Evaluations on the Traditional Ankara-Ayaş Houses

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ABSTRACT
Ayaş is a county connected to Ankara Province and is an important historical settlement center, which has preserved its original texture up until the present-day. Ayaş is a settlement established in the valley and hills formed by the Ayaş Brook that passes through the center of the county. It reflects the original values of a traditional settlement order with its streets shaped according to the topography, its religious structures, and its houses. The traditional houses are the main elements of the city, which developed in an organic texture. The Ayaş houses were shaped with the effects of the traditional family structure, economic structure, climate, topography, geological structure, and materials. The traditional city texture and houses are losing day by day their original values due to population increases, unsound urbanization, defective restorations, neglect, and indifference. First, 26 traditional houses were determined within the scope of this study. The traditional city texture of Ayaş, the general settlement attributes, and the architectural attributes of the traditional houses, the plan order, plan types, façade order, and architectural elements were studied by researching in a detailed manner the houses determined.
Keywords: Ayaş, traditional, house, preservation, historical surroundings, traditional city texture

INTRODUCTION

Ayaş is a county center connected to Ankara Province. Ayaş County is located approximately 58 km to the northwest of Ankara. Starting from Ankara, Ayaş is on the Beypazarı, Nallıhan, Göynük, Taraklı, Geyve, Sakarya, and Kocaeli road. It is surrounded by Polatlı in the south, Kızıcahamam in the north, Sincan and Kazan in the east, and Güdül and Beypazarı Counties in the west. The Ayaş County center was established in a rugged terrain surrounded by hills. The Gelincik Rocks and the Tekke Summit are in the east, Nal Hill is in the west, Top Hill is in the south and İbicek Hill is in the north. The 50-meter-wide Ankara – Istanbul highway passes through the central settlement and splits the settlement into two, as Upper and Lower Ayaş.

The Ayaş city texture is a settlement form where construction and access are solved with difficulty due to the topography. The Kocadere Brook and the Kirazlıdere Brook in the south and immediately to the north of these streams, which first becomes steep and then the southern slope, which has a more suitable incline for settlement, constitute the natural structure and natural identity element of the settlement.

The Ayaş Region has a steppe climate, which is semi-arid. Since the sea effect is prevented because of the mountains, it has slight precipitation conditions that are generally semi-arid. With the terrestrial effect, the difference in temperature among the seasons is rather excessive, and the winters are cold and severe, whereas the summers are hot and dry (Aksu, 2009).

Ayaş is located on the historically important Silk Road between the Ankara-Istanbul transport axis (Fig. 1). Starting from Istanbul, it traverses through Istanbul, Üsküdar, Bostancı, Kartal, Hereke, Gebze, Izmir, and Sapanca and by dividing into two here, one branch reaches Ankara via Geyve, Taraklı, Göynük, Mudurnu, Nallıhan, Beypazarı, Güdül, and Ayaş. The towns and cities that developed surrounding this road, which is an historical

trade route, still carry the historical value added to them by the Silk Road. The location of Ayaş and its being on a trade and military route have been the main attributes that have shaped it within history and that have affected its population. In fact, later, together with the arrival of the Turks, this attribute continued, and it was observed that it was one of the stopping points of the trade caravans (Yücekaya, 2004).

Figure 1. Historical Silk Road route.
http://www.gotourturkey.com/2013/03/caravansarytour-turkey-by-the-silk-road

THE HISTORY OF AYAŞ
The past of Ayaş, located on the Silk Road, dates to very ancient times. It is understood from the archaeological excavations and the research conducted by the General Directorate of Mining Research and Exploration (M.T.A.) that the historical periods in Ayaş started with the Hittites around the 2000s B.C. "The cube tombs found as a result of the excavations and research are an indication of this with the ceramics, Cuneiform writings, and Hieroglyphics belonging to the Hittite, Phrygian, and Hellenistic periods" (Ayyıldız, 2010). However, the oldest known history dates to the Mnizus (Mnizos) Period, which was established in the Byzantine Era. Mnizus was one of the five large bishopric centers on the road that connected the various centers of the eastern and western countries to each other (Sürücü, 2008). Teurrefort, Kiepert, and Perrot are among the researchers who defend this claim. The citizens of Mnizus settled in the environs of Karakaya during the Byzantine Era due to its defense opportunities and the curative waters.

