

# Builders and building tradition of Barbaros as intangible cultural heritage

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## Abstract

This paper aims to document the traditional builders and their know-how in a particular geography, namely the rural settlement of Barbaros in the Urla district of İzmir, Turkey. It aims to shed light on the actors of the building traditions of Barbaros, the process of knowledge transfer among builders, and the traditional know-how related to local building materials and construction techniques as intangible cultural heritage. The research method of this study includes literature review, site survey, and study of oral history. Literature sources provided the theoretical background and limited information related to the history of Barbaros. To understand the traditional building stock in Barbaros, site surveys were conducted in 2016, 2017, and 2020. An oral history study was done with the last living builders and the relatives of late builders. These narratives provided invaluable information for answering the research questions. The results of the study contribute to the conservation of intangible heritage by recording the know-how of the last bearers of traditional construction in Barbaros. This documented experience can be used in future restoration projects not only in Barbaros but also in surrounding settlements with the same traditional construction features. The results of the study are also remarkable in terms of revealing the importance of oral history in documentation studies.

## Keywords

Barbaros, Building masters, Building tradition, Intangible cultural heritage, Traditional construction know-how.

## 1. Introduction

Traditional construction know-how has been transferred from generation to generation by word of mouth, observation, replication, and through the master-apprentice relationship for centuries (Hubka 1979, Karakul 2012, Karakul 2015b). This construction know-how has recently been the concern of conservation of intangible cultural heritage, especially after the UNESCO 2003 Convention (Karakul, 2015b). The UNESCO Convention defines traditional craftsmanship as one of the domains of intangible cultural heritage to be protected (UNESCO, 2003). Identification, documentation, and transmission are mentioned among the safeguarding measures to ensure the viability of intangible heritage (UNESCO, 2003). However, drastic changes in building technology and the availability of cheap, easily applicable modern building materials and construction techniques have resulted in the abandonment of building traditions. Thus, the traditional construction knowledge that remains in the minds of the last masters faces the danger of extinction as it is no more being transmitted to younger generations.

This loss of traditional construction techniques in relation to loss of traditional building masters is one of the conservation problems of rural heritage in Turkey (ÇEKÜL, 2020). Any still-living builders are too elderly, and they have not raised a new generation of builders generation of builders (ÇEKÜL, 2020). There is a huge gap in the literature re-

lated to traditional builders in Turkey and their knowledge.<sup>1</sup> This study aims to contribute to this limited literature by documenting the traditional builders and their know-how in a particular geography, namely the rural settlement of Barbaros in the Urla district of İzmir, Turkey (Figure 1).

All rural settlements in Urla are rapidly changing due to the effects of tourism and urbanization. Among the fifteen rural settlements in Urla, the settlement of Barbaros hosts the most traditional buildings (Kırcalı, 2017)<sup>2</sup>. Thus, Barbaros has important potential for understanding traditional construction materials and techniques. In comparison to many neighbors, Barbaros did not experience the population exchange of 1923, so building traditions were sustained.<sup>3</sup> Moreover, the last bearers of this continuity of building tradition are still living. For these reasons, Barbaros is chosen as the case for this research. The paper aims to shed light on the actors of the building traditions of Barbaros, the process of knowledge transfer among builders, and the traditional know-how related to local building materials and construction techniques.

## 2. Research method

The research method of this study includes literature review, site survey, and study of oral history. Literature sources provided the theoretical background and limited information related to the history of Barbaros. To understand the traditional building stock in

