

## Characteristic Architectural Elements of Traditional Barbaros Houses with a Single-Living Space and Their Relationship with Daily Life\*

### Tek Göz Geleneksel Barbaros Evlerinin Karakteristik Mimari Elemanları ve Elemanların Gündelik Hayatla İlişkisi

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#### Abstract

Barbaros is a rural settlement in Urla, İzmir, Turkey. This study aims to understand the architectural elements of Barbaros houses with a single-living space, their spatial organization, relation with daily life, and the local terminology for them. Moreover, it is aimed to reveal possible similarities and dissimilarities between architectural elements of other single-living space rural houses in different settlements in close geography. The site survey data was collected in 2016, 2017, and 2020. Fourteen houses were examined, all of which still preserve their original spatial characteristics and architectural elements. The plans and architectural elements of each of the 14 buildings were documented in sketches and photographs. The architectural elements of each house and their characteristics, including form, material, and location in space, were analyzed. The Barbaros case was compared with other rural settlements in Çeşme, Karaburun and Urla. Oral interviews were conducted with 13 people to reveal the relationship between architectural elements and daily life.

#### Keywords

Barbaros, Urla, rural heritage, single-living space houses, architectural elements

#### Öz

Bu çalışma tek göz Barbaros evlerinin mimari eleman özelliklerini, mekân içindeki dizilimlerini, gündelik hayattaki kullanım biçimlerini ve bu elemanlara ait yerel terminolojiyi anlamayı amaçlamaktadır. Bununla birlikte, yakın çevrede diğer kırsal yerleşimlerdeki tek göz evlerin mimari elemanları ile benzerlik ve farklılıkların ortaya konması hedeflenmiştir. Arazi çalışması 2016, 2017 ve 2020 yıllarında yapılmıştır. Özgün mekânsal özellik gösteren ve mimari elemanlarını koruyan 14 ev incelenmiştir. Bu evlerin plan ve mimari elemanları eskizler ve fotoğraflarla belgelenmiştir. Her evin mimari elemanları biçim, malzeme ve mekân içindeki düzenleri açısından ele alınmıştır. Barbaros ile çevre yerleşimlerdeki mimari elemanların benzerlik ve farklılıklarını anlayabilmek için Çeşme, Karaburun ve Urla kırsal yerleşimleri ile ilgili literatür taranarak karşılaştırmalar yapılmıştır. Mimari elemanların gündelik yaşamla ilişkisini ortaya çıkarmak için 13 kişiyle sözlü görüşmeler de gerçekleştirilmiştir.

#### Anahtar Kelimeler

Barbaros, Urla, kırsal miras, tek göz geleneksel ev, mimari elemanlar

\* The data of this research is collected within the scope of the master's thesis entitled "Understanding Cultural Landscape Characteristics: The Case of Barbaros settlement, Urla-Izmir" conducted by Şeyma Sarıbekiroğlu under the supervision of Assist. Prof. Dr. Fatma Nurşen Kul at İzmir Institute of Technology, Department of Architectural Restoration. The collected data in 2016 and 2017 is re-evaluated.

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### ***Genişletilmiş Özet***

Kırsal alanlarda değişen sosyal ve ekonomik koşullarla birlikte yapılı çevre de değişmektedir. Geleneksel kırsal konutlarda mekânların çok işlevli kullanılması yaygınken, zaman içinde farklı işlevler için farklı mekânlar oluşması ve ıslak hacimlerin ev içine alınmasıyla, birçok hayatsal eylemin aynı mekânda gerçekleştiği tek göz evler kullanılmamaya ya da değiştirilmeye başlanmıştır. Tek göz evlerde barınanlar bu evleri yıkıp yerine yeni evler yapmayı ya da yeni mekânlar ve ıslak hacimler eklemeyi seçebilmektedir. Bu sebeple özgün hâlini koruyan tek göz evlere ulaşmak zaman geçtikçe zorlaşmakta, bu evlere dair bilgi kaybolmaktadır.

Barbaros, İzmir ili Urla ilçesine bağlı kırsal bir yerleşimdir. 2016 ve 2017 yıllarında yapılan Barbaros kültürel peyzajını belgelemeye yönelik alan çalışmaları sırasında iki adet tek göz evin mimari elemanlarının ve bu elemanların oda içindeki dizilimlerinin oldukça benzer olduğu fark edilmiştir. Bu gözlem, yerleşimdeki tek göz evlerin mimari eleman organizasyonunda tekrar eden bir düzen olup olmadığı sorusunu ortaya çıkarmıştır. Bu araştırma sorusu çerçevesinde bu çalışma tek göz Barbaros evlerindeki mimari elemanların (kapı, pencere, ocak, yunak, dolap, raf, sedir ve trabzan) özelliklerini, bu elemanların mekân içindeki dizilimlerinde tekrar eden biçimlenmeler olup olmadığını, gündelik yaşamdaki kullanım biçimlerini ve bu elemanlara ait yerel terminolojiyi açığa çıkarmayı amaçlamaktadır. Bununla birlikte, Barbaros tek göz evleri ile yakın çevresindeki kırsal yerleşimlerde bulunan tek göz evlerin mimari elemanları arasında benzerlik ve farklılıkların ortaya konması hedeflenmiştir. Barbaros'ta 2016, 2017 ve 2020 yıllarında gerçekleştirilen alan çalışmasında özgün mekânsal özellik ve mimari elemanlarını büyük ölçüde koruyan 14 ev ayrıntılı olarak incelenmiştir. Bu evlerin plan ve mimari elemanları eskiz ve fotoğraflarla belgelenmiştir. Her evin mimari elemanları biçim, malzeme ve mekân içindeki düzenleri açısından değerlendirilmiştir. Mimari elemanların gündelik yaşamla ilişkisini ortaya çıkarmak için 13 kişiyle sözlü görüşmeler yapılmıştır. Bu görüşmeler, tek göz evlerin ve bu evlerdeki mimari elemanların kullanım biçiminin ve yunak, ocak başı, ocak kulağı, direk başı gibi yerel terminolojinin ortaya çıkmasını sağlamıştır. Barbaros ve çevre yerleşimlerin mimari elemanlarına dair benzerlik ve farklılıkların ortaya konması için Çeşme, Karaburun ve Urla kırsal yerleşimleri ile ilgili literatür taranmış ve karşılaştırmalar yapılmıştır. Literatürde tek göz evlerle ilgili bilgi bulunan yerleşimler: Çeşme ilçesindeki İldırı; Karaburun ilçesindeki Çullu, Hisarcık, Kösedere ve Küçükbahçe ve Urla ilçesindeki Bademler, Balıklıova, Kadiovacık, Kuşçular, Nohutalan, Ovacık, Özbek, Zeytineli ve Zeytinler yerleşimleridir. Bu yerleşimler Barbaros ile karşılaştırılmıştır.

İncelenen 14 adet Barbaros evinin tümü yığma taş yapılarıdır. 14 evin 13'ü kullanım dışıyken, yalnızca bir tanesi günümüzde emlak ofisi olarak kullanılmaktadır. 11 adet ev avludan giriş alırken, üç eve doğrudan sokaktan girilmektedir. Avlu içindeki yapılar avlu duvarından bağımsız olarak avlunun ortasında ya da avlunun bir ya da birden

fazla duvarını kısmi olarak oluşturacak şekilde avlu sınırında olabilmektedir. Yapılan görüşmeler tek göz evlerde çok çocuklu kalabalık ailelerin yaşadığını göstermiştir. Bu tek yaşam alanı, uyuma, yemek pişirme, yemek yeme, ısınma, yıkanma gibi farklı işlevlere ev sahipliği yapmıştır. Yapılardaki mimari elemanlar, birbirinden farklı gündelik yaşam pratiklerinin tek bir mekânda çözümlenmesine olanak sağlamaktadır. Bu mimari elemanlar kapı, pencere, ocak, yunak, dolap, niş, sedir ve korkuluktur. Tek göz evlerin kapıları çoğunlukla tek kanatlı ve ahşaptır. Ocakların iki yanında ocak kulağı denilen raflar vardır, ocağın üzerinde ise ocak başı denilen raf bulunmaktadır. Ocaklar hem ısınmak hem de yemek pişirmek için kullanılmıştır. Isınma için kullanılan başka bir araç mangallardır. Ocaktan alınan közlerin mangala konulmasıyla ısınma sağlanmıştır. Ocak başı ve ocak kulağına yemek pişirmek için gerekli malzemeler ile, mum, fener gibi aydınlatma gereçleri konmuştur. Odanın bir köşesinde bulunan yıkanma kabinleri olan yunaklar; duvar içindeki bir girintide ahşap kapılı ya da oda köşesinde ahşap bölücü duvarlarla oluşturulmuş yine ahşap kapılı elemanlardır. Dolaplar, gömme, yüklük ya da duvara monte biçiminde oluşturulmuştur. Nişler, raflı, rafsız ve testi koymak için özel formlu nişler olarak sınıflandırılabilir. Yapı duvarlarının iç ve dış yüzeylerinde raflar bulunmaktadır. Dış yüzeylerdeki raflar için kayrak taşı, iç yüzeylerdeki raflar için kayrak taşı ya da ahşap kullanılmıştır. İç raflar kısmi olabilir ya da duvar boyunca devam edebilmektedir. Odaların ortasında bulunan dikmelerin üst seviyesinde bulunan raflar direk başı olarak adlandırılmaktadır. İncelenen evler arasında yalnızca bir evde ahşap sedir ve ahşap korkuluk görülmüşken incelenen diğer evlerde bu iki elemana rastlanmamıştır. Evlerin girişinde bulunan korkulukların ayakkabı çıkartırken destek almak için kullanıldığı belirtilmiştir. İncelenen Barbaros tek göz evlerinde ocaklar ve kapılar çoğunlukla aynı duvarda bulunmaktadır. Testilik kapının yan duvarında ve kapıya yakın konumlanmıştır. Yunak kapının karşı duvarındaki bir köşededir. Ocakların yanında kibrit koymak için sıklıkla küçük nişler yer almaktadır.