Coins belonging to the Roman and Byzantine Eras, the Roman ceramics, the historical Roman Hammam, and many other movable-immovable cultural heritages found in the excavations conducted, set forth the cultural wealth of Ayaş. Together with the Turks entering and settling in Anatolia, a branch of the Turks entered Anatolia after the battle of Manzikert in 1071, and in 1073, they conquered Mnizus, which was claimed to be one of the five large bishopric centers of the period, and settled in the Ayaş tribe and to the Ayaş region of today that gave its name to this tribe. It was observed in time that the villages of Ayaş were given the names of groups and communities, such as clan, tribe, and nomad group. In fact, there are place names from the villages of Ayaş having the Oghuz Turkish tribe names. These are names taken from the Oghuz Turkish tribes who broke off from the homeland in a period of history and settled here.

Ayaş (Ayas) is a pure Turkish name. It means "bright, luminous night." Ayaş is the name of a Turkoman tribe connected to the Bozok Branch of the Oghuz Turks, of the Gün Han Sons Bayat Clan of the Barak nomad group (Er, 1995).

Figure 2. Four of the districts mentioned in the Ankara Sanjak Foundation Register.

The first region where the Turks settled in Ayaş was preferred due to providing for the advantage of defense on the hill that dominated the valley and for the curative waters and the present-day settlement is to the north of the Karakaya region. The citizens of Ayaş, who constructed a fortress and thermal spring in this region, later expanded the settlement areas towards the Ayaş Brook. Thus, just as the settlement is recalled in the present-day, it also developed in that period as the two different settlements of Upper and Lower Ayaş. After the arrival of the Turks, Ankara and its surroundings were first under the rule of the Mongolians and later the Ilkhanids in the second half of the thirteenth century. Ankara and its surroundings were annexed to the Ottomans in 1354 during the reign of Orhan Gazi (Er, 1995).

According to the archive documents in history, the name of Ayaş was first encountered in the foundation registrations of the Number 9 Ankara Cadastral Register Books dated 1462 (Demirkan, 2006). Whereas the other written documents of the Ottoman period are the "Ankara Cadastral Record" dated 1523, the "Ankara Foundation Register" dated 1532, the "Ankara Sanjak Detailed Register" dated 1571, and the "Ankara Sanjak Foundation Register" dated 1571 (Ünal, 1992). Four of the districts mentioned in the "Ankara Sanjak Foundation Register", which are İmam Ferah, Ömeroğlu, Cami, and Şeyh Muhiddin, remain today without a change in their names (Fig. 2).

Ayaş, just as in the present-day, was one of the administrative units connected to Ankara Province in the Ottoman period. Whereas Ankara appeared as one of the sanjaks included in the Anatolian Province from around the middle of the seventeenth century up until the reign of Sultan Mahmud II. Evliya Çelebi stated in the seventeenth century that Ayaş was the Harameyn foundation connected to the Engürü (Ankara) Sanjak, that it had one thousand households and ten mihrabs, and that within the group of shops there was a mosque, masjid, caravanserai, and hammams (Karamağaralı, 1993).

Whereas when the nineteenth century is considered, the center of Ayaş was on the Dersaadet (Istanbul) Avenue, it was nine hours to Ankara and located between two mountains. There were 1,949 males, 794 females, and it was composed of 819 households according to the Ankara Province Yearbook dated 1890-1891. It was stated that there were 44 villages, 4,637 households, 10 caravanserais, one hammam, 15 coffee houses, 45 mosques, 15 masjids, seven madrasahs, one telegraph office, one municipal office, two mountain passes, one middle school, 45 primary schools, 25 water mills, and two large, timber bridges connected to Ayaş.

It was mentioned in the same yearbook that there was a thermal spring in the Karakaya district and there was a library with 325 printed volumes next to the Sacred Bünyamin-i Veli Hazretlerinin Mosque. According to the yearbook, there were 19 males and six females for a total of 25 non-Muslims in the county center at that period (Ünal, 1992).

Besides these, it was stated that according to Gültekin, the educational levels of the users of the traditional texture in Ayaş in the past were high and furthermore, that it was an educational center at a regional scale. The educational institutions first opened in Ayaş were the primary schools and the madrasahs. Whereas it is surmised that the first middle school was opened in 1871. According to the Ministry of Education Yearbook dated 1900, there were seven madrasahs, two primary schools, and one middle school in Ayaş. Whereas, according to the Ankara Yearbook dated 1907, there were 11 madrasahs, one middle school, 55 boy's primary schools, and three girl's primary schools in Ayaş (Gültekin, 2010).

It was stated in the Ankara Province Yearbook dated 1902 that in addition to the previous yearbook, there were five mosques, one madrasah, three fountains and four primary schools that were constructed and repaired in Ayaş. At the date the yearbook was written, it was stated that there were 70 males at the middle school in the county, whereas there were 1,530 male students at the primary schools and that 764 female students continued their education (Ünal, 1992).