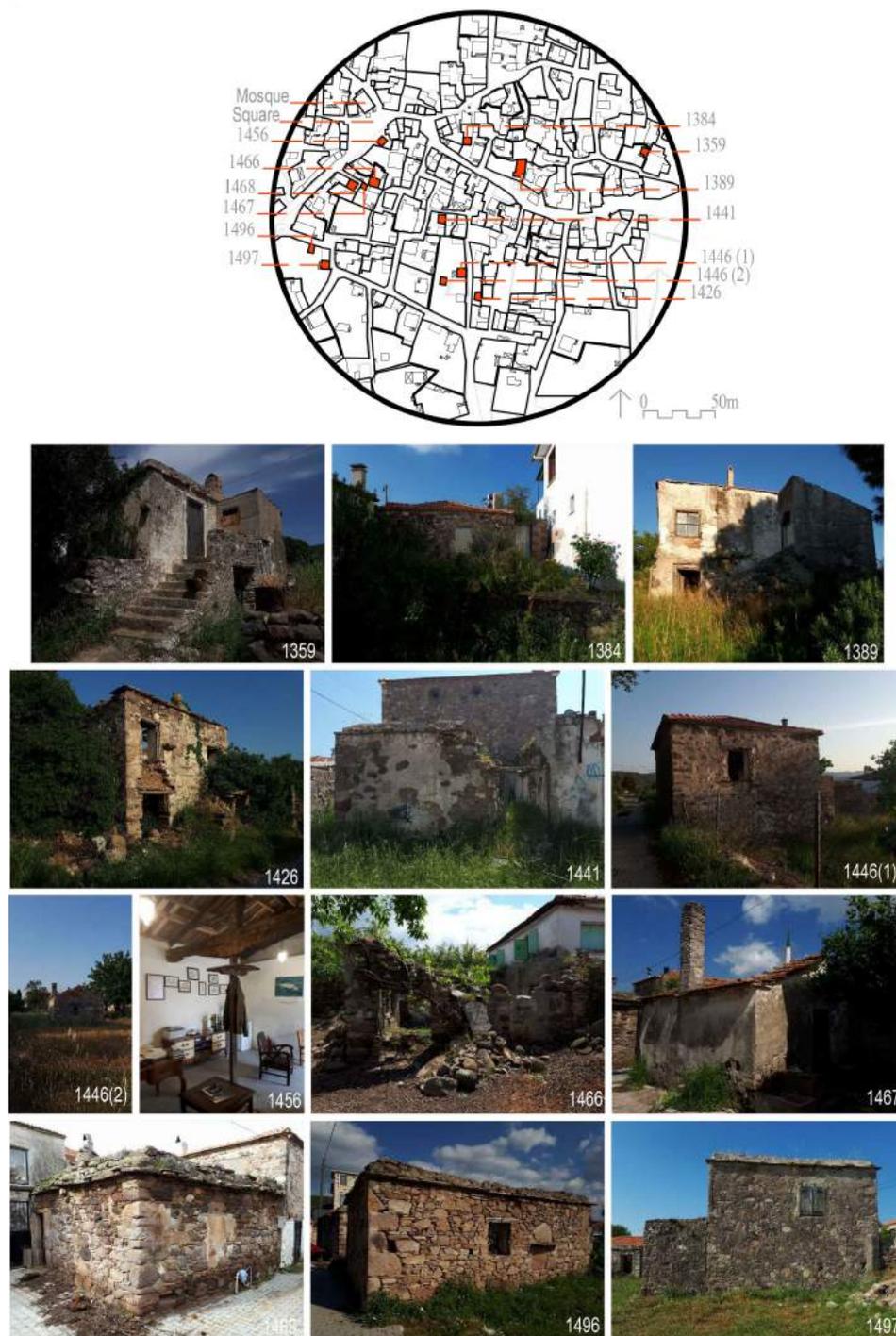


Figure 1. Location of Barbaros settlement.

Barbaros, a site survey was conducted in 2016-2017 within the scope of the master thesis written by the author. In 2020, another site survey was done for completing missing data. 113 parcels were surveyed in lot scale. Structures in the lots, their locations, functions, and exterior characteristics were analyzed. The 13 houses that maintain their original characteristics were examined in detail (Figure 2). Most of these 13 houses

were not in use and had material and structural problems. The structural problems and partial collapses enabled the author to understand the construction details including the walls, floor slabs, and roofs.

Besides the site survey, an oral history study was conducted with the last living builders and the relatives of the late builders. Interviews were held with Emine Uz, Suat Taşkın, Tolanay Barış, İlhan



**Figure 2.** Distribution and photos of surveyed houses. Parcel numbers are given at the lower right corner of each photo.

Ece, and Ahmet Koşfur in 2016 and 2017. Emine Uz is the wife of builder Hasan Uz who passed away. Suat Taşkın and Tolanay Barış are builders who previously worked in Barbaros. Ahmet Koşfur is a builder who has worked in Barbaros and as of 2016, continued to work with contemporary building materials and techniques. İlhan Ece is the son of the builder Hafız Ömer and has taught carpentry in villages including Barbaros. These narratives provided invaluable information for answering the research questions.

Other than interviews, the deconstruction process of a traditional earthen flat roof is documented in situ together with Ahmet Koşfur, who supervised the process (Figure 4). While deconstructing the earthen flat roof, Koşfur explained the construction process of each element step by step. By taking these data in reverse, the information about the earthen flat roof system was able to be deciphered in detail.

### 3. Building tradition as intangible cultural heritage and builders as tradition bearers

As Hubka points out, the design of traditional architecture is formed in the minds of the builders, contrary to the modern design process (Hubka, 1979). The know-how related to traditional architecture is transmitted to the next generations via a master-apprentice relationship. This traditional knowledge, craftsmanship, and the techniques and skills of builders constitute the intangible aspects of traditional architecture, and conservation of these intangible aspects is as important as the conservation of the buildings themselves (Karakul, 2015b).

