

OTTOMAN ARCHITECTURE

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Abstract

Introduction: Throughout the years, numerous factors have contributed to the formation of city identity, urban fabric, and architecture. These factors include inspirations from various civilizations and religious influences. Architecture is also determined by such physical constraints as climate, geography, and the availability of specific materials. This article in particular addresses Turkey, a vast country with significant culture, and its architecture shaped by the strong identity of the nation. **Methods:** The article explores the influence of diverse aspects and intangible factors on Turkish residential and sacral architecture. For that purpose, the history of the Ottoman Empire is analyzed, and the evolution of the Turkish Hayat house is examined, which is the basis of various housing styles in Turkey. **Results and discussion:** Political will and ambition as well as the glorification of victories in battles were the key elements behind many landmarked mosques. As for the Hayat house, it is closely associated with the lifestyle of the Turks who founded the Ottoman Empire.

Keywords

Byzantine architecture, Ottoman architecture, Mimar Sinan, monumental mosques.

Introduction

The location of Turkey became a key factor shaping the Ottoman architecture since Turkey is situated between Europe and Asia, thus combining two cultures. It serves as a bridge between two conflicting religions: Christianity in the west and Islam in the southern regions. After the fall of Rome, Christianity spread to Constantinople (currently Istanbul). Constantinople stood as the seat of a new evolving empire for 1100 years till 1455. The areas to the east of Constantinople included many weak provinces, and that was the state of affairs till the arrival of the Seljuks and the establishment of the Seljuk Empire that lasted from 1037 to 1194. Hence, in the 11th – 15th centuries, the Turkish religious architecture was profoundly influenced by the surrounding cultures, in particular, those of the Byzantine Empire, Seljuk Empire, and various Islamic nations, and gradually formed its new identity by borrowing various components from them.

In his book, Al Abidin (2005) suggested studying the history of Turkey to gain a clear vision for the development of Turkish architecture. According to some historical resources, the history of the Ottomans dates back to the small Kayi tribe, which in the 13th century fled from the Mongol invasion and migrated in search of land to inhabit. The Seljuk leader was impressed with their bravery and granted the Kayi clan lands at the northeast border with the Byzantine Empire. That way they could fight against the Christians from the west. At the time, the Kayis were led by Ertuğrul. When he died, his son

Osman, the future founder of the Ottoman Empire, became the leader of the clan. The successors of Osman expanded the Ottoman Empire west and south. For instance, in 1326, Orhan, one of his sons, took the lead and enlarged his province by conquering Bursa. Orhan's son, Murad I, conquered Adrianople, renamed it Edirne, and announced it the capital of the Ottoman Empire. Later, after Murad I was assassinated, his son Bayezid expanded the empire southeast. Mehmed the Conqueror, the grand-grandson of Bayezid, conquered the Christian city of Constantinople and made it the new capital, replacing Edirne. He brought an end to the Byzantine Empire. The fall of Constantinople dealt a massive blow to Christendom, as the Muslim Ottoman armies thereafter were left unchecked to advance into Europe. In 1453, after the fall of Constantinople, Hagia Sophia, the largest Christian church of the Byzantine Empire, was converted into a mosque. Hagia Sophia served as inspiration for Ottoman architecture. Its multi-domed roofing with a central spherical dome was adopted by the Ottomans in their mosques. Another element of early Ottoman architecture is the Byzantine technique of alternating courses of brick and stone. This technique replaced the ashlar facing of the Seljuk period in central and western Anatolia.

During the early era of the Ottoman Empire, resources were mainly used to defend or extend its boundaries. Therefore, churches were converted into mosques so that some building materials could be reused. According to the Turkish historian



Fig. 1. Portal to the of Ottoman Mosques and Seljuk stoneworkers (<https://www.merhabahaber.com/ince-minare-yeniden-insaa-edilmeli-mi-1657595h.htm>)

Doğan Kuban (2010), the Sultan took 50–90% of state revenues for personal use, leaving to city councils only 10%. Thus, in the early period of Ottoman expansion, architecture was undeveloped and was under the influence of Seljuk traditions. For instance, in Turkistan and the Islamic states of Anatolia (currently east of Turkey), the premises constructed by the locals were heavily influenced by Seljuk architecture, imitating its major features, which can be seen in ornamental stone buildings of elegantly simple design, harmonious proportions, and elaborate decoration around doorways. During the Seljuk period, not the dome but distinct portals and gates were the key elements of Ottoman mosques (Fig. 1). After the fall of the Seljuk Empire followed by the fall of the Ilkhanate, Mehmed the Conqueror turned to Anatolia to unite Anatolian beyliks under his rule. The monumental approach of the time can be seen in the building of Yakutia madrasa. *"From the reign of Murad I onwards, the Ottomans, having gained wealth and power as a result of the conquest in Balkans, now turned to a new monumental style based on their 14th-century experience and potentials"* (Kuban, 2010).