Barbaros tek göz evlerinin mimari elemanları ile yakın coğrafyadaki tek göz evler mevcut literatüre dayanarak karşılaştırılmıştır. Barbaros yerleşimindeki evlerin hiçbirinde iç merdiven görülmezken, Ovacık, Özbek, Kuşçular ve Küçükbahçe'de iki katlı, tek göz, içten ahşap merdivenli yapılar mevcuttur. Benzer şekilde, Barbaros evlerinde aynı duvarda yan yana iki pencere bulunmazken Balıklıova, Birgi, Kadıovacık, Küçükbahçe ve İldırı'da bulunduğu görülmüştür. Tahtaboş, pencere girintisinde lavabo, dinî ikonalar için süslemeli ahşap raflar, zeminde testilik ve taş sedir de Barbaros'ta görülmeyen fakat civar yerleşimlerde bulunan mimari elemanlardır.

Barbaros tek göz evleri çoğunlukla kullanım dışı olduğundan ve bakım yapılmadığından kaybolma tehdi altındadır. Evleri kullanan insanların kaybıyla yapılara dair bellek yok olmaktadır. Bu çalışma ile tek göz evlerin mimari elemanları, dizilimleri ve kullanımlarına dair bilgi kayıt altına alınmaya çalışılmıştır.

### Introduction

With the changing conditions of rural places in terms of social and economic abilities of inhabitants as well as the availability of new building materials and technologies; the character of built environment in rural settlements has also changed. Single-living space houses are probably the earliest most impacted type of buildings affected from this change. With changes in people’s living habits, different functions (such as eating, sleeping, working) which used to take place in the same room are now expected to have separate spaces. Toilets also started to be included in the main mass instead of being an isolated mass in the courtyard. Inhabitants of single-living space houses may prefer to demolish their houses and build new multi-space houses or add new rooms and wet places to their houses. With these reasons and the loss of people who used to live in single-living space houses, it is getting hard to learn about these spaces. Fortunately, in situ 14 single-living space houses were examined in Barbaros. Also, daily-life practices in these single-living space houses were deciphered through oral history studies. (F. 1). The Barbaros case is compared with close rural settlements in Urla, Karaburun, and Çeşme (F. 2).



F. 1: Location of the 14 houses (Prepared by Sarıbekiroğlu, 2022)



F. 2: Locations of compared rural settlements (Prepared by Saribekiroğlu, 2022)

As in nature, a building always has patterns repeating themselves.<sup>1</sup> Alexander explains:

*If the patterns out of which a thing is made are alive, then we shall see them over and over again, just because they make sense. If the way a window looks onto a tree makes sense, then we shall see it over and again; if the relationship between the doors make sense, we shall see it for almost every door; if the way that the tiles are hung makes sense, we shall see almost all the tiles hung in this way; if the arrangement of the kitchen in the house makes sense, it will be repeated in the neighborhood.<sup>2</sup>*

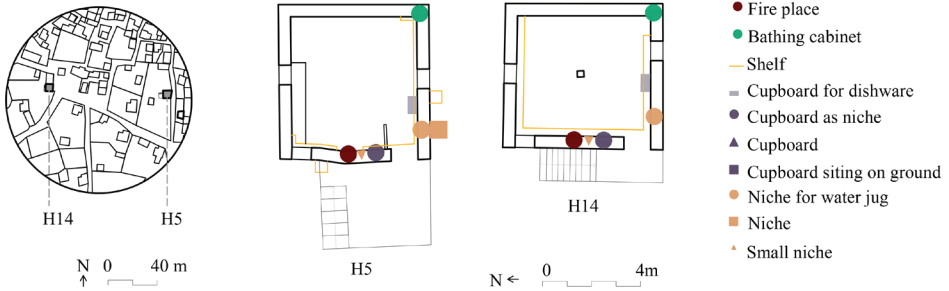
After realizing the extreme similarity of two single-room houses in the Barbaros rural settlement in Urla, İzmir, Turkey, the question of whether single-living space buildings in Barbaros have a pattern in the organization of their architectural features was researched. These two houses are almost identical in terms of architectural elements and their positioning within the rooms<sup>3</sup> (F. 3, F. 4). Both houses are two-story buildings with a barn at ground level and a single-living space at the first level. They both have their entrances in the west wall. On this entrance wall, a door, a cupboard, a small niche, a fireplace, and a window are placed from south to north, respectively (F. 3, F. 4). In addition, there is a wooden shelf at the upper level on the west wall of both houses (F. 3, F. 4). On the north wall, both rooms have a window and wooden shelf at the upper level. The east walls of both rooms are blind, without

1 Christopher Alexander, *The Timeless Way of Building* (New York: Oxford University Press, 1979), 146-149.

2 Alexander, *The Timeless Way of Building*, 149.

3 These houses located at parcel numbers 1446 and 1497. They are numbered for this text as H5 and H14.

openings or architectural elements. At the southeast corner, a bathing cabinet is placed in both rooms. Additionally, on the south walls of both rooms, there is a window, a wooden cupboard with shelves for dishware, a niche for water jugs, and a niche, running from east to west, respectively.



**F. 3:** Scaled plan sketches of H5 and H14 with architectural elements (Prepared by Saribekiroğlu, 2022)



**F. 4:** Living spaces of H5 and H14 at first level. Above photos belong to H5 and below ones to H14. Left: West walls. Middle: North walls. Right: South walls. Y: yunak. W: window. Cd: cupboard for dishware. Cwj: cupboard for water jugs (Photos by Saribekiroğlu, 2017; prepared by Saribekiroğlu, 2022)

### Aim

This study aims to understand the architectural elements of single-space Barbaros houses, their organization in space, their relation with daily life, and the local

terminology for them. Moreover, it is aimed to reveal possible similarities and dissimilarities between architectural elements of other single-living space rural houses in different settlements in close geography, including Urla, Karaburun, and Çeşme.

### Research Method

The site survey data collected in 2016 and 2017 within the scope of the master's thesis was used to decipher the organization of architectural elements within the space and their relation with daily life.<sup>4</sup> The survey data collected in 2016-2017 was supported with another survey in April 2020 within the scope of the IZTECH RES599 Seminar in Architectural Conservation course<sup>5</sup>. Since the departure point of this study was the striking similarity of two single-space houses, single-space housing units in Barbaros are examined in detail. In 2016 and 2017, 228 plots were examined. The number for residential plots was 110, commercial plots was 20, *harım*<sup>6</sup> was 11, and the public plots was six; there were 81 unused plots.<sup>7</sup> 105 residential plots were in use, eight were temporarily in use and 46 plots were originally residential but are now being used for different functions.<sup>8</sup> Within the same survey, 13 single-living space houses that were accessible and which had kept their traditional characteristics were documented. In the 2020 site survey, another single-living space house in parcel no 1469 was documented and included in this study. In total, 14 houses were examined, all of which still preserve their original spatial characteristics and architectural elements (**F. 1**). Two of these 14 houses are located in the same lot, whereas the other 12 houses are placed in their own lots. 13 of these houses are abandoned today possibly due to their small size, which is incompatible with today's level of comfort and expectations<sup>9</sup>. This state of abandonment allowed the authors to understand the original materials and technique, form, size, and use of architectural elements.

The plans and architectural elements of each of the 14 buildings were documented in sketches. The spaces and the architectural elements were measured approximately to keep the sketches in scale. The site survey was supported by systematic photographic documentation of the spaces and their architectural elements. The architectural elements of each house and their characteristics including form, material, and location in space were analyzed. For the survey of architectural elements' layouts,

4 Şeyma Saribekirođlu, "Understanding Cultural Landscape Characteristics: The Case of Barbaros Settlement, Urla-İzmir" (Master's thesis, İzmir Institute of Technology, 2017), 85.

5 The RES599 (Seminar in Architectural Conservation) course in 2020-2021 Spring Semester is given by Assist. Prof. Dr. F. Nurşen Kul.

6 Local Turkish name for vegetable gardens in and around residential area.

7 Saribekirođlu, "Understanding Cultural Landscape Characteristics: The Case of Barbaros Settlement, Urla-İzmir," 85.

8 Saribekirođlu, "Understanding Cultural Landscape Characteristics: The Case of Barbaros Settlement, Urla-İzmir," 86.

9 House in parcel no 1456 (H7) were being used as estate agent.

the main consideration was the location of doors, windows, and fireplaces, since these elements existed in all houses. The location of each element within the room and the interrelation of architectural elements was analyzed.

To reveal the similarities and differences of architectural elements and their layouts between Barbaros and close settlements, the Barbaros case was compared with close rural settlements in Urla, Karaburun, and Çeşme. This comparison was based on information from literature sources (**Table 1, F. 18**).

**Table 1:** Sources of related information comparing single-living space houses in Urla, Karaburun, and Çeşme. (Prepared by Saribekiroğlu, 2022)

Compared information type	Source	Place	Information
<b>General info for rural houses</b>	(Akış et al., 2013: 59)	İzmir rural houses	Rarity of single-living space houses
	(Tunçoku et al., 2012: 8, 29)	İzmir rural houses	Rarity of single-living space houses Orientation of houses
	(Emir et al., 2005: 173)	West villages of Karaburun	Balcony
	(Emir et al., 2005: 170)	Çullu, Karaburun	Houses are mostly single space Mostly square plan Door and window next to each other
	(Emir et al., 2005: 172, 173)	Hisarcık, Karaburun	Mostly single space Mostly two storey Mostly square plan Wooden interior stairs
	(Cöcen, 2007: 85)	Küçükbahçe, Karaburun	One or two storey
	(Görür, 2019: 131, 147, 158, 163)	Küçükbahçe, Kösedere, Karaburun	Mainly two wing door Interior or exterior stair Niche and fireplace at same wall Luminaries at street façade
<b>Information about specifically single-living space houses</b>	(Tunçoku et al., 2012: 29)		One or two storey Ground level as depot or barn
	(Kayın and Kırçalı, 2018)		One or two storey Have fireplace, niche, seating platform
	(Cöcen, 2007: 81)	Küçükbahçe, Karaburun	Architectural elements

To reveal the relation between Barbaros's built-in furniture and daily life; oral history studies conducted in 2016 and 2017 were used. Among 23 interviews made within the scope of the thesis study, 13 interviews gave information about architectural elements (**Table 2**). These interviewees were five women and eight men aged between 77 and 89 years old. The architectural elements' functions, ways of use, local words



for them, and relation with daily life practices were revealed through these interviews.

