolished and replaced with new structures. (Binda, A Anzani.1998) With

multiple researches being done upon these buildings the recognition of their values is what brought a voice to their structures and taught the society that they are much more than just ruins. The essential action of rehabilitation is one taken to transform the historic areas into living organisms and making them viable. In the late 1800s, antiquity was a sufficient reason to protect and rehabilitate the medieval buildings as the society would take advantage of a potential living space. (Oktay, Gunce, 2014)

Despite the fact that after the World War II in 1944 historic buildings were only being conserved for the townscape value they had rather than rehabilitated to be further used for their architectural capability, the conservation idea changed a couple of decades later as by the end of the 20th century the heritage boom brought the harmony in the combination of rehabilitation and preservation in the heritage mansions (Forsyth, 2008). Svetlana Boym, a professor of Slavic language in Harvard University, writes in her book “Future of Nostalgia” that the urban renewal taking place in the present is no longer futuristic but nostalgic; the city imagines its future by improvising in its past (Byom 2011: 75)

2.1.1 International Rehabilitation and Preservation Charters

In 1931, after the First World War, a conference in Athens was held by the International Museums Office and the first European restoration assembly was established. Two years later, in 1933, the Athens charter, drafted by Le Corbusier, was established at the fourth Assembly of the International Congress on Modern Architecture. By doing so, for the first time in history a concept and importance of international heritage was introduced and this represented a major step in the evolution of ideas. This brought the creation of the League of Nations which more after got known as UNESCO. (ICOMOS, 2011)

In the first international congress there were seven recommendations published, of which the main purpose was to integrate the architects, the archeologists and the city planners into working together to bring back to life the destroyed cities. Another recommendation was for the contemporary artists to contribute in the decorations of heritage monuments, thus adding a modern idea to the “old” structures. (ICOMOS, 2013) These following major resolutions are three out of the seven articles, known as the "Carta del Restauro," which were passed at the Congress in Athens:

Article:2 - Proposed restoration projects will be subjected to expert evaluation in order to avoid mistakes that may result in the structures losing their character and historical significance.

Article:3 - All countries' problems with historic site preservation will be handled by legislation at the national level.

Article:6 - Historical sites are to be given strict custodial protection.

After the Second World War there were various buildings demolished, especially the heritage ones. Many people lost their homes and many fled their countries, details that led the government to take in hand the reconstruction of major residential sites and, in some cases, the reconstruction of cities. Having the “Reconstruction charters of Venice”, which was separated in the *First International Congress of Architects and Specialists of Historic Buildings* held in 1957 and in the *Second International Congress of Architects and Specialists of Historic Buildings* held in 1964, brought the congress which is now known as ICOMOS, International Council on Monuments and Sites. This congress brought a voice to the demolished or damaged heritage buildings and highlighted their historical importance. (ICOMOS, 2011) Some of the main articles are written below:

Article 2 - Both sciences and techniques that may lead to the analysis of monuments must be used for the protection and preservation of architectural heritage.

Article 3 - In conserving and restoring monuments, the aim is to preserve them no less as works of art than as historical evidence.

Article 12 - Replacements of missing components must be harmoniously incorporated with the whole, but must be distinguishable from the original at the same time, so that the reconstruction does not falsify the artistic or historical facts.

The second international congress was interpreted as a safeguard to the common heritage for the future generation and the heritage buildings' authenticity was considered as a common responsibility. The aim of the charter is defined in one clear sentence in Article 3 where it claims that *the intentions of preserving and rehabilitating heritage buildings/monuments is to safeguard them as works of art as much as historical evidence*. (Appendix A). Article 9 reveals that the process of restoration aims to preserve and express the historical and aesthetical value of the heritage building with respect on its original materials, but when those are missing, the

approach followed must be done by modern techniques so that it does not give the feeling of falsification.

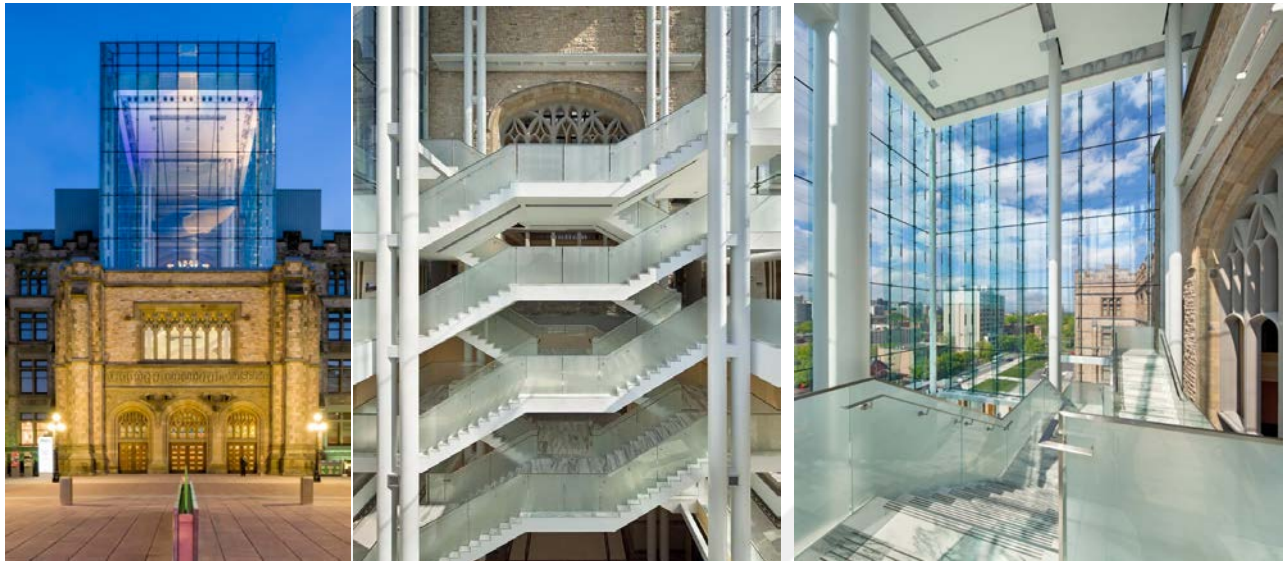


Image 2.1: Canadian Museum of Nature
Source: (AAS Architecture, December 2013)

The building above is the 1912 beaux-arts building in Ottawa, site of Canada's oldest national museum and in 2010 it underwent renovation. Thanks to the addition of a glass entity at the entrance, the structure got a contemporary twist, replacing the original tower demolished due to structural problems in 1915. The so-called "Lantern" enables natural light to flow, enhances circulation and spatial configuration. According to the Venice charter this is a better and more original approach than rebuilding the office in the same way it once used to look like. This is an example of different eras of history and architecture working harmoniously in once specific building, in the exterior as well as in the interior of the building, and not only is it pleasing to the eye but also this iconic action projected the edifice and consolidated its historical importance. (AAS Architecture, December 2013)

As a conclusion, what the charters expressed was that the original structure must be kept alive and preserved as much as possible, but the demolished parts should not be copied by the new techniques since they can be seen as a falsification of the original structure, instead a whole new modern/contemporary approach would be the best solution to the reconstruction of a heritage building. In the case of other monuments, the experts unanimously agreed that a comprehensive investigation of the flaws and nature of the deterioration should be conducted before

any consolidation or partial repair is started. They concluded that each case needed to be handled separately. (ICOMOS November 2011)

2.1.2 Turkish National Rehabilitation and Preservation Charters

Between May 2012 and March 2013 the National Architectural Protection Experts Meeting was performed and Turkey's ICOMOS National Review Committee was identified. Turkey, being a nation of universal cultural heritage filled with prosperity and diversity, has provision to protect the natural threats of before, during and after the Ottoman period. This brought the preparation of the Turkish Architecture of property conservation declaration also known in Turkish as Türkiye Mimari Mirasi Koruma Bildirgesi. (ICOMOS – Mimari mirasi koruma Belgesi, 2013)

This document sets out the basic principles of architectural heritage preservation for all fields and various sectors of society participating in the preservation process, includes concepts of architectural heritage, conservation processes and tools, education and policies for conservation, and the appropriation to society of preservation. (ICOMOS – Mimari mirasi koruma Belgesi, 2013) There are many important articles in the Turkish national rehabilitation charters. The main articles are mentioned below:

Article 2: The intervention done to a structure should not damage the structure, it should be careful not to destroy or change any historical documents and the integrity of the structure must be preserved.

Article 4: Interventions to the structure must not be misleading for future research, but should be able to be carried out without damaging the original structure as much as possible.

Article 5: New materials and techniques must be used not only to be in harmony with the original structure but also they must proof their resistance and sustainability with scientific data.

It is clear how important the originality of the structure is for the Turkish national rehabilitation charters. From article 2 it is understood and taught that the most important thing to do when it comes to the rehabilitation of a building, most of the original structure must be reused. This can be seen in section four, subsection 3.2: *Intervention approaches*. When it comes to the

adaptive-reuse approach, it is claimed that the original structure must be raised to an acceptable standard of modern living, whilst the integrity of the structure should be respected. (ICOMOS, 2013)

Turkey, being the epicenter of the world for over a millennium, is a country which has had many monumental structures throughout its history. The Ottoman-Turkish house, a designation for wooden urban vernacular houses, became framed as a European inheritance for an international audience. Even-though this type of architecture was originally used to define a nationalist and revivalist professional agenda and flourished during the eighteenth and nineteenth century, it became codified as “Turkish House” in the late 1970s (Sezer 2005, 2009). The architect-educator Sedat Hakkı Eldem and his students documented many surviving examples of significant vernacular houses and used these case studies as a manifesto for the protection of the Turkish house (Sibel Bozdoğan, 1987, 1996, 2001, 2012) The old wooden houses’ signature name known as the “Turkish House” was defined as a distinguished architectural vernacular heritage in the “post-World War II European preservation discourses”. There discourses were the response of the growing concerns about the destruction of historic cities through the fast growing urbanization (Kirshenblatt Gimblett 1998, 2006). The heritagisation of these vernacular houses helped the Turkish historical architecture not only to be protected and cherished as a valuable symbol of the society, but also to be used as an element in the everyday life of the community.



Image 2.2: Türk Alman Kitabevi Cafe

Source: harbiyiyorurum.com/istanbuldaki-en-iyi-7-kitap-kafe/

Above the interior of a rehabilitated Turkish house into a coffee shop for book lovers is seen. This house dates back in the 1950s’ and has been rehabilitated in 2015. The approach of the interior architect can speak itself that they tried to protect and save as much of the original

design as possible. Keeping the same concept of the brick walls, the wooden panels on the walls as well as on the ceilings, the long timber floors and the newly implemented fireplace shows the respect towards the original design. (Brandmail, 2016) But is this approach a perfect one or is it considered a falsification of history? One can argue that this rehabilitated house is a great approach not only by being more sustainable and protective towards the heritage of the Turkish architectural history but also directing the fast growing society towards the learning of the historical values and its architectural aspects. Nevertheless, using other materials than the original ones may be considered as fake towards the value of the architectural character. For example, the fireplace has been renovated in a way so that it can speak of an historical era, but since it is just a copy of the original one, can it be perceived as fake?

The Venice Charter claims that the monument, in this case the fireplace, should not be rebuilt, but instead just add the new parts along the historical one by *highlighting* the new added pieces. The new parts must be integrated harmoniously in the fireplace, yet be distinguished from the original. This is done so that the restoration does not falsify the historic evidence. (ICOMOS, 2013)

The Turkish charter as well has the same approach as the Venice one. The best approach would be to have the new materials built along the original one, but of course this should have been done by connecting the old with the new in a way that if it was decided that the new design was not fit, it to be able to be exchanged. The Articles written below are some of the examples of the Turkish national approach to the rehabilitation and preservation of heritage buildings: (ICOMOS – Mimari mirasi koruma Belgesi, 2013) According to Article:2 the interventions made should have not harmed the structure and attention must have been made not to modify the fireplace in order to preserve the remains of historical records, thus, the structure's integrity has not been protected. Article:4 as well claims that interventions should not have mislead future research and studies.

Even though it is specifically written in the Turkish national charter that the buildings must be analyzed thoroughly before starting the intervention, in Turkey there are many examples of badly restored and falsified historical buildings, and this brought the conclusion of a great loss in the heritage wealth. Their examples can be seen below.



Image 2.3: The Ocaklı Ada Castle

Source: BBC News, August 2015

The Ocaklı Ada Castle, which remained from the Genoese, came to this final design after the restoration in 2015. The castle, which has a history of 2000 years, has no traces from the old state and it was considered as a great loss in heritage values. Ümit Pencereci, a constructor whose work is mostly concerned with restoration claimed: “I have been in restoration for over 9 years, and for the first time I witnessed the restoration of a Castle that resembled to Sponge-Bob.” On the other hand, there are the professors who were the archeologists that participated in the decisions taken on the renovation of the Ocaklı Ada Castle who claim that since the building was derogating more and more each year, it was necessary to make an intervention. (BBC News, August 2015) The real question left to be asked is: was it the right approach?

The second building was built in 1591 in Beyoğlu Fındıklı/Istanbul by Süheyl Bey and Mimar Sinan. The mosque, which once had an octagonal plan and a dome, in 1958 had to be demolished as there was a necessity for a road expansion. What was left of the building was considered and restored to be used as an office building. (Tarihçi Prof. Dr. Nurhan Atasoy for hurriyet) Although, by the accordance of the No.2 Regional Protection Board, this building’s only function could be that of a mosque. The outcome, of what once was a beautiful octagonal building, is seen below.

By destroying or badly rehabilitating heritage buildings, the value of the nation itself risks getting lost with them. The rehabilitation of these buildings is what will bring back to life what was left to us as a present and what will be our will to the next generations to come.



Image 2.4: Mosque in Beyoğlu Fındıklı

Source: BBC News, August 2015

To summarize, even though the Turkish rehabilitation charters exist, it is not certain yet the reason why there are many inappropriate rehabilitation examples of these structures. As Turkey has been the epicenter of the world for many centuries, there are so many valuable architectural heritage structures that have been lost forever by some major mistakes. The best approach we can have as the contemporary architects of the era is to respect the heritage that has been left in our hands by our ancestors, rehabilitate it with as few changes as possible, and preserve it the best way possible.

2.2 Classification of Heritage Buildings/ Mansions

“A nation’s culture is shaped by their history which is formed by cultural diversity in a long time, and historic architectural works are their physical expression.”
(Armstrong, 1995)

Briefly, what makes a building a historic one falls down into three main categories: 1- Historic significance which consists on the usage of specific materials, 2- Historic integrity when the structure is an example of a historical period and 3- Historic context which is the information about historic trends and properties grouped by an important theme in the history of a community, region or nation during a particular period of time. (Addl. Director General (Arch.), 2013)

Some specific materials such as mortar, wood, steel or limestone and their construction connections are a great example of functional vernacular architecture. Most of the Turkish houses, also known as *konak*, are characterized as possessing all of these three categories.



Image 2.5: Konak found in the Turkish village Mengen, photograph taken by Sara Fishta, 2018

The picture above was taken on the road to the Yedi Goller, a forest in Bolu, where a valid example of a Konak house is shown. The beauty of this konak's structure is that there is no plaster put on the exterior walls and this helps identify the construction methods even from a distance. This gives us the chance to evaluate the building by afar. On the ground floor the wooden diagonal elements are used as per strengthening the connection between the mortar and the bricks. This connection method also separates the structure into different smaller parts, a main detail that is healthy for the building in case of earthquakes.

The same method is shown as an example below and it is that of an old konak found in Safranbolu. It is understood that this building, even though it is over 70 years old and badly damaged (source: asked the neighbors), the core of this structure is still standing tall. Thanks to these details it is possible for us, as interior architects/ architects/ constructors to have the chance and bring this building back to life while not only using its core but also respecting the original design and using local materials.



Image 2.6: Safranbolu, used to be an old house, its waiting to be restored into an elementary school.

Photograph by: Sara Fishta

Konak structures are usually found in old cities, towns and often in villages. Nevertheless, Turkey is an unexplored mine where these architectural gems tend to get lost in any big city. Because of its location and historical events, Turkey is a prime example of harmonious combination of many different cultures which in some cities brings the outcome of contrast in architectural structures. It possesses some of the oldest frame-works, reflecting cultural influences of the many empires that once ruled. There are multiple examples of untouched structures that have confronted the obstacles of time found not only in the peripheries of the city, but also in the center of it. These two structures shown above are classified as heritage buildings because of the historical construction method and the materials used; therefor they are classified as having *historic architectural significance*.

The pictures below are those of Afif Pasha Yali, a 110-year-old konak and it's the second most expensive mansion of the Bosphorus (about 40 Million Dollars). This structure does not only have *historic significance* because of its marvelous structure but also beholds *historic integrity*. Almost all the owners of this mansion were important historical figures and its project manager was the famously known Turkish architect Sedat Hakki Eldem, thing that made this building even more appealing. (Posta.com.tr, November 2012)



Image 2.7: Afif Pasha Yali

Source: Haberler.com - "Afif Paşa Mehtabiye Köşkü" dosyası İBB'de

The history this mansion possesses was so intriguing that the first domestic series in Turkey was inspired by the situations the owners went through, and not only, the series was also filmed inside this house. However, this film shot by Yeşilçam remained very dull next to the real lives in this mansion. Witnessing many loneliness and collapse, silent shoots and deaths, this magnificent and full of secrets mansion is now all alone, quiet and desolated. This building is characterized as a heritage building because of its architecture as well as of its historic integrity. At the moment it is still on the market.(Posta.com.tr, November 2012

Finally, the third category of heritage buildings classification is that of properties grouped by an important theme in the history of a community. In 1468, Sultan Mehmed the Conqueror brought many Albanian warriors and traders and installed them in the districts of Istanbul where among other places, they also founded Arnavutköy, a place named after them meaning Albanian village. The buildings below are all structures found in Arnavutkoy/ Istanbul. Because of a big fire that happened in 1887, many of the original byzantine houses were demolished. Nevertheless, the architectural foundation of these houses rose again in the Turkish house style combined with a minor influence by the architecture style of that time and as a conclusion these beautiful structures came back to life. (Zeliha Gülçat 2004) These mansions don't have their construction methods shown as the previous example, instead they are all plastered and painted in vivid colors, a detail that not only preserves the history of the structure but also accepts the minor changes done as the years pass by and gives it an aesthetically pleasing feeling.

Despite the fact that two major fires nearly devastated Arnavutkoy, the inland laneways are now brimming with the Turkish Traditional Konaks. Many include intricate woodwork around the doorways and eaves, as well as elegant balconies, pastel painting and some of which were embellished with Art Nouveau motifs. This site is a great example of not only the *historic context* but also of the *historic significance* and *historic integrity*. (Zeliha Gülçat 2004)



Image 2.8: Arnavutköy

Source: Wikipiedia

The scope of heritage remained largely unchanged from that established by the Council of Europe in 1975, although the Burra Charter included three additional elements which are the main reasons why heritage buildings are categorized as such and why they should be protected at any cost. The detailed identification a building must go through before being reconstructed or categorized as a heritage one are listed in the sub-sections below.