These monumental components manifested in the addition of twin minarets in front of the building (Fig. 2). *"Here a synthesis non-existent in the 13th century is created by the combination of a twin-minaret façade with a roofed madrasa. The 14th century witnessed in Eastern Anatolia the erection of an imposing monument reminiscent of the traditions of the proceeding century"* (Kuban, 2010).

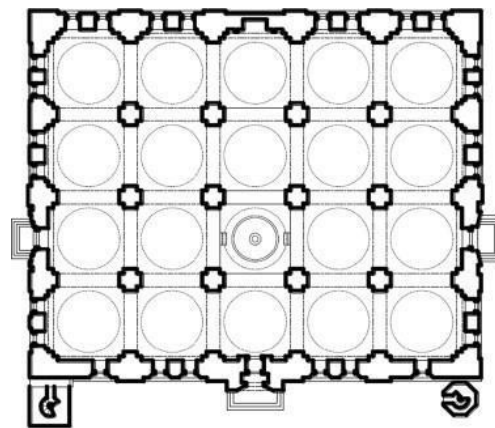
Nonetheless, the influence of Christian architecture on local traditions was evident in the stonework of Yakutia madrasa.

In Europe, it was the religious authority that played a key role in constructing and subsidizing monumental architecture, while in Turkey, the willpower of sultans was the crucial factor behind the construction of spectacular monumental buildings. After the 14th century, the Ottomans gained more



Fig. 2. Monumental portal to the Madrasa

a)



b)



Fig. 3a. Multiple-dome arrangement of the mosque (<https://seyyahalemi.com/bursa-ulu-camii/>)

Fig. 3b. A fountain in the middle of the prayer hall (<https://acoustima.com/acoustic-solution-for-mosques/>)

power and extended the boundaries of the Ottoman Empire. That is why they needed to construct monumental buildings reflecting the triumph of their achievements. Monumental mosques were erected in the main cities of political significance: Manisa, Bursa, Amasya, Edirne, and Constantinople. Thus, the core of imperial administration formed in those provinces, and high-ranked buildings, including palaces, conducting cultural, social, and commercial activities, appeared there. In the following section, we will consider several case studies to assess the development of the Ottoman style in sacral architecture. We will also study the history of Turkey and some other aspects to identify the main inspirations shaping Ottoman mosques.

Case Studies

1.1. Ulu Mosque, Bursa, 1396, Bayezid I

Political power surpassed all other factors, including religious and economic influences, in shaping the identity of architecture in the Ottoman Empire. Bursa was a key city in the political fabric of the Ottoman Empire, thus many state institutions were established there. During the Ottoman era, Bursa became a capital. Many monumental buildings were constructed in the city. New types of buildings appeared: baths, covered markets, courts, schools, and *zawiyas* (centers with various functions, such as being a place of worship, school, monastery, and/or mausoleum). Bursa was one of the most important cities in the Byzantine Empire. It was closely connected to the Western culture and remained virtually unchanged after the fall of the Byzantine Empire.

The growth of the city during the Ottoman era was determined by the desire of the Sultan. He instructed the construction of many *zawiyas*, public baths, and the great Ulu Mosque. The mosque in Bursa is one of the first mosques in Turkey. It manifests a shift in Ottoman architecture since the central dome was replaced by multiple smaller domes stretching over the prayer hall (Fig. 3a). Ordered by Sultan Bayezid I, the mosque was built in 1396 to commemorate his great victory at the Battle of Nicopolis. It is a major monument of early Ottoman architecture and one of the most important mosques in the city. The mosque has a rectangular shape and is crowned by twenty hemispherical domes replacing the central dome, which was a distinct feature of Byzantine architecture. The domes in the central row of the Ulu Mosque are higher than the rest, thus emphasizing the fountain located underneath (Fig. 3b). However, the Seljuk influence is quite evident: it manifests in the simple design, elaborate main gates, brick-built minarets, and stone structures. It should be noted that all those features were common in the first period of the Ottoman Empire.