Ayaş, by benefiting from the opportunities provided to it by the geographical and administrative location during the period of the Ottoman Empire, recorded significant developments from the economic, cultural, and social aspects. However, towards the end of the nineteenth century, the county center started to lose its vigor. This was due to the significant effect of losing the demand for the old transit roads passing through Ayaş, especially after the opening of the Suez Canal and the construction of the Istanbul-Ankara railroad. This region continued its life in a static manner after these dates up until the founding of the new republic (Fig. 3).

Figure 3. Ayaş in the 1950s (Er, 1995).

According to the Ankara Province Immovable Cultural Assets Inventory list, there were 98 immovable cultural assets in Ayaş County. Of these, 43 were houses and the other structures were fountains, tumuli, mosques, etc. While four of the houses belonged to the Republic period, 39 were traditional houses that belonged to the Ottoman period. The official registration of these works of art was conducted in 1962 (Fig. 4).

Figure 4. Map of the registered buildings.

Topographical attributes were the most significant factor, which has determined the house settlement of Ayaş County. The house settlement on the Ayaş topography, which has both sloped lands and plains together, was conducted according to the slope and water sources. The Ayaş Brook, which affects the Ayaş form of settlement, is a brook that starts from Başayaş village and extends up until the county center. Consequently, an organic settlement type is observed in the county.

Besides the water sources, the religious buildings also presented major importance at the point of establishing the districts. Just as in the classical Ottoman city order, in Ayaş as well, the city squares and the settlement areas developed in the environs of the mosques. The mosques are also the most important focus points in Ayaş. Besides these, the dervish lodges and small dervish lodges were important focus points for districts, just like the mosques. It is thought that the streets where the Bünyamin Ayaşi and the Yavuz Analar tombs are located were also developed with this perception.

The Cumhuriyet (Republic) Square is an important focus point for the Ayaş center. The Great Mosque, Pasha Hammam, Sheikh Muhiddin Mosque, and the Municipal Building is an important area defined by the Cumhuriyet Square. This square, which is the center of Ayaş, is a significant square where the commercial center, bazaar, and bus stops are located (Figs. 5-6).
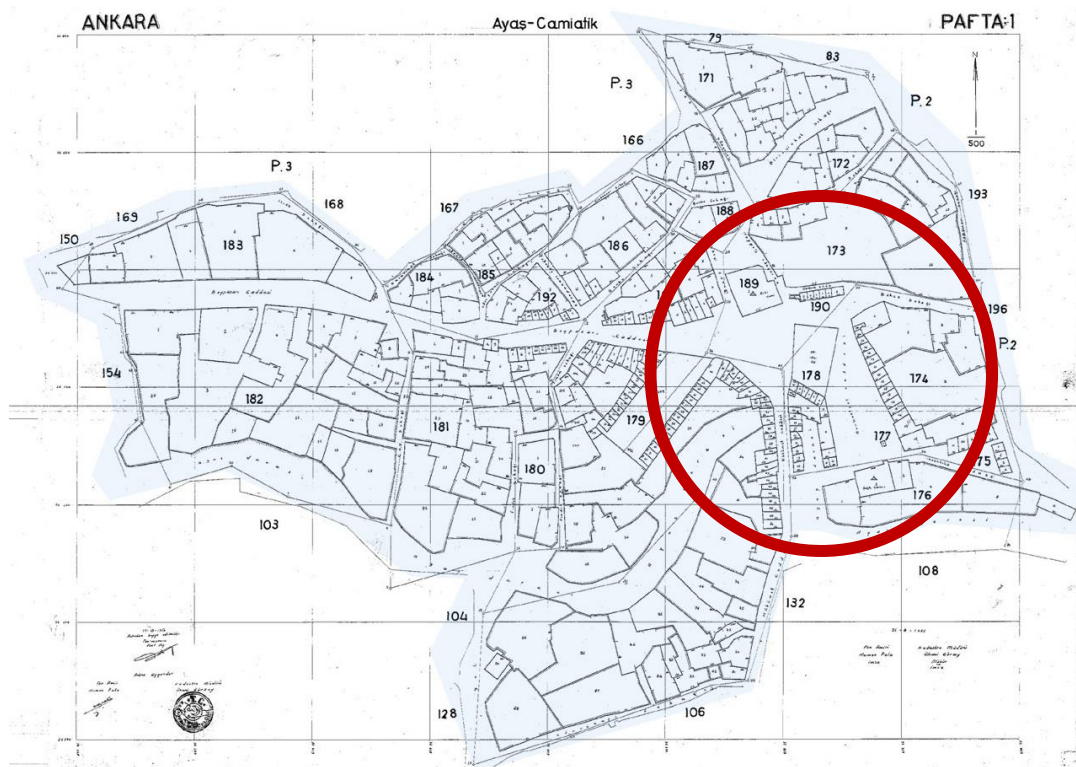