Conservation of the intangible aspects of buildings requires the continuous transmission of traditional construction know-how. With this aim, in 1993 UNESCO launched the Living Human Treasures system. Living Human Treasures are defined as “persons who possess to a very high degree the knowledge and skills required for performing or re-creating specific elements of intangible cultural heritage” (UNESCO, n.d.). This system aims to encourage member states to grant official recognition to talented tradition-bearers and practitioners, thus contributing

to the transmission of their knowledge and skills to the younger generations. The national version of this system was launched in 2008 in Turkey with the name of National Inventory of Living Human Treasures under the Ministry of Culture and Tourism. However, only one master builder has been recognized in the national inventory so far.<sup>4</sup> The project, organized by Associate Professor Dr. Özlem Karakul in the Fine Arts Faculty of Selçuk University in 2013, is worth mentioning as this workshop, aiming to continue the knowledge, skills, and experience of master craftsmen (Karakul, 2015a), is one of the pioneering studies in Turkey.

### 4. Barbaros settlement and its transformation

Barbaros is located in the Urla district of İzmir, a metropolitan city in the western skirt of Turkey (Figure 1). It is situated on the Barbaros plain together with three other villages, which are Uzunkuyu, Zeytinler, and Birgi (Figure 1). The previous name of Barbaros was Sıradam. The earliest existing document about Sıradam is an Ottoman Period census of 1842-1843. According to this census, Sıradam was a small village with a population of 129 (Başaran & Haykıran, 2015). As understood from the names, family epithets, hometowns, and professions, it was a Turkish village in the mid-19th century<sup>5</sup>, although there was a relatively dense Rum population in neighboring villages.<sup>6</sup>

Barbaros was officially classified as a village until 2012, at which time it became a neighborhood with the law numbered 6360 (Resmi Gazete, 2012).<sup>7</sup> The settlement has experienced a rapid transformation spatially, socio-culturally, and economically in recent years. Even so, becoming distanced from agriculture has been an issue for many decades and has created changes; in the early 2000s, the non-use of most of the agricultural land in the plain due to the loss of tobacco agriculture for economic reasons caused a rapid transformation. Lands have remained empty and have become for-profit properties. In 2008, 300 decares of land were sold to people from outside Barbaros (Yaka, 2016). Not only lands but also some buildings have passed into other hands over the last two

decades. Property values have increased in recent years, and an estate agency was opened in the village in 2015. There are several other reasons for the changes in Barbaros including the opening of the toll motorway connecting İzmir, Urla, and Çeşme in 1997; construction of the Karaburun state road; the plan for an airport in Çeşme; the constitution of İzmir Institute of Technology in the early 1990s; the opening of the Labor, Culture and Art House in Barbaros in 2009; the first culture festival of Barbaros in 2012; the shooting of a television series in the village; the Peninsula Project that includes the Ephesus-Mimas Road<sup>8</sup> passing through Barbaros; and the Strawman Festival<sup>9</sup> first organized in 2016, then again in 2017 and 2019, which made Barbaros especially known for its charm. The impact of these activities has made Barbaros into a settlement of remigration today. Traditional buildings are being modified with modern interventions or replaced with new modern buildings. Also, new buildings are being constructed both in the settlement center and in the Barbaros plain. These are changing the traditional character of the settlement and leading to the loss of related information.

## 5. Learning about builders and building tradition of Barbaros

### 5.1. Actors of building tradition in Barbaros

The actors of the construction of the traditional buildings were mainly builders and unskilled workers. Home owners were also actively involved prior to construction by supplying materials and sometimes by making decisions about the building. They would supply necessary building materials such as stone and earth, either directly from nature with their physical effort or by buying them. Builders were implementing a general spatial typology for

houses as one or two rooms above or next to a barn and an entrance space<sup>10</sup> (S. Taşkın, personal communication, 2016). Sometimes, if the home owners were able to understand, they would join the planning process (S. Taşkın, personal communication, 2016).

Unskilled workers were carrying materials to the builders. Two builders were working interactively face to face while building the stone masonry (A. Koşfur, personal communication, 2016). Unskilled workers (*amele*) were carrying stone and earth mortar to them. The ones who were carrying earth mortar (*çamur*) were called *çamurcu* and the workers who were carrying stone were called *burgoz* (S. Taşkın, personal communication, 2016). According to Taşkın, the word is probably Greek/Romaic. On the other hand, İlhan Ece defines *burgoz* as the ones who were helping the builders, making mortar, carrying it on their shoulders up a stairway. He also proposes that *burgoz* is a Romaic word. A *burgoz* would be able to work as a builder later on as he became experienced (İ. Ece, personal communication, 2016).

According to the narratives of the interviewees, the oldest builders of Barbaros were Rums from Birgi and Alaçatı. Then, when a group of Albanians came to the Gülbahçe, Urla, they built in Barbaros and became instructors for local builders at the same time (T. Barış, personal communication, 2016). In the 1950s, carpentry courses were held in Barbaros and thus developed a group of local artisans experienced in woodwork. Biographical information about these local builders and carpenters (Figure 3), their sources of knowledge, and missions in construction tradition will be shared in the following sections.