**Table 2:** Information for interviewees. (Prepared by Saribekiroğlu, 2022)

	Initials of the interviewee name	Birth place, year of birth and age of interviewee	Gender	Interview date(s)
1	S.T.	Barbaros 1936 – 80	Male	13.05.2016 24.09.2017
2	İ.D.	Barbaros 1928 – 88	Male	13.05.2016
3	İ.P.	Barbaros 1933 – 83	Male	14.05.2016 24.09.2017
4	H.N.T.	Barbaros 1937 – 79	Female	14.05.2016
5	A.K.	Kadıovacık 1935 – 81	Male	18.05.2016
6	T.B.	Barbaros 1934 – 82	Male	19.05.2016
7	M.D.	Barbaros 1939 – 77	Female	22.05.2016
8	F.N.A	Barbaros 1928 – 88	Female	31.05.2016
9	N.E.U.	Barbaros 1927 – 89	Female	04.06.2016
10	Ü.A.	Barbaros 1939 – 77	Male	23.04.2017
11	D.P.	?	Female	24.09.2017
12	A.A.	?	Male	24.09.2017
13	Ü.D.	?	Male	21.10.2017

### Studies on Traditional Residential Architecture in Anatolia in Terms of Single-Room Houses and Their Architectural Elements

Traditional rural housing issues are excluded in early studies regarding traditional house architecture in Anatolia.<sup>10</sup> The statement of Doğan Kuban in his book *The Turkish Hayat House* can be considered as a possible reason: “Originally this book was conceived as a large compendium of all the vernacular traditions in Turkey. Such a task needed collaboration. Yet the content of such an extensive work was too much for our individual programs. So, I had to change the initial goal and concentrate on the main theme i.e., the Hayat House.”<sup>11</sup>

It is not possible to find much about single-living space houses in the early studies for traditional dwellings in Anatolia. These studies classify traditional houses according to their plan types, construction techniques and materials, and geographical distribution of plan types.<sup>12</sup> Sedat Hakkı Eldem focuses on the sofa for the classification; examines the first-floor sofa and room relation; and accepts the earliest “Turkish House” type as several rooms in a row directly opening to the

10 V. Betül Kurtuluş and Neriman Şahin Güçhan, “Characteristics of Rural Architecture and its Use in the Çomakdağ Region: Çomakdağ Kızılağaç Village, Turkey,” *Vernacular Architecture* 51/1 (2020), 57-58.

11 Doğan Kuban, *The Turkish Hayat House* (İstanbul: Eren Yayıncılık, 1995), 7.

12 Gül Asatekin, “Understanding Traditional Residential Architecture in Anatolia,” *The Journal of Architecture* 10/4, (2015), 390.

courtyard without a sofa. The same classification is used by Kuban, and the pattern of the Turkish house explained as follows: “two rooms with an in-between recess, or without recess, which open to a courtyard, sometimes preceded by a colonnade or arcade, a kind of large vestibule”.<sup>13</sup> Küçükerman states that the sofa is not seen in the oldest examples of Turkish Houses and the common area between rooms appeared later.<sup>14</sup> The examples before the establishment of the common sofa area are stated as the simplest state of Turkish house. In these examples, access between rooms is from the outside.<sup>15</sup> So, here again, single-living room buildings are out of consideration.

Aran’s study focuses on vernacular buildings in Anatolia and describes them as “structures developed by ordinary human beings to maintain their physical and intellectual life, adapting to the challenging restraints of nature, and also developing the habit of establishing a harmonious relationship with their surroundings.”<sup>16</sup> Aran shares a single-room space pattern: *hanay*<sup>17</sup> as an excellent example of indigenous buildings with “interaction between human behavior, buildings and natural environment”.<sup>18</sup> It is described as:

*Hanay is an essential structure for continuing rural life and is constructed with materials like stone, earth and wood, available on nearby terrain. This structure, in the form of cube based on an approximately square plan, displays a compact organization that resists natural conditions. With its single-room space located in a courtyard it shelters a family. To live in a single room with the whole family requires the harmony of rare social customs. As such it becomes an example of an exact and sensitive balance between culture, environment, and building form.*<sup>19</sup>

The pattern language of *hanay* is shared as: “windows towards the landscape, south facing hedged courtyard, entrance with exterior stairs, square room over granary, bulged fireplace with flanking windows, thick walls of cut stone, earthen flat roof, carved ornament”.<sup>20</sup>

Kuban shares the following elements in a room: the *sedir (divan)*, cupboards and other storage facilities, the floor and the ceiling, windows and illumination, the door,

13 Kuban, *The Turkish Hayat House*, 21.

14 Önder Küçükerman, *Turkish House in Search of Spatial Identity*. (İstanbul: Turkish Touring and Automobile Association, 2017), 59.

15 Küçükerman, *Turkish House in Search of Spatial Identity*, 108.

16 Kemal Aran, *Beyond Shelter: Anatolian Indigenous Buildings* (Ankara: Tepe Architectural Culture Center, 2000), 14.

17 Kurtuluş and Şahin Güçhan’s study reveals that *hanay* or *haney* word is used for rooms elevated from ground and also for the most ornamented room of a house in Çomakdağ region. See Kurtuluş and Şahin Güçhan, “Characteristics of Rural Architecture and its Use in the Çomakdağ Region: Çomakdağ Kızılağaç Village, Turkey,” 55.

18 Aran, *Beyond Shelter: Anatolian Indigenous Buildings*, 48.

19 Aran, *Beyond Shelter: Anatolian Indigenous Buildings*, 48.

20 Aran, *Beyond Shelter: Anatolian Indigenous Buildings*, 133.

the fireplace, the *direklik*, and the *sergen*.<sup>21</sup> The *sedir* surrounds the room on two or three sides, essentially placed under windows, commonly placed opposite the entrance.<sup>22</sup> Cupboards are placed opposite the main windows, mostly on the entrance side.<sup>23</sup> Traditional room doors are one leaf.<sup>24</sup> Fireplaces are often combined with cupboards and are commonly placed at the center of one of the walls without windows.<sup>25</sup>

Küçükerman examines windows, upper lights, doors, floors, ceilings, seating arrangements, cupboards, and fireplaces.<sup>26</sup> According to his examination, the entrance and cupboards are closely related with mutual influence on the concept and construction.<sup>27</sup> The doors of less important rooms are made of two vertical timbers tied by three cross members.<sup>28</sup> Primitive houses and unimportant rooms with low ceilings have cupboards continuing from the floor to the ceiling without interruption.<sup>29</sup>

Aran describes the spatial organization of *hanay*:

“The hanay is accessed via an exterior stairway; it has a symmetrical façade, on which bulges a fireplace with windows at two sides and an ornamented chimney. Side walls bear two diametrically placed windows at the same level with the fireplace opening. The hanay’s walls are constructed with regular rubble stones; they have earthen flat roofs and stone eaves.”<sup>30</sup>

Asatekin shares architectural features of a traditional residential room in her study suggesting a methodology for the evaluation of traditional residential architecture in Anatolia. Architectural features as horizontal surfaces are: area of floor for shoes, the main platform of the room, sitting platform, and ceiling; and as vertical surfaces are: wall, doors, windows; detailed features: fireplace, closets, a niche for gas lamps, a niche for a mirror, niche for flowerpots, a niche for beverage containers, shelves, small space for ablution, cantilevered projection, and balconies.<sup>31</sup> No rule or pattern is given for the location or organization of these elements.

In a more recent study, Local Architectural Identity book, it is stated that single-room house culture which goes back to 6000 B.C., exists in many regions in Anatolia.<sup>32</sup> In

21 Kuban, *The Turkish Hayat House*, 114-131.

22 Kuban, *The Turkish Hayat House*, 114, 117.

23 Kuban, *The Turkish Hayat House*, 117.

24 Kuban, *The Turkish Hayat House*, 125.

25 Kuban, *The Turkish Hayat House*, 127.

26 Küçükerman, *Turkish House in Search of Spatial Identity*, 110-189.

27 Küçükerman, *Turkish House in Search of Spatial Identity*, 135.

28 Küçükerman, *Turkish House in Search of Spatial Identity*, 143.

29 Küçükerman, *Turkish House in Search of Spatial Identity*, 177.

30 Aran, *Beyond Shelter: Anatolian Indigenous Buildings*, 133.

31 Asatekin, “Understanding Traditional Residential Architecture in Anatolia,” 404-407.

32 Kemal Çorapçiođlu et al., *Yöresel Mimari Kimlik I* (İstanbul: Mimar Sinan Güzel Sanatlar Üniversitesi Döner Sermaye İşletmesi Müdürlüğü, 2008), 124.

the book, primary elements forming a room are listed as sitting platforms, cupboards, and a fireplace.<sup>33</sup> The local and architectural character of the room is created with surfacing, windows, top windows, ceiling, cupboard surfaces, and ornaments.<sup>34</sup>

### Characteristics of Barbaros Single-Living Space Houses

All of the 14 single-living space houses studied are stone masonry (F. 5). 11 of them are accessed from a courtyard (H1, H2, H4, H5, H6, H8, H9, H11, H12, H13, and H14) and three of them are accessed from the street (H3, H7, H10) (F. 6). Houses may be located in the middle of their plots (H6) or may be adjacent to one or more of the plot borders (F. 6). Other than the houses, traditional Barbaros residential plots may include a barn, *mağaza*<sup>35</sup>, toilets, well, *mengere*<sup>36</sup>, and oven. Traditional Barbaros houses are one or two storey structures. In this study, of the 14 surveyed living spaces, nine are one storey and so the living spaces are at ground level (H2, H4, H6, H7, H8, H9, H10, H11, and H13). Five of them are two storey and so the living spaces are on the first level (H1, H3, H5, H12, and H14). The ones on the first level are accessed with a stone masonry exterior stair. The stairs lead to a landing, where access to living spaces is provided. Beneath these living spaces, there exist barns on the ground level.