Over the last 40 years, since the establishment of the Venice Charter in 1964, there have been numerous conservation recommendations in the form of contracts, proposals, and laws that have comprehensively defined the term "heritage" in the most comprehensive way possible. From a simple concern for individual structures and sites, the degree has extended to include groupings of buildings, historical areas, towns, habitats, social elements, and, more recently, immaterial heritage all examples mentioned above and all belonging to the three elements of historical building preservation.

2.2.1 Identifying the *overall aspects* of the classification of a Heritage Building; Exterior/Structure

The *overall* visual aspects to identifying a heritage building rely on the observation made at its distinguishing physical aspects without actually focusing on the interior details. The building's envelope, (eg: patterns of vertical and horizontal elements, decorative bands, dark brown bricks and other specific materials), its roof and roof features (specific dormers and chimneys), porches (distinctive balcony frames), windows and doorway openings, galleries, arcades and finally various exterior materials that contribute to the building's character are the major commitment to a building's comprehensive personality. If the various materials, features and spaces that give a building its visual character are not recognized and preserved, then essential aspects of its character may be damaged in the process of change [Lee H. Nelson, FAIA, September 1988]. How these features are identified is by taking a thorough examination of the buildings sides and tries to understand its architectural context.



Image 2.9: xx

Source: <http://www.turkosfer.com/geleneksel-turk-evi/>

- The Envelope - The shape of a building is the first thing that catches one's eye and is the first feature to be examined when a building is being considered to be evaluated as a heritage one. It is important for all the facades of the building to be evaluated separately be-

cause even though at first sight the front one may not be as interesting, a side porch, opening or difference in materials may make a whole difference in understanding whether the building is worth of being listed or not. Therefore, when analyzing the shape of a building, the observation made must be done from a distance and on its all sides individually. (Lee H. Nelson, September 1988)

- Roof and Roof Features - The roof and its various features may be the character-defining aspects of a specific building. They may include windows, decorative stonework, or its shape itself may be the reason why the building's visually important to its overall visual character. The roof is not only a highly visible component; it may have elaborate stone dormers or decorative metalwork and slate work. Any changes made to the patterned slate work, or to the other roofing details would damage the visual character of the building.



Image 2.10: Belgrade Fortress, Serbia

Source: Wikipedia

- Windows - Window restorations are one of the main problematics when dealing with the rehabilitation of a building. Being hard to keep the original glazing a necessity for isolation, insulation and change in the materials is required. Nevertheless, they have a great impact in the character of the building itself, therefore re-interpreting the original window opening by matching the section sizes, profiles, moldings etc. will be the solution for harmony between the modern security and performance that a window requires to its original design. (Lee H. Nelson, September 1988)

2.2.2 Identifying the *specific aspects* of the classification of a Heritage Building: Interior/ Details

The *specific* aspects, in contradiction to the overall ones, are those aspects that make the difference for the owner or person that will inhabit the determined area and it is what assures if a building should be listed as a heritage one or not. These details involve the appreciation of the building at a close range (some would say even at arm's length) where it is possible to see all the surface qualities such as the color used, the texture they possess or the quality of the craftsmanship (Handbook of conservation of heritage buildings - Addl. Director General, 2004). Perceiving the character of interior spaces can be somewhat more difficult than dealing with the exterior. In part, this is because so much of the exterior can be seen at one time and it is possible to grasp its essential character rather quickly, whereas to understand the interior character, it is necessary to move through the spaces one at a time. As an interior architect, while rehabilitating an interior space, elements such as materials and craftsmanship (eg: wooden floors, wall-paintings and decorations), finishes used, spatial arrangement of the area etc, are the evidence that teaches us of those specifications that may dictate a building from a “simple” one into a “unique” one, thus being classified as an historical heritage structure. (H. Ward Jandl, 2001)



Image 2.11: Bayramiç Hadımoğlu Konağı

Source: T.C Çanakkale Valiliği

- Materials and Craftsmanship - Materials having an inherent texture that contributes to the close range character, such as stucco, exposed aggregate concrete, or brick textured with vertical grooves are a great illustration that expresses the “art construction” of the time.



Image 2.12: Bayramiç Hadımoğlu Konağı

Source: T.C Çanakkale Valiliği

- Another example would be for the building to retain combinations of materials used in juxtaposition such as several different kinds of stone, combinations of stone and brick, dressed stones for window lintels used in conjunction with rough stones for the wall, and most importantly for the choice of materials or the combinations of materials to have contributed to the character of the building itself. Furthermore, when evaluating almost any evidence of craft details, whether handmade or machine-made, the contribution to the character of a building made because of its manifestation of the materials of the times in which the work was done, of the tools and processes that were used is something that will most definitely list a building as a heritage one. All of these aspects are a part of the surface qualities that are seen only at close range. (H. Ward Jandl, 2001)

- Flooring - As mentioned above, the flooring consists of the mixture of the materials and the craftsmanship used. Depending on any of these two aspects it will be considered as worthy of making the residence enter in the listing of heritage buildings.
- Walls - Historic paintings and frescos present on the walls and ceilings are the reason why in historic buildings interventions and additions in walls and ceiling structures are doubtful, (Pfluger and Baldracchi, 2011).
- Ceilings - The work of art, their heights and level settlements are what also define if a certain building is unique enough to be listed as a heritage one.

- Interior Spatial Arrangements - Space arrangements are another aspect that makes an interior space unique. For instance, in a house that has a front and back parlor linked with an open archway, the two rooms are perceived together, and this visual relationship is part of the character of the building. To close off the open archway would change the character of such a residence. (Addl. Director General, 2004)

More than ever, a lack of awareness, experience, and care threatens architectural heritage across the world. Some have already perished, and others are in jeopardy. It is a living legacy that must be effectively understood, defined, interpreted, and managed for future generations. Developing courses focused on heritage conservation aspects, learning respectful aware design with cultural context, design, and implementation of conservation projects presents a real challenge for developers, architects, and professional education programs that are responsible for preparing courses focused on heritage conservation aspects, learning respectful aware design with cultural context, design, and implementation of conservation projects for future generations. (H. Ward Jandl, 2001)

SECTION III: The role of an interior architect in the rehabilitation of Heritage Mansions

"Architecture should speak of its time and place, but
yearn for timelessness."

Frank Gehry

Many questions arise when it comes to the material choice when rehabilitating a heritage building. Should new or old materials be used in the process? The rehabilitated structure should be speaking the same language with the old one or only emphasizing it? Are the traditional materials enough to help with a damaged building? The main role of the interior architect is to answer these questions for the benefit of the structure to be strong-standing as well as for it to be aesthetically pleasing and functionally usable.

It is the architect's assignment to help the structure achieve both durability and authenticity without being a falsification of history. The methods on how to achieve this is by identifying

the reconstruction, rehabilitation and preservation methods that can be implied to the structure. Because heritage buildings, especially the old ones, are best conserved if they are inhabited and are in use every day, the rehabilitation it goes through should be thoroughly agreed upon between the constructors, architects, designers, and the occupiers so that it has an opportunity to have a healthier long-lasting life. Choosing the right function for heritage rehabilitation is a difficult challenge. The fact that the selecting process is influenced by a variety of elements and effects may cause some issues. All of them must be balanced by the team of professionals who maintain and repair them. (Kabila Faris Hmood, May 6th 2019)

This section will be discussing the steps needed to go through before starting the reconstruction of the heritage building, the steps to follow during its rehabilitation and which final steps to follow for its preservation. Also, an appropriate layout plan and which necessary experts should work together on it before the work starts, which methods do they approach and the final design agreed upon will be evaluated accordingly.

3.1 Methods to bring to life a Heritage Building.

It is important to constantly keep in mind the new materials that can be used during the rehabilitation of a heritage building. Even though it is necessary to save the language the structure bares, the new materials allow for the core to be more bearable and sustainable. For being able to use the best approach it is necessary to go through a building plan by the experts who give professional ideas and sometimes whose approvals may be required. Historic buildings with viable purpose can be rehabilitated, but the empty ones decay rapidly. (Pendlebury, 1996)

The first step of the plan is to do the research before-hand as well as the research on site while investigating the structure of the building. Historians or archeologists are the first specialists that should inspect, reveal the archive and the past history the building considered as a heritage one may retain. As they check if there is any valuable piece that needs to be recorded and evaluated in the site or area around the building, the next to follow the inspection are the architects. (Julia Sowińska-Heim, 2020)

Architects are the ones who make the design, who choose the details and their designs will be the one to decide upon the reconstruction or rehabilitation methods. Nevertheless, if the historian or archeologist claims that the heritage building's structure should not be changed

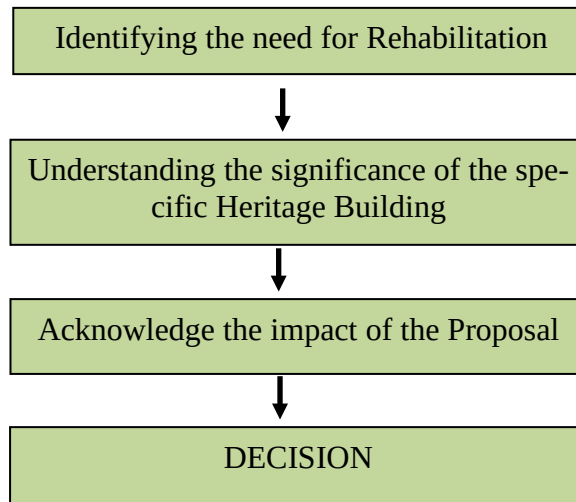
because of its valuable elements, the architect is expected to do the design accordingly. The approach the architect takes will be definitive for the livelihood of the structure.

Structural engineers also play a big role in this plan arrangement. It is necessary for them to already have experience on working on existing heritage buildings and to have a wide knowledge on how to *save*, *protect* and *reuse* the elements a structure carries. In case of damaged buildings, they are the ones evaluating if the ruins are structurally resistant to be used again or if they should be exchanged for more stable new ones. The connection/construction methods are also at big risks and have great responsibility for the structure and the building's life. If the structure is in a good shape or if it needs reinforcement, is a decision taken by the structural engineer. (Jokilehto, J.1999)

Finally, interior architects, the designers that make it possible to express the heritage building as a monument, for it to highlight its character or go the other way and allow for it to lose all of its architectural details. As interior architects, old buildings are the heritage our colleagues left behind for us to conserve and rehabilitate so that the society keeps on using and reusing their them functionally. Bringing an old building back to life is our method on respecting their work and giving back to the society. If the ruins are not healthy, adaptive reuse of the building may grant to keep its particularly usable parts as well as creating a new design with them or around them. (Jokilehto, J.1999)

The plan arrangement is done by starting evaluating the building from the exterior. This is done so that the architect has a perception about the buildings envelope structure, if there are some windows that need to be rehabilitated, some walls that have fallen down and need to be reconstructed, if the ceilings are damaged and need to be redone, as it was mentioned previously. The Rehabilitation plan takes all these aspects, identifies the damages done and suggests the best approach on how to bring these details back to life. (Jokilehto, J.1999)

After analyzing in detail the aspects that were damaged, the architect/ constructor/ interior architect etc. decide if the approach they want to follow is to rehabilitate those damaged structures or adapt a new framework to the existing one, all while respecting the history of the building. It is important that when deciding in adapting the structure the approach should be reversible so that repairs should enable to be undone in the future. (Burra Charter, 2013)



Graph 3.1: Rehabilitation analysis

Source: Sara Fishta

Methods such as reconstruction, rehabilitation and preservation will be evaluated thoroughly in this sub-section and the examples taken are separated as per evaluation to the approach taken, if it is a good final result and if a different approach would be a better choice.

3.1.1 Reconstruction

To reconstruct means “to construct anew/once again”. The reconstruction of a damaged place would refer to the process of building up again something that has been destroyed as could happen in a natural disaster or in case of human made terrors. For example, damages caused because of an earthquake or damages caused because of a war, what may be left of it can be only ruins. (Jukka Jokilehto, Rome, 2013) Because of World War II there were numerous damaged architectural structures in many European countries. Many sites and *cities* had to be reconstructed after the war was over and the question made from the philosophers was: Do we keep the originality of the city by reconstructing it as it once used to look, or do we start anew? Since reconstruction is the approach used to bring those ruins back to life, it corresponds with two theories: 1- Reconstructing the building by using the same concept design, same materials, and same structural connects by using new materials or 2- go the other way and use the foundation of the building as a tool to create some totally newly designed building. Warsaw for example is a great case of the architectural reconstruction philosophy after the war. (Mikołaj Gliński, 2015)

After 1918, in Poland the characteristics of the buildings were designed with a state-building symbolism, monumentality, innovation and modernity. Warsaw, being the capital, was gradually destroyed during the 6 years of WWII and the final loss of the structures was at 84% destruction. Because the city was nearly fully demolished, it was considered for Lodz to become the new capital. Nevertheless, because of the human factor, which means that the former residents came back home and the displaced people who flocked to the ruins began to virtually reconstruct, a resolution that called for Warsaw's reconstruction started. (Mikołaj Gliński, 2015)

After the II World War, Germany, the UK, France, Italy and Holland reconstructed selected historical buildings, but Poland's approach on the reconstruction of Warsaw on the other hand required for *the hole city* to be brought back to life. Zachwatowicz, who was the head of the Biuro Obudowy Stolicy also known as BOS (The office for the Reconstruction of the Capital) had a patriotic thought that "A nation and its cultural monuments are one entity", thus full reconstruction was uniquely justified and the residential houses were styled after typical Polish 17-century merchants houses. Nevertheless there was a paradox happening during those years of reconstructing the city as many buildings that had survived the war were demolished on purpose, a decision taken by the BOS to prevent for the righteous private owners to take back their property. They did reconstruct the city but rebuilt from the beginning their architectural structures. The resolution of BOS brought the end of the reconstruction of Warsaw. The example of this city was a critical approach of the philosophical the theory of reconstruction because they did use the same design aspects of the buildings but not use the buildings itself. (Mikołaj Gliński, 2015)



BEFORE



AFTER

Image 3.1: Royal Castle of Warsaw

Source: Wikipedia

Most guidelines for the philosophy of reconstruction, for example those of the Burra or the Venice charters, suggest that the new construction be differentiated from the original design. Their proposal is done with the purpose of acknowledging that if there is not enough information about the building, *the reconstruction process should stop until all necessary details are found* and worked upon. This is done so that the decisions are made in an ethical way; if not the reconstructions of replica buildings may be seen as falsification of history. (Mikołaj Gliński, 2015)

3.1.2 Rehabilitation

Rehabilitation is that principle which is considered as a sustainable management of changes in historical buildings. The reason why rehabilitation is considered as such is because it's the approach that brings to life an already existing building, thus it brings a change in the economic and industrial practices, demographic shifts and it especially brings a new identification to the structures which may no longer be functioning. (Orbasli, 2008)

The rehabilitation of interior spaces pays major importance not only to the aesthetics and authenticity of the original structure, but also to the improvement of energy efficiency of the area. Since old structures did not use much of isolation, in some rehabilitated examples one can notice an original wooden window exchanged with a PVC one, detail that destroys little of the originality that is left. (Thomas Yarrow, 2016)

The building below used to be a lodging (lojman) located by the Bosphorus in Istanbul. This building was redesigned accordingly to the rehabilitation principles into a loft. As it can be seen from the pictures, many of the walls of the building have not been touched, the original brick and masonry walls are still standing tall and strong, as well as the untouched wooden roof. (Büyük Yalı Loft, Istanbul, Berna 2021)

The structure is made out of two floors and a half: The basement floor, the ground floor and the mezzanine floor which was added later. From the articles found on the Turkish national charters, the designers respect towards the original design was shown by building the mezzanine floor in contemporary design features, hence differentiating the new and the old construction methods. Because the structure was found on its core when it was decided to be rehabilitated, it was possible for the interior architects to insert a major detail: floor heating. Since

usually in heritage buildings the original floors are made out of hardwood and the designers want to preserve its originality, this detail is usually not found. While designing this loft, the interior furnishings were chosen so that they would highlight the original structure, as well as give a modern and cozy feeling to its interior.

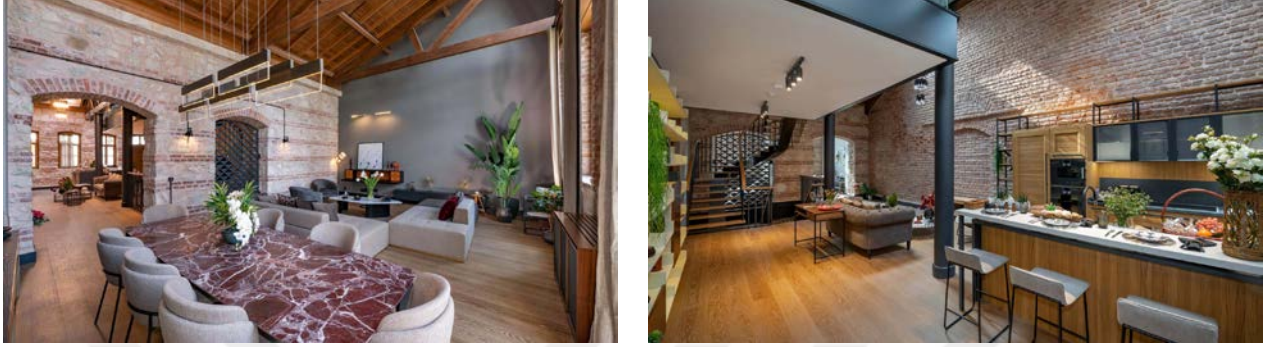


Image 3.2: Büyük Yalı, Istanbul

Source: Büyükyalı.com

This can be seen on the combination of the rustic kitchen cabinetry harmonizing with the structure. When it comes to the electricity, adding new outlets, new tv cables, new lighting elements and so on, the approach that the designers chose was to layer to cables on top the brick walls, bringing like this a more unique feature to the design without even ruining the structures originality. (Büyük Yalı Loft, Istanbul, Berna 2021)



Image 3.3: Mutfak, Büyük Yalı, Istanbul

Source: Büyükyalı.com

As mentioned in the sections above and as seen on the international and national charters, this loft house can be used as an example for which approaches one must use when rehabilitating a heritage building. Rehabilitation, being the path that connects reconstruction and sustainability in a harmonious way, is the best approach to be used when dealing with old structures, thus the values the structure possess are protected as well as highlighted to their best potential.