1.2. Bayezid Mosque, 1501, Istanbul, Bayezid II

In the 14th–15th centuries, the mosque design gradually developed. The central dome over the

prayer hall now was supported by a semi-dome instead of multiple columns. Before this new concept, numerous columns in prayer halls divided the internal space, separating the rows of those praying and interfering with the line of sight. The new concept provided a single spacious prayer hall. Bayezid II ordered to build a new mosque in his honor. It is known that Khair Al Deen was the architect who implemented this new approach of arranging single prayer halls for a better relationship between those praying and a person giving Friday speeches. The layout was changed from a rectangle to a cross. The cross layout reflects the influence of Byzantine Christian architecture, but this feature is undesirable in Islamic architecture. Nevertheless, the two asymmetrical wings in the west and east were considered new distinct elements. The roof over the east wing comprised four small domes with a large central dome, while the west wing included two additional domes, thus making the building a non-uniform multi-unit mosque (Fig. 4).

Kuban thought that this mosque was a great inspiration for many Ottoman architects, where the courtyard marked a turning point to the new approach in Ottoman architecture (Fig. 5). The central dome supported by two semi-domes over the prayer hall was inspired by the Byzantine architecture of Hagia

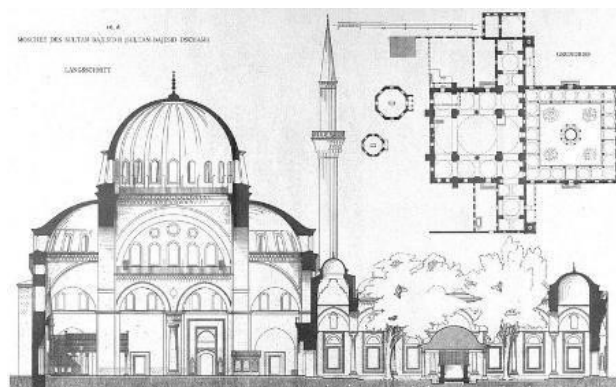


Fig. 4. Semi-domes of the mosque



Fig. 5. Roofing of the mosque

Sophia. The layout of this mosque and, in particular, its roofing was further developed in the Süleymaniye Mosque by the architect Mimar Sinan.

1.3. *Üç Şerefeli Mosque, 1447, Edirne, Murad II*

Edirne was one of the first cities where numerous churches were converted into mosques. The Üç Şerefeli Mosque was commissioned by Sultan Murad II and built in 1447 as a symbol referring to Edirne as the capital of the Ottoman state. In its design, the monumental approach was employed, which manifested in the following: 1. a single central dome supported by four lower domes emphasizing the central one, 2. emphasis on the prayer hall with the central dome centered around it, 3. taller minarets with three balconies next to the prayer hall. The mosque has a rectangular shape in plan. Here the influence of Byzantine architecture is less evident since the central dome dominates over the small ones and there are no semi-domes. The Üç Şerefeli Mosque features a new element — an open courtyard (Fig. 6) surrounded by open arcades. It also includes two types of minarets at the corners. The taller pair of minarets highlights the prayer hall (Figs. 6 and 7). The layout of the mosque represents an intermediate stage between the Seljuk Turkish style and the truly Ottoman style, which will later reach its pinnacle in Istanbul.

1.4. *Şehzade Mosque, 1544, and Süleymaniye Mosque, 1557 (architect: Mimar Sinan)*

The architect Mimar Sinan was a member of Sultan Selim's military campaigns and fought in many Ottoman battles in Europe, Asia, and Africa. He played an important role in shaping Ottoman architecture. During the battles, he advised on the construction of bridges within a shorter period of time, thus helping the army to advance and conquer cities. During his military career in the army of Sultan Selim and his son Suleiman, including the occupation of European cities, Sinan had the opportunity to study architectural monuments. He also was in charge of converting churches into mosques. The desire to design monumental mosques commemorating Ottoman emperors led Sinan to develop a different approach to iconic architecture (in particular, in his later career), which was employed in the Şehzade Mosque built to honor Suleyman's beloved son Şehzade Mehmed who died of smallpox at the age of 21. When designing the Şehzade Mosque, Sinan was inspired by Hagia Sophia but managed to come up with a unique approach to the construction of a larger central dome: 1. by supporting the pendentives of the central dome with four piers located at the corners of the dome; 2. by arranging semi-domes north, east, west, and south of the central dome so that the massive buttressed walls could take the load (Fig. 8). The four piers were topped with elegant small domes, and the massive buttressed walls were wisely concealed (Fig. 9). The dome dimensions varied in order to break the monotony