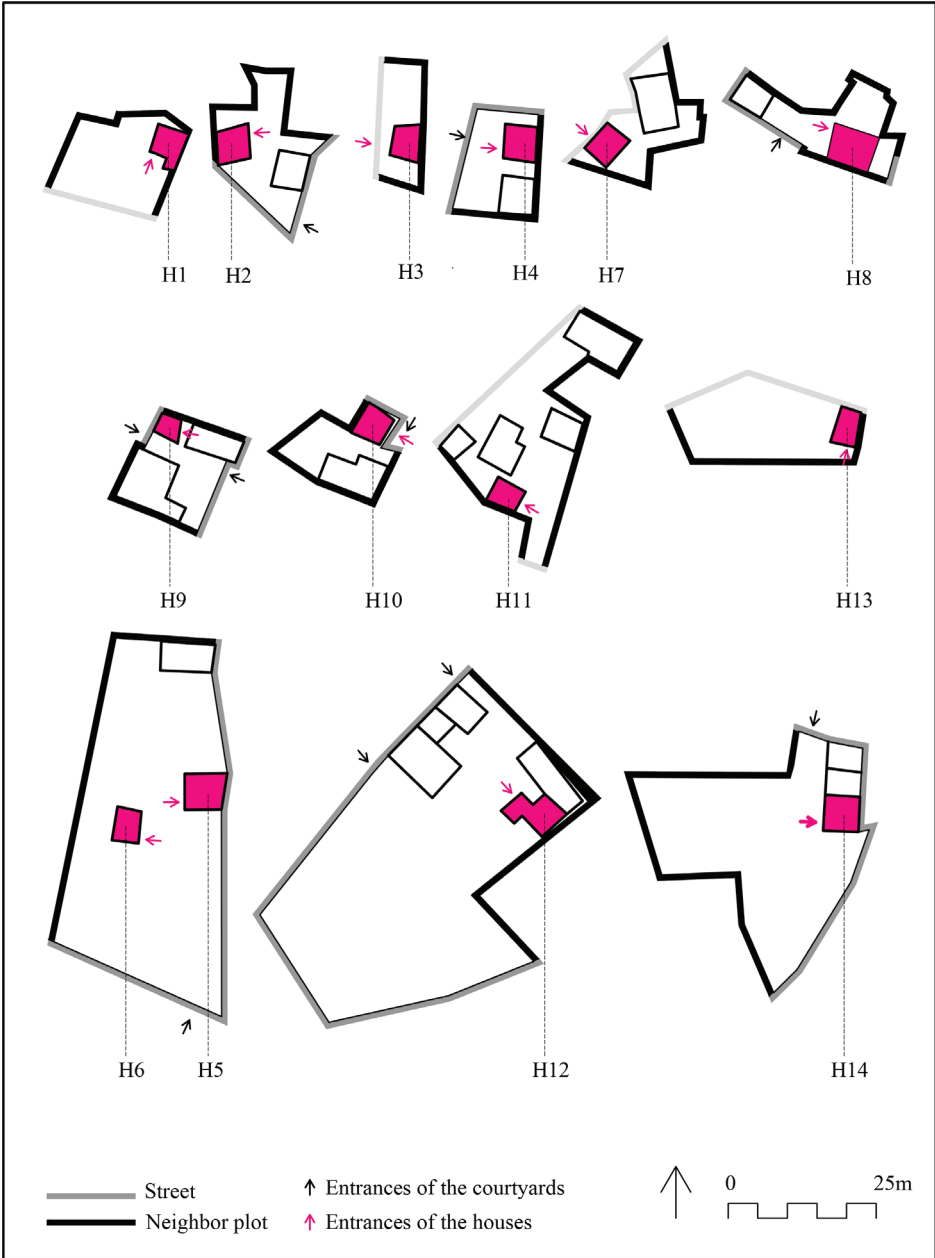
F. 5: Exterior views of surveyed houses (Photos by Sarıbekiroğlu, 2017-2020)

33 Çorapçioğlu et al., *Yöresel Mimari Kimlik I*, 133.

34 Çorapçioğlu et al., *Yöresel Mimari Kimlik I*, 133.

35 Indoor space for storage and/or process agricultural products.

36 Element in which grapes are put and squashed, and liquid flows from a void.



F. 6: Houses in their lots (Prepared by Sarıbekiroğlu, 2022)

The narratives of our interviewees show that single-living space houses were used by crowded families with five to seven children. The only living space was used for different functions such as sleeping, cooking, and eating by the whole family. The multi-purpose use of a single space by many people is remembered as difficult and comfortless, as Ü. A.'s narrative implies:

“Five, six children, mother, father all in one room. Kitchen, all at the same place. Fireplace, wood fireplace. That was the situation. Those houses were 6 to 6 or 7 to 7, so 49m<sup>2</sup>, with that many children... With four, five children how did a family live, stay there? In fact, we are in the west, a civilized part of Turkey. We are seeing old buildings in Kula, in Ankara Beyparazi. For example, in Kastamonu. How did they construct such big buildings? That needed too much money.”

M. D. talks about her childhood house:

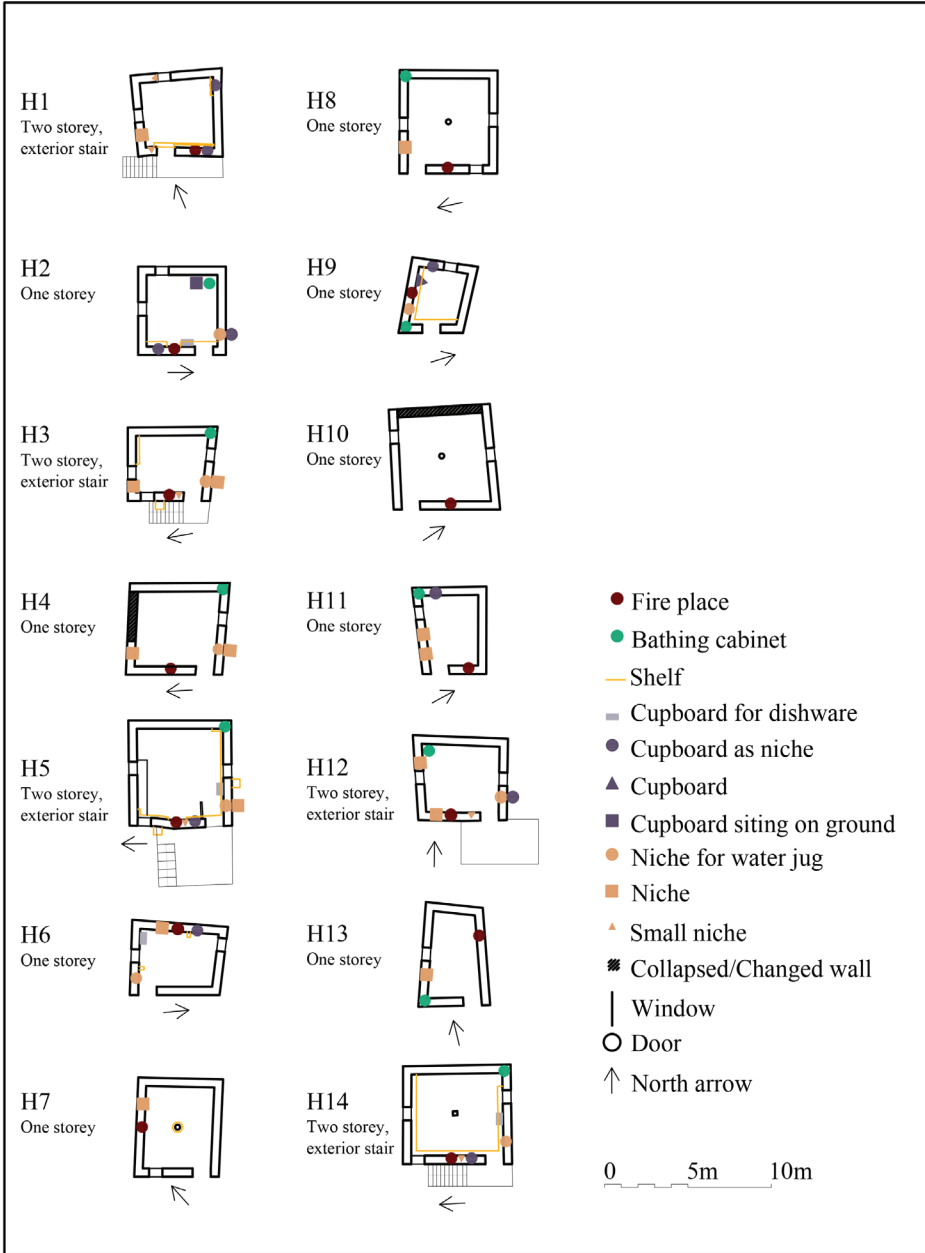
“Two storey, below was the barn and on the top, the house exists. No kitchen. All were at the same place. We were seven siblings, my dear mother was putting beds next to each other, we were all lying. In the morning, all (beds) were packed, placed in the closet, and covered up with linen. What can you do? There was one (space).”