3.1.3 Preservation

Since the preservation of Historic buildings maximizes the use of existing materials and infrastructures, reduces waste and preserves the historic character of older towns and cities, it is often known as *the ultimate recycling project*. (The WBDG Historic Preservation Subcommittee, 2017) Preservation, as a concept, is called the treatment and protection of the buildings after they went through the process of reconstruction and/or rehabilitation. It is the last, and the most important step to follow after rehabilitating a building since it lasts as long as the structure is standing tall. Preservation refers to a collection of procedures that ensure the architectural and historical features of significant parts of buildings are preserved, such as repairing, minimizing erosion, and ensuring appropriate criteria for the protection of these structures.

Being the process whose activities are involved in the protection of heritage resources, it includes the study, development, administration, maintenance and treatment of these resources, be this an object, a building, a structure or site. Architectural preservation embodies a remarkable interpretation of artistic creativity and technical innovation, as preserving a building is not limited to aesthetics but also in respecting functional elements while adapting to contemporary infrastructure needs. (ARTiculations, oct.2018)

As it was mentioned above, for a heritage building to be preserved it sometimes goes through different stages of renovation, rehabilitation and reconstruction. Preservation is described as the act or process of taking steps to maintain a historic property's current form, integrity, and materials. Work emphasizes on continuous care and restoration of historic materials and features rather than substantial replacement and new construction, including preparatory efforts to safeguard and stabilize the site. New external additions are not included in this approach; but, within a preservation project, restricted and sensitive upgrades to mechanical, electrical, and plumbing systems, as well as other code-required work to make properties functioning, are acceptable.



Image 3.4: Pizzo Villa, Lake Como/Italy

Source: www.dimorestoricheitaliane.it/en/dimora/villa-pizzo/

The pictures above are those of the Pizzo Villa located in Lake Como/Italy. This house is a great example of a beautifully preserved mansion, it was built in 1629 and is still usable to this day. This great villa has been inhabited from different people of different backgrounds over the years. Even-though the owners changed, the aesthetics of the house always remained in tact with the original design. The biggest differences that it underwent was the coloring of the walls in 1948 after the Villa was purchased by the lovely Parisian madame Elise Musard, who gave it a distinctive feminine touch by dying it pink, which it has kept to this day. The floors and ceilings have been retreated but not changed or reconstructed since the late 1800s. (<https://www.dimorestoricheitaliane.it/en/dimora/villa-pizzo/>)

The responsibility to maintain the *local communities' architectural legacy* is just as essential as the responsibility to protect major constructed heritage and its values or customs from previous eras. Some physical and/or intangible advantages of historic preservation are the authenticity and historical preservation, it honors the past, texture, workmanship, and style of the original design which are all aspects of aesthetics. There are multiple ways on how to preserve a building, the important thing is to care enough for its preservation and to thoroughly research on the history of the structure. The historic integrity of architecture is important so that the building and the heritage have a healthier and longer life.

3.1.4 Adaptive reuse

“Adaptive reuse is the perfect way to breed new life into older buildings, conserving important resources and celebrating a property’s historic value”

Susana Barucco, Historic Preservation Consultant.



Image 3.5: The Parchment Works House, UK
Source: Routledge: DeZeen, Lizzie Crook, 2013

When it comes to most heritage buildings, because of their construction methods and healthy materials, not only are they spatially designed and every space of the area thoroughly thought through, they are soundly constructed and fit for continuance of use as well. This is exactly what adaptive reuse suggests: Using a particular building for a different purpose that it originally was designed for. Most of the methodologies used to adaptively reuse a heritage building follow a rehabilitation standard bringing to usage an “old” existing building and converting it into a “new” one with a different purpose. (Routledge: London, UK, 2019)

Giving a different purpose to a building is not a simple task. Not only does it require experience to identify and acknowledge the historical value of the structure, but it is also a strategy to let the interior architect bring out the details of the architectural features while being sustainable and resourceful. A country which has many different examples of adaptively reused buildings is defiantly the United Kingdom where there are numerous castles or ruins turned into contemporary dwellings. (Routledge: London, UK, 2019)

The one example found above is a 17th-century parchment factory ruins' that were used as the base and the main concept of the architectural design of a contemporary house for a retired couple. Even-though the clients brief asked for the walls to be demolished, the architectural studio suggested to design within the walls and take advantage of the open spatial plan. (Will Gamble studio director, DeZeen, 2013) As seen in the pictures below, the architect tried to use and protect the fallen walls as much as possible, so much that they did not touch most of the exterior walls. "It has real charm both historically and aesthetically. It was very much part of the character of the building as a whole and therefore we felt strongly that it needed to be preserved and celebrated." Will Gamble added. (DeZeen, Lizzie Crook, 2013)

The building is single-storey in height with an added roof storey on the bedroom area, it has a strict stepped form and more than half of the pre-existing ruins have been used. When they were designing, the studio firstly thought of filling up the ruins with new materials but soon after decided to protect the original ruins and only infill half of it. As seen in the pictures below the old and new material harmony can be noticed on the eastern side of the building. The original brick structure on the bottom floor had only the spaces filled with the new materials, whereas the upper levels the new brick structures were added. This gave a different life to the building while highlighting the importance of the original architectural structure. By doing this they used the preservation principle on when rehabilitating a building, thing that raised the value of the property. (DeZeen, Lizzie Crook, 2013)



Image 3.6: The Parchment Works House, UK

Source: DeZeen, Lizzie Crook, 2013

The need and desire to preserve the heritage of this building is evident also in the interior of the house which is filled with materials that were found on the site. Elsewhere, five-metre-long oak beams found outside were also cut down to be create lintels for the extension's doors and windows which was paired with contemporary weathered steel and wood detailing. It is noticeable that the concept behind the interiors was to go for an honest palette of materials that celebrated the architecture of the cattle shed and the ruin. The architect tried to preserve the character of the ruins as much as possible by leaving most of what was already there uncovered and untouched.



Image 3.7: The Parchment Works House Interior, UK

Source: DeZeen, Lizzie Crook, 2013

Being able to reuse this building's blueprints brought the opportunity to create a sustainable and uniquely designed structure with a nod to history, and a current purpose. Adaptive reuse environmental and social advantages offer the chance to living a more sustainable life, brings benefits for energy consumptions and enhances the community's character. The economic advantages on the other hand increases the market value, it creates cost savings and finally it encourages investment. Adaptive reuse is now a necessary approach to a better social life.

3.2 The interior architect's handbook to rehabilitating a heritage building

If the historic structure is to be rehabilitated, it is important that the new use does not need significant changes to the interior spaces or the loss of character-defining architectural elements or finishes. The feeling of time and place connected with both the structure and the neighborhood in which it is located is lost if an interior loses the physical remnants of its history as well as its historic purpose. The recommendations that follow address some of the most frequent issues that come up while rehabilitating ancient interiors. (H. Ward Jandl, October 1988)

1- Keeping and maintaining significant floor layouts and internal areas that contribute to the building's overall historic character. The size, structure, proportion, and connection of rooms and corridors are all factors to consider. Lobbies, reception halls, entry halls, double parlors, theaters, auditoriums, and major industrial or commercial use areas all have a connection between features and spaces. Put service activities that are required by the building's new use in secondary areas, such as toilets, mechanical equipment, and office machines.

2- Subdividing areas that are particular to a building type or design, or that are closely linked to certain people or patterns of occurrences, should be avoided. Space can be divided vertically with the addition of new walls or horizontally with the addition of extra levels or mezzanines. New extra floors should only be considered if they do not compromise the structural system or conceal, harm, if they don't destroy character-defining areas, features, or finishes. Consider eliminating the walls and returning the space to its original dimensions and size if rooms have already been partitioned due to a previous insensitive remodeling.

3- Avoiding the creation of new cuts in floors and ceilings that might alter the character of character-defining areas or their historic arrangement. Only in exceptional circumstances, such as when the existing interiors are not historically or architecturally significant, may a new atrium or light-well be installed.

4- Drop ceilings should not be installed below decorative ceilings or in rooms with high ceilings since they detract from the character of the structure. In addition to concealing or removing important elements, such treatments will alter the proportions of the room. Drop ceilings should be properly set back from windows in buildings that lack character-defining areas, such as mills and factories, so that they are not visible from the outside.

5- Keep and maintain interior elements and finishes that contribute to the building's overall historic character. Columns, doors, cornices, baseboards, fireplaces and mantels, paneling, light fixtures, elevator cabs, hardware and flooring, wallpaper, plaster, paint, and finishes like stenciling, marbleizing, graining, and other decorative materials that accent interior features and provide color, texture, and patterning to walls, floors, and ceilings are examples of this.

6- Keep the stairwells in their original configuration and placement. It should be considered building new steps in secondary spaces if a second means of egress is necessary. In many situations, fire-retardant coatings, such as intumescent paints, fire suppression systems, such as sprinklers, and the building of glass enclosures can allow the retention of staircases and other distinguishing elements.



Image 3.8: Hoyran Wedre Country Houses, Hoyran/Turkey

Source: Wikipedia

7- Radiators, vents, fans, grilles, plumbing fittings, switch-plates, and lighting are visible characteristics of early mechanical systems that are essential in establishing the overall historic character of the structure. If new heating, air conditioning, lighting, and plumbing systems are installed, they should be done such that character-defining areas, features, and finishes are not destroyed. Ducts, pipes, and wires should be hidden as much as possible: in secondary areas, if possible, in the attic, basement, or in closets.

8- To reveal brick and timber, avoid removing paint and plaster from conventionally finished surfaces. Painting previously unpainted millwork, on the other hand, should be avoided. Plasterwork that has deteriorated is urged to be repaired. If the plaster is too damaged to keep and the walls and ceilings aren't very ornate, gypsum board can be used as a substitute. The choice of paint colors that are appropriate for the time period in which the structure was built is suggested.



Image 3.9: Traditional House, Elbasan/Albania

Source: <https://maison-monde.com/maison-traditionnelle-albanaise/>

Architectural characteristics and finishes that should be conserved during the rehabilitation process should be clearly noted on drawings and on the construction site. This procedure, along with careful monitoring of interior demolition work and protection from fire and vandalism, can help prevent the accidental loss of architectural components that contribute to the building's historic identity. (H. Ward Jandl, October 1988)

3.3 Not all heritage Mansions can be saved

Multiple elements have put heritage buildings at risk and there are countless threats that especially old structures face with. When a building has been left unused for several years, untreated and forgotten, if it does not have a significant purpose anymore and the only reason why it is considered as a heritage building is because it is old, then the building is not in the benefit of anyone to be saved.

There are buildings that when they were constructed they were just average at the time, that they were important only because of the historical integrity that it once had and have deteriorated over time. Taz Loomans, an American architect located in Phoenix claims that perhaps the history of these structures can be captured by preserving a small section of the building or by reusing some of the components, but buildings in this category should be taken under consideration for *demolition*. “The important thing is that the history is saved, preserved and for us to integrate into our present and future identity.” (Taz Loomans, may 2020)



Image 3.10: Schaefer building in Illinois/USA

Source: <https://www.youtube.com/watch?v=WIqmSR5dLf0>

In some cases, the heritage building may be a hazard for the society and a threat to the public, removing it increases safety and property values. For example, an old wooden heritage building is considered as a fire hazard if it does not have a purpose and if it is not inhabited anymore. Removing a property that is dangerous or otherwise tough to look at can actually increase the value of the properties around it. (Dig it, February 2019) It is also helpful to demolish an old house or a property of historic significance so the property may be used in a manner that is more valuable to the community. This may vary from a city park to a new house to a community garden. (Hometown Demolition 2017)

The building above was built in 1851 by Jerome Carlton and was 167-year-old at the time of its demolition in 2018. It had multiple and different functions through its life, starting as a shoe and boot store, then used as a post office of the town by 1865, changing its function into a drug-store by 1878, had many different owners through the years and as a last activity it

functioned as a small pizzeria by 1993. Since it was left empty and without a purpose after its last function, demolishing it for the mere purpose to build a new contemporary structure was thought to be the best solution. (Ronald W. Loos, 2016)

Some investors think that old heritage buildings are in the way of development and therefore prefer its demolition. Even though they may think that the construction of a new green contemporary building would be more profitable, they should acknowledge the loss in cultural heritage and do take into consideration that in the long run demolition is actually a loss in the economic aspect. When an old building has been rehabilitated, hence the core structure has been used and some other parts restored and/or reconstructed, it adds values to the historic property and it can be used in a new way that benefits and enriches the community, like as a museum, wedding venue, local attraction and so on. (Paul Spite, Architect September 2018)

If a building is considered as a heritage one, it is protected by the law and yet it is in great danger of demolition, what will happen to the longevity of this structure? Is there any way for it to be reconstructed, rehabilitated and preserved? A great example of this would be the 96-year-old building attached below. This structure had been used as office headquarters for the company trust of Florence hall during its longevity, but since it had been abandoned for over 30 years, the leaking happening in it “was the beginning of the end” says Ray Reich, the downtown manager of Florence City.



Image 3.11: Florence Trust Company Building/USA

Source: <https://www.youtube.com/watch?v=wUrrOaJ82XI&t=18s>

It was required for the building to be demolished so that the Francis Marian University's new medical wing could be built. Even though the preservation group of the city wanted to save the building, after having a thorough tour inside of it, it was decided that it was impossible to save this heritage structure. (ABC news, October 2013)



Image 3.12: Florence Trust Company Building/USA

Source: <https://www.youtube.com/watch?v=wUrrOaJ82XI&t=18s>

The reason why the preservation community wanted to protect and save this building was because of the architectural elements that it possessed but unfortunately most of these architectural elements were destroyed by years of water penetration. If this building had been inhabited instead of being abandoned for the last 30 years, it would still be standing tall today. Because of the water penetration, all the walls would have to come down and be constructed from the beginning. As seen in the picture above, the mold had eaten the floors, walls and ceilings, because they were not structurally sound everything in the interior had to be done anew. If this building would get to be inhabited again, everything would have to be built from scratch. (Ray Reich, October 2013)

The solution that the university and the preservation community offered was to use the core of the building for the new medical school of Francis Marion University. As seen in the pictures below, the moisture has penetrated the walls and the mold has damaged the structure deeply. Nonetheless, the final decision taken was to destroy the building and construct a new healthier one.



Image 3.13: Florence Trust Company Building/USA

Source: <https://www.youtube.com/watch?v=wUrrOaJ82XI&t=18s>

As a conclusion, the decision rather an old building is worth saving or not is in the hands of the owner or the developer. However, protecting it to be reused with a different purpose is the best approach, economically and culturally, therefore it is necessary to protect its values with all costs. To gather it all up, heritage buildings are a valuable piece of the social culture. Reconstructing what was damaged by being sustainable with the procedure, brings the outcome of a rehabilitated structure. Giving it a different purpose is also a great solution. Adaptively reused buildings are as important as an art piece and they must be protected as much as heritage monuments are. The reason why there have been charters created throughout the years is because heritage preservation prohibits wasting of past generations' resources and energy, as well as total replacement with contemporary, energy-intensive materials. Heritage landmarks are as well, without a doubt, the tangible manifestation of a city's identity. The lived-in design, strategic locations, and usage of these buildings provide distinct stories about how a city came to be, as well as forecasts about where it might go in the future. (N.Phetsuriya, and T.Heath, 2020)

SECTION IV: Basic Characteristics of the Traditional Turkish Mansion

The house is a building that has varied structural characteristics based on the physical surroundings, cultural influences, and technological advancements of the time. When designing, it is only natural to take into account the cultural values and natural environmental circumstances of the people who live in that civilization. According to Eldem's (1968)

description, the Turkish home is a type of house that was established in Rumelia and Anatolian Regions for 500 years, evolved and created with its unique features inside the old Ottoman state's limits. According to Kuban (1976) on the other hand, the Turkish home is a form of housing that has reacted to the demands of Turkish people for millennia, displaying shape and plan elements appropriate for the traditional Turkish family's living culture and customs. To gather it up, the Traditional Turkish house could be characterized as a form of dwelling that combines architectural traits gained by Turks in the past from the countries they lived in with their traditional living customs, in line with the geography they used to live in.

The Turkish home is a reflection of the Turks' tent lifestyle, which itself was related to the nature as well as their established life. The layout and structure were created with topography and environmental circumstances in mind and reasonable, adaptable, and practical solutions were used. Because a Turkish house is one that is constructed for the comfort and orderly life of its inhabitants, every feature is structured according to human proportions as the design evolves from the inside out. The unique design of these structures, its durability and its successfully arranged plans are what made this house type famous and took the name of a full civilization: The Turkish House. This type of house is also known as Konak, a word derived by “konaklama” which in Turkish means accommodation. (Hulya Yurekli and Ferhan Yurekli, 2007) According to Bektaş (1996), the Turkish house formation principles are categorized as:

- 1-Life, nature, and environmental circumstances are all in accordance with one another.
- 2-Rationality and realism
- 3-Inner-Outside Harmony
- 4-Inner-Outside Solution (Expression of simplicity in the house)
- 5-Attitudes.

The following elements influenced the development of the Turkish home in wide areas of social life and traditions, religion, climate and geographic location, material and socio-economic status. (Cengiz Bektaş, 1996, pg:30)

Because of the variability in the Turkish weather, the konak houses also have been designed in different variations accordingly to their location such as houses to be used in the city, houses to be used by the sea/lake, houses made out of wood and even houses to be used in the village.



Image 4.1: Mudurnu bolu tarihi evler/ Turkey

Source: Turkeyhomes.com

Even though there are so many different houses designed accordingly to which city or village it is located into, the construction methods always remain the same. The size of the house or the wealth of the owner of the house did not matter or influence the construction methods whatsoever. There were always the main materials and the construction system used: Load bearing walls, timber frame with filling material and plaster. Wealth was only reflected by the number of the rooms and by the interior decorations, thing that made all these houses speak one specific language and differ from any other culture. This brought the outcome of one specific advanced and strong standing architecture style. (Cengiz Bektaş, 1996, Pg:116-118)

According to Sedad Hakki the Turkish house's concept is parallel to the modern architecture's concept. The architectural character which in its core was skeletal construction, used characteristics such as ample windows, transparency, lightness, the free plan and modular logic, all of which were interpreted by Sedad's findings in reinforced concrete structures. It was established that "the characteristics of the Turkish house were contained in a wide range of housing styles and architectural principals starting from those of the ancient Chinese and extending right down to those of such modern masters as Frank Lloyd Wright and Le Corbusier" (Fifty yearly republican architecture, Sedad H. Eldem 1973)

4.1 Construction methods and facades of the Turkish House

“The buildings are easily considered as strong evidences and witnesses in terms of culture and civilization.”