Ömer Ece (*Hafız Ömer*) was doing varied kinds of work including agriculture, rifle repair, clock repair, management of the watermill in Barbaros, serving as imamate –he received education at a madrasah in İzmir-, tinsmithing, and masonry (İ. Ece, personal communication, 2016). Ömer Ece learned to build from his father Nabi Yusuf who was also an imamate (İ. Ece, personal communication, 2016). He built many

Builders	Carpenters
Rums from Birgi and Alaçatı	Fahri Ersan
Albanian migrants from Gülbahçe	Bahaddin Yaka
Bekir	Tolanay Barış (1934)
Nabi Yusuf	Suat Taşkın (1936)
Ömer Ece (Hafız Ömer)	
Hasan Uz (Eşref usta)	
Ali Taşkın	
Tolanay Barış (1934)	
Ahmet Koşfur (Kara Ahmet) (1935)	
Suat Taşkın (1936)	

Figure 3. Builders and carpenters of Barbaros.

houses in Barbaros, Kadiovacık, and other nearby villages. Ömer Ece's wife's grandfather Bekir also possessed building skills (İ. Ece, personal communication, 2016). He remade the millpond including building a wall around the pond and altered the mill structure by adding one more millrace (Figure 5).

Tolanay Barış was born in 1934 in Barbaros. He attended the seven months carpentry course in 1951 in Barbaros<sup>11</sup>. The teacher was İlhan Ece and courses were conducted in the ateliers, which used to be located within the existing unused school building (Figure 4). The ateliers were built by villagers at the request of the state in 1945. Fahri Ersan, a carpenter, was one of the people who worked on the construction and built the roofs of the ateliers. After the carpentry course, in 1952, Barış started to work with Suat Taşkın. They did carpentry work for awhile and then started to build houses. Barış continued to work until he retired. From the early years of his work as a carpenter, he has a memory with coworker Eşref Usta (Hasan Uz). In 1952, they prepared a window including the window frame and glass for the house of Barış's family. This was the first use of glass windows for Barış's family. Before the construction of the glass window, if the shutters were opened, any weather conditions from outside would enter the house (T. Barış, personal communication, 2016).

Suat Taşkın was born in 1936 in Barbaros. His father Ali Taşkın was also a builder. Suat Taşkın states that his father did not have a master. When Suat Taşkın finished fifth grade, his father sent him to apprentice under the carpenter Bahaddin Yaka. Suat Taşkın finished four years of apprenticeship in his atelier, which is used as a coffee shop today (Figure 4). Later he opened his carpentry business, and his son continued his work (Figure 4). Today, this carpentry atelier building serves as a café.

Barış and Suat Taşkın's first building work was a house for Barış's father in 1963 (Figure 4). They demolished Barış's father's existing house to build a new one in its place, reusing the original stones and taking the necessary earth for the mortar from the area

around the watermill at Barbaros. They plastered the house with lime. Barış stated that they generally worked in this way, demolishing old houses to build new ones and reusing their materials. Demolishing old houses was difficult since the earth mortar was strong (as long as it did not get wet from rain) (T. Barış, personal communication, 2016).

Ahmet Koşfur was born in 1935 in Kadiovacık, Urla. He is a builder who was still actively working as of 2016 when the interview was conducted. His father was also a builder, but he mentioned that he did not learn the work from him since they separated when Ahmet was young. He states he learned to build by self-education. He both built stone masonry houses and later reinforced concrete houses<sup>12</sup>. In that sense, he is an example of a traditional builder who changed his building techniques according to changing construction practices, material availability, and the desires of the employer.

İlhan Ece taught carpentry in Barbaros for seven months in 1951. His students included Tolanay Barış and approximately ten others. Ece received his primary school education in Çeşme, his middle and high school education in İzmir. He graduated from high school in 1947 and then worked as a teacher trainee at Karadeniz Ereğli Orta Sanat Okulu for five months. His next position was at Zonguldak Sanat Enstitüsü. After these, he began to give his seven-month carpentry course, which he taught in Menemen/Emiralem; Güzelbahçe; Urla/Barbaros; Karaburun/Eğlenhoca; Karaburun/Kösedere; and Karaburun/Mordoğan. This course was named the 28 Numbered Mobile Village Course<sup>13</sup> (28 Numaralı Gezici Köy Kursu) and depended on Mithatpaşa Erkek Sanat Enstitüsü<sup>14</sup>. İlhan Ece was teaching carpentry for seven months in the villages of his choosing and then returning to Barbaros for holidays. After teaching his course in Mordoğan, İlhan Ece resigned and rented an atelier in İzmir where he worked with five carpentry machines. Later, he constructed his own atelier in Karabağlar. Ece indicated that at that time, Karabağlar was a village and he was the one to get the electricity service connected there.