Vertical distribution of functions with a barn at ground and house on the first floor were typical. Today, that organization is remembered with a negative connotation concerning smell. D. P. mentions:

“Sheep were staying here under the house. At the top, we were sitting, below there were our animals. For example, now there is one animal and it smells. In those days, we were getting used to the smell of animals. It (the floor) was wood; there was no concrete or something. The scent was coming between woods.”

### **Architectural Elements of Barbaros Single-Living Space Houses**

The surveyed houses have a door, window, fireplace, bathing cabinet, cupboard, niche, shelf, sitting platform, and balustrade as architectural elements. In the following section, the characteristics of these elements will be shared.



F. 7: Scaled plan sketches of houses' living spaces (Prepared by Sarıbekiroğlu, 2022)

**Door**

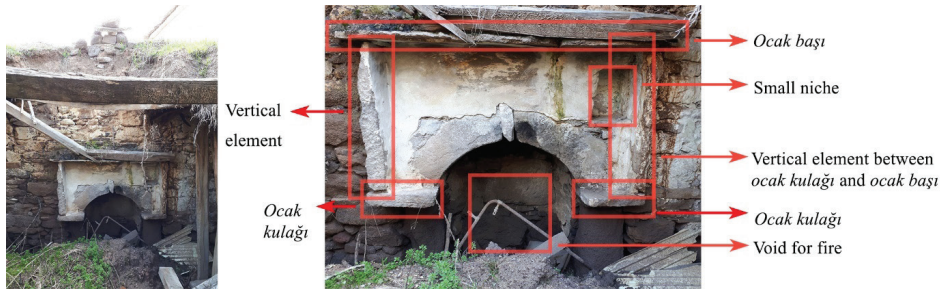
Door openings of five houses at the first level open to a landing where a courtyard is accessed with stairs (H1, H5, H12, and H14) or a street (H3) is accessed (F. 5, F. 6, F. 7). Door openings of seven houses at the ground level open on to the courtyard

(H2, H4, H6, H8, H9, H11, and H13) (F. 5, F. 6). Two houses at the ground level open directly on to the street (H7 and H10) (F. 6).

Of the 14 houses, six have doors (H1, H2, H5, H6, H12, H14) (F. 5). Five houses are severely damaged and their doors do not exist (H3, H4, H8, H10, and H11) (F. 5). The existing four are single-wing wooden doors (H1, H6, H12, and H14). One has a single-wing metal door that is not original (H2). One has a double-wing wooden door (H5). All wooden doors are composed of vertical timber planks adjacent to each other and horizontal timber elements on the interior face fixing timber planks together.

### Fireplace

Fireplaces are formed of a void for fire, chimney for smoke, two small shelves called *ocak kulağı* at two sides, a shelf called *ocak başı*, and vertical elements between the *ocak başı* and *ocak kulağı*. All 14 houses have all these elements except H4 and H11. In those, *ocak başı* are lost. H10 has a small niche in the area bordered by the *ocak kulağı*, *ocak başı*, and in between the vertical elements (F. 8). The *Ocak başı* can be made from wood or slate stone. As the narratives of the interviewees indicate, fireplaces were used as heating and cooking element; and their shelves were used to store cooking-related objects and lamps.



F. 8: Fireplace in H10 and its elements (Photos by Sarıbekiroğlu, 2017; prepared by Sarıbekiroğlu, 2022)

Builder and carpenter T.B. states: “There was a shelf on top of the fireplace. We called that *ocak başı* and put oil, lamp, salt... Things that are used at kitchens. In the past, there was no kitchen. All are inside the house. Food was being cooked there, the bed was also there.” The narrative of A. K. gives information about the material and use of fireplaces: “We were putting *ocak kulağı* from slate stone. (...) We put a lamp on them. (...) To put match, we were leaving a small hole.” The narrative of S. T. shows the use of fireplace for heating was not sufficient and as a result not comfortable: “In our childhood, there were no stove but fireplaces. You put big wood in the fireplace, they burn, you get heated by the fireplace but your front gets heated and your back freezes. (...) Food was cooked there and also we were getting heated.”



D. P's statements reveal that women were active at supplying wood for the fire and she also shares the place for wood collecting and types of woods:

“In the past, we women were going to bring dry wood to get prepared for winter. With donkeys, horses we were carrying wood from the back of Yumru Mountain<sup>37</sup>. When we come back home from work in the summer, we were preparing wood to use for cooking and frying. There were no trees but bushes, dried things, we were collecting those, wrapping and bringing with animals. Wild strawberry, oak, sandalwood, various trees.”

F.N.A. also mentioned that in addition to the fireplace, braziers were also used for heating. She stated: “In the past fireplace was burning, we were putting brazier. We were taking firebrand and putting it in the middle like brazier and heated with that. There was no stove. For many years, I used both brazier and fireplace.”

### *Bathing Cabinet*

The bathing cabinet is called *yunak* in Barbaros houses. Among the surveyed houses, there are three types of *yunak*: a wooden cabinet, a wooden cabinet combined with a cupboard, and a niche at the corner with a door (F. 9). Wall surface finishing does not differ inside these types of *yunak*, it is the same as the interior wall finishing of the space, which is limewash. For the bathing cabinets on the first level, a void at the ground passing through the wall section is made for the water outlet. This void leads to an exterior channel made with *çöplem*<sup>38</sup> tiles (F. 9). The *yunak* ground level is elevated to around 10 cm higher than the ground level of the living space. Of the third type *yunak*, only H5 and H13 have wooden doors. H5 is ornamented with diamond shaped wooden pieces.



**F. 9:** 1: *Yunak* with cupboard in H2. 2: *Yunak* as wooden cabinet in H12. 3: *Yunak* as a niche in H14. 4: Water outlet of *yunak* in H14. 5: Close view to water outlet of the *yunak* in H14.

(Photos by Sarbekirođlu, 2017; prepared by Sarbekirođlu, 2022)

37 Yumru Hill is located close to the Barbaros settlement center, located its southwest.

38 Mission tile is called *çöplem* in Barbaros.

Ü. A. highlights the small size of bathing cabinets by saying it was hard to crouch down. Builder and carpenter T.B. also describes the small size of the of *yunak* and the evolution of bathing spaces from *yunak* to bathrooms in Barbaros:

“In the corner of a house we were enclosing a place with wood, that was a bath. I remember that kind of baths, in the past, builders before us built them. When you are having a bath, your arm was remaining out. It was called ‘*yunak*’. In the 1950s, we started to have relations with the city; we wive to and from the city and saw modern baths. ... Before there was no relation with the city. Our customs were like that.”

### *Cupboard*

In the surveyed houses, four types of cupboards are seen: a cupboard as a niche (H1, H2, H5, H6, H9, H11, H12, and H14), a cupboard on the ground (H2), a cupboard as an element fixed on the wall (H9), and a cupboard with shelves for dishware (H2, H5, H6, and H14) (F. 7, F. 10). All types of cupboards are built with wood.



F. 10: 1: Cupboard sitting on the ground in H2. 2: Cupboard as niche in H5. 3: Cupboard fixed on the wall in H9. (Photos by Saribekiroğlu, 2017)

### *Niche*

In the surveyed houses, there are three types of niches: niches with shelves (H2, H3, H4, H5, H6, H9, H12, and H14) (F. 11), niches for water jugs (H1, H3, H4, H5, H6, H7, H8, H11, H12, and H13) (F. 12), and single void small niches (H1, H3, H5, H12, and H14) (F. 13). Water jug niches can be for a single jug; double jugs and double jugs with another niche under or top (F. 12). Double water jugs niches at H2 and H13 have narrow wooden shelves on top of them. The niches for water jugs mostly have semi-circular shaped wooden elements possibly to make the movement of the jug easy to pour the water (F. 12).



F. 11: 1: Niche with shelf on top in H7. 2: Niche in H11. 3: Niche with arched top in H13.  
(Photos by Saribekiroğlu, 2017, 2020)



F. 12: 1: Single jug niche in H9. 2: Double jug niche in H6. 3: Double jug niche with another niche on top in H4. 4: Double jug niche with another niche under it in H5.  
(Photos by Saribekiroğlu, 2017)



F. 13: 1: Small niche in fireplace wall but not next to fireplace in H1. 2: Small niche in window opening in H1. 3: Small niche under *ocak başı* in H10. 4: Small niche next to fireplace in H14.  
(Photos by Saribekiroğlu, 2017)

### *Shelf*

Shelves exist on the interior and exterior wall surfaces. Interior shelves are on walls or wooden posts in middle, which are called *direk başı* (F. 14).<sup>39</sup> The only *direk*

<sup>39</sup> T.B., personal communication, May 19, 2016.

*başı* is seen in H7 (F. 14). It is made of wood. Interior shelves on walls can be made of wood or slate stone. Interior shelves can be partial or extend along with the whole wall. There are mainly three different levels for shelves: the lowest for *ocak kulağı*, the middle for *ocak başı* and the highest for top levels of openings: windows and doors (F. 14). Exterior shelves are made from slate stones (H3, H5, and H13) (F. 15). All exterior shelves are next to a window (F. 15). While H5 and H13 have one exterior shelf, H14 has two at two different facades. In H13, the same slate stone functions as an exterior shelf and shelf of niche in the wall at interior.



F. 14: 1: Small wooden shelf at *ocak kulağı* level in H6. 2: High level shelf supported below in H9. 3: High level shelf suspended to beams in H14. 4: *Direk başı* in H7.  
(Photos by Sarıbekiroğlu, 2017)



F. 15: 1: Exterior shelf in H3. 2: Exterior shelf in H5. 3: Exterior shelf in H13.  
(Photos by Sarıbekiroğlu, 2017)

### ***Sitting Platform***

A sitting platform is only seen in H5. It is made of wood (F. 16).