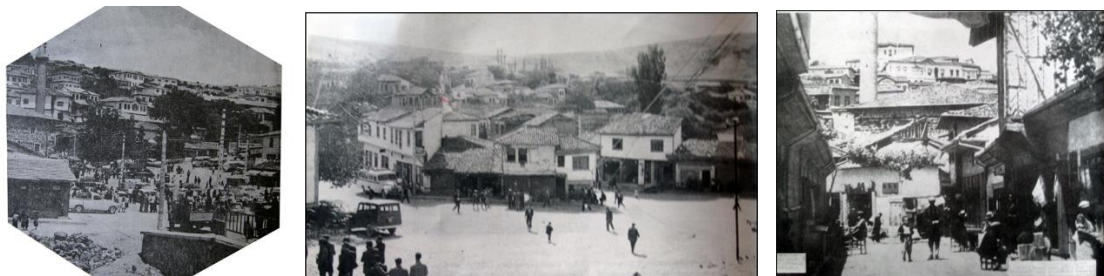**Figure 5.** Cadastral Map of Ayaş in 1957.

Figure 6. Cumhuriyet Square in the 1950s (Er, 1995).

Ayaş is a settlement that was founded in the valley and on the hills formed by the Ayaş Brook, which passes through the center of the county. The streets to the south of the Ayaş Brook cut perpendicularly to the Cumhuriyet Square. Whereas in the north, it is in a complicated and unsystematic manner. The difficulty of the sloped land and at the same time, the organic street formation, which is the city texture that can be seen in traditional Anatolia in general, forms the general city texture of Ayaş. The houses in the region are generally two-storied. To the north of the Ayaş Brook, the houses, which are arranged in rows on the same elevation, are forming the structures generally attached to each other and parallel to the Ayaş Brook. Together with these, it was observed that the larger programmed and three-storied houses are settled separated from each other. There are small squares formed from the intersection of several streets in the texture of Ayaş. Generally there is a fountain at these small squares (Fig. 7).

Figure 7. Connections of roads.

Almost all the houses, according to their size, have a garden or a courtyard. The houses benefited from the topography of the land, and it has provided for the back courtyard or the garden of the houses to be above the soil level of the basement. At these types of houses, there is an entrance to the house, both from the street and from the courtyard at a lower elevation.

It is possible to classify the location of the houses as houses entered only from the street, only from the courtyard, and both from the street and from the courtyard (Fig. 8).

Houses entering the house directly from the street are generally in an attached order, without garden or with a back garden. In houses that are not attached and have back gardens, there is an exit to the back garden either from behind or at the side of the house. The main outer walls of these houses entered from the street are shaped according to the form of the plot. Houses with a street texture are formed with the main outer walls for those with an attached order. Generally, entrance into the house from the street is provided with timber, double doors. The doors open to the areas given the name of *aralık* (corridor) for the service spaces on the ground floor.

The courtyard of the houses entered from the street to the courtyard and from the courtyard to the house are generally with eaves covered with clay roofing tiles and entrance is provided with a timber double courtyard door. Additions to the building, such as poultry coops, barns, and granaries are in the courtyard.
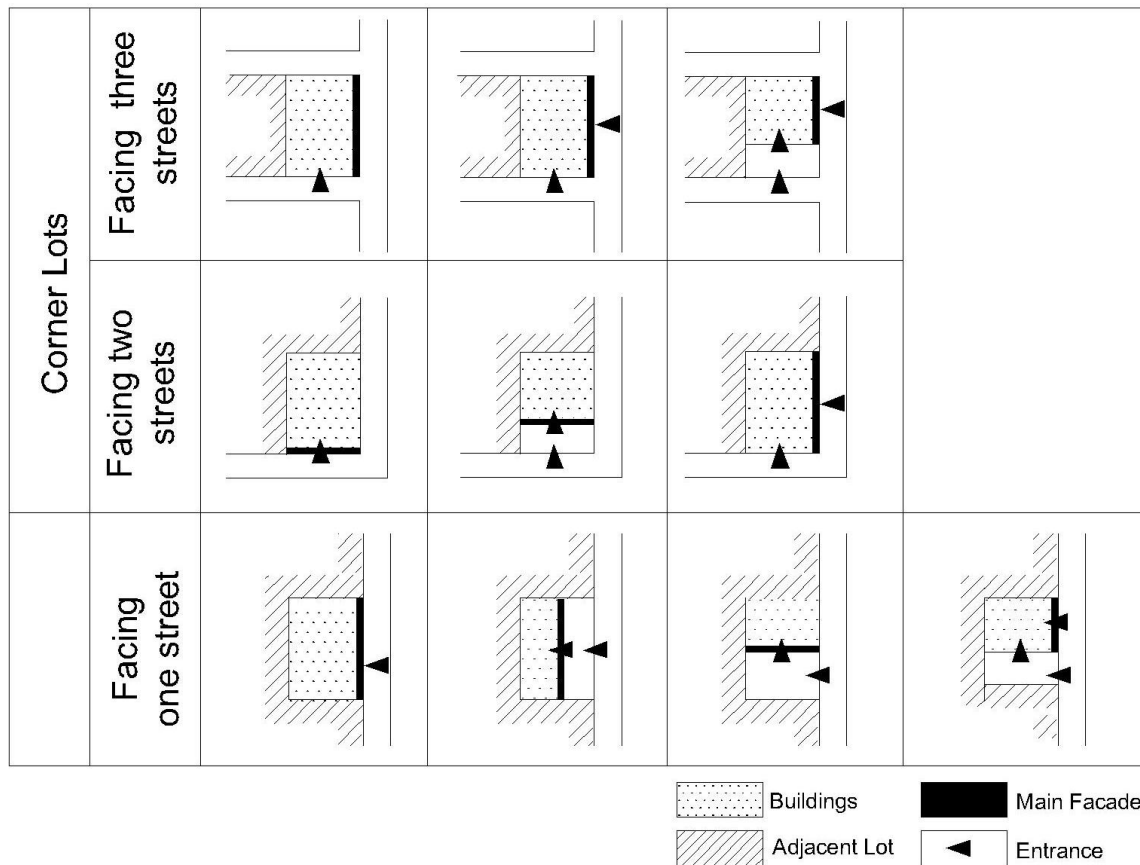
Figure 8. Entrance typology.