Sedad Hakkı Eldem

The Ottoman Empire left a meaningful and inspirational architectural legacy filled with charming, functional mansions and distinctive elements in its structure. Most of these buildings differ from a two-story framework or a three-story framework built in brick, reinforced with horizontal or diagonal wood beams and arranged in plans according to the gender subdivision called as *selamlık* for men and *haremlık* for women. The *selamlık* was placed on the first floor and the *haremlık* was located on the second and third floor. (Serena Acciai, January 2017)

The *konak*'s structural design is characterized by dense frames of modular elements and is commonly based in a masonry basement, property which soothes the actions of seismic shaking and protects the vertical structures from contact with moisture. Its framework is done by wooden elements filled with adobe, mixed masonry or bricks, thing that stabilizes and reinforces the structure as much as makes it lightweight. External coatings are usually made in plaster or sometimes, differing from the geographical position of the mansion, in wooden pan-



els. (Cengiz Bektaş, 1996)

Image 4.2: Sivrihisar/ Turkey

Image 4.3: Hotel Charshiata Guest House

Source1: <https://sinandogangeziyor.wordpress.com/2017/06/22/bir-ilceye-vuruldu-adi-sivrihisar/>

Source2: <https://grecetravelforum.com/Bulgaria/Charshiata-Guest-House.html>

A one-story home used to be typical of traditional Turkish architecture. Despite the fact that the number of floors expanded through time, the main floor would always be the top floor of the home (Eldem, 1968). The main floor has been elevated to allow for more light, air, sun, and views due to the state of the ground on which the home is positioned. It is not possible to actually use the entrance floor because the garden walls and pillars that support the structure are on this floor. The ground floor was eventually walled off and utilized as a storehouse, barn, and stony place. The walls are made of brick and have no windows. Between the bottom floor and the main floor, an intermediate storey was later constructed also known as the mezzanine floor, a floor which however, does not span the entire structure, but simply a portion of it. This mezzanine floor is slightly lower in height than the main floor, it's primarily made of wood and its windows are smaller, fewer in number. Since the 19th century, by getting higher ceilings and different designs, these mezzanine levels have acquired prominence and function as much as the main floor. (Serena Acciai, January 2017)

Protrusions (Çıkımlar) are the most essential component determining the look of the house's exterior. Overhangs are architectural features that enable the top level to overflow towards the street and are supported by piers from the lower floors. From the 16th and 17th centuries, Islam's secluded living style, driven by a feeling of privacy, began to open up to the street. As a result, the projections were done first in the head rooms and it afterwards begun to be constructed in other rooms on the street side. Additionally, the rise in the demand for light and space on the facades of the buildings as a result of the Baroque movement in the 18th century resulted in the shift of the facades and an expansion in the overhangs. During this time period, curved surfaces, Baghdadi plaster, and embroidered overhangs and eaves began to be used. The Empire style displays its impact in the 19th century, under the reign of Mahmut II. The façade and ornamentation are simplified in this style layout, and the curving surfaces are minimized (Günay, 1998).

The primary structural material in the building of a Turkish home is wood, with mud brick as a filler element. Although clay soil is the primary component of adobe, sun-dried mud-brick walls have been built into which reed (kerpic) have been incorporated (Özer, 2006). The ground level is built of brickwork, with wooden beams running through it. Although the flooring and ceilings are made of wood, the iwan floors in certain homes are made of terracotta tiles known as "lime" (H. and F. Yürekli, 2005). By binding construction components like stone, adobe, and

brick together, the mortar creates a cohesive structure. 'Mud' is the earliest mortar used in locations where adobe and brick are utilized as construction materials (Özer, 2006). Lime-washing is used on both the interior and external walls. In front of the windows, there are wooden cages and fences. The lower levels are made of compacted dirt, while the top floors are made of wood.

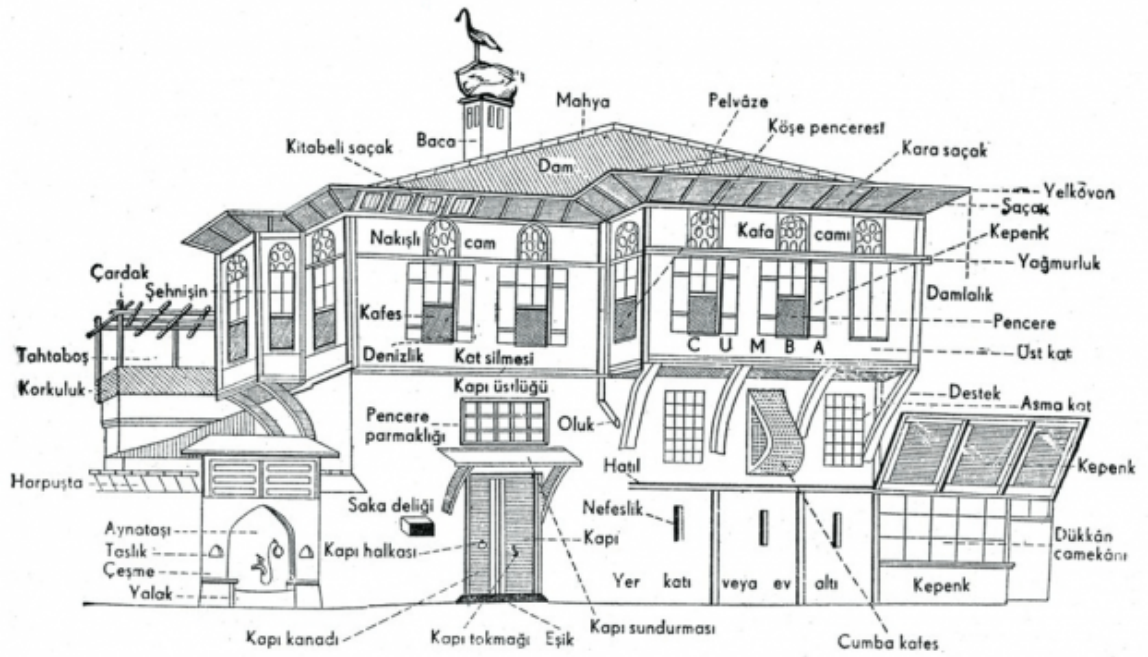
According to Çobancaoğlu (2007) traditional wooden home construction systems, which are the major examples of local architecture, are described under three broad themes.

a) Wood Masonry System: This is achieved by stacking the wood bars on top of each other in their natural form or by processing them in a horizontal sequence and joining their corners using the crossing technique.

b) Wooden Frame System: This is the creation of a load-bearing system by stacking wood on a foundation or masonry (stone, adobe, wood).

c) Mixed System: This refers to the combination of several construction systems.

The usage of wood as a construction material in the form of cross bracing demonstrates the strength concept. Wooden struts were also employed in window and overhang constructions, with mudbrick filling the voids of the frames. The use of wooden supports between rows of windows created a window-structure interaction and where the overhangs are placed there is found wooden buttresses on the walls. The broad walls stretching from the ground floor to the top floor are where the fireplace is placed and these walls are carved to form the stove and cabinets (Çobancaoğlu, 2007)



Drawing 4.1: Elements of the Turkish House

Source: Turkishnews.com

Thanks to the wooden structure, it is easy for the window openings to be managed according to the size desired. The window sizes are usually in a 1/2 ratio which makes it be a rectangular size positioned vertically on the facade. The windows are made entirely of wood and summer houses usually have skylights as well as bay-windows, a most unique type which is seen widely in the upper floors. The bay-window, also known as “cumba” in Turkish, is one of the most inactive elements of the traditional Turkish house. Regardless of the roughness of the facade, the bay-window smoothed the structure, provided the opportunity to intake much more natural light in the interior, and transformed simple ordinary rooms into square quadrangles and the overhang of the window usually differs from 100-130cm. (Çobancaoğlu, 2007)



Drawing 4.2: Serena Acciai (left)

Image 4.4: Example of a Mashrabiya in exterior shot (middle) and in interior shot (right)

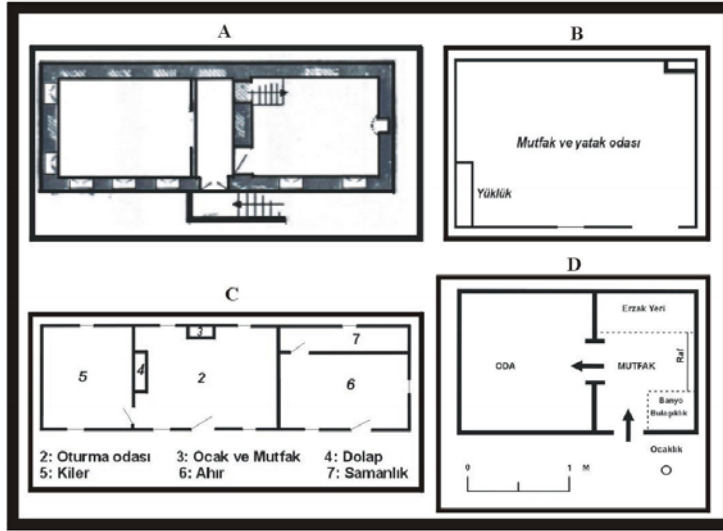
Source: https://www.researchgate.net/figure/Example-of-a-Mashrabiya-in-exterior-shot-on-the-left-and-in-interior-shot-on-the-right_fig1_331277122

The main characteristic the konak's windows have is that of the usage of mashrabiya/kepenek elements. Meshrabiya are called the lattice covered windows facing on to the street and both selamlık's as well as the harem's windows had mashrabiya. Nevertheless, the mashrabiya's opening were much smaller on the harem's windows so that the people passing by the street could not see the women inside, but the women could see everything from their point of view. Such an example can be seen in the pictures below where the mashrabiya is not only used for the purposes mentioned above but also as a method of controlling the lighting in the interior of the "oda", which in the Turkish house such was called the room. (Serena Acciai, January 2017)

4.2 Plan arrangements of the Turkish House in Anatolia

The concept of "üstte gök, altta toprak" which in Turkish means "sky above, earth below" is used in the interior space with the referral of the Turk's tent life and it directed to the ceiling (sky above) and the floors (earth below). The Turkish understanding of *family* was different back at the time when they designed and created this structure known as konak. The Turks have lived together for generations because of their social lives and traditions and the main idea was to bring the tent life inside the house. Their hierarchy was divided as such: Grandfather, grandmothers, aunts, uncles, and grandkids were all engaged in this way of life and all lived together,

but the family as a whole was formed by the husband and wife. This big family structure necessitated a wide and diverse space which possessed all the everyday life fundamentals and allowed for each family to have their privacy. In addition, a separate room has been considered for the storage and handling (such as carpets, rugs, or looms) for such a big family, as well as a different separate room for the newly married son and wife. (Cengiz Bektaş, 1996, Pg:99-104)

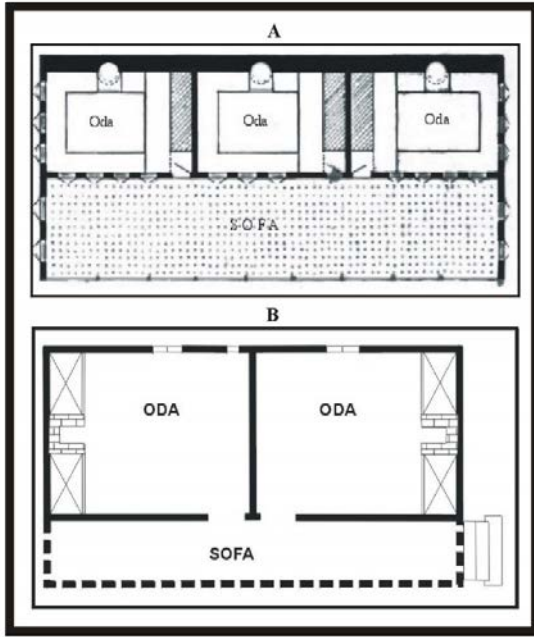


There are four main plan arrangements in the Traditional Turkish House and they are all arranged according to the common space also known as “sofa”: 1) Plan without a Sofa. It is the most primitive state of the Traditional Turkish House. The rooms have no relation to each other and each room is entered from the outside. (Eldem, 1968)

Drawing 4.3: Sofasız plan tipleri/Sedad Hakkı Eldem
Source: Türk Evi Plan Tipleri - Sedad Hakkı Eldem, pg:65

These types are usually the case for houses with inner courtyards, front gardens or side gardens protected by gates and garden walls. It was applied in the central, southern and eastern regions of Anatolia. All the activities would be held in one room. As seen in the examples of sofas house type, the room was the place where all the everyday activities would be held, such as cooking, eating, sleeping etc. This concept was the main concept of all the traditional Turkish houses, and it will be noticed that as the buildings grew, the concept of the activities held in the *oda* stayed the same as well as the plan layout of room, such as having the *sedir* or couches built in around one or two walls of the room, having the *ocak* or fireplace in the middle of one of the walls and having the *yüklük* or the wardrobe on the sides of the fireplace. (Eldem, 1988: 63-67)

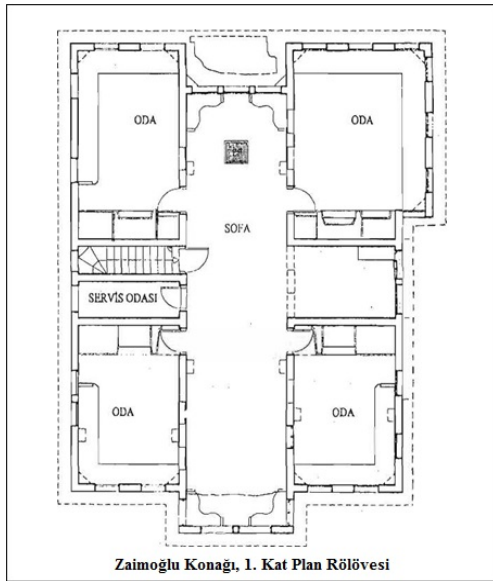
The second plan arrangement is the: 2) *Plan with Outer Sofa*. This type of konak is usually found in rural areas of Anatolia. Since the sofa has been constructed in the houses open towards the courtyard and gardens, it was usually used as a living space for most of the year, bringing like this the opportunity to live together with the nature. In warm areas the front of it was left completely open to create a cooling opportunity for the household. In the picture on the left there are two different examples of the Outer Sofa Plan where all the rooms are open towards it making the sofa the main and most circulated area. Another common dominator is the sedir, yukluk and ocak which are all elements that appeared in the first type as well.



Drawing 4.4: Dış Sofalı plan tipleri/Sedad Hakkı Eldem

Source: (Eldem, 1988: 63-67)

The third plan arrangement is the: 3) *Plan with Inner Sofa*. This is the most common plan of the traditional Turkish house. A plan type called "karnıyarık" among the people emerged by taking the sofa between the rooms. It has been used in every climatic zone of Anatolia as it is



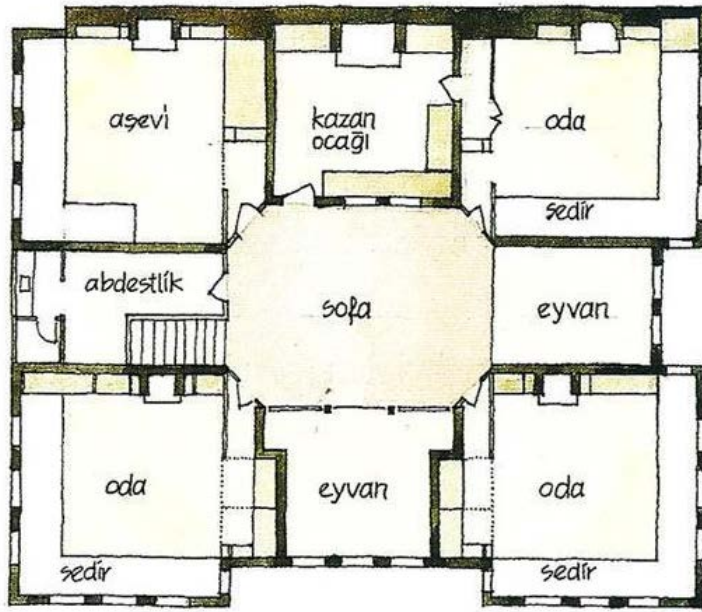
Drawing 4.5: İç Sofalı plan tipleri/Sedad Hakkı Eldem

Source: (Eldem, 1988: 63-67)

more protected than the house with an outer sofa. It is especially preferred in congested settlements, towns and cities. The main reasons for this preference are that it contains more rooms and is more economical than the houses with outer sofas. Usually the sofa of the house, being the main corridor or antre, it is located towards the sunny side of the road so that the natural lighting can be controlled accordingly. In this original type the staircase had its own area but later it was infiltrated into the sofa and positioned randomly. The sample plan shown above shows perfectly the hierarchy a traditional *konak* possessed. (Eldem, 1968)

There are four odas positioned on all four corners of the house to take advantage of the lighting, the “*buyuk oda*” being the biggest one is the room where usually the whole family was gathered and the guests were welcomed, and the *cumba* located on the end of the sofa, open towards the main street. The other activities such as the service room, the stairs, the wet areas and the cellars, which is also known as “*depo*” in Turkish, are separately located throughout the layout plan.

The fourth and the latest implemented type was the 4) *Plan with Middle Sofa*. This layout also widened the chance of enlarging the simple Turkish house into a mansion, a palace, a pavilion and it took many different forms in Istanbul, bringing like this the outcome of an enriching design to the house. With the sofa in the middle, the house plans turned into squares or rectangles close to squares. Four rooms have been placed at the four corners of the building,



and service spaces such as stairs, iwans (eyvan), bathroom, cellars (depo) and kitchens have been placed between the rooms. While the sofa was originally four corners, the corners were chamfered over time and octagonal, polygonal, oval or elliptical shapes were formed. The fact that the sofa is protected has enabled the house to be well heated, which has been the reason for preference for cold regions. (Eldem, 1968)

Drawing 4.6: Orta Sofalı plan tipleri/Sedad Hakkı Eldem

Source: (Eldem, 1988: 63-67)

As seen in the example plans attached above, the spatial plan of the interior of the Turkish house is usually conceived with one main idea: having the Oda (room/s) around a sofa (hallway). Sofas are not only a circulation area but also a resting, gathering and sitting area. In different regions the name of the sofa may be known also as sergah, sergi, sayvan, çardak, divanhane. Since this is the area which is most visited, the ceiling is usually profiled with

wooden covering and has different ornaments. In the palace pavilions and mansions of the 20th century, extremely rich wood carvings, abstract decorations made with various paints and plaster ceilings gained weight. (Eldem, 1968)

The floors are timber-made and are floating floors, detail which was done between the 17th and 18th century and was seen in the modern architecture many years later. The boards are positioned without any adhesive or nail for the purpose of investigation and intervention, this also allowed for the mansion to have natural ventilation and enabled the building to breathe in humid climates. These specifications brought as a conclusion the prevention of condensation and moisture in the rooms. The Turkish house's interior decoration received more attention where more rooms and sofas have been embellished. Interior décor, stoves, and cabinetry have all used stone. On stone, stylized floral motifs, figures, calligraphy, and geometric moldings were created. Large-headed nails were used to decorate cabinet doors, ceilings, and flowers in metal decorating. (Ministry of culture and tourism, Republic of Turkey, 2014)



Image 4.5: Latifoğlu Konağı Müzesi, Yozgat/Turkey

Source: Wikipedia

This is a great example of architectural understanding that the Ottomans possessed. With the simplicity of the timber floors, the ornamented wooden ceilings were the elements used to make the contrast in the Turkish House. The most common decoration style is the ceiling designed by making triangles and hexagons within wooden staves (Bektash, 1996, 56).