F. 16: Sitting platform in H5 (Photo by Sarıbekiroğlu, 2017)

### ***Balustrade***

A balustrade is only seen in H5. It is made of wood and one face is colored in blue (F. 17). Ü.D. shares with us that old houses had wooden elements called *trabazan* in the very entrance of the house to hold while taking off shoes.



F. 17: Balustrade in H5 (Photos by Sarıbekiroğlu, 2017)

### **Positioning of Architectural Elements in Single-Living Space Barbaros Houses**

The specific positioning and layout of architectural elements are analyzed according to their orientation and position. The location of the door within the room and the wall it is placed in (door wall) is taken as a reference for this analysis. The door is selected since it exists in every case and there is always one of them.

The numbers of windows in the houses are one, two, or three (F. 7). Five houses have one window (H4, H7, H9, H11, and H13), five houses have two windows (H1,

H2, H6, H10, and H12), and four houses have three windows (H3, H5, H8, and H14) in their living spaces. One window houses have four different locations for their windows in relation to the position of the door. H4 has its window on the right wall. H7 has its window on the door wall. H9 has its window on the opposite wall. H11 and H13 have their window on the left wall. Two window houses have two different locations for windows, in relation to the position of the door. H1 and H2 have their windows on the left and opposite walls. H6, H10, and H12 have their windows on the right and left walls. Three window houses have one layout for the location of their windows. H3, H5, H8, and H14 have their windows on the door walls, right walls and left walls. Moreover, in these cases the orientation of the door and windows are also the same. The door is located at the west, and the windows are at the west, north, and south.

The similarity of the four houses, H3, H5, H8, and H14 is not limited to the number and location of their windows and doors (F. 7). Their fireplaces and *yunak* are also located in the same place in the living space. The extreme similarity in terms of orientation and ordering of architectural elements of H5 and H14 is already explained in the introduction. Also, H3, H5, and H14 have a niche for water jugs in the same place on the south wall. H3 and H8 have a niche in their north walls. H3 and H5 have an exterior slate stone shelf on the west façade next to the window. H5 and H14 also have a similar shelf for kitchenware in between the window and niche for water jugs. While the sizes of H5, H8, and H14 are also very similar, H3 is a smaller house than these three and does not have a courtyard like these three houses (H5, H8, and H14). H2, H4, H11, H12 also have similarities with these houses with three windows. Tunçoku et al. mention that the orientation of the İzmir rural houses at hillside settlements is determined by topography while it is not valid for plain settlements.<sup>40</sup> Barbaros is a plain settlement and any common orientation for houses is not determined. This similarity between the four houses can be explained as their being constructed by the same builder(s) or close relations of the owners of the houses.

Fireplaces have three different locations concerning the position of the door. H6 has its fireplace on the opposite wall. H7 and H8 have their fireplace on the left wall of the door wall. H13 has its fireplace on the right wall of the door wall. In the other ten living spaces (H1, H2, H3, H4, H5, H8, H10, H11, H12, H14), the fireplace is located at the same wall as the door.

Ten living spaces have a *yunak*. All of them are located in the corner of the space. There are three different locations concerning door position. Eight *yunak* are located next to the opposite wall; five (H2, H3, H4, H5, H14) in the right corner, and three (H8, H11, H12) in the left corner. Two *yunak* (H9, H13) are located next to the same wall that has a door, both in the left corner.

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40 Sarp Tunçoku et al., *İzmir Kırsal Alan Yerleşim ve Mimarlık Envanteri: Kırsal Konutlar - 1* (İzmir: İzmir İl Özel İdaresi, 2012), 8.

Eight living spaces have a niche for water jugs. They all located one of the side walls of the door wall. Six niches for water jugs (H2, H3, H4, H5, H12, and H14) are located in the right wall of the door wall. In these spaces, the door is located on the right side of the wall. Possibly there is a preference for the two elements to be located close to each other since outside is widely used. H6 and H9 have a niche for water jugs at the left wall of the door wall. H9 has its door on the left side, so the two elements are close again. H6 has its door somewhere in the middle of the wall.

Four living spaces have small niches. One of them, H1 has two small niches; one niche on the fireplace wall and one niche next to a window on the opposite wall. H5, H12, and H14 have small niches at the fireplace wall and next to the fireplace. H1 has its door between one of its small niches and fireplace.

### **Comparison with Closeby Rural Settlements' Single- Living Space Houses**

The results of the study were compared with the studies about rural houses in İzmir and specific rural settlements near Barbaros including rural settlements in Urla district; in Çeşme, Ildırı; in Karaburun, Küçükbahçe, Çullu, Hisarcık, Kösedere. Along with written information, which is limited in terms of the organization, of the architectural elements, drawings of single-space houses were examined (**Table 1, F. 18**).

#### ***İzmir Rural Settlements***

Akış et al. and Tunçoku et al. state that although not frequent, there are single-living space houses in İzmir rural settlements.<sup>41</sup> Akış et al. add most of the rural houses in İzmir have more than one room.<sup>42</sup> However, the oral study with the locals of Barbaros revealed that the earliest houses in Barbaros were a single-living space. Moreover, Kırçalı states that in Barbaros one storey single-living space houses are common.<sup>43</sup> The same was stated for other eight rural settlements of Urla, which are Zeytinler, Yağcılar, Bademler, Özbek, Gülbahçe, Kadıovacık, Birgi, Nohutalan.<sup>44</sup> According to Emir et al.; in Karaburun, Çullu and Hisarcık houses are mostly single-living space.<sup>45</sup>

Tunçoku et al. state single-living space rural houses in İzmir are two floors with a depot or barn at ground level; or single floor.<sup>46</sup> In parallel with this information, in Barbaros, our studied cases show that they are one floor or two floors with a barn at ground level.

41 Tonguç Akış et al., "İzmir Kırsal Alan Konutları," *Mimarlık* 370 (2013), 59; Tunçoku et al., *İzmir Kırsal Alan Yerleşim ve Mimarlık Envanteri: Kırsal Konutlar-1*, 29.

42 Akış et al., "İzmir Kırsal Alan Konutları," 59.

43 Çağnur Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları" (Master's thesis, Dokuz Eylül University, 2019), 360.

44 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 69, 138, 168, 206, 249, 287, 335, 377 and 379.

45 Sedat Emir, Zeynep Durmuş Arsan and Nilgün Kiper, "Karaburun Yarımadası (İzmir) Kırsal Mimarlık Envanteri 2004 Yılı Çalışmaları: Çullu ve Hisarcık Köyleri," *TÜBA Kültür Envanteri Dergisi* 4 (2005), 170, 173.

46 Tunçoku et al., *İzmir Kırsal Alan Yerleşim ve Mimarlık Envanteri: Kırsal Konutlar-1*, 29.

### *Urla Settlements*

In Özbek, Urla; single-living space houses are one storey or two storey.<sup>47</sup> Kayın and Kırçalı state that in Özbek one storey single-living space houses are simple spaces with a fireplace, niche, and sitting platform.<sup>48</sup> Two-storey single-living space houses are accessed with exterior or interior stairs.<sup>49</sup> While the number of floors is one or two for single-living space houses, in line with Özbek, in Barbaros all the studied examples have only exterior stairs.

In Zeytinler, Yağcılar, Bademler, Birgi, and Nohutalan, single-living space houses are one storey or two storey with exterior stairs.<sup>50</sup> In Ovacık, Gülbahçe and Kuşçular single-living space houses are one storey or two storey with interior stairs.<sup>51</sup> In Özbek and Kadıovacık, single-living space houses are one storey, two storey with exterior stairs, or two storey with interior stairs.<sup>52</sup> In contrast with Ovacık, Gülbahçe, Kuşçular, Özbek, and Kadıovacık, two storey single-living space houses with interior stairs was not seen in Barbaros.

In Zeytinler, Ovacık and Nohutalan, in contrast to the Barbaros cases, some fireplaces exist at the corner of the houses.<sup>53</sup> Similar to Barbaros cases, in Zeytinler, Uzunkuyu, Zeytineli, Özbek, Balıklıova, Kadıovacık, Birgi, Nohutalan, and Kuşçular, the fireplaces generally have two small shelf at its two side (*ocak kulağı*) and an upper shelf (*ocak başı*) on top of the fireplace.<sup>54</sup> In contrast with Barbaros, in Ovacık, Bademler and Gülbahçe, the fireplaces generally have a single upper shelf without small shelves at the two sides.<sup>55</sup>

In Zeytinler, Uzunkuyu and Kadıovacık, a bathing cabinet is located at a corner of the house or behind a room door.<sup>56</sup> The latter was not seen in the Barbaros cases. In Bademler, a bathing cabinet does not exist, a laundry was used to have a bath.<sup>57</sup>

In Zeytinler, Uzunkuyu, Zeytineli, Ovacık, Bademler, Özbek, Balıklıova, Gülbahçe, Kadıovacık, Birgi, Nohutalan, and Kuşçular, there are generally niches next to

47 Emel Kayın and Çağnur Kırçalı, "Urla Özbek Köyü Kırsal Mimari Mirası," *YAPI Dergisi* 442 (2018), 51.

48 Kayın and Kırçalı, "Urla Özbek Köyü Kırsal Mimari Mirası," 51.

49 Kayın and Kırçalı, "Urla Özbek Köyü Kırsal Mimari Mirası," 51.

50 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 75, 138, 140, 167, 169, 360, 361, 377 and 379.

51 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 150, 152, 249, 252, 398 and 399.

52 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 206, 208, 213, 287, 289, and 297.

53 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 66, 149, and 376.

54 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 66, 89, 119, 205, 235, 286, 359, 376, and 398.

55 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 149, 166, and 248.

56 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 66, 89, and 286.

57 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 166.



fireplaces.<sup>58</sup> In Barbaros, of the 14 cases, just five have a niche or cupboard at the wall with a fireplace (H1, H2, H5, H12, and H14).