and emphasize the central dome, forming a triangle (Fig. 10). A triangle emphasizing the vertical was an essential feature of the Ottoman style, employed in the Süleymaniye Mosque with a two-story gallery topped with domes and a pitched roof to break the monotony of similar-sized domes. The Süleymaniye Mosque is one of the most important historical landmarks in Istanbul, designed by Sinan and erected on the orders of Sultan Suleiman on one of the seven

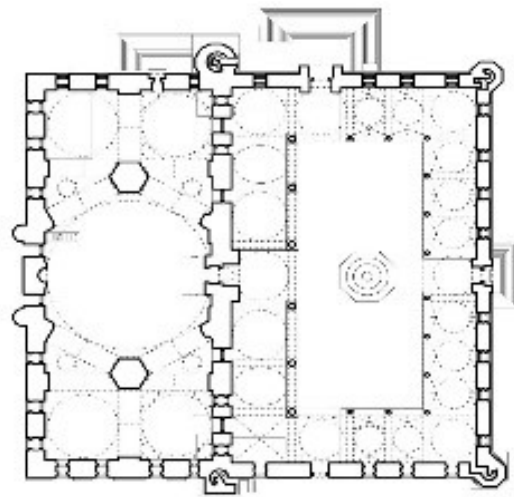


Fig. 6. Plan of the open courtyard

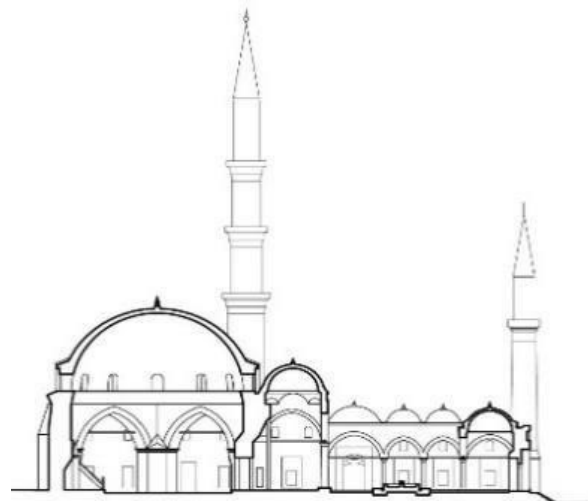


Fig. 7. Vertical of the building, emphasized by various components (<https://cengizselcuk.com/edirne/>)

hills of the city, which asserted Suleiman’s historical significance. Sinan replaced two semi-domes north and south of the central one with five domes. They include two small domes alternating with three larger ones to break the monotony. Meanwhile, twin semi-domes remain on the east and west sides.

The Süleymaniye Mosque is the second largest mosque in Istanbul. It features both Islamic and Byzantine structural elements. The central dome is supported by semi-domes and four pillars, similar to those in the Şehzade Mosque.

The four minarets of the Süleymaniye Mosque refer to Suleiman’s being the fourth sultan who took the throne after the conquest of Constantinople, while the ten balconies on the minarets refer to Suleiman’s being the tenth Ottoman sultan (Figs. 11 and 12). The design of the Süleymaniye Mosque also plays on Suleiman’s self-conscious representation of himself as a “second Solomon”. It references the Dome of the Rock, which was built on the site of the Temple of Solomon, as well as Justinian’s boast upon the completion of Hagia Sophia. The Süleymaniye Mosque, similar in magnificence to the preceding structures, asserts Suleiman’s historical importance. The structure is nevertheless smaller in size than

Hagia Sophia.

1.5. Selimiye Mosque, 1569, Edirne, Selim II

The mosque was commissioned by Sultan Selim II and designed by the great Ottoman architect Mimar Sinan. It stands at the center of a complex comprising a hospital, an Islamic school, a library, baths, and shops. For its location, Sinan chose Edirne’s highest point so that it could be visible from every corner of the city. In his design, Sinan attempted to stand up to the rumors spread by Christian engineers who claimed that Muslims could not build a mosque larger than Hagia Sophia.