Houses having an introverted plan system have courtyards with high garden walls. When these courtyards are considered based on the building, they can be evaluated as a closed exterior space with a spaciousness where the family could gather, such as the *sofa* (hall, long room into which several rooms open) inside the house. Whereas when it is considered at the scale of the city texture, the high walls, which are constructed for forming the courtyard, are the main factor, which forms the street texture (Yücel, 2018).

A great number of the houses in Ayaş are two-storied. Three-storied and single-storied houses are observed less. If the houses are located on a flat area, then they are two-storied and if they are on an inclined area, then they are formed of 2 stories plus a basement. There are also single-storied/basement or only single-storied houses.

The upper story that can be qualified as the living area, is composed of a *sofa* (main sitting room), rooms, and sometimes service spaces as well.

Plan Order
The plan typology was prepared by studying 26 buildings. The information on the buildings was obtained from the plan drawings showing the original designs of the buildings, from theses, from books, and from the field studies. The plan typology of the Ayaş houses was made according to the upper story plans, which are called "living stories" (Fig. 9).

Figure 9. Plan typology.

According to the plan typology, the buildings were first divided into three groups: "spaces on one side of *sofa,*" "spaces on two sides of *sofa,*" and "spaces on three sides of *sofa*." In addition, these 26 buildings were separated into six sub-groups from the aspect of the number of spaces surrounding the *sofa.*

Among the 26 buildings, only two buildings had plans with "spaces on one side of *sofa.*" There are 20 traditional buildings having the plan type of "spaces on two sides of *sofa.*" Within this group, they were divided in two as *spaces on adjacent sides of "sofa"* and *spaces on opposite sides of "sofa."*

When the buildings in this group were studied carefully, one of them had three spaces on *opposite sides of "sofa", three of them had three spaces on adjacent sides of "sofa", 12 of*

them had four spaces on opposite sides of "sofa", two of them *had five spaces on opposite sides of "sofa" and two of them had six spaces on opposite sides of "sofa".*

There were four traditional buildings in the group having the plan type "Spaces on three sides of *sofa.*" Three of them had four spaces and one of them had five spaces.

Façade Typology
There are two façade forms, with projection and without projection, in the traditional Ayaş houses examined. Facades without projections are generally plain and unostentatious facades. In some buildings, in the part that corresponds to the place of the *sofa,* there is a roof in the form of a pitched roof covered with a shielded wall.

The ideal form in the plan organization for rooms is square or rectangle. The reason in traditional architecture for taking care that the rooms are quadrangular or close to quadrangular is the fixed elements used in interior space organization and the arrangement of these elements attached to the walls. The location of the house according to the lot affects the form of the room and in situations where the room becomes removed from the quadrangular form, it was attempted to obtain the ideal form in rooms on the upper stories with the help of projections (Eldem, 1987).

Figure 10. Examples of projections.

Within the projection forms in Ayaş, just as there are projections in the rectangular form in parallel with the façade, they can also be in the triangular form as a triangle. Triangular projections, as the result of suiting the lot on the ground floor, is for making the upper floor right-angled to the form constituted (Fig. 10).