Similar to the Barbaros cases, the niches for water jugs are located in the side wall of the door in Zeytinler, Zeytineli, and Birgi.<sup>59</sup> In Kadıovacık, the niche for water jugs can be at the side wall of the door or next to the bathing cabinet.<sup>60</sup> In Bademler, water jugs were put under the flooring in one storey houses, these had special openings in the wooden flooring to reach the jugs.<sup>61</sup>

### *Karaburun Settlements*

In west settlements of Karaburun and Bozköy, wooden balconies exist, locally called *tahtaboş*.<sup>62</sup> Balconies were not observed in Barbaros.

In Çullu, the houses are primarily single space; mostly in square or close to square plan; there are also a limited number of rectangular plan single-living space houses.<sup>63</sup> The ground floor is used as a depot, cellar, or barn, the first floor is used for living, eating, and sleeping.<sup>64</sup> In the houses, bathing space and stairs were not observed and it is predicted that houses had wooden stairs.<sup>65</sup> On the ground floor, there is a door and a window at the right or left side of the door.<sup>66</sup>

In Hisarcık, the houses are primarily single space, mainly two storey, square or close to square plan.<sup>67</sup> Two storey houses have wooden interior stairs.<sup>68</sup>

In Küçükbahçe, houses are one story or two story.<sup>69</sup> One storey houses are single space.<sup>70</sup> They have mainly fireplaces for heating, niches and built-in cupboard for

58 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 66, 89, 119, 149, 166, 205, 235, 248, 286, 359, 376, and 398.

59 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 67, 120, and 359.

60 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 286.

61 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 167.

62 Emir, Arsan, and Kiper, "Karaburun Yarımadası (İzmir) Kırsal Mimarlık Envanteri 2004 Yılı Çalışmaları: Çullu ve Hisarcık Köyleri," 173.

63 Emir, Arsan, and Kiper, "Karaburun Yarımadası (İzmir) Kırsal Mimarlık Envanteri 2004 Yılı Çalışmaları: Çullu ve Hisarcık Köyleri," 170.

64 Emir, Arsan, and Kiper, "Karaburun Yarımadası (İzmir) Kırsal Mimarlık Envanteri 2004 Yılı Çalışmaları: Çullu ve Hisarcık Köyleri," 171.

65 Emir, Arsan, and Kiper, "Karaburun Yarımadası (İzmir) Kırsal Mimarlık Envanteri 2004 Yılı Çalışmaları: Çullu ve Hisarcık Köyleri," 171.

66 Emir, Arsan, and Kiper, "Karaburun Yarımadası (İzmir) Kırsal Mimarlık Envanteri 2004 Yılı Çalışmaları: Çullu ve Hisarcık Köyleri," 170.

67 Emir, Arsan, and Kiper, "Karaburun Yarımadası (İzmir) Kırsal Mimarlık Envanteri 2004 Yılı Çalışmaları: Çullu ve Hisarcık Köyleri," 172, 173.

68 Emir, Arsan, and Kiper, "Karaburun Yarımadası (İzmir) Kırsal Mimarlık Envanteri 2004 Yılı Çalışmaları: Çullu ve Hisarcık Köyleri," 173.

69 Öget Nevin Cöcen, "Identifying the Values of Küçükbahçe Village Through Its Architecture and Collective Memory". (Master's thesis, Middle East Technical University, 2007), 81-85.

70 Cöcen, "Identifying the Values of Küçükbahçe Village Through Its Architecture and Collective Memory," 81.

storing, bathing cabinets with timber plank partitions or walls, and a washbasin in window niches with a carved base and a hole as water outlet.<sup>71</sup>

In Küçükbahçe and Kösedere, the architectural elements are doors, windows, shutters, balustrades, stairs, fireplaces, niches, cupboards, closets, and luminaires.<sup>72</sup> In both villages, doors are mainly two-wing.<sup>73</sup> Two storey houses have interior timber stairs or exterior stone stairs.<sup>74</sup> The wall with a fireplace generally has no openings.<sup>75</sup> Niches are generally located on the same wall with a fireplace.<sup>76</sup> Luminaries are easily accessible exterior flat stone shelves used for lighting the roads and are located on the street facades of the houses.<sup>77</sup>

### *Ildırı, Çeşme*

In Ildırı, the architectural elements are listed as a door, window, stair, fireplace, niches, stone lampstands, stone or terra-cotta water drainage elements, washbasin, bathing cabinet, and timber embellished shelf for religious icons.<sup>78</sup> Staircases are located on the exterior and built with stone in an L shape or straight.<sup>79</sup>

### **Evaluation of the Positioning of Architectural Elements**

Common choices for positioning of architectural elements in the studied single-living space Barbaros houses are compared with the other houses in different settlements including Bademler, Balıklıova, Birgi, Çullu, Hisarcık, Ildırı, Kadıovacık, Kösedere, Kuşçular, Küçükbahçe, Nohutalan, Ovacık, Özbek, Zeytineli, and Zeytinler (**Table 1**). Of the 20 houses, nine are one storey (C1, C3, C4, C7, C9, C11, C14, C15, and C18); seven are two storey with exterior stairs (C2, C5, C6, C12, C16, C19 and C20); and four of them are two storey with interior stairs (C8, C10, C13, and C17) (**F. 18, F. 19**). C8 has a barn at ground level.<sup>80</sup> C10 and C13 are the only examples respectively in Özbek and Ovacık as two storey single-living space house with an interior stair and a depot at their ground levels.<sup>81</sup> C20 is the only example with two

71 Cöen, "Identifying the Values of Küçükbahçe Village Through Its Architecture and Collective Memory," 81.

72 Burçin Görür, "Construction Techniques of Traditional Houses in Karaburun Villages" (Master's thesis, İzmir Institute of Technology, 2019), 130-165.

73 Görür, "Construction Techniques of Traditional Houses in Karaburun Villages," 131.

74 Görür, "Construction Techniques of Traditional Houses in Karaburun Villages," 147.

75 Görür, "Construction Techniques of Traditional Houses in Karaburun Villages," 154.

76 Görür, "Construction Techniques of Traditional Houses in Karaburun Villages," 158.

77 Görür, "Construction Techniques of Traditional Houses in Karaburun Villages," 163.

78 Cemre Aylı, "Restitution Proposals for Ruined Traditional Houses in Ildırı" (Master's thesis, İzmir Institute of Technology, 2018), 77-84.

79 Aylı, "Restitution Proposals for Ruined Traditional Houses in Ildırı," 81.

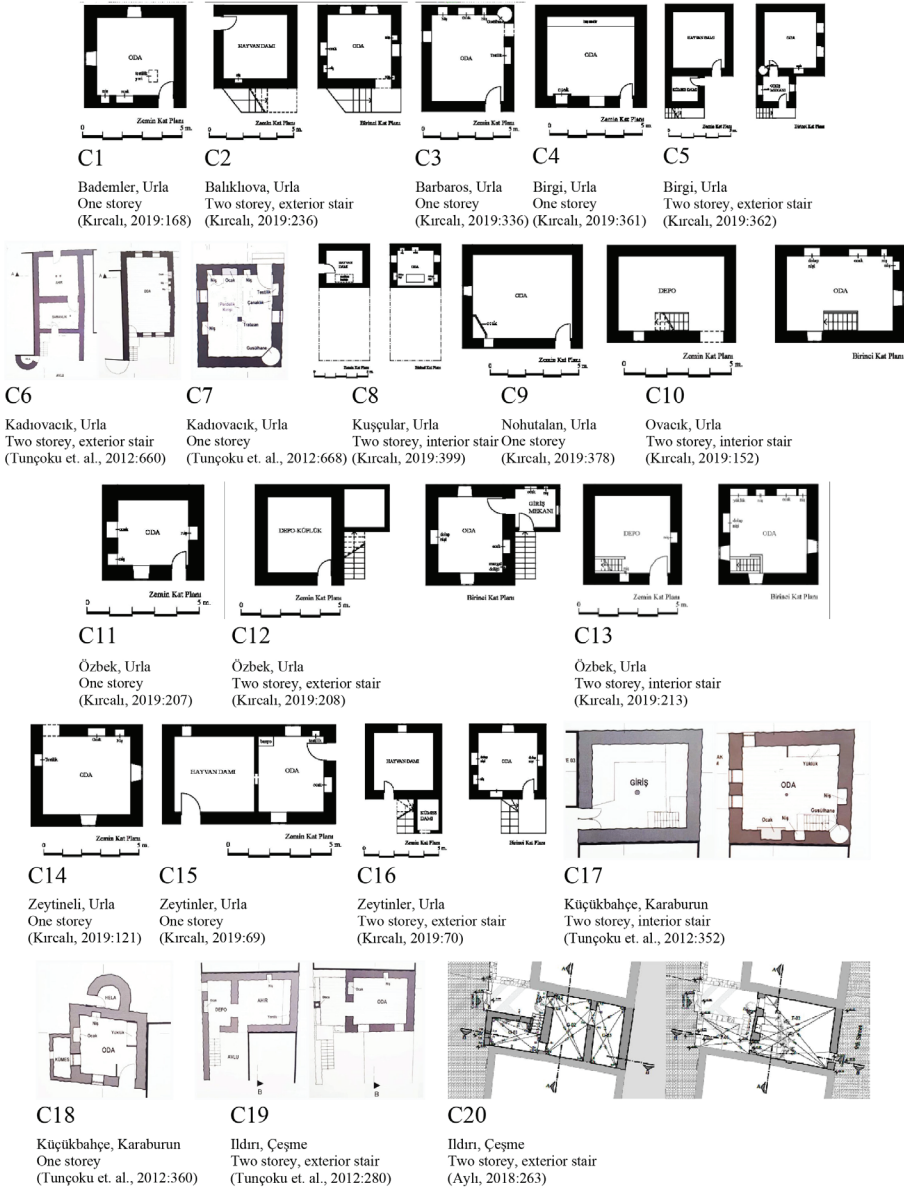
80 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 399.