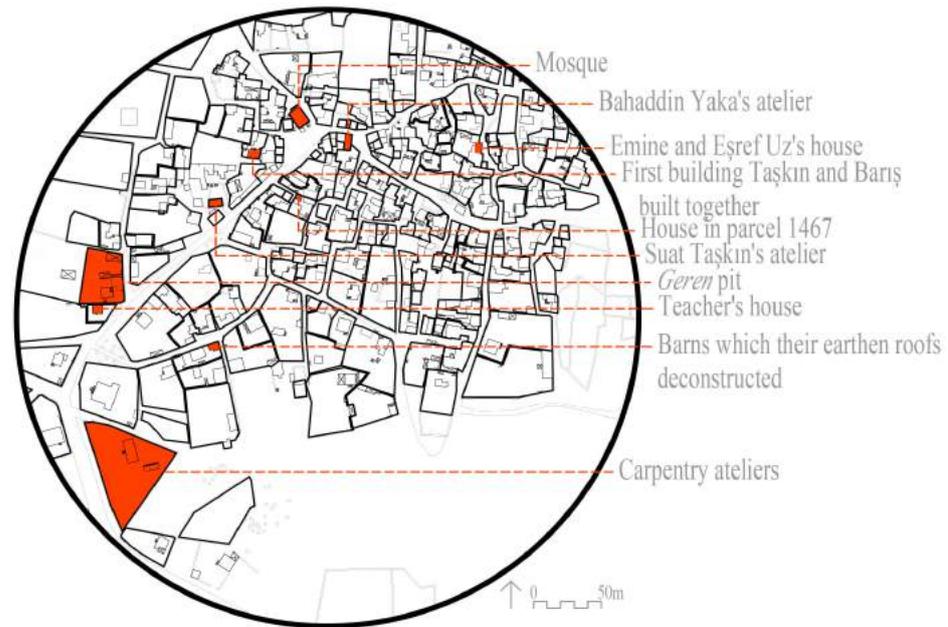


Figure 4. Distribution of mentioned places.

## 5.2. Building materials and their sources

For the masonry, Suat Taşkın and Tolanay Barış used fieldstone and a stone quarry in Barbaros. The stone quarry did not belong to one person or institution. It was open to public use and the process was handled by the workforce. However, a man nicknamed Köse Dayı was working there constantly to quarry stones and sell them. Quarried stones were carried by horse-drawn carriages or tractors. The quarry is not in use today and is filled with earth (Figure 5).

Earth was a building material used for different purposes. It was used as a covering layer for flat roofs, and to make mortar and plaster. Although none of the interviewed builders had built a flat earth roof, they knew about

the necessary earth characteristics and its sources. The earth used for the roofs is called *geren* which is defined as the earth that cracks when it is dry, infertile, salty, and clay-like (Turkish Language Association, n.d.). Around Barbaros, when the soil is dug, *geren* earth can be reached; but in those days there was a commonly used *geren* pit close to the teacher's house (Figure 4) (S. Taşkın, personal communication, 2016). The next parcel of the teacher's house used to have a *geren* pit which is filled in today (Figure 5) (İ.Ece, personal communication, 2016). *Geren* was also supplied around the piney graveyard (Figure 5) (A. Koşfur, personal communication, 2016). While the traditional roof system was flat and the covering material was earth, in time roofs were altered to pitched roofs covered with tile. In the early alterations, over and under tiles were used. In time, they were exchanged for Marseilles tiles. Taşkın and Barış changed many houses *çöplem* tiles (over and under tiles) to European tiles (Marseille tile). Tiles were bought from Kilizman (which is formally named Güzelbahçe today) and from İzmir. For earth mortar, the earth should be *kayran*: sandy soil that does not crack in summers. Earth mortar was eroded by mice; lime was more durable (A. Koşfur, personal communication, 2016).



Figure 5. Distribution of sources of building materials.



**Figure 6.** Lime kiln at the north of the settlement (on the left) and lime kiln at the west of the settlement (on the right).

Lime was used for the buildings in Barbaros for the mortar, plaster, and paint. It began to be used commonly at the beginning of the 1950s with the opening of the lime kiln in Barbaros. Limestones were burned in the kiln, then chilled, and sold (S. Taşkın, personal communication, 2016). A hole was dug for boiling lime. Lime was placed in the hole, water added, and the lime slaked (S. Taşkın, personal communication, 2016). After this process, the lime was ready to use (S. Taşkın, personal communication, 2016). Taşkın did not have a ratio for lime and sand (S. Taşkın, personal communication, 2016). He would throw his mix on the wall, and if the mix stayed on the wall, it was ready to use. If the mix did not stay on the wall, more lime should be added (S. Taşkın, personal communication, 2016). Two lime kilns exist close to the Barbaros settlement (Figures 5, 6).

Wood, which was needed for the roof, structural elements, and constant furniture, was bought from a timber merchant in İtfaiye, İzmir by T. Barış and S. Taşkın (T. Barış & S. Taşkın, personal communication, 2016). The existing pine trees around Barbaros were not sufficient (S. Taşkın, personal communication, 2016). They bought the wood in İzmir and processed it in Barbaros by hand – without the use of machines due to the absence of electricity. In the past, chestnut wood was coming from Chios to Çeşme, İzmir by sea (T. Barış, personal communication, 2016) (Figure 1). Wood was taken from Çeşme with hinnies and carried by horse drawn vehicles to the construction sites (T. Barış, personal communication, 2016). There are still houses in Barbaros that maintain chestnut wood elements with no decay since as long as it is kept away from water, chestnut tree wood is a durable, rot-proof material (T. Barış, personal communication, 2016). Koşfur

shares that he was buying wood both from Urla and İzmir<sup>15</sup>. He used pine and poplar tree woods but preferred poplar for roof structures since wood-worms will not eat it.