The projections made throughout the façade are generally preferred for expanding the area. Timber beams are used for supporting the cantilever that continues throughout the façade. The corbeled cantilever projections, called "Ankara projections" are also observed in the Ayaş houses. These types of projections are observed more frequently in the projections that continue throughout the façade (Fig. 11).

Figure 11. Examples of the Ankara projection type.

In some buildings, the projection was made in the form of a continuation of the *sofa.* These projections, which are called oriel windows, are supported with buttresses. These projections provide advantages for expanding the space, directing towards the street and/or view, and for illumination, and ventilation. In facades with many projections, generally one more projection is made that would emphasize the *sofa* in the form of an oriel window on the projections made throughout the façade for elongating the space (Fig. 12).

	Without projection	With projection			
		Whole facade	Part of the facade	Elongation of the "*sofa*"	Multiple projection
One storey					
Two storey					
Three storey					

Figure 12. Façade and projection typology of traditional Ayaş houses.

BUILDING SYSTEM AND ATTRIBUTES OF MATERIALS

The Ayaş houses were built with the "half-timber wall" *(hımış)* technique, which is encountered frequently in the Anatolian houses (Fig. 13). In this technique, while the foundation and ground stories were covered with stones with the stacking technique, the upper stories of the building were constructed with filling materials, such as sun-dried bricks or fired bricks between the timber frameworks. The basic building materials in the Ayaş houses built with the half-timber wall technique were stones, timber, sun-dried bricks, and fired bricks.

Figure 13. Examples of the "half-timber wall" (hımış) technique.

Since stones are durable, they are an especially preferred material in the construction of buildings. Stones, which are preferred the most in the Ayaş houses, were generally used at the plinth (flood) level or on the ground floors. When the samples were considered in general, it was observed that stone materials were used on the entire foundations of houses and on the ground floor walls. Stone materials, which are encountered as covering materials on the floors of house courtyards, were also observed with the stacking technique of unhewn stones on the courtyard walls and garden walls. Besides these, it is known that the original street coverings were stone.

Bricks are known as a building material that is molded with water and argillaceous soil, placed into molds and baked in ovens. Bricks in the traditional Anatolian houses were a material preferred in the production of façade walls of mezzanine or upper stories, stoves, and chimneys. It was used as a filling material on the upper story walls at Ayaş (Fig. 14). At some of the buildings examined, the exterior facades were left without plaster most of the time and were decorated.

Figure 14. Timber frame construction with brick infill.

Wooden materials were used as building materials with the timber framework system and as carrier building materials on the upper stories. They were used in the production of construction elements, such as props, buttresses, floor joists, and braces. Furthermore, they were used in the production of construction elements, such as roof coverings, plasterboard walls, doors, window timberworks, flooring, ceiling coverings, floor moldings, and staircases.

Floorings were stone on the service units of the lowest floor, whereas it was timber in the rooms and the upper floors. The ceilings in the living spaces were generally timber coverings, and decorative examples were rarely encountered. Whereas the ceilings of the service spaces had ceilings that were generally either without covering or with very plain coverings.

Timber was also used for architectural elements, such as bathrooms, large cupboards often built into wall for storing bedding, divans, large built-in cupboards where bedding was stored during the day, balustrades, railings and shelves.

Sun-dried brick materials were basic materials used for filling between the wtimber frameworks used in the production of upper stories. Single-storied buildings, which were made completely of stacked sun-dried bricks, were determined, even if rarely.

Brick materials were one of the filling materials used in houses. The timber frameworks were filled between with bricks. Whereas the façade surfaces were plastered with earth mortars. Examples were also found of bricks used on the upper floor of houses that were left without plaster by laying them in a decorative manner.

As a mortar material, the sun-dried brick or brick filled upper floors were generally plastered with mud mixed with straw or mortar made of brick, dust, and lime (Fig. 15). There was lime whitewash on the wall surfaces. In the wall paints, the colors, such as white, yellow, blue, orange, and ash of roses were encountered.

Figure 15. Timber frame construction with mudbrick infill.

The roof materials were timber for the roof skeleton and the eaves. There was timber veneer below the eaves and the roof coverings were Turkish-style clay roofing tiles.

PLAN ELEMENTS

When the plans of the stories were examined in detail, it was observed that the basement floors were planned as the hayloft, barn, or depot, the ground floors were generally composed of the service story and partially of rooms, whereas the upper floors were planned as the living story. Other than these stories, in some buildings, there were mezzanines formed by rising half a story from the ground floor, that were generally used in winter, whose height was lower than the living story.