He employed a new approach by placing an octagonal supporting system created through eight pillars incised in a square shell of walls, and that allowed him to surpass the size of Hagia Sophia’s central dome. The building represents political power as well as the development of economic and cultural functions. In fact, Sinan succeeded in creating a larger dome, but his design was inspired by Hagia Sophia: many elements were borrowed from Hagia Sophia, including the octagonal piers and the central spherical dome, small semi-domes around the central dome (Fig. 13), multiple-dome gradient in height (a creative approach forming a triangle), and

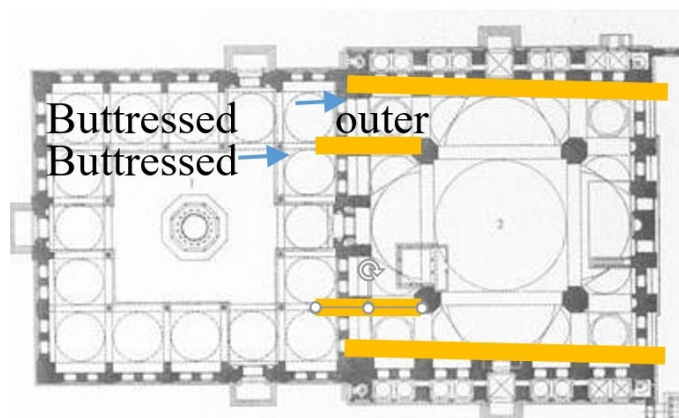


Fig. 8. Şehzade Mosque (on the top) (<https://worldplaces.org/turkey/MGeKzcpENz97uCUIB2Rvlw-ehzade-camii.html>)
Plan of the Şehzade Mosque with four semi-domes (from below)



Fig. 13. Hagia Sophia

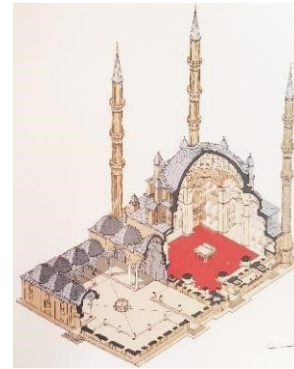


Fig. 15. Four minarets of the Selimiye Mosque

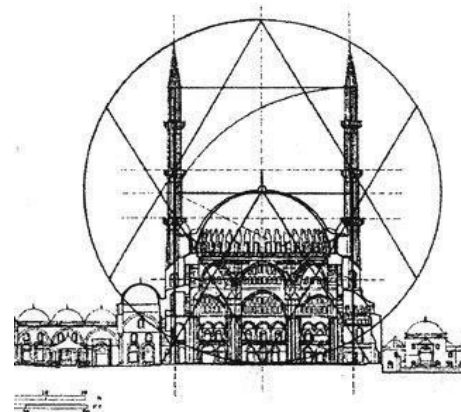
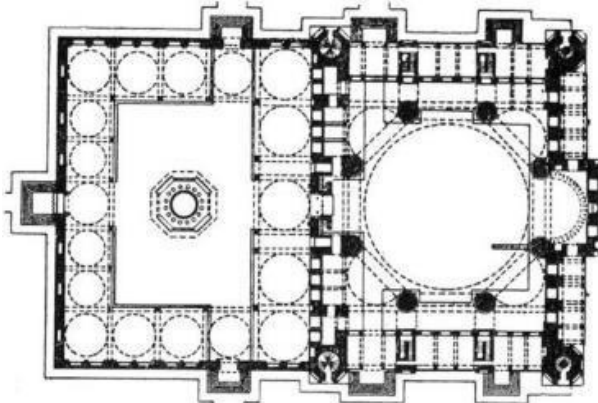


Fig. 14. Plan of the Selimiye Mosque, top view (on the left). Octagonal supporting system of the Selimiye Mosque and a triangle formed (on the right)

a preference for high land. When the construction of the Selimiye Mosque was finished, Sinan was 84 years old. He managed to overcome the need for four giant semi-domes around the one in the middle by replacing the square walls below the dome with an octagonal system on eight pillars (Fig. 14).

The result was a massive spacious inner dome and enhanced visibility in the prayer hall. The monumentalism and symbolism were highlighted by the use of the following six layers:

1. The first (base) layer is the arcade around the open courtyard.
2. The second layer is the passage from the prayer hall to the backyard.
3. The third and fourth layers connect the roofing with the vertical supports and accommodate the domed corner towers and buttresses. In these layers, the roofing is an alteration between the pitched roof, towers, and small semi-domes.
4. The fifth layer is the central dominant dome with eight pillars.
5. The sixth layer is represented by four minarets around the prayer hall (Fig. 15).