Image 4.6: Van Evi Museum House/Turkey

Source: Alamy.com

The room or the “*oda*” was the area where the life happened. In it would be found all the necessary equipment related to the everyday life such as couches, also known as “*sedir*”, cooking and eating equipment, a fireplace to use for cooking or open when it’s cold, and finally sleeping beds. The shape of the *oda* would usually square or rectangular, and had windows open towards the garden or the secondary road. Usually the “*buyuk oda*” was the only one that had detailed ornaments of the ceilings whereas the other *odas* had ceilings of simple white plaster caged by wooden beams. This big room may be understood as the main living-room area where all the family would gather for special occasions or where the guests would be welcomed. Since usually the guests would stay over, there were always *sedir* for them to sit, rest and sleep. (Ünügüralp 1984)



Image 4.7: Van Evi Museum House/Turkey

Source: Ünügüralp 1984, pg:53

The Wet Spaces which included kitchen, bathrooms and abdestlik have been an important problem in design. An element that usually most of the odas had in the Traditional Turkish house was the gusulhane, an area which was the equivalent of a bathtub built inside of a wardrobe close to the fireplace, thus the water used would always be warm. In the periods when modern plumbing materials (pipes, valves, taps) and city drinking water network were not available, it was not possible to bring water to wet areas, especially to the upper floors. If the house had its own fountain, well or cistern, water was used by transporting it from these sources. In the house, large hand-held copper buckets and earthen pots were used to store daily water. (Selvinaz Gülçin Bozkurt, 2009)

The stairs have changed their location many times as the Turkish house was advancing in usage and plan layout so rapidly. In the first and second type, they would have positioned outside and parallel to the *sofa*, in the third type they would have their own area located between the *odas* and land into the *sofa* and in the fourth type they would be positioned randomly in the *sofa*. The stairs would usually be single armed and changed their function from being hidden away or left outside, into being the surrounding of galleries and an ornament of the house. (Eldem, 1987)

The Barn (Ahır), Haystack (Samanlık) and the Warehouse (Ambar) were built as a separate structure but usually, in most of them, they are located on the ground floor of the house. Since cattle are very important especially for people living in villages and towns who are engaged in agriculture, the Barn and Haystack, which provides the care of cattle, nutrition and protection, have been an integral part of the house. This hierarchy of the house can be understood also from the facade where the ground floor is made out of mortar and the the upper livable area is made out of plaster. (Eldem, 1987)

4.3 Types of the Traditional Turkish house in Anatolia

The type and structure of the Turkish houses were related to the climatic conditions and their location in the nature. Regions dominated by continental climate (Eastern, Southeastern Anatolia and Central Anatolia) being that the winters are cooler and longer in these regions, mud-brick and stone masonry structures are found. The stone Masonry Buildings is built by a primitive Turkish building material obtained by mixing mud brick clay soil with water and straw, kneading it into wooden molds and drying it in the sun. There are large and small sizes called mother and offspring. They are not used in important and bigger buildings because of their low tensile and compressive strength (Oras, 2018: 1629-1638)

The look of central and eastern Anatolian village settlements is characterized by adobe structures, single-story mud brick homes, and flat roofed houses. Stone masonry buildings predominate in stone-rich areas of the same geographical regions. If these stones are extracted from the quarry, they are soft and easy to treat. Over time, they harden and gain strength. Depending on the climate zone of the Turkish house, the lower floors of two or three-story houses have an introverted character that is effectively insulated from the elements. As a result, the bottom floor's exterior walls are often built of stone or a mixed adobe main wall with stone masonry supports. Usually the window does not open to the exterior, however a mezzanine facing the street can have its window opened. The carvings and reliefs on the facades and numerous decorative features on the stone walls grab attention. These stone houses are favored by individuals in both cold and very hot climates and this is because of the freshness the stone gives during the hot summer days. (Bektash, 1996)



Image 4.8: Harput Evi Örneği/Turkey

Source: Geleneksel Harput Evlerinin Enerji Performansının Değerlendirilmesi: Şefik Gül Evi Örneği

On the other hand, on the sea coasts where the temperatures are higher and the rains are heavier (Rumeli, north, west, Southwest Anatolia), the *wooden structures* were preferred. It is not common to create a basement in these buildings, however, as mentioned in the sub-section above, the basement termed cellar is slightly submerged in the earth in many locations on the bottom level. Aside from that, this property has usually only one room, and the mezzanine, if there is one, is largely above this cellar. Because there is no basement, the foundation walls of the structures are shallow. They may even be considered to lack appropriate foundation. (Berker, 1982)

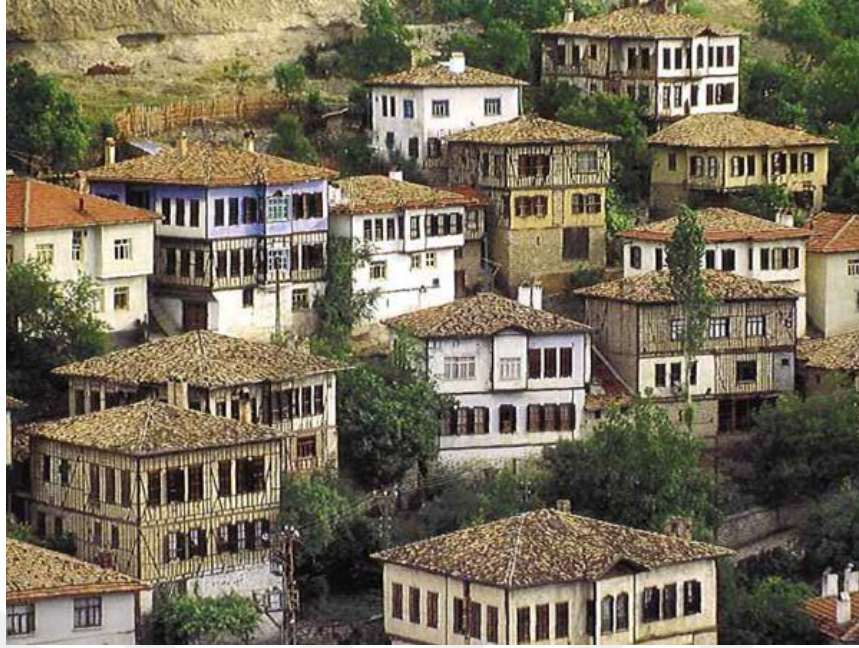


Image 4.9: Safranbolu/Turkey

Source: Wikipedia

The timber/wood structures are either erected on a shallow foundation stone wall with mortar or on big cubical corner stones in timber frame buildings. If it was erected against a stone wall, the skeleton was finished with the major pillars, intermediate pillars, side braces, window lower and upper beams, and floor release beams, which were installed on the remaining wooden beams put against the wall. If the property has two or three levels, the process is done on each floor in the same manner. (Arseven, C. Esat,1975)

As a practice, big processed stones removed from a nearby ancient ruin were used as cornerstones in numerous dwellings. Furthermore, engraved inscriptions, column bases, statue bases, and cornices were utilized as cornerstones. Mud brick, brick, and stone were used as skeletal infill in wooden frame buildings in various locations, and in other cases, they were left empty and thin wooden laths were fastened to the interior and exterior and coated with lime mortar. Baghdadi plaster is what the Turkish call it. The interior surface of summer cottages, such as grape homes, is covered with wood, but the exterior surface is left open. These holes were filled with thin flat stones in the specimens from the Black Sea region. (Arseven, C. Esat,1975)



Image 4.10: Traditional Turkish Houses in Anatolia According To the Regions

Source: Wikipedia

4.4 Traditional Turkish houses' influence in the Balkans

The Balkan peninsula's location at the crossroads of Europe and the Middle East is just one of several many aspects that make it so remarkable and culturally distinct. The region has been a melting pot of diverse races, cultures, and faiths throughout the majority of its lengthy history. No regional power has perhaps been able to expand its influence as far and as deep as the Ottoman Empire. (Milana Nikolova, *Emerging Europe*, February 14, 2021) During the Ottoman dominance over the Balkans, which lasted more than five centuries, a systematic relocation strategy was implemented from the early years of the invasion. With the voluntary or forced relocation of Turkish tribes from various parts of Anatolia, the territory quickly became Turkified and Islamized (Barkan: 1952, pp. 56-59).

Because of the territory of the Balkan's strategic, military, commercial, economic, and socio-cultural importance, the Ottoman Empire engaged in intense rebuilding operations, not just for the sake of reconstruction, but to make the region a homeland. New cities and villages were formed while existing ones were reconstructed and rehabilitated with a new understanding. In cities, the elaborate structures were built around mosques which dominated the city's physical structure (Milana Nikolova, *Emerging Europe*, February 14, 2021).

According to Kuban, the most notable characteristic of Ottoman towns in Western Anatolia

and the Balkans was that they grew outside of city walls and in the style of a home with a garden (Kuban, 1995: 21-27). It has been observed that all houses in various areas adopt similar building processes, materials, space organization, and facade arrangement to the Anatolian ones. However, the ruling house, which dates from the first half of the 18th and 19th centuries in Balkan, divides the dwelling quarters of different economic levels from the other houses.

In Greece for example, the homes maintain their traditional organic plots, the street design, as well as their placement on the street and orientation of the communities inside the parcel, are comparable to Ottoman - Turkish towns in other regions. Wood and stone are the most often utilized construction materials. On the main floor, the building's front facing the street is either totally deaf or has very few windows. Although the homes generally continue as a wooden floor above the bottom level, two-story structures on the ground floor are uncommon. In comparison to the Turkish houses found in Anatolia, the basement floors are uncommon in the Balkans. The rooms on the top levels have wooden outcrops that obstruct the view of the street or courtyard. These structural features, which also impact the street texture, demonstrate the region's growth of wood craftsmanship. Another common element is that the ground floors are used as a barn, warehouse, basement, kitchen, or day-to-day working space. There are a few instances where the ground level has been used for sitting and sleeping. A stove can be found in all the rooms around the house. There are also in-wall niches that act as cupboards and cabinets. Furthermore, the bedrooms feature huge wooden closets with the so-called 'musandira' and bathhouses known as 'hamamlik' (İsmet Osmanoğlu & Mine Neznet Oglou, 2019, 300-302)

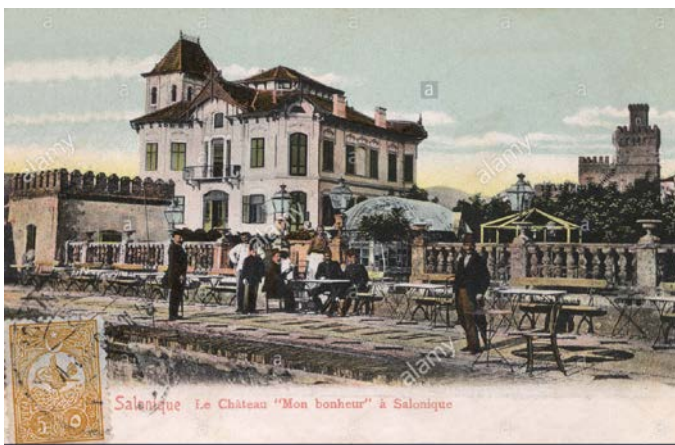


Image 4.11: Chateau de bonheur, Thessaloniki/Greece (left)

Image 4.12: Hafiz Bey Konağı, Thessaloniki/Greece (right)

Source: İsmet Osmanoğlu & Mine Neznet Oglou, 2019, 300-302

The Turkish historical buildings were different according to the country they were positioned in and were adapted according to the variety of topographical, cultural and climatic elements. Since Turkey possess different climates within the country, the *konaks* were designed appropriately according to the cities. In the Balkans on the other hand, the *konaks* were designed accordingly to the country they were positioned in. For instance, the ones found in Albania, which has a more wet climate, differ from the ones found in Serbia or Bosnia which have a drier and cooler one. Nevertheless, even though these mansions were located in different countries they had more or less the same terminology when it came to the plan typologies such as: sofa, hayat, çardak, taşlık, şahnişin, divanhane and many other terms. (Cerasi, 2020)

In Serbia, a number of older, bigger, and more expensive mansions formerly owned by the Ottoman Turks were regularly swapped between higher-ranking leaders of the First Uprising and the Ottoman authority (Durić-Zamolo, Beograd, 170). The wealthier Serbs frequently opted to live in konaks, enormous palace buildings formerly utilized by the Ottoman Turks for both residential and governmental functions. The locals, regardless of religion or ethnicity, regarded “Traditional Turkish” housing—particularly konaks—as the most attractive residences. Even Karaore and Prince Milosh, Serbian political leaders and staunch opponents of Ottoman authority, as well as members of their extended families, lived in konaks. Ottoman konaks may still be found in Serbian old towns, such as the selamlık of the Paşa's konak in Vranje, Radul Beg's konak in Zajear, Muselin's konak in Valjevo, Tahir Beg's konak in Pej, and numerous more konaks in Nis.(Valjevo: Muzeu Kombëtar, 1995)



Image 4.15: Ethnographic Museum Vlore/Albania

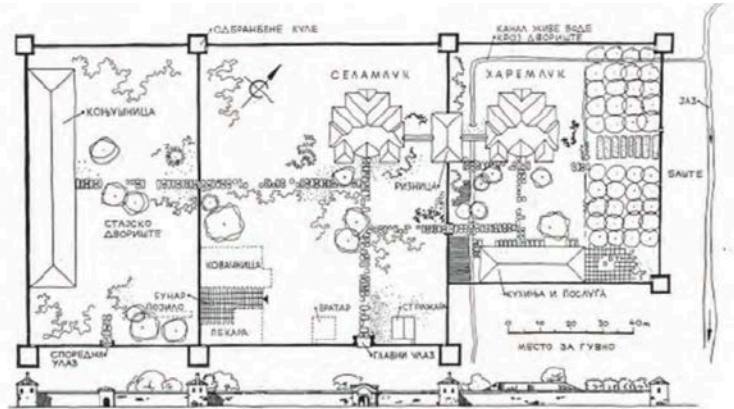
Source: Alamy.com



>Image 4.13: Paša's Konak, Vranje/Serbia (left) Image 4.14: Radul Beg's Konak, Zajear/Serbia (right)

Source: Branislav Kojić 1953, pg: 224–43

In the drawings below, built in the 1820s–30s is the konak of Avzi-Paša in Bardovci, near Skopje, in the Former Yugoslav Republic of Macedonia. Separate homes for the family and visitors within the walled perimeter with defensive towers reflect the reality of life in the first half of the nineteenth century (Branislav Kojić 1953, pg: 224–43). In terms of architecture, it was generally middle-sofa-type, with three reasonably large multi-functional rooms opening into the wide porch on the upper level. At ground level, a room for horse equipment storage and two wine cellars were dug into the slope of the terrain. On the other hand, due to religious prohibitions against drinking alcohol, classic Ottoman konaks would not feature wine storage. (Cerasi, “Formation of Ottoman House,” 116–56).



Сл. 2. Западен дел на Целма, септември — Fig. 2. Bardovci prele Sloplje situation

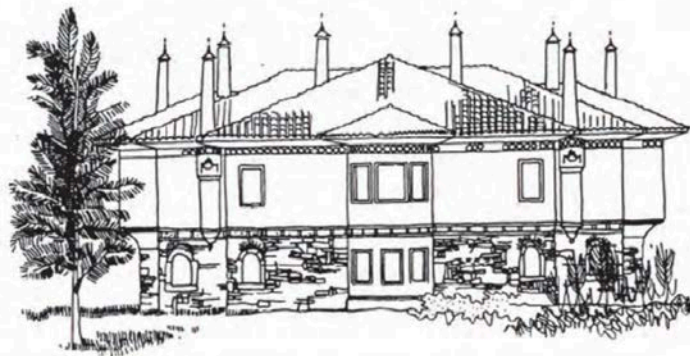


Image 4.16: Avzi-Paşa in Bardovci /Macedonia

Source: Branislav Kojić 1953, pg: 224-43

Vernacular architecture workshops, as well as their training and the availability of building materials in the surrounding area, are likely critical for understanding the architectural characteristics of these freshly erected konaks in the early nineteenth century in the Balkans (Kolarić, 1985). As seen in the picture below the “buyuk oda” of this Turkish konak located in Albania has quite some many resemblances.



Image 4.17: Konak in Gjirokaster /Albania

Source: Alamy.com

Residential architecture of the 1700-1850 era in Balkan, particularly that of representative konaks constructed as big, notable residences of local officials, wealthy merchants, and successful individuals, was infused with aesthetic, symbolic, and proprietary considerations. The religious variations among the residents, on the other hand, had only a little influence on the architecture of the konaks. Due to the spatial arrangements, which enabled a pleasant existence, an extended family, and was an established form of family life among the locals, who tended to live in single-family dwellings made for the wealthiest members of the First and Second Rebellions to reside in konaks. Eventhough it was frequently referred to as traditional “Turkish” mansions and connected with Muslim nobles, the christians’ and orthodox’ konaks featured unique interior ornamanets. For example, the konaks of the Kati and Hristi families in Prizren and Pirot, respectively had a niche for icons known as ikonluk within their wood-carved interior furniture, which held an oil light and an image of a patron saint, showing that the inhabitants were Christians (Nenadović, Fjalor i ilustruar, 2009, 284). In muslim houses on the other hand, instead of the ikonluk, there was an abdesluk for conducting the abdest, a ritual that involved prayers, handling and reading the Qur'an, and ceremonial washing with water (Nenadović, Fjalor i ilustruar, 2009, 285).

The construction of the konaks as big homes reacted to the Balkan population's quality of living. From 1804 until the 1830s, after a period of urban discontinuity and isolation from major Western European cultural movements, accessible builders and construction workshops were

critical for the materialization of urban dwellings (Belgrade: Klio, 2004, 47–51). The majority of the employees in these construction workshops were educated mostly in Bosnia and Herzegovina, Stari Vlah, and the surrounding districts of Ohrid and Skopje, which were still part of the Ottoman Empire in the 1830s. The architecture of the Balkan konaks emerged from fluid, dynamic, and oftentimes repetitive reinventions of specific architectural solutions, demonstrating how the "past" frequently altered the "present," and the "conquered" frequently transformed the "conqueror." (Jovanka Kali, 1975).

SECTION V: CASE STUDY - ANALYSIS AND DIFFERENCES OF A REHABILITATED TRADITIONAL TURKISH MANSION IN BERAT/ALBANIA AND IN SAFRANBOLU/TURKEY

"The buildings are easily considered as strong evidences and witnesses in terms of culture and civilization."