The attributes of the spaces included in the houses and the effects on the relationships to each other were observed in the formation of the regional architectural identity. Two main elements were determined and were included in the formation of the spaces: rooms and *sofas*.

Rooms were functionalized as both a unit of the house and as an independent living area from the other spaces. Whereas the *sofas* were passage spaces to these areas and were used as a shared area of use. The other elements, which affected the space formation other than the *sofa* and rooms, were the wet volumes, storage areas, oriel windows, and staircases.

Sofa

The *sofa*, both due to its location and its aim of use in daily life, was a shared area of use that provided for the relationships among rooms and among stories. The doors of rooms opened to the *sofa*, the rooms surrounding the *sofa* did not have a physical connection with each other except through the *sofa*. Staircases were also located in the *sofa*. A major part of daily life passed in the *sofa*.

Another reason that the *sofa* was an important element stemmed from the fact that the *sofa* affected the plan and shape of the house, because when the classification of the plan diagram of houses was conducted, the first factor was to take into consideration the location and form of the *sofa* in the plan and the plan names were determined connected to this. The *sofa* as a location in the interior space organization was included in three different locations as exterior, interior, and central (Eldem, 1987).

Furthermore, *sofas* were also an important element in the plan design as spaces that provided for passage and connection between the stories. The *sofas* in the Ayaş houses were located according to the view. The staircases located in the *sofa* were placed connected to the form and location of the *sofa*. Projections and balconies were spaces that had the attribute of the continuation for many of the *sofas*. The windows of the sofas were large, and the ceiling heights were higher than the other rooms of the house (Fig. 16).

Figure 16. Examples of facades.

Other than passage and circulation in the *sofa*, there were also places set aside for sitting. At the same time, the oriel windows were used as seating areas. These seating places, by taking on a special character, were raised from the *sofa* in a certain manner. These special seating places were called *seki* (sitting platform).

Rooms

Rooms were designed and implemented with attributes that would meet the needs for sitting, resting, eating, bathing, heating, and going to bed with the objective of answering the necessities of daily life. Rooms were generally quadrilateral planned spaces, which provided for entrance from the *sofa*. The number of rooms in the Ayaş houses, just like the number of stories, were shaped according to the economic status of the building's owner. Connected to this, they had equipment that would answer these needs. On one or two walls in the room there were large, built-in cupboards where bedding was stored during the day and wardrobes, whereas on the walls looking at the street or garden, there were rows of windows. In front of these windows, there was a seating element with a height of 20-45 cm given the name of *seki* (Fig. 17).

Figure 17. Examples of *seki* (sitting platform).

Kitchen (*Aşane*)

In Ayaş, kitchens were called *aşane*. Kitchens had a fireplace or a *tandır* (oven consisting of a clay-lined pit or a large earthen jar buried in the ground) and were generally on the ground floor and the front facades of buildings. The floor coverings could be stones, fired earthen ceramics or bricks. The ceilings of the *aşane*s were open floor joists and without covering. Sometimes kitchen equipment on the walls and small niches for storing firewood and kindling were observed.

Corridor

It was the space, which provided entrance to the house from the courtyard or from the street. It opened to spaces, such as the barn, hayloft, and toilet. Connection to the upper floor was provided with a staircase.

Hayloft, barn, and depot

In houses that had a basement, they were generally in the basement, whereas in houses that did not have a basement, they were on the ground floor. The ground floors generally had compressed soil floors. There was no covering on the ceilings.

Toilet
It could be found both in the house, in the courtyard, and on the ground floor. In most buildings, it was on the ground floor next to the barn and opened in the shape of a niche within a carrier wall. Whereas toilets, which were entered from the landing of a staircase could be deciphered clearly with the projection they made at the façade (Fig. 18).

Figure 18. Examples of toilet locations on facades.

ARCHITECTURAL ELEMENTS
Floorings and Ceiling Coverings
The materials used on the ground floor coverings in the Ayaş houses displayed changeability according to the functions of the spaces. The floor coverings implemented in the Ayaş houses were timber, terracotta tiles, square cement floor tiles, alum cement, stone, or compressed soil. The flooring of the barn or depot spaces located on the ground floor or basement was natural stone coverings or compressed soil. The floors of the rooms and *sofa*s were timber veneers. Whereas it was observed that in the kitchens and corridor spaces, terracotta tiles and square cement floor tiles were used (Fig. 19).

Figure 19. Examples of original terracotta tiles and timber ceiling coverings.

Wood was the ceiling covering material in the Ayaş traditional houses. Just as in the floor coverings, the ceiling coverings displayed changeability according to the functions of the spaces. However, the changeability here was related to the form of use and workmanship of the materials. The ceilings in spaces, such as the service spaces, barns, and depots were uncovered timber beams left open. However, the room and *sofa* ceilings were timber covered. Some of the coverings in these spaces were made with timber carved central design ceilings and decorated with moldings (Fig. 20).