81 Kırçalı, "Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 152, 213.

doors in the living space. While in Kuşçular, Ovacık, Özbek and Küçükbağçe two storey single-living space houses with interior stairs exist, in Barbaros none of the searched examples have interior stairs.



**F. 18:** Photos of compared single-living space houses exteriors and architectural elements (Kırçalı, “Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları,” 69, 70, 121, 207, 208, 213, 236, 378, 490; Tuñçoku et.al., *İzmir Kırsal Alan Yerleşim ve Mimarlık Envanteri: Kırsal Konutlar-1*, 280, 352, 360, 660, 661, 668, 669; Aylı, “Restitution Proposals for Ruined Traditional Houses in İldırı,” 133, 137)



**F. 19:** Plan drawings of compared single-living space houses in Urla, Karaburun, and Çeşme (Kırçalı, “Urla Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları,” 69, 70, 121, 152, 168, 207, 208, 213, 236, 336, 361, 362, 378, 399; Tuñçoku et.al. *İzmir Kırsal Alan Yerleşim ve Mimarlık Envanteri: Kırsal Konutlar-1*, 280, 352, 360, 668; Aylı, “Restitution Proposals for Ruined Traditional Houses in İldırı,” 263)

Of the 20 compared cases, five have one window (C3, C4, C11, C16 and C20), ten have two windows (C1, C5, C7, C8, C9, C10, C12, C14, C18, and C19), four have three windows (C2, C13, C15, and C17), and one has four windows (C6) (F. 19, F.

**20)** While one, two, and three windows living spaces were seen in the Barbaros cases, examples with four windows were not seen. Also, five of the compared houses have double windows side by side on one wall (C2, C5, C17, and C19) or two walls (C6) (**F. 20**). In none of the Barbaros cases was a side by side double window seen in one wall.

Of the 16 examples with a door on the living level (except the cases having interior stairs), ten have a fireplace in the door wall (C1, C4, C5, C7, C12, C14, C15, C16, C19 and C20), three have a fireplace in the left wall, one has it in the right wall, one has it in the opposite wall and one has a fireplace at the corner (**F. 20**). In none of the cases of Barbaros is there a fireplace at the corner. Most of the houses have their fireplace at the door wall, similar to the Barbaros cases.

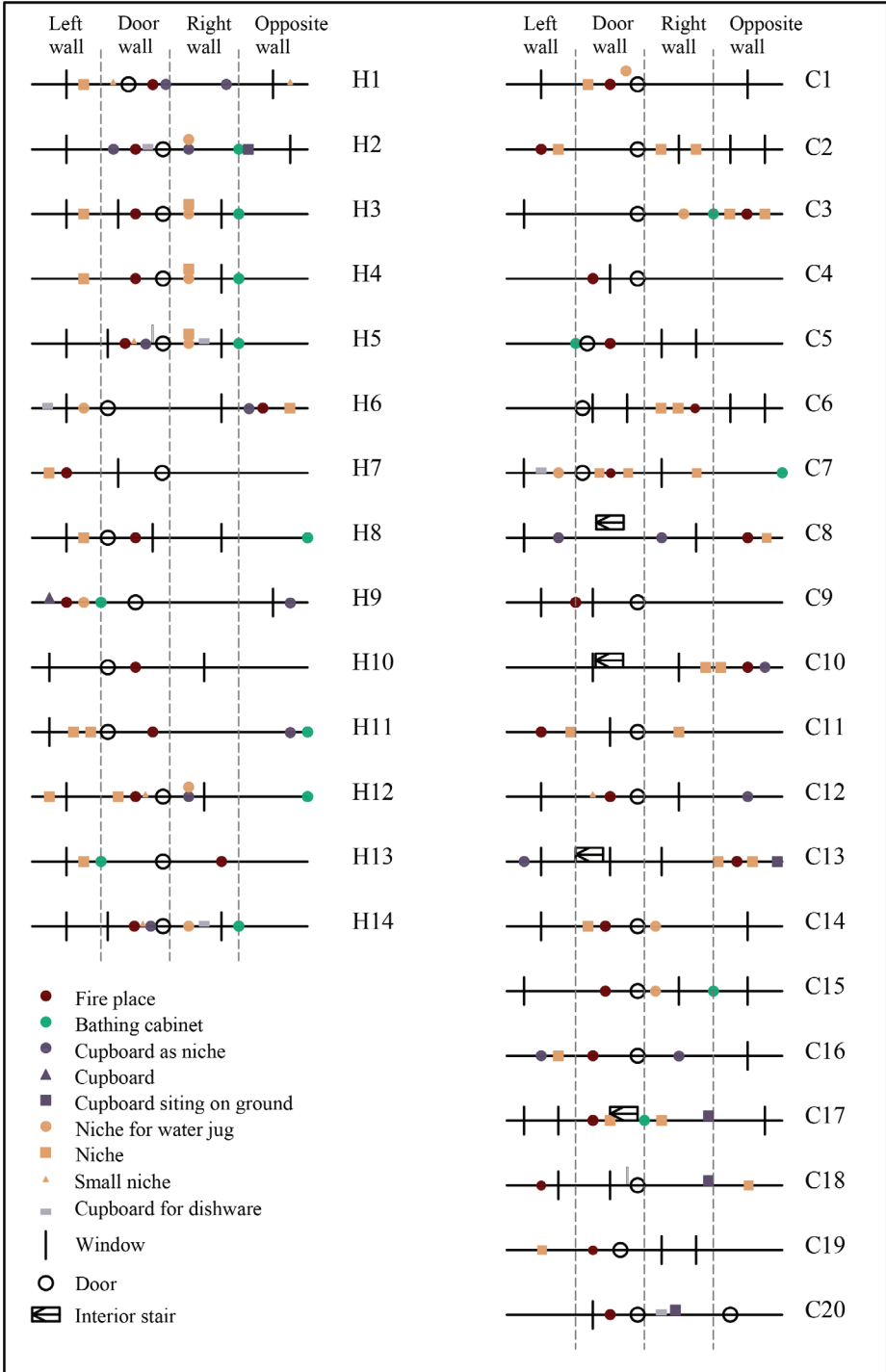
C1 has a water jug place not as a niche at the wall but as an independent element from the wall on the ground.<sup>82</sup> In none of the Barbaros cases, was a separate space from walls seen for water jugs. C3, C7, C14, and C15 have niches for water jugs at the side wall of the door wall (**F. 20**), similar to the Barbaros cases. Other compared houses do not have a niche for water jugs.

In Barbaros, there is only one case with a sitting platform, and it is wooden. In contrast, C4 has a stone sitting platform.<sup>83</sup>

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82 Kırçalı, "Urula Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 168.

83 Kırçalı, "Urula Bölgesi Kırsal Mirasının Karakteristikleri ve Koruma Sorunları," 360, 361.



F. 20: Linear ordering of architectural elements in Barbaros houses and compared Urla, Karaburun and Çeşme rural houses. (Prepared by Sarıbekiroğlu, 2022)

## Conclusion

As in all compared settlements, Barbaros single-living space houses are one storey or two storey. As another common feature, the ground floor of two storey single-living space houses is used as a depot or barn. The general preferences for positioning of architectural elements in Barbaros traditional single-living space houses are:

- Fireplaces and doors are mostly in the same wall.
- Niches for water jugs are always in the side wall of the door.
- The *Yunak* is mostly next to the opposing wall of the door, in the corner.
- Fireplaces often have small niches next to them to put matches (F. 20).

A repeated pattern for architectural element layout is seen at H3, H5, H8, and H14 (F. 20). Aside from these four houses, specific positioning according to orientation for architectural elements could not be observed. In these four houses not only openings which are the elements directly influenced by the orientation in terms of sun and wind; but also fixed furniture has the same positioning. A possible reason for the similarity can be that all four houses were built by the same builder.

When general features of a room are searched in traditional house literature and compared with Barbaros cases, it is seen that some commonly mentioned elements do not exist in the studied Barbaros houses such as top windows, cantilever projections, balconies, special niches for mirrors or beverage containers. In contrast to Kuban's generalization for sitting platforms being on two or three sides of a room and commonly opposed to the door, the only sitting platform in the studied Barbaros houses exists on one wall and it is a side wall to the door (F. 16). While Kuban mentioned that fireplaces are commonly located on the walls without windows, in four of the Barbaros cases fireplaces are located on the wall with a window (F. 20). While Küçükerman explains the constructional relation between doors and cupboards, this relation was not seen in the Barbaros cases. A floor to ceiling cupboard is seen only in one case of Barbaros (F. 10), despite Küçükerman mentioning that it is a common characteristic for the unimportant rooms and primitive houses.

While all two storey cases in Barbaros have exterior stairs, so the living space is reached from outside with stairs (F. 7); the examples in Ovacık (C10), Özbek (C13), Kuşçular (C8), Küçükbahçe (C17) houses have interior stairs and the living space is reached from indoors via a depot or barn at ground level (F. 19). While two windows side by side in the same wall are not seen in the Barbaros cases, in Balıklıova (C2), Birgi (C5), Kadiovacık (C6), Küçükbahçe (C17), and Ildırı (C19) some houses have a double window in the same wall side by side (F. 7, F. 19, F. 20). There are architectural elements that were not seen in the Barbaros cases at all and these are

the *tahtaboş*<sup>84</sup>, washbasin in window niches<sup>85</sup>, timber embellished shelf for religious icons<sup>86</sup>, water jug placed on the ground (C1) and stone sitting platform (C4) (F. 19).

Single-living room houses were left out of surveys in earlier studies on traditional Anatolian housing. However, these single-space houses are unique examples capable of meeting the basic requirements of a multi-child family in a very limited space. This study showed that the interiors of single-living space Barbaros houses are finely designed, and the architectural elements are very well organized for effective use of the only space of the housing unit. It is revealed that there is one repeated pattern for the interior organization.

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