### 5.3. Traditional Barbaros house: Spatial and construction characteristics

Traditional Barbaros houses are one or two storey. In two storey buildings, living spaces on the first level are reached via exterior stone masonry stairs (Figure 7). In both one and two storey houses, living spaces have similar spatial qualities. Under living spaces, barns exist. One storey houses have adjacent barns or separate barns placed in the same courtyard. The structural system is stone masonry (Figures 9, 10). The average wall thickness of the walls of one storey buildings is 50 cm, except for the wall with the fireplace. The fireplace wall thickness is 60 cm. Two-story buildings' ground-level wall thickness is 60 cm, and the first-level thickness is reduced to 50 cm. The recessed 10 cm is used to superpose wooden flooring (A. Koşfur, personal communication, 2016). The binding material of the masonry walls is either lime or mud mortar. The exterior wall surfaces can be unplastered, plastered, or partially plastered with lime only at joists. Interior wall surfaces are unplastered for barns and plastered with lime for living spaces. In some houses, wooden posts in the middle or at the sides next to the walls exist to support the wooden flooring. Posts at the ground level are placed on a stone base to separate them from the ground for waterproofing (Figures 9, 10). Posts either have Y shape tops embracing main wooden beams or flat tops and bolsters (Figures 9, 10).

Roof and flooring are composed of a one-way or two-way timber beam system (Figures 9, 10). The traditional



Figure 7. A one storey house (on the left) and a two storey house (on the right).



Figure 8. Traditional earthen flat roof elements. 1. Main beam, secondary beams, lath, moss, and earth layers (parcel 1360). 2. Water spout (parcel 1468). 3. Post, main beam, secondary beam, and earth layer (parcel 1468). 4. Secondary beams, branch, bush and moss layers (parcel 1468). 5. Post, bolster, main beam, secondary beams, and sandalwoods as covering layer (parcel 1487). 6. Moss from the roof in the hands of Koşfur (parcel 1487). 7. Main beam, secondary beams, earth layer (parcel 1497).

flat roof is covered with earth. From bottom to top, the traditional earthen flat roof includes a *düver* (main beam); *mertek* (secondary beams); *seren* (twigs) or sawn timber; bushes such as myrtle or *piren*; moss; earth with no specific quality to reduce the necessary amount of *geren*; and lastly *geren* earth. The moss used is called *kara saman* (İ. Ece, personal communication, 2016). Five to six cm thickness of *geren* is more than enough for waterproofing and it is necessary to ram it with a stone roller (A. Koşfur, personal communication, 2016). Flat roofs have a slight inclination for water flow (A. Koşfur, personal communication, 2016). The water is drained with the help of water spouts placed at the lowest level of the inclination.

Houses have fireplaces, niches, cupboards, shelves, and bathing cabinets as architectural elements (Figures 9, 10). For the back of the fireplace and *ocak kulağı*<sup>16</sup>, slate stone (*kayrak*) was used (A. Koşfur, personal communication, 2016). Houses constructed by Rums had ornamentation (T. Barış, personal communication, 2016). Ceilings were the main elements that were ornamented (T. Barış, personal communication, 2016). Other types of ornamentations were also utilized depending on the economic condition and request of the owners. For example, Emine Uz's house was done by Rum builders from Birgi at the wish of her husband's grandfather (E. Uz, personal communication, 2016). The house had bird ornamentations at each corner

that turned according to the direction of the wind (E. Uz, personal communication, 2016). This house is the only one in the settlement which had a vaulted entrance to its courtyard. While these older houses of the settlement are ornamented, Barış stated he never constructed an ornamental element. This could be either because of the weakening economic conditions or Turkish masters lacking the related know-how. The architectural elements produced by Barış were all simple ones such as *yüklük* (cupboard); *ocak başı* (shelf on top of the fireplace to put oil, salt, a lamp, and so on); and *direk başı* (shelf on top of posts) (T.Barış, personal communication, 2016).

## 6. Evaluation as a conclusion

This paper aimed to decipher the actors of the building tradition, the process of knowledge transfer among builders, and the traditional construction know-how in Barbaros. The results of the study showed that building tradition in Barbaros was multicultural including the Rums from Alaçatı and Birgi, migrant Albanians from Gülbahçe, and locals of Barbaros. After the Rums left with the population exchange, Turkish and Albanian builders who learned from them transferred their know-how to the next generation. Thus, Barbaros is a place where the traditional building knowledge transfer was not interrupted. The local builders, local treasures of intangible cultural heritage, are introduced including a short biography, the story of how they became builders, and their professional experiences. It is observed that local builders used to gain traditional knowledge through master-apprentice transfer, or without a master, through varied working experiences with different groups. Later, formal education included this local process. Today, there are no traditional local builders in practice, and the knowledge transfer process has been interrupted.