Figure 20. Examples of ceilings of depots and rooms.

Staircases

The staircases found in the Ayaş houses were timber staircases in the forms of I-U-L. The balustrades of the staircases were generally timber processed. The bottom of the staircase in some houses was closed and used as a pantry or cupboard (Fig. 21).

Figure 21. Example of timber staircase and balustrade.

Fireplaces

Fireplaces were the original cooking elements found in kitchens. They were built inside stone walls. Generally, there were niches or cupboards next to the fireplaces (Fig. 22).

Figure 22. Examples of fireplaces in kitchens.

Windows

Windows in the traditional Ayaş houses displayed diversity from the aspect of dimensions, shape, and decoration according to the function and locations of the space in which they were found. There were three types of windows: service space windows, life space windows, and above and next to door windows. Room windows were single or in the form of double-triple groups (Fig. 23). It was an important characteristic system for the openings on the facades of traditional houses. The shapes of window openings were varied as rectangular or arched. There was an approximate ½ ratio in the living space windows. From the aspect of opening order, there were sash windows or normal inner opening casement windows. The sofa windows were somewhat different from other windows and were more decorative. The service area windows were small and stationary. The windows above doors were windows opened for illuminating the closed spaces (corridor spaces) opened by the door. They were rectangular. There were examples where there were iron railings in front of them.

Figure 23. Examples of windows.

Doors

Door types were formed according to the function of the space that they served. These were doors that provided entrance from the street to the courtyard, doors that provided entrance from the street to the house, living space doors, and service doors.

Doors that provided entrance from the street to the courtyard were double doors. On top of them there was a roof covered with slanted Turkish-style clay roofing tiles (Fig. 24).

Figure 24. Examples of main doors and roofs.

Doors that provided entrance from the street to the house were double doors. There were windows in the upper parts above the doors. There were iron railings on top of them. These windows illuminated the corridor (Fig. 25).

Figure 25. Examples of entrance door and top windows.

Whereas room doors acquired a different character according to the story where they were located. These were single doors. The doors of the rooms on the upper floor that looked at the *sofa* were more decorated. The interior doors that opened to the *sofa* were of the same dimensions and form. The surfaces of these doors opening to the *sofa* were in the same form and generally the back surfaces were unostentatious. The doors of the service spaces and the ground floor rooms, toilets, and kitchens were plainer and smaller than the doors opening to the *sofa* (Fig. 26).

Figure 26. Examples of door types.

The large cupboard used for storing bedding and often built into a wall, bracket/shelf for lamps, shelf usually placed near the ceiling of room or rack on which certain farm crops were dried, place suitable for use in making a sherbet, transom, large, built-in cupboard where bedding was stored during the day, *gusülhane* (zinc-lined bathing cubicle in a house), and wardrobes were elements found in the interior spaces in the traditional Ayaş houses. The large, built-in cupboards were located from end to end on the wall where the doors open. There were two-three or four partitions. One part of the large, built-in cupboards was built for the *gusülhane* and the other part was for storing mattresses and quilts (Fig. 27).

Figure 27. Examples of *musandra* (large cupboards for storing bedding and often built into a wall).

In some of the houses examined, there was also a *sandalye çakması* (batten chair) and a timber coat rack (Fig. 28).

Figure 28. Examples of *sandalye çakması* (batten chair).

Roofs

All the houses constructed in Ayaş in the traditional style had hipped roofs. The covering materials of these roofs, which were timber seating, was completely Turkish-style clay roofing tiles (Fig. 29). There were timber eave moldings on the ends of the roof eaves. In these houses, gables were used on the roof on facades, which looked at the road or which showed a front façade attribute.

Figure 29. Roof views of Ayaş.

CONCLUSION

Within the scope of this study that was conducted with the objective of setting forth the characteristics of the traditional civilian architectural heritage of Ayaş, has a historical identity that is a major asset and is 58 km from Ankara. Just as is the case throughout Türkiye, the buildings, materials, and the building techniques in Ayaş have started to disappear as time passes, due to unsound urbanization and destruction of the historical texture. The traditional buildings unique to the region are decreasing day by day. The users, by changing some sections in accordance with the needs of the age, are the cause of the loss of originality of the buildings with inferior quality additions or new buildings are constructed in place of the old ones. It is necessary to start the required activities for preserving the high-quality buildings located in the traditional texture by taking the location of Ayaş and its tourism potential into consideration. In recent years, the ratio of destruction has increased to a great extent in Ayaş and preservation activities should be accelerated on the historical environs scale and the single-building scale and monumental buildings and traditional houses should be taken under protection.

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