Sedad Hakkı Eldem

The transmission of the culture of inhabited spaces may be understood by studying the structures which were placed in distant and different regions. The functioning of the house, common places, and methods of living are so inextricably linked with human existence that humans have never backed away from taking this notion with them. As a result, it is possible to assert that first, the concept of architectural "type" can be transitory, re-inventing itself as a result of cross-cultural exchange of peoples and places; and second, that these historical buildings known as konak have taken on a variety of distinct forms in different countries, adapting to a variety of climatic, topographical, and cultural elements (Sedad H. Eldem, *Türk Evi, Osmanlı Dönemi*, 1968).



Image 5.1: Berat /Albania

Source: Wikipedia

This section will be taking in comparison two different cities of two different countries and analyzing the cross-cultural influence the Traditional Turkish house had: First the city of Berat located in Albania will be taken under research with the rehabilitated Konak of Xherabalti which has turned into a hotel and the second one will be the city Safranbolu located in Turkey with the rehabilitated konak of the Kaymakamlar which has been adaptively reused into a museum. The reason why these two cities were chosen to be compared is because they are both protected by UNESCO, they both have several houses which have been rehabilitated and are now open to tourists, and finally their most common point, the Ottoman/Turkish architectural structure.



Image 5.2: Safranbolu /Turkey

Source: Wikipedia

5.1 Analysis of the cities of Berat/Albania and Safranbolu/Turkey

Berat is a city located in southern Albania. It is bordered by mountains and hills, notably by the Tomorr mountain, in the east which was designated as a national park and the river Osum (with a total length of 161 kilometers) which flows through the city. It is an UNESCO World Heritage Site since 2008, has a distinctive architectural style with elements from many civilizations, noticeably Illyrian, Byzantine and Ottoman, elements that have coexisted for millennia throughout history, and the ancient Illyrian tribe of the Dassareti were the city's first known residents (6th century BC). UNESCO, 2010



Image 5.3: Berat /Albania

Source: Wikipedia

Archaeological evidence shows that in the century VII-VI BC a pre-urban settlement with its pottery workshops and a differentiated social life was developed in Berat. This city displays the cohabitation of religious and cultural communities spanning numerous centuries, from the 4th century BC till the 18th century. Berat lays by the castle which is built on a rocky hill in a triangular shape, with a perimeter of 1440 m, 24 towers and two gates. With its Illyrian foundations, rebuilt several times in the VI, XIII, XV and XIX centuries, it is today not only one of the largest inhabited castles, but also a stone archive that offers a variety of styles and contributions of different eras: Illyrian, Roman-Byzantine, Albanian and Turkish. The fortifications were reinforced in the 5th century by Byzantine Emperor Theodosius II, restored in the 6th century under Emperor Justinian I, and rebuilt again in the 13th century under the Despot of Epirus after being burned down by the Romans. Today, the city exemplifies the architectural quality of traditional Turkish architecture which were built from the late 1800s and early 1900s. (UNESCO, 2010)

Safranbolu, on the other hand, is Anatolia's best-preserved town. With its little-changed cobbled pavements and authentic marketplace, it is a virtual open-air museum for those who want to imagine how an Ottoman town looked 200 years ago. (City of Safranbolu, UNESCO)

Safranbolu's sloping landscape, which is located in a deep canyon carved out by three rivers, resulted in certain innovative architectural solutions. The natural gradient of the roadway is often followed by the stone-built ground floors of Konak houses, most of which are two- or three-story mansions. Meanwhile, the top levels may project over the street, supported by buttresses. Despite the fact that the houses are built on small, irregularly shaped lots, the upper level rooms are rectangular and roomy thanks to this construction style. Another feature of the approach is that the axis of the house can be changed significantly on the higher stories based on need or solar exposure. (City of Safranbolu, UNESCO)



Image 5.4: Safranbolu /Turkey

Source: UNESCO

Safranbolu, which is located in Turkey's Black Sea area, is believed to be a true representation of Turkish tradition. Its history dates back to 3000 BC. It is a unique Anatolian town with mosques, marketplaces, neighborhoods, streets, and ancient homes that bring history to life. It demonstrates a fascinating interplay between geography and historical habitation. In the 17th and 18th centuries, the modern layout and characteristics of Safranbolu were formed. (City of Safranbolu, UNESCO)

5.1.1 Berat City and the Konak of Xheabalti

“It is called The City of a Thousand Windows and at night, when the rare and beautiful Ottoman architecture is lit up, you can see why.” - Merlin & Rebecca’S blog.

Berat was the first city in Albania to be named a "Museum City" under the rule of the dictator Enver Hoxha, giving it protection from the Communist urban planning that steam-rolled most of the country's old world charm. Below there is a picture of Berat city and the influence its architecture had from the Ottoman empire can noticeably be seen. During the Ottoman rule, Muslim landowners and officials built the majority of Berat's large houses and the Turkish influence is evident in the traditional furnishings. Hani i Xheblatit, one of the few traditional houses that have been elegantly restored into a famous hotel because of their characteristic historical and architectural integrity, is a great example of a rehabilitated mansion which was turned into a boutique hotel. Hani I Xheblatit is a Unesco World Heritage Site and is protected by the Directory of Cultural Monuments. It is located in Berat, a 5-minute walk from the plaza and it is located in Mangalem's old quarter, along the Osumi River, linked to Gorica's quarter by the Gorica bridge. What is special about this hotel is that the original elements of the konak have been respectably preserved, such as the exterior walls, ceilings and roof. (UNESCO, 2010)



Image 5.5: Berat /Albania

Source: Tripadvisor.com

As it can be seen from the pictures above, this hotel is a three-story height mansion where the ground floor is made out of mortar stone and the upper floors are covered in white plaster with a contrast of wooden windows, a typical konak which has been beautifully rehabilitated and preserved with the original elements. Since the houses of Berat are located on the hill and look as if they are positioned on top of each other, it is possible to enter the hotel only by reaching the stair shortcut which opens to the plaza, or make a little detour and walk up the hill. The entrance is positioned on a landing area from the narrow roads of the old city where there are two other different house entrances found and one exit to allow the passage to the upper konaks. In the pictures below the entrance can be seen that it has been changed from the original, but has kept the same figure, color and shape from the original design. The door entrances located in this area are usually oval on the top, this is a detail with characterizes the knocks located in the Balkans. Usually the Turkish konaks have sharp edges and straight lines, the oval element is borrowed from the byzantine architecture which is still alive in some old Albanian homes.

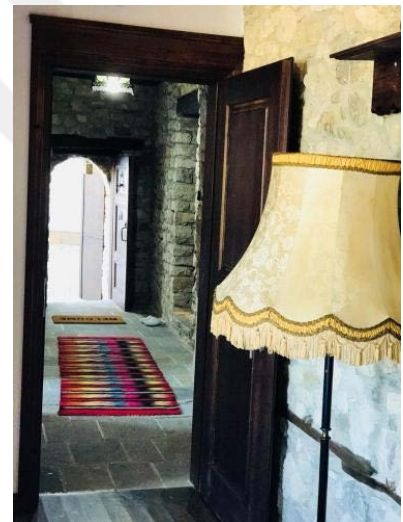


Image 5.6: Xheblati Hotel, Berat /Albania

Source: Tripadvisor.com

As one enters the building, they are welcomed to what once used to be the “hayat” of the floor but now is being used as the reception where the tourists are welcomed. This hotel has 8 rooms, which are all positioned on the upper floor, a restaurant positioned on the basement floor and a terrace which is built just adjacent to the restaurant. The rehabilitation this hotel went through is a great example of preserving history and reusing it for a new and profitable purpose. Not only the architectural elements of the buildings have been preserved precisely, but

also some of the furniture and textile cloths were inherited from the ancestors. The rug seen in the picture above for example, is one of those cloths that has been used for 4 generations and is still usable nowadays.



Image 5.7: Xheblati Hotel -1.kat, Berat /Albania

Source: Tripadvisor.com

The reason why this konak is so well preserved is because people have been living in it for many generations and the house has been constantly taken care of. The update that took place in it is usually the usage of the electrical outlets and the renovation of some old partition, such as the stairs. The stairs that bring you from the reception to the closed restaurant have been rehabilitated and wood partitions from the site of the original structure have been reused and painted. The same has been done with the infrastructure. To reinforce the structure beams and columns of wood have been added and painted. The walls have been rehabilitated with new pieces which resemble the original ones. This is in contradictory with the article 12 of appendix A which claim: (Replacements of missing components must be harmoniously incorporated with the whole, but must be distinguishable from the original at the same time, so that the reconstruction does not falsify the artistic or historical facts.) Nevertheless, the harmony that this chaotic stone wall has brings a smoothness to it. (Venice Charter, 1964)



Image 5.8: Xheblati Hotel Room Sample, Berat /Albania

Source: Tripadvisor.com

As mentioned in the sections above, in the Turkish Traditional Houses a fireplace would be found in each and every room of the house, not only in the big oda, and the ceilings would be decorated with wood to show the hierarchy of the rooms. Even-though it has been updated to the “modern” lifestyle with the elevated bed, the air-conditioner, the self-standing light and the electrical outlets, the room above is a great example of the Konaks understanding of life-style.

The wall cabinet as well is a small detail that used to be famous in the Traditional Turkish architecture where the most intimate belongings would be put and “hidden away”. To bring the outlets though the walls it as necessary to open up that wall and then close it up again.



Image 5.9: Xheblati Hotel Room Sample, Berat /Albania

Source: Tripadvisor.com

The way they did it in this particular konak was by carefully removing the original stones, bringing out the electrical cords, and the putting the wall back together in the same manner but with more advanced adhesives of course.

5.1.2 The city of Safranbolu and the Kaymakamlar Evi

The narrow and curving streets of Safranbolu create a larger vista at the corners following topographic lines, and the varied consoles of the homes contribute to fascinating street viewpoints. The streets have stone paving that slopes inwards to drain surface water, and older homes are half-timbered with diverse building materials filling the spaces between the beams. Because there are no windows on the street façade, stone walls seem to be garden walls. Built-in cabinets, fireplaces, bookcases, and seats are common in the principal rooms on the first levels. The ceilings are often ornately carved and painted. The rooms serve various uses and are connected by corridors known as "sofas," which are an essential part of the house. (T.C Safranbolu Kaymakamlığı, 2020)

The houses' interiors are just as beautiful as their exteriors. The middle storeys, which have low ceilings and are utilized in the winter, are comforting and warm like a womb, but the upper floors, which are used in the summer, are light and airy with high ceilings. The master bedroom, which is the most attractive room in the house and has the best view, is normally on the top floor. The skilled craftsmen displayed their ability in this room, which was embellished with woodwork and stenciling. Each room in a typical Safranbolu house was furnished to fulfill all of the demands of the core family. Residents of Safranbolu dubbed each of these rooms a "oda" because they could double as a sitting room during the day, a kitchen, a bedroom, and a bathroom, all at the same time, owing to the hearth, the floor mattresses brought out of the cupboard at night, and the washstand hidden in the cupboard. Each of the rooms was given a name such as "storage oda," "guest oda," or "dining oda" because they were constructed as separate entities. (Gülçin Bozturk, 2013)



Image 5.10: Kaymakamlar Evi Müzesi, Safranbolu/Turkey

Source: safranbolu.gov.tr

While other locations vanished with the onslaught of modern living, ancient Safranbolu kept faithful to its roots and transports visitors back in time, as if they were traversing the streets of an Ottoman stronghold. Although the unformed outside architecture of Safranbolu houses is appealing to the eye, it is the internal décor and design that conjures up thoughts of Ottoman life. The Kaymakamlar Evi, which focuses on Safranbolu culture in the 18th and 19th centuries, is the greatest venue to view this. (T.C Safranbolu Kaymakamlığı, 2020)

The Kaymakamlar Evi was constructed using traditional materials such as stone on the lower half and wood on the upper half, with a conventional pattern around the center of the building. It is one of the most important Safranbolu Houses, reflecting the history, culture, way of life, and technology of 18th and 19th century Turkish civilization. It is considered to have been constructed in the early 1800s. Hacı Mehmet Efendi, the commander of Safranbolu Barracks, is the owner. Since Hacı Mehmet Efendi was known among the public as "Kaim – Office," which is the equivalent of a lieutenant colonel, his family has been known by this nickname. On 16.12.1981, the Kaymakamlar Evi, which was expropriated and restored in 1979 by the Ministry of Culture for the Protection and Rehabilitation of Safranbolu, was put into service as an Education Center in the Safranbolu district, which has preserved its urban texture and all of its architectural features until today. (T.C Safranbolu Kaymakamlığı, 2020)



Image 5.11: Kaymakamlar Evi Müzesi Sedir Örneği, Safranbolu/Turkey

Source: safranbolu.gov.tr

5.2 Analysis of the Structures

The reason why the konak located in Berat and the one located in Safranbolu were chosen is because of their common structural features: They are both Traditional Turkish houses, even though they are located in different countries they both were built in the time period under the Ottoman rule (19th century), they both have been adaptively reused to a different purpose from their original family house and they have had different rehabilitation approaches. On one hand there is the Konak of Xhebalti which is a konak with a side sofa and the walls had been changed during the years to create a livable hotel space, and on the other hand there is the Kaymakamlar Konak which has been preserved for years and has been turned into a museum to show the traditional Turkish lifestyle during the Ottoman period.

Xheblati Konak was rehabilitated as one of Berat's first mansion hotels in the late 1980s and has been in operation for over 35 years. The changes caused by 150 years is not even compared to the changes brought by these last 35 years. The following are the conclusions drawn caused by the renovation at the property:

- Due to the requirement for big rooms such as the reception, lobby, and breakfast room, trenches were dug on the ground floors: Indeed, the stone walls of the Xheblati Hotel's bottom

floor were opened up with random arches, resulting in a wide common space with non-original windows.

- Due to the excessive number of beds and the requirement of having a bathroom and toilet in each room, some decay and degradation can be noticed in moist areas: While the typical family size in Albania used to be 5-6 people, nearly all mansion hotels now have a capacity of 20 beds in 7-8 rooms. With the construction of two rooms, the capacity was increased to 20 beds and 7 rooms.
- By building annexes for boiler rooms, staff rooms, and warehouses, caused major structural difficulties to the structure and made for the reinforced concrete building look like a falsification of history.

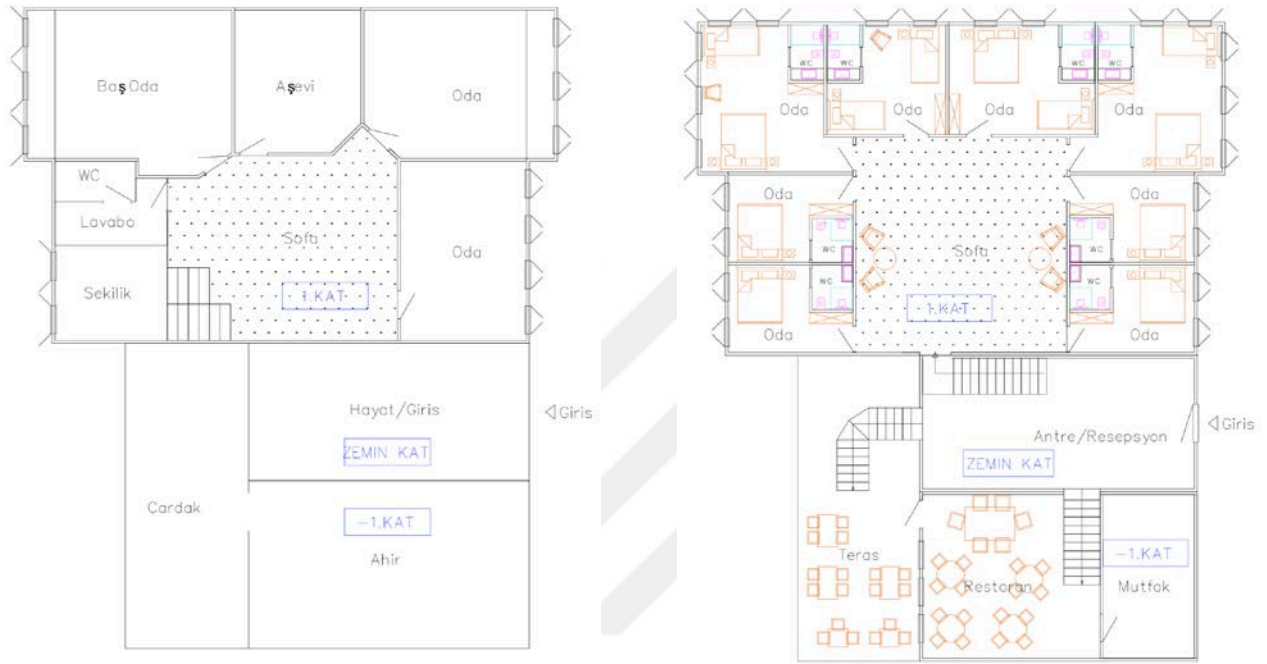
The last rehabilitation the Kaymakamlar Evi went through was in the year 2020 and it has been the same since. Since the mansion has been turned into a museum and is not used as a dwelling anymore, but more as a touristic place where people come to learn about Anatolian tradition and culture, the need to add different functioning rooms was not raised like in the Xheblati konak. With the plan layout being kept the same, what has been restored are usually just the materials and the furnishings used.

5.2.1 Before and After Plan Arrangements

Xheblati house used to be a corner sofa type of house, with three rooms, one abdestlik, one asevi (kitchen), a big barn and a no-ceiling cardak. The entrance used to be done from the mezzanine floor and still to this day it has not changed. What has changed are the room numbers and the plan layout. Because today it is used as a hotel, the necessity for much rooms had risen, that is why the first floor changed from a three-room storey into an eight-room storey.

The two plans display the older and newer plans of the Traditional Turkish house located in Berat/Albania. It can be seen that the facade of the building has been kept the same as the original, except some minor acceptable changes like opening of the windows on the south west wings. The problem with these new openings is that they have copied the originals ones, thing that would be called as a falsification of heritage from the charter of Venice. On the other hand, the resemblance is uncanny and is hard to tell the difference when one sees it. The changes

done on the upper floor, so by adding extra walls to create new spaces and by putting down 3 of the original walls, created the opportunity to have healthier electric cable and plumbing solutions. The owners had decided to try and save the original layout as much as possible, this is the reason why they did not change the size of the sofa.



Drawing 5.1: Original Plan, Xheblati Hotel, Berat/Albania (left)

Drawing 5.2: Contemporary Plan, Xheblati Hotel, Berat/Albania (right)

Drawn by: Sara Fishta

The function of the barn has changed tremendously. By being used for storage and being turned into a lovely restaurant brought a lovely feeling to the hotel. Originally, if one wanted to go to the barn would have to leave the building through the cardak, and then enter it and this was because the original stairs were located only on the outside. After the renovations the building went through, the necessity to connect the new restaurant with the entrance raised, thus the opening of the entrance walls to create the stairs that would connect the ante with the restaurant was the solution. The approach made for the construction of the stairs was to use an original load bearing wall and put on it original slabs found to the site and thus create an authentic staircase with original pieces.