The main materials of Barbaros's building tradition, which are stone, earth, branches, and bushes, were provided locally from the Barbaros landscape. Moss for earthen flat roofs was collected from neighboring coastal settlements. Wood for structural ele-

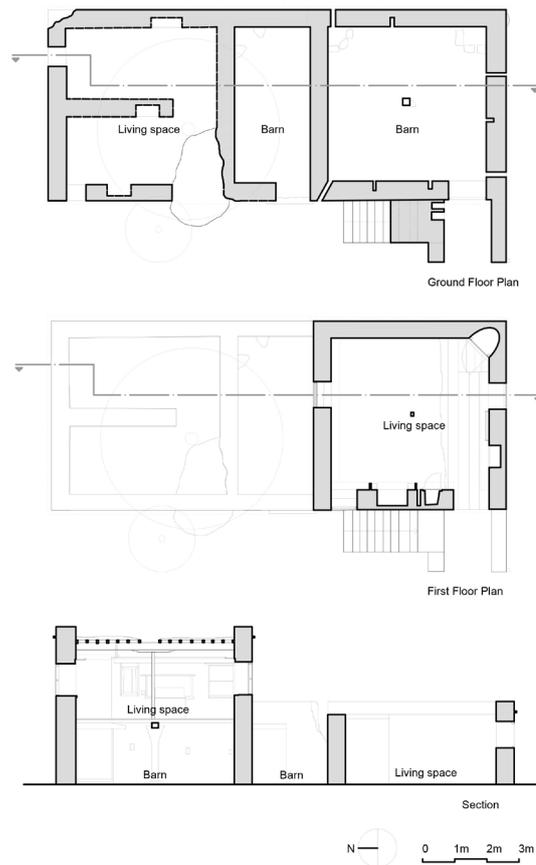


Figure 9. Plans and section of the house in parcel 1497.



Figure 10. Photos of the house in parcel 1497. 1. West façade, lime plastered surface, exterior stair, slate stone eave, chimney. 2. South façade, partially plastered surface, slate stone eaves. 3. Entrance of the barn. 4. Post, main beam, and secondary beams of the barn. 5. Unplastered wall surface of the barn, niches. 6. Bathing cabinet (*yunak*), window, shelf, post, and niche for water jug in the living space. 7. Door, cupboard, match niche, fireplace, post, window in the living space.

ments was brought by sea from Chios, Urla, and İzmir city center according to the narratives. In time, with the opening of a lime kiln, lime took the function of the earth for mortar and plaster. The earthen flat roof tradition was left behind and tiles began to be used for pitched roofs. As a result, the now unused *geren* pits were filled.

Abandoning the traditional construction techniques in Barbaros, as in the whole world, meant the last builders did not transfer their know-how, an intangible cultural heritage, to younger generations. This study contributes to the conservation of intangible heritage in this respect by recording the know-how of the last bearers of traditional construction. This documented experience can be used in future restoration projects not only in Barbaros but also in surrounding settlements with the same traditional construction features. In addition, the results of this study are remarkable in terms of revealing the importance of oral history studies for the holistic documentation of intangible cultural heritage.

### Endnotes

<sup>1</sup>Among these limited sources Davulcu, 2009; Davulcu, 2015; Davulcu, 2017; Eken & Kul Özdemir, 2019; Karakul, 2012, 2015a and 2015b can be mentioned. Davulcu shares the builders and building tradition of Sakarya as the result of site survey and interviews with builders (2009). Names and photos of five builders from four villages and one district are shared. Job descriptions of builders and various workers working with them are provided. Process of being a builder is shared. Tools used by builders, yearly and daily working times for construction, basis of payment to builders, and rituals related to construction are mentioned. Other study by Davulcu handles stone masonry tradition in Ahlat and works of stone mason Tahsin Kalender from the Ahlat district of Bitlis (2015). This study includes rituals of construction, bibliographical information about Tahsin Kalender and his professional training and experiences. Davulcu's (2017) research on İhlara Valley shares different actors of building traditions and their roles. Rums were active

builders before the 1923 population exchange. He outlines the training and knowledge transfer of builders, payment of builders, construction season, working days and hours, tools used, construction process and undocumented rules of construction. Eken and Kul Özdemir (2019) share house architecture of Gölde Village of Manisa with the contributions of the last stone mason Osman Gür. Karakul's studies put forward approaches and methodologies for the conservation of the knowledge of traditional builders (2012, 2015b), and also share about implementation of the project named Living Human Treasures of Traditional Architecture (2015a).