They emphasize the vertical of the structure, forming a triangle.

Hayat house

2.1. Background

The Hayat house design emerged thanks to the Turkomans who were nomads migrating from

Central Asia or Western China. They converted to Islam during their migrations and around the 11th century settled in the Anatolian basin where they lived on agriculture, cattle breeding, and weaving. The Hayat house consists of many components, where the main one is an eyvan, a space leading to two rooms on each side (an open gallery). At later stages, the gallery evolved into many configurations (Fig. 16). The ground level was raised a little to form a half-basement that could be used as a stable or a store room.

The Halil Agha house in Mudanya (Bursa Province) is modeled after the Hayat house. It has a wooden colonnade with two-tier galleries and multiple openings on the front facade, while the side face is blind and does not have any openings. The Turkomans used open areas to move between the premises in a Hayat house since they originally lived in tents. This way is still used in the Balkans and Anatolian regions. When the nomads settled and stopped migrating, they adapted their customs to the new environment. Tents turned into rooms, and the Hayat house emerged.

Since they lived on agriculture and cattle breeding, the Turkomans designed the layout to suit their way of living. The open galleries of the Hayat house ensure contact with the surroundings and make it possible to supervise farming activities. Therefore, the possibility to move through open

spaces is quite a logical solution.

2.2. Lack of privacy

However, such a layout resulted in a lack of privacy for women. Thus, since the Hayat house did not meet Islamic rules, open galleries were inadvisable.

In Islam, the configuration and components of a house must protect women's privacy and ensure they lead a secluded life. That led to the transformation of open galleries into inner courtyards with semi-open spaces. Furthermore, separate zones were allocated for men and women. Actually, such segregation was common in palaces and houses of wealthy owners. A middle-class house consists of multiple-purpose spaces. For instance, during the day, a living room is a place to welcome guests, but in the evening, it is mainly used by family members.

The idea of allocating separate zones for men and women became quite popular in the 18th and 19th centuries, as Muslims believed that houses are for family, and, since men are usually out during the day, they normally belong to women. In agricultural communities, women participate a lot in outdoor activities, while in urban environments, they spend most of their time at home. Thus, privacy is very important in urban residential areas. As a result, particular measures are taken to protect privacy: high walls, concealed openings, latticed and stained-glass windows, enclosed spaces, and separate zones for men and women. The living room on the first floor and other spaces project over the street, so the inhabitants can see what is outside without being seen. The Murat House in Bursa (Fig. 17) serves as an example of minor adjustments to the Hayat house, aimed to protect privacy. All rooms open into the gallery (hayat) but face the inner courtyard. The side walls extend to the ceiling, reflecting the continuity of blind openings, which was common for the 18th- and 19th-century houses.

The shape of the Hayat house evolved over time as can be seen in the Beyoglu house (Kula, Manisa Province). It is a typical version of the Hayat house, with all the rooms leading to the gallery (Fig. 18). The

building has wooden colonnades. The upper level projects over the lower one, and the two rooms and the gallery extend further.

The Hayat house features additional extended spaces — a brilliant new element creating a three-dimensional effect. A similar approach was taken in the Cakiraga mansion in Birgi (Izmir Province), built at the end of the 18th century. The building was mostly rooted in antiquity, reflecting cultural relations with early nomadic peoples.

The Cakiraga mansion has a U-shaped layout and extends toward the courtyard. However, it is still determined by the original layout of the Hayat house, which consists of two rooms flanked by the eyvan (Fig. 19). In the Cakiraga mansion, the eyvans are at the end of the gallery, leading to additional rooms, forming a U-shape, and facing the garden. The areas projecting from the gallery extend the layout into the courtyard. This extended space forms new covered areas overlooking the garden, which can be used for socializing, family gatherings, and interaction with the private surroundings. Eyvans together with the rooms next to them, opening into the gallery, can be considered quite a new feature of Turkish houses.

In the case of the Cakiraga mansion (Fig. 20), the open layout of the Hayat house was transformed into a semi-open layout, which will further develop later. *"The Cakiraga mansion in Birgi represents a particular stage in the development of the Hayat house when the rural character of the house remained intact and its most highly developed characteristics were displayed"* (Kuban, 2010).

2.3.. Influence of Christian architecture on the Hayat house layout

In the 18th century, Turkish houses were affected by European culture. That resulted in the transformation of the Hayat house layout and its transition to the shape of a cross. This layout featuring double access is quite common in the dense urban fabric, where gardens and courtyards have minimum dimensions (Fig. 21).

For instance, the influence of Western architecture on the Sipahi house in Izmir is quite

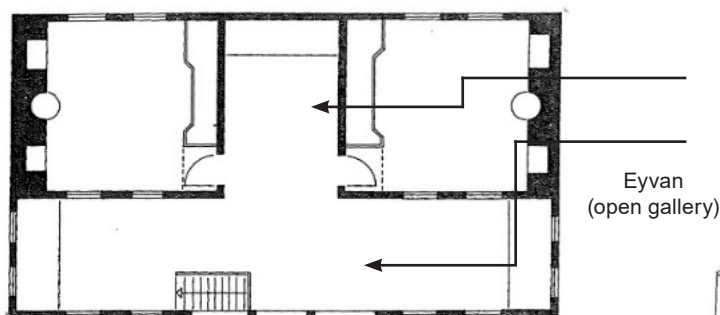


Fig. 16. Halil Agha house in Mudanya (Bursa Province), a typical Hayat layout

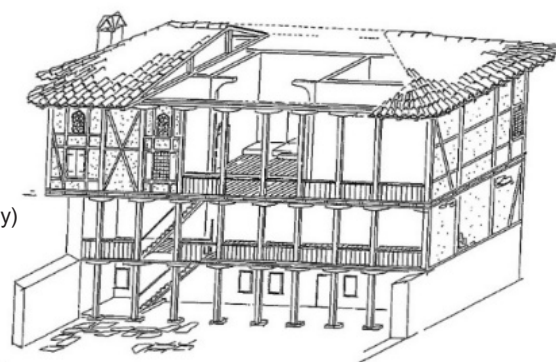


Fig. 17. Murat house, the blind wall without any openings

evident (Fig. 22). According to Kuban (2010), the house looks like a church with the layout in the shape of a cross, an opening in the middle, and four rooms at the corners, located symmetrically. He argued that the house design was affected by European influences and was characterized by symmetry and center-aligned halls (Kuban, 2010).

The axial arrangement is actually a version of the Hayat house layout without an open gallery, which usually opens into the surroundings, with the four eyvans transformed into enclosed spaces. In fact, the four eyvans with the rooms at the corners form a cross-like shape, thus reflecting the influence of Christian architecture. In densely populated areas in Central Anatolia, Balkan regions, and Istanbul, the mentioned center-aligned layout was transformed into a central sofa space going along the entire length of the house, with rooms on one or both sides of the sofa space (Fig. 23). At the ends of the rectangular sofa space, enclosed zones with windows are located, which ensure the visual connection with the outdoor landscape.

After World War I, massive destructions affected Constantinople (both the city center and other vast areas). According to many Turkish authors, the Hayat House and its altered version were already widely spread in the city and its early districts.

At the end of the 19th century, new luxurious waterfront houses emerged in the city, with the modified Hayat house layout where the premises were clustered around multiple horizontal and vertical axes. For instance, the Koceoglu palace built in the 18th century follows such an approach, where

the components of the Hayat house are clustered around the vertical axis (Fig. 24).

Furthermore, new elements were added such as columns in the middle of the main sofa space. The house was also divided into male and female sections, with corridors connecting them.

In the Koceoglu palace, the lower cluster of units is the female section. It consists of multiple private rooms and baths (hammams). This section is center-aligned and is further away from the entrance, while the upper male section is connected to the entrance. The layout of the Koceoglu palace was further developed in the Yasinci palace built at the end of the 18th century.

Fig. 25 shows rounded staircases and sofa spaces of the Yasinci palace. The palace also has male and female sections (men are not allowed in the female section). This layout is symmetrical along the vertical axis. The female (haramlek) section differs from the male (salamlik) section in some places, but this is less evident in the lower strata of society. The living room was used by men and women in turns (during the day and night).

The Saffet Pasha palace in Istanbul was built in the late 19th century. Here the idea of male and female separation is also evident. The male and female sections are located on the opposite sides of the space in the middle. Fig. 26 shows its layout in the shape of a cross, which is a modification of the Hayat house layout, symmetrical along the horizontal axis. According to Kuban (2010), in this layout, the core of the Hayat house with the sofa space in the middle is located on two sides of the