Image 5.12: Xheblati Hotel, Berat /Albania

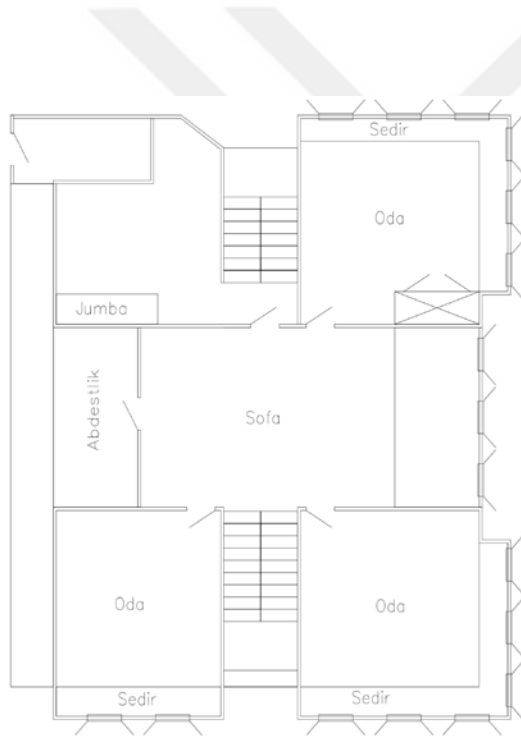
Finally, the çardak, which once would be used as a balcony and as the only pathway to go to the barn, is now the most lovable space of the hotel. With a lovely view towards the Osumi river, the client's favorite spot is the terrace. Even though the function of the house has been changed, not much has changed from the original layout. This lovely hotel is a reflection of the history and it is an example showing how the Traditional Turkish house was so visionary.

The Kaymakamlar Evi, which debuted in 1981 and remained open for the following years, continued to be a regulatory-compliant teaching facility that also accommodated guests' travel and lodging needs. In recent years, the museum has been utilized as a home in the face of an increase in both the number and quality of lodging options in the neighborhood. Our District Governor's Service Union has renovated the district governorship of the Kaymakamlar Evi, whose land belongs to the Ministry of Culture, and its garden and home with servants have been improved and used as a cafeteria.

	Old Konak	New Hotel
Usable Floors	2	3
Stairs	2	3
Wc	2	9
Floor finish	Stone	Tile
Ceiling finish	Wood	Wood
Function	Barn	Restaurant

Table 5.1: Old Function vs New Function

Source: Sara Fishta



In terms of mass, layout, and facade, the building on Hidirlik Yokusu Street in Safranbolu Bazaar possesses the features of a unique Turkish House. By appropriately applying topography data, the three-story structure was solved with two distinct entrances from two different streets. A huge double-winged entrance leads into the bottom level from the street. To the occupant, the door has a basic yet comforting appearance. There is a small detail with the slapstick, bracelet-shaped ring on the door and the door latch which are used in Harem and Selamlk life, as well as a mystery of opening and closing the door.

Drawing 5.3: Kaymakamlar Evi Plan, Safranbolu/Turkey

Drawn by: Sara Fishta

The "Hayat" part of the bottom floor, which is covered in dirt or stone, appears to shoulder the structure with its deafening and strong street front walls, virtually shielding it from the elements. It opens with gildings in the direction of the garden, adding a second layer of security as well as light and air circulation to the internal rooms. Between the garden and the street, the major living levels have taken on production-related duties, and the animals were housed in a

barn. The ground floor walls were built of stone to reduce wear on the structure, which is largely made of wood material, and to protect it from external hazards, as well as to increase the lifetime of the structure, which is mostly made of wood material. The building's top stories are framed in wood and filled with adobe. Yellow pine is used for the floor and ceiling boards, doors, carvings, and cabinets.

The mobility on the facades with wide eaves is covered by the roof. The hall, which is the major feature of the design, was developed on the first and second floors, and the stone walls of the ground floor were continued to the street and garden with the help of buttresses, resulting in the desired layout. This order brought the top floor back to the original Turkish house concept, which revolved around the increasingly central sofa. The selamlik are the two chambers at the top of the first-floor stairs, whereas the Harem is the opposite portion and higher level. The food service between the selamlik and the harem is provided by the viewing platform on this floor.



Image 5.13: Kaymakamlar Evi Müzesi Giriş, Safranbolu/Turkey

Source: Tripadvisor.com

The rooms on both floors are designed to fulfill all of the demands of the persons living under the same roof in a busy family situation. Each room has a sofa, as well as the option of dining at the floor table, sleeping on the floor bed, and washing in the ghoulis in the cabinet where the mattresses are kept. The ceiling decorations made of walnut and pine wood are rich

examples of taste and elegance, while the windows offer enough of light to the house. The Harem and Selamlık's 7 rooms and sofa are decorated with traditional materials and presented to guests with creative animations and local music in keeping with the times.

5.2.2 Rehabilitation Approach

It is obvious that the Xheblati Hotel tried to express its history with as little renovation as possible. Nevertheless, because of the age and time this konak was built, it had to be updated to the latest codes. The entrance floor and the barn were originally made out of stone tiles, thing that had to change or at least be replaced. For the mere reason so that history is being portrayed in the hostel, the owner decided to create a concrete/tile effect. The construction mortars walls are also portered in the interior and they have been cleaned with a cotton cloth.

The interior walls that have been added in the upper floor are almost all added later. Adding these walls was easier to add the electrical outlets and create more original spaces. Out of the 5 original interior walls, only two have been kept. To highlight the fireplace of the existing rooms, the owner had decided to cover them with the stones found on the site, creating like this a historical yet unique feeling in the rooms. The niches on the side of the bed are a typical element in the interior of the Traditional Turkish house. It would be used as the contemporary use of hidden drawers.



Image 5.14: Xheblati Hotel, Room Sample nr.2, Berat /Albania

Source: tripadvisor.com

The interior of the rooms was preserved as much as possible. This can be seen from the detailed on the ceilings and the wooden partitions. The ceilings are original. They have been kept in the most beautiful manner and treater accordingly. The only change that they have had is the paint coat they get done every decade.



Image 5.15: Xheblati Hotel, Giriş, Berat /Albania

Source: tripadvisor.com



Image 5.16: Xheblati Hotel, Ceiling Sample, Berat /Albania

Because it was necessary to create wet areas for each room, the plumbing project required to open up some areas of the original floors to make the exits of the water. The interior of the newly constructed bathrooms was not the best choice though. What they did was use ceramic tiles, use just any casual sink and wet closet, and a glass partition for the shower, all details that degraded the feeling of originality when staying at the hotel.



Image 5.17: Xheblati Hotel, Room & Bathroom Sample, Berat /Albania

Source: tripadvisor.com

The Kaymakamlar House as well had the same approach. Eventhough it was used as an educational facility till the late 1980s, the renovation done on it made for the plan to go back to its original layout, with the rooms of the selamlık and haremlık on the first floor, as well as the other oda in the second floor. All was done with the mere purpose of turning the old house into a museum of traditional Turkish domestic architecture. The 7-room Kaymakamlar House is filled with fine craftsmanship. Except for the walls, everything is made of wood, and the fact that no nails were used to join the pieces demonstrates the period's brilliance.

The ground floor is made of large-scale masonry. The building's top stories are framed in wood and filled with adobe. Yellow pine is used for the floor and ceiling boards, doors, carvings, and cabinets. The mobility on the facades with wide eaves is covered by the roof. The sofa, which is the major feature of the design, was developed on the first and second floors, and the stone walls of the ground floor were continued to the street and garden with the help of buttresses, resulting in the desired layout. This order brought the top floor back to the original Traditional Turkish house concept.



Image 5.18: Kaymakamlar Evi Müzesi Dönme Dolap Örneği, Safranbolu/Turkey

Source: tripadvisor.com

The original dwelling was built according to the haremlik and selamlık practices, allowing the women in the house to roam freely. Even the food cooked by the ladies were delivered to the males by a Ferris wheel from the kitchen. The Ferris wheel's prepared dinner is placed in one eye, and the woman who places the food knocks on the wood. This is how the person behind the cabinet would know the meal was ready and would turn the cabinet to take the food. As a result, men and women would not be able to see one other. This has all been portrayed in the museum.

The rooms on both floors are designed to accommodate all of the demands of persons living in a big family environment. Each room has a sofa, as well as the option of eating at the floor table, sleeping on the floor bed. The house is well-lit thanks to the numerous windows but it was necessary to add the lighting outlets nonetheless. Walnut and pine ceiling decorations are excellent examples of taste and beauty. Traditional materials are used to furnish the Harem and Selamlık's seven rooms and couches.

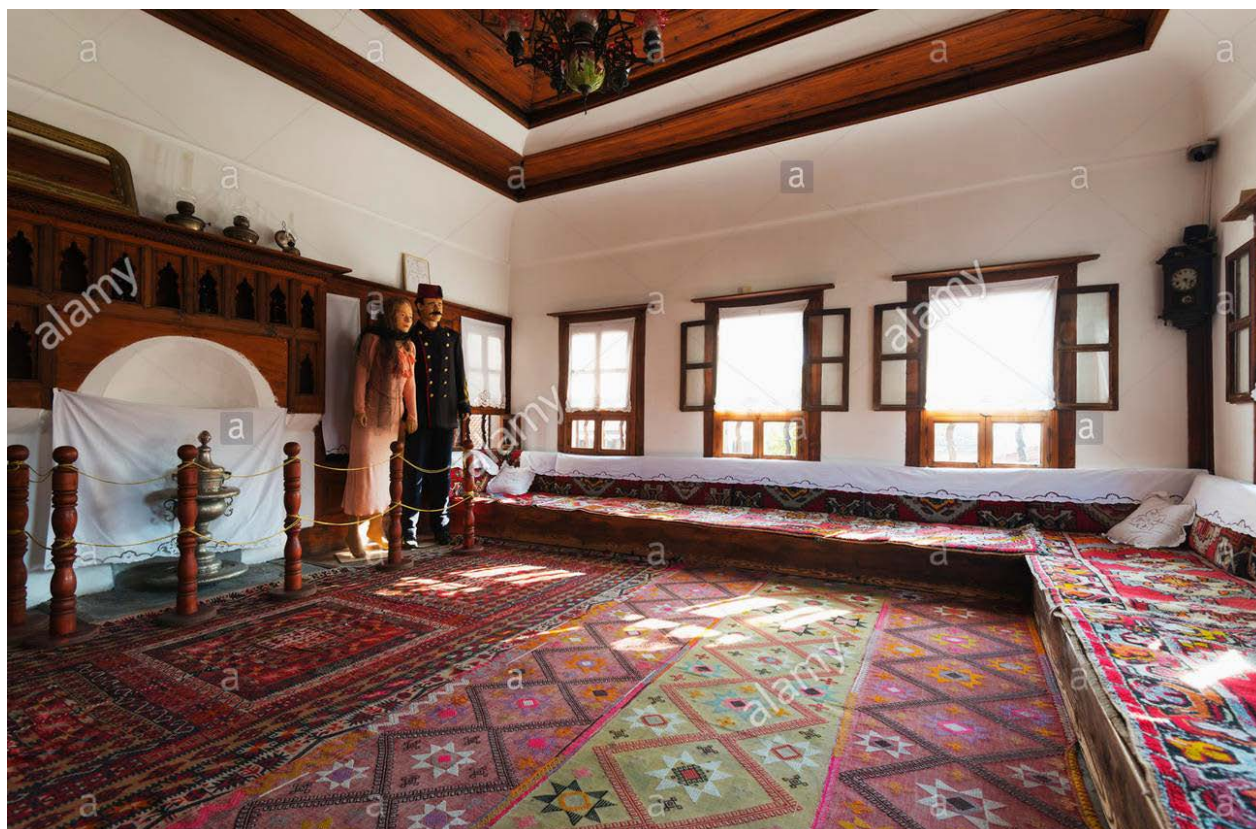


Image 5.19: Kaymakamlar Evi Müzesi Oda Örneği, Safranbolu/Turkey

Source: tripadvisor.com

	Xheblati Hotel	Kaymakamlar Konak
Nr. of Oda	8	7
Floors	3	3
Ornamented Ceilings	4	7
Selamik/Haremlik	-	✓
Fireplace	4	7
Sedir	-	✓
Sergen	✓	✓
Doner Dolap	-	✓

Table 5.2: Xheblati Hotel vs Kaymakamlar Evi/ Elements

Source: Sara Fishta

5.2.3 Furniture Update

The traditional Turkish houses have relatively minimal furnishings. The multi-functional fittings seen in nomadic tents and functioning for both day and night use are shown as the few fixtures in multi-functional rooms in permanent settlement dwellings (Bektaş, 1996: 110; Günay, 1998: 245). Nonetheless, this updated konak has brought in all the furnitures required for the hotel. At the entrance an antique console and an arched shelf is found. In from of it there are two big armchairs which function as a waiting area for the clients. In the barn floor there are 5 tables, four of which are round and one is a openable rectangular table. The chairs used as well as the tables date back to the early 1990s when the konak was first decided to be turned /into a hotel. All of these furniture add a medieval feeling to the room.



Image 5.20: Xheblati Hotel, Furniture Samples, Berat /Albania

Source: tripadvisor.com

Even though the floors are original wood, the usage of carpet is a necessity in the Albanian culture. Since the houses would usually only be plastered walls with some painting on it, the contrasting piece would be the carpets where color would make the pop. The Albanian tradition, in comparison to that of the Turkish one, requires to show off the best belonging of the owner, that is why smalls objects such as vases and small pottery work is always a necessity in each room.

The rooms of the Xheblati hotel have shelves on the walls, shelves which are a contrasting detail kept from the Traditional Turkish houses. These shelves are usually one or two rows, maksimum 30cm in depth and are as long as the wall they are located into. These shelves are used for putting small ornaments and giving a warmer feeling to the room. The wardrobes used have a standard size of 180cmX60cm in depth and their heights vary from 180cm to 200cm. In the Albanian tradition, the handwork of clothes such as curtains, sheets and bed covers are usually all done by hand from the lady of the house and they are all artisanal. Since all the windows have blinds from the outside, the curtains cover only half of the window and are used more as an ornament rather //than used for the controlling of the light.

The most basic condition of ceilings is uncovered ceilings, which allow the structure to be seen. C-S curved wooden corbels support the major wooden beams and trusses found in the long span ceilings, where the wooden runners are exposed. The joints of woods arranged side by side are covered with profiled staves and encircled by ornate wooden cornices on ceilings with wood coverings. The wooden cover is adorned with numerous geometrical shapes produced by thin wooden staves, especially in major rooms and projected chambers.

In the Kaymakamlar house the walls are plain. Vertical, rectangular recesses created from the thickness of the wall can be found in various rooms. The cylindrical niches, which are situated in the middle of the walls in large rooms and are covered with marble on the inside and adorned with plaster or wooden material, are used as lamp stands or flower stands. In this house as well as in the Xheblati house the contoured, wooden cornices that run along the upper level of the doors and windows enhance to the interior's aesthetic richness. In addition to glass sashes, there are wooden bars on the inside walls of the windows. These bars are designed to form small square portions and /are used to obstruct the view as well as provide safety.



Image 5.22: Kaymakamlar Evi Müzesi, Çocuk Odası Örneği, Safranbolu/Turkey

Source: tripadvisor.com

The most basic condition of ceilings is uncovered ceilings, which allow the structure to be seen. C-S curved wooden corbels support the major wooden beams and trusses found in the long span ceilings, where the wooden runners are exposed. In most Traditional Turkish homes, fixed furniture is not present. Moving furniture was utilized, with different tasks requiring different locations in the space. According to the purpose of the oda, the sedir is moved to the edges of the room and the central region is left unoccupied. The structure might be made of wood, stone, adobe, or stone, but the cedar's position in the chamber will never vary. The sedir might be on one or three sides, depending on the size of the space. Sedirs are generally solved depending on the construction and the load-bearing flooring. The most common material used is wood. Sedirs have a width of 75cm and a height of 35cm. To assure seating, the top of the upholstery is covered with a soft cover. Backrest pillows and embroidered covers of the same size on the reclines, soft cushions and breech coverings on the seats all come together to create a complete set.



Image 5.23: Kaymakamlar Evi Müzesi, Ocak Örneği, Safranbolu/Turkey

Source: tripadvisor.com

The fireplace in Turkish homes is designed to fit the room's form and function. It usually is a brick-built semi-circular structure inside the wall that's used to heat the space and prepare meals when necessary. It has a smoke-drawing cone on it. It's also known as "cooking hood" or "hood." Wood or plaster are used to make the hoods. Molding method was used to create plant and simple life embellishments on plaster hoods. Wooden hoods, on the other hand, are the most beautiful specimens of woodworking because they include symmetrical flower patterns. In the Kaymakamlar as well, the area of the hood has been covered in wood and a shelving structure has been added. This is to show how the Turks would be beneficial with their space usage. The fireplace, in both affluent households and head rooms, has taken on an aesthetic as well as a practical role. The fireplace would generally be situated in the middle of the room, between the cabinets.

SECITION VI: CONCLUSION

The standards on how to bring back to life a heritage building is implemented in accordance with each project's economic and technical viability. It is best if a property will either be used as it was in the past or will be repurposed with minimum changes to its unique materials, features, spaces, and spatial linkages that define this heritage property, same approach that had been used for the Xheblati hotel in Berat. Nevertheless, the property's historic character should

be kept and preserved such as it was done for the Kaymakamlar Evi in Safranbolu. Rehabilitation suggests that each property will be identified as a tangible record of its date, location, and usage. It is important that no changes shall be made that provide the impression of historical development, such as adding conjectural features or elements from other historic sites. When we take these two buildings under observation we come to the conclusion that the rehabilitation that they had followed has been as such. Even though the hotel in Berat has been adaptively reused from a traditional Turkish konak into a hotel, it still holds the original structure and character of the original design.

When choosing on how to modify the structure, it is crucial that the method be reversible, so that these new repairs may be undone in the future. (Burra Charter) The methods used to bring back to life a building:

1. Reconstruction
2. Rehabilitation
3. Adaptive Reuse
4. Preservation

	Xheblati Hotel	Kaymakamlar Konak
Reconstruction	✓	✓
Rehabilitation	✓	✓
Adaptive Reuse	✓	✓
Preservation	✓	✓

Table 6.1: Xheblati Hotel vs Kaymakamlar Evi

Source: Sara Fishta

The two case studies have both gone through the four main and most important steps of protecting their architectural heritage and character. They both started with the *reconstruction* of the original structure by bringing the falling walls back up, renewing and re-treating the old areas and rebuilding the missing zones. After the reconstruction of the main areas and walls,

the buildings went through the *rehabilitation* process. This included the treatment of the construction elements such as the window treatments, the floor, wall and ceiling treatments and the openings for the electrical outlets. The next process is that of the *adaptive reuse*, and as mentioned before, this is the process of giving a building a different purpose from that of the original one. With the Xheblati hotel it is obvious that turning it from a traditional Turkish house into a Hotel the adaptive reuse approach has been followed. On the other hand, taking a traditional Turkish house and turning into a museum by expressing its original purpose, thus not changing any of the functions of the rooms, may arise the doubt if the Kaymakamlar Evi did follow the adaptive reuse approach or not. Even though the houses' layout may have not been changed, the way that it used today, thus as a museum where many different people enter and leave, brings the outcome of this beautiful museum-house to constantly be under examination, therefore changing its function is acceptable as an adaptive reuse approach. Finally, the *preservation* approach, where it is required for the building to be maintained and used has been followed. Since people who come and visit need a clean and sterile place, the preservation of the two structures has been continuing for decades.

Regarding the identification of a building and deciding rather it is a heritage one or not breaks down into the three main categories:

- *Historic significance*, which consists on the usage of specific materials in a structure such as mortar, steel, limestone or original wood.
- *Historic integrity*, which is the determination by the structure's historical era.
- *Historic context*, which is characterized as the information about historic trends and properties grouped by an important theme in the history of a community, region, or nation during a specific time period.

	Xheblati Hotel	Kaymakamlar Konak
Historic Significance	✓	✓
Historic Integrity	✓	✓
Historic Context	X	✓

Table 6.2: Xheblati Hotel vs Kaymakamlar Evi/ Historic Categories

Source: Sara Fishta

When the two structures: Xheblati hotel and the Kaymakamlar Evi, were investigated rather they can be identified as heritage structures or not, they had to be categorized at least as one of the following ranks. After the research done, it was evident that both of these structures consist on the usage of specific materials in their structures, had the classification of the *historic significance*. Nevertheless, this category was not the only reason they were identified as heritage buildings and protected by UNESCO. Thanks to the traditional Turkish house architecture, they both are a structural determination of historical era, thus they both have the characterization of *historic integrity*. Regarding the historic context on the other hand, only the Kaymakamlar evi enters this category. Kaymakam means 'District Governor' in Turkish, and its owner used to be Hacı Mehmet Efendi, the commander of Safranbolu Barracks who would be called as 'Kaim -Makam', which is the equivalent of a lieutenant colonel. Important history has happened in this konak and therefore it could be categorized as a heritage one thanks to it. Xheblati hotel on the other hand does not qualify this category. Nonetheless, it qualifies the other two which is more than enough to be certified as a heritage building.

After following these three categories, the classification of a particular heritage building continues with the identification of the *overall aspects* such as the identification of the structure, the facade, the openings, the roof etc, and with the identification of the *specific aspects* of the building, identification which is focused on the interior details such as the materials & craftsmanship, the flooring, walls, ceilings and the interior spatial arrangements. The role of the interior architect in the rehabilitation of heritage mansions is assigned to help the structure achieve both durability and authenticity without falsification of history. After thoroughly examining the areas that have been destroyed, the architect/constructor/interior architect, etc. must determine whether to rehabilitate the damaged structures or adapt a new framework to the old one, all while keeping the building's history in mind. The interior architect's handbook on rehabilitating a heritage building has been thoroughly written on section III, subsection 2. The final results of both the structures are as below:

<i>Plan Layout</i>	Xheblati Hotel		Kaymakamlar Konak	
Old vs New Usable Floors	2	3	3	3
Old vs New Rooms	4	8	8	8
Old vs New Bathrooms	2	9	3	3
Old vs New Function	Barn	Restaurant	Barn	Museum Entrance

Table 6.3: Xheblati Hotel vs Kaymakamlar Evi/ Plan Layout

Source: Sara Fishta

<i>Floor Layout</i>	Xheblati Hotel	Kaymakamlar Konak
Room Size	All the bedroom sizes changed	All the room sizes are as the original design
Room Structure	Most of the Rooms structures changed	All the room structures are as the original design
Connection of the Rooms	As the original design	As the original design

Table 6.4: Xheblati Hotel vs Kaymakamlar Evi/ Floor Layout

Source: Sara Fishta

<i>Subdividing Areas</i>	Xheblati Hotel	Kaymakamlar Konak
Vertically	Walls have been added to create new areas (rooms & bathrooms)	No changes have been made
Horizontally	Ceilings have been redesigned according to the new added walls/created areas	No changes have been made
Dropped Ceilings	No	No changes have been made

Table 6.5: Xheblati Hotel vs Kaymakamlar Evi/ Subdividing Areas

Source: Sara Fishta

<i>Interior Elements/Historic Character</i>	Xheblati Hotel	Kaymakamlar Konak
Doors	Similar doors resembling the original design.	No changes have been made
Fireplace	No changes have been made	No changes have been made
Cornices	Cornices have been added to the newly added rooms.	No changes have been made
Lighting Fixtures	New lights have been added	New lights have been added
Wood Floors	No changes have been made	No changes have been made
Stone Floors	From stone – Turned into ceramics	No changes have been made
Paint	Repainted the same original color	Repainted the same original color
Plaster	Added necessary to hide the hardware	Added necessary to hide the hardware
Finishes	Retreated	Retreated

Table 6.6: Xheblati Hotel vs Kaymakamlar Evi/ Interior Elements

Source: Sara Fishta

<i>Staircase</i>	Xheblati Hotel	Kaymakamlar Konak
No/ of staircases	+1 staircase added	No changes have been made
Treatment	Wood Staircase	Cleaned and painted

Table 6.7: Xheblati Hotel vs Kaymakamlar Evi / Staircase

Source: Sara Fishta

The architectural characteristics and finishes were conserved during the rehabilitation process and were clearly noted on drawings and on the construction site. This procedure, along with careful monitoring of interior demolition work and protection from fire and vandalism, helped prevent the accidental loss of architectural components that contribute to the building's historic identity.

The historical structure of the konak, also known as the Traditional Turkish house is one of the most iconic architectural structures of the Ottoman period that thankfully is alive to this day.

Because the structure has been designed accordingly to the human needs throughout the centuries, this structure has been updating and changing functions through time. It is crucial to ensure the rehabilitation of social and cultural viability of traditional dwellings which are part of cultural heritage. The rehabilitation of two traditional Turkish houses which are both protected by UNESCO and which have both been constructed during the same period in time are two examples which have been adaptively reused from their first purpose, thus the buildings themselves have had the chance to have a longer life. It is seen from the research that there are some elements that are not in accordance with the Athens of Venice charter, but that they have been accepted as an exception.

The rehabilitation the structure in Berat has gone through allows for its clients, thus the society, to not only learn about history but also live it. The rehabilitation that the building followed respected and highlighted the historical architectural values as well as the society's cultural ones, thus bringing back to life an era that no longer exists. Even though the owner had to re-arrange the plan according to the new purpose the house was given, thus making the house from a three-room floor into an eight-room floor, the original elements that were used did not destroy or falsificate history. The Kaymakamlar Evi on the other hand, since it was once refurbished into a medrese previous to it turning into a museum house, it had to be reconstructed as the areas that it once had.

Finally, the two case studies are great examples of the rehabilitation approach. Even though they were adaptively reused, they have both kept the originality of most of the structure and thus history can be perceived from both of these traditional Turkish houses. Before any alterations to the building were considered, it was vital to identify and evaluate interior architectural components after conducting research on the structure's history and function. New usage was decided on and plans drawn up only after their reviews were completed. The best rehabilitation retains and protects the rooms, sequences of spaces, features, and finishes that define and form the building's overall historic character.

Sources:

1. 18 Preservation Briefs (Lee H. Nelson, FAIA, 1988)
2. Preserving Canada's Heritage: The Foundation for Tomorrow: (Heritage Canada Foundation, 2003).
3. IInd International Congress of Architects and Technicians of Historic Monuments, Venice, 1964.
4. A history of Architectural Conservation, Jakilehto, 2011
5. The Convention for the Protection of Cultural Property in Event if Armed Conflict - The Hague, 14 May 1954
6. The role of cultural (architecture) factors in forging identity, Lahud 2008.
7. ICOMOS – Türkiye Mimari mirasi koruma Belgesi, 2013
8. Economic Recovery: The Important Role of the Construction Industry, Patrick Hogan, November 2020.
9. Introductory Chapter: Heritage Conservation - Rehabilitation of Architectural and Urban Heritage, Kabila Faris Hmood, May 6th 2019.
10. Heritage and Transformation, Purchla 2005.
11. The Digital in Architecture: Then, Now and in the Future, Mollie Claypool, 2019.
12. Rehabilitation and reuse of historic masonry buildings in Europe, Volume1, Issue3/April 1998/ Pages 271-278. Binda, A Anzani.1998.
13. Proposals for Revitalization of Historical Settlement Oktay, Gunce, 2014.
14. Understanding Historic Building Conservation, Forsyth 2008.
15. Future of Nostalgia. Svetlana Boym 2011, pg: 77.
16. Thirty years of ICOMOS, 2011. Paris, pg: 45
17. IInd International Congress of Architects and Technicians of Historic Monuments, Venice, 1964, Adopted by ICOMOS in 1965.
18. Thirty years of ICOMOS, 2011. Paris, pg: 95
19. Glassy Renovation Brings Natural Light into Canadian Museum of Nature, AAS Architecture, December 2013.
20. The Athens Charter for the Restoration of Historic Monuments – 1931, ICOMOS November 2011.
21. ICOMOS – Mimari mirasi koruma Belgesi, 2013
22. Turkish house in search of Spatial Identity, Sezer 2005, 2009.

23. Modernism and Nation Building: Turkish Architectural Culture in the Early Republic (Studies in Modernity and National Identity) 2002
24. World Heritage and Cultural Economics. Duke University, Barbara Kirshenblatt-Gimblett. 2006.
25. Kitap ve Kahve Tutkunlarının Yeni Adresi: Türk Alman Kitabevi Café, Brandmail, 2016
26. ICOMOS - The Venice Charter 1964, article12
27. ICOMOS - Mimari mirası koruma Belgesi, article2
28. URL: <https://www.bbc.com/news/blogs-news-from-elsewhere-34073669>
29. Tarihçi Prof. Dr. Nurhan Atasoy for hurriyet, 2015
30. Handbook of Conservation of Heritage Buildings, Addl. Director General (Arch.), July 2013
31. Hüzünlü kadınların yalısı - Posta.com.tr, November 2012
32. The oral history of Arnavutkoy Documentary, Zeliha Gülçat 2004
33. Architectural Character—Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character, Lee H. Nelson, FAIA, September 1988
34. Handbook of conservation of heritage buildings - Addl. Director General, 2004
35. Rehabilitating Interiors in Historic Buildings Identifying and Preserving Character-defining Elements H. Ward Jandl, 2001
36. Pfluger and Baldracchi, 2011; European Renewable Energy Council, 2009
37. Handbook of conservation of heritage buildings - Addl. Director General, 2004
38. 1concept Statements – Famous Architects’ Dictums Group Research Work, Echidna 2015
39. Kabila Faris Hmood, Heritage Conservation - Rehabilitation of Architectural and Urban Heritage, May 6th 2019)
40. Jokilehto, J.: A History of Architectural Conservation, pp. 115–118. Routledge, London, 1999
41. Adaptive Reuse of Architectural Heritage and Its Role in the Post-Disaster Reconstruction of Urban Identity, Julia Sowińska-Heim, 2020
42. Conservation of built cultural heritage, laws enabling preventive approach: the case of Italy, in M. Gustin, T. Nypan (eds.), Cultural Heritage and legal Aspects in Europe, Koper 2010, pp. 168-178
43. Reconstruction in the World Heritage Context, Jukka Jokilehto, Rome, 2013
44. How Warsaw Came Close to Never Being Rebuilt, Mikołaj Gliński, 2015
45. Architectural Conservation: Principles and Practice, Orbasli, 2008.

46. How conservation matters: Ethnographic explorations of historic building renovation, Thomas Yarrow, 2016
47. Müstakil tarihi yapının içinde yaşamak, Büyük Yalı Loft, İstanbul, Berna 2021
48. Plevoets, B. van Cleempoel, K. Adaptive Reuse of Built Heritage: Concepts and Cases of an Emerging Discipline; Routledge: London, UK, 2019.
49. The Parchment Works house extension built inside ruined stone walls, Will Gamble studio director, DeZeen, 2013
50. The Parchment Works house extension built inside ruined stone walls, DeZeen, Lizzie Crook, 2013
51. Rehabilitating Interiors in Historic Buildings: Identifying and Preserving Character-Defining Elements, H. Ward Jandl, October 1988.
52. Hometown Demolition 2017, youtube video,
<https://www.youtube.com/watch?v=WIqmSR5dLf0>
53. Designing and Modifying Residences for Aging in Place, Paul Spite, Architect September 2018
54. ABC news, Ray Reich, October 2013
55. Defining the Distinctiveness of Urban Heritage Identity, Natthakit Phetsuriya and Tim Heath, 2020
56. The Turkish House, a concise re-evaluation - Hula Yurekli and Ferhan Yurekli, 2007
57. Türk Evi, Cengiz Bektaş, 1996, Pg:30
58. Türk Evi, Cengiz Bektaş, 1996, Pg:116-118
59. Sedad H. Eldem, "Elli Yıllık Cumhuriyet Mimarlığı [Fifty Yearly Republican Architecture]," Mimarlık, no. 121–122, nov. –dec. 1973, pg. 5–11
60. The Ottoman-Turkish House According to Architect Sedad Hakkı Eldem: A Refined Domestic Culture Suspended Between Europe and Asia, Serena Acciai, January 2017, pg:18
61. Türk Evi, Cengiz Bektaş, 1996, Pg:34-45
62. The Ottoman-Turkish House According to Architect Sedad Hakkı Eldem: A Refined Domestic Culture Suspended Between Europe and Asia, Serena Acciai, January 2017, pg:15-20
63. Reha Günay, Türk Ev Geleneği ve Safranbolu Evleri, Yapı Endüstri Merkezi Yay., İstanbul 1999, s. 19-21.
64. The Turkish House, a concise re-evaluation - Hula Yurekli and Ferhan Yurekli, 2007

65. An Evaluation Toward Classification of Vernacular Wooden House Construction Systems of Turkey, Çobancaoğlu, 2007
66. The Ottoman-Turkish House According to Architect Sedat Hakkı Eldem: A Refined Domestic Culture Suspended Between Europe and Asia, Serena Acciai, January 2017, pg:18
67. Türk Evi, Cengiz Bektaş, 1996, Pg:99-104
68. Türk Evi Osmanlı Dönemi / Turkish Houses Ottoman Period, Eldem, 1988: Pg:63-67
69. Sedat H. Eldem “Türk Evi Plan Tipleri”. İstanbul, İTÜ Mim.Fak. Bas.Atölyesi 1968 pg:10-27,34
70. Sedat H. Eldem “Türk Evi Plan Tipleri”. İstanbul, İTÜ Mim.Fak. Bas.Atölyesi 1968 pg:93-94
71. Ministry of culture and tourism, Republic of Turkey, 2014
72. Türk Evi, Cengiz Bektaş, 1996, Pg:56
73. Ünügüralp, T., 1984. Geleneksel Türk Evinde İnsan Mekan İlişkileri Açısından Mekan Oluşumunu Etkileyen Faktörlerin Saptanmasında Kullanılacak Bir Yöntem Önerisi. Doktora Tezi, M.S.G.S.Ü.,Fen Bilimleri Enstitüsü, İstanbul, Pg:18.
74. 19.yy’da osmanli konut mimarisinde iç mekan kurgusunun safranbolu evleri örneğinde irdelenmesi, Selvinaz Gülçin Bozkurt, 2009
75. “Osmanlı Dönemi Türk Evi III.” İstanbul,Türkiye Anıt Çevre Turizm Değerlerini Koruma Vakfı. Eldem,1987
76. The Assessment of Indoor Ambient Air Quality of Houses in Turkey, Oras, 2018
77. Türk Evi, Yapı Kredi Yayınları, İstanbul, Cengiz Bektaş, 1996, Pg:14
78. Berker, M.“Ahşap Mimari Anıtlarda Koruma Uygulamaları ile İlgili Yöntem Önerileri”, Basılmamış Doktora Tezi,1982
79. Arseven,C. Esat. “Türk Sanatı” İstanbul,Cem Yayınevi,1975
80. Arseven,C. Esat. “Türk Sanatı Tarihi” İstanbul, Maarif Basımevi
81. Milana Nikolova, Emerging Europe, February 14, 2021
82. Osmanlı Devleti’nin Bilinen En Eski (1495-1496) Bütçesi ve 1494-1495 Yılı İcmali. OA.Barkan: 1952, pp. 56-59
83. Milana Nikolova, Emerging Europe, February 14, 2021
84. Türk Hayatlı Evi, Kuban, 1995: 21-27
85. Traditional Ottoman - Turkish Houses in Northern Greece, (İsmet Osmanoglu & Mine Neznet Oglou, 2019, 300-302)
86. Architectural Characteristics of the Bosnian Chardaklia House, Cerasi, “Formation of

- Ottoman House,” 2020, Pg:116–56
87. Đurić-Zamolo, Beograd, Pg:170
 88. Konel Muselimov: udhëzues dhe katalog i ekspozitës muzeale Valjevo Nahija dhe Valjevcit në Kryengritjen e Parë dhe të Dytë Serbe (Valjevo: Muzeu Kombëtar, 1995);
 89. Procedimi i Mbrojtjes së Monumenteve të Kulturës 4–5, 4 Branislav Kojić 1953, Pg: 224–43
 90. Cerasi, “Formation of Ottoman House,” 116–56
 91. Kolarić, “Gradjevine i gradjevinari,” 1985, Pg: 5–28
 92. Nenadović, Fjalor i ilustruar, Pg: 284-285. On the Hristić house and its ikonluk, see www.topirot.com/09-KISpomenici/Muzej.htm accessed July 5, 2009
 93. “On the Architecture of the Konaks in Serbia (1804-1830s)” Jelena Bogdanovic 2007, Pg: 179
 94. Pallati I despotve serb ne Budimu,” Jovanka Kali, Zograf 6, 1975, Pg: 51–58
 95. (Sedad H. Eldem, Türk Evi, Osmanlı Dönemi, op. cit. (note 28), p. 25).
 96. Brief description of Berat, UNESCO, 2010, URL: http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Venice/pdf/special_events/Berat1.pdf
 97. City of Safranbolu, UNESCO, URL: <https://whc.unesco.org/en/list/614/>
 98. IInd International Congress of Architects and Technicians of Historic Monuments, Venice, 1964.
 99. A history of Architectural Conservation, Jakilehto, 2011, pg:47
 100. Kaymakamlar Gezi Evi, T.C Safranbolu Kaymakamlığı, information gathered on 2020
 101. 19. yy’da osmanli konut mimarisinde iç mekan kurgusunun safranbolu evleri örneğinde irdelenmesi, Gülçin Bozturk, 2013