<sup>2</sup> According to Kırçalı (2017), in Urla settlements traditional building culture is changing due to tourism in coastal settlements and urbanization in mountain and plain villages. While in rural areas there is the issue of all types of settlements' being destroyed, coastal settlements are being destroyed more rapidly than mountain and plain villages. Among plain villages, Barbaros and Kadiovacık are the ones that- more than other settlements in Urla- have kept their traditional buildings in use and have a strong bond between the people and the settlement. Moreover, Barbaros is the settlement that still has more earthen flat roofs in comparison to others. Among all fifteen settlements of Urla, only four still have earthen flat roofs, while three have just one building with the system. with the system (Kırçalı, 2017). In Barbaros, 14 earthen flat roof were still existing in 2020 (Saribekiroğlu & Kul Özdemir, 2020).

<sup>3</sup> The population exchange took place as a part of the Treaty of Lausanne in 1923 between Turkey and Greece.

<sup>4</sup> Living Human Treasures National Inventors of Turkey includes thirty people selected between the years 2008 and 2015. Among thirty people, there is only one building master, who is Tahsin Kalender, a stonemason from Ahlat, Bitlis (Araştırma ve Eğitim Genel Müdürlüğü, n.d.). He unfortunately passed away in 2020.

<sup>5</sup> The Ottoman Period census of 1842-1843 shares demographic and economic aspects of the settlements of Çeşme including Sıradam. According

to the census, there were one hundred twenty-nine people in Sıradam. Sixty-one men were farmers; one was a barber; one was a mukhtar and imam; one was an imam and hafız; two were soldiers (Bölükbaşı and Gulam). There were eighteen men named Mehmed, fifteen men named Mustafa, thirteen men named Ali, twelve men named Hüseyin, ten men named Ahmed, eight men named Hasan, five men named Bekir, five men named İbrahim, and five men named Yusuf. Family name related epithets were Bekir oğlu, Kaya oğlu, Koca oğlan oğlu, Sağrılı oğlu, Tiryaki oğlu, Yazıcı oğlu, Koca çoban oğlu, Kaba sakal oğlu, and Bacaksız oğlu. Hometown related epithets were Filibeli, Keşanlı, Kırçalı, Konyalı, Kulalı, Manısalı, Yeniceli, Trabzonlu and Torbalı. Religious epithets were Hacı and Molla. The census also gives information about physical qualities of people, such as beard, mustache and height. Age is also shared. People were aged between one to seventy-five years old with the average age being twenty-four years old.

<sup>6</sup> Birgi and İldırı(Lithri) are two close settlements to Barbaros having a population of Rums.

<sup>7</sup> With law 6360, all villages of 27 big cities became neighborhoods.

<sup>8</sup> Efes-Mimas Road is the common name for the routes created by İzmir Metropolitan Municipality. It includes walking and cycling routes; and vineyard and olive theme roads.

<http://rota.yarimadaizmir.com/>

<sup>9</sup> Strawman festival organized by people who live in Barbaros. It includes stands for selling products, movie screenings, games, exhibitions, etc. <https://www.facebook.com/barbarosoyukfestivali/> and <http://www.barbarosoyukfestivali.com>

<sup>10</sup> Taşkın mentions this space as *ev önü* in Turkish.

<sup>11</sup> Tolanay Barış is the only person who mentioned the financial source of the carpentry courses as the Marshall Plan. However, no source which confirms this claim could be found.

<sup>12</sup> He shares that he lived through many failures with reinforced concrete buildings. There were collapses. Koşfur shows the reason as his material source. He shares that he took sand

from stream beds and it never became efficient. In these his last years of work, he only builds roof structures.

<sup>13</sup> In 1939, for men who lived in villages, forging and carpentry courses were opened; and for women who lived in villages, tailoring courses were opened (T.C. Milli Eğitim Bakanlığı, 2019).

<sup>14</sup> The history of Mithatpaşa Mesleki ve Teknik Anadolu Lisesi (Mithatpaşa Vocational and Technical Anatolian High School) goes back to İzmir İslahhanesi which opened in 1868 for providing education to abandoned children. They were taught shoe, sock, and undershirt making; carpentry; dictation; calculation; and religion. In 1891, the school name become İzmir Hamidiye Sanayi Mektebi. After the proclamation of the Republic the name become İzmir Sanatlar Mektebi. In 1974-1975 the education semester was named Mithatpaşa Endüstri Meslek Lisesi (T.C. Milli Eğitim Bakanlığı, 2019).

<sup>15</sup> Keskin Kereste was the exact shop where Ahmet Koşfur bought necessary wood for constructions.

<sup>16</sup> Small shelves at two side of a fireplace for lamps (A. Koşfur, personal communication, 2016).

<sup>17</sup> This paper is based on the master thesis entitled "Understanding Cultural Landscape Characteristics: The Case of Barbaros Settlement, Urla-İzmir" by Şeyma Sarıbekiroğlu under the supervision of Assist.Prof.Dr. Fatma Nurşen Kul at İzmir Institute of Technology in 2017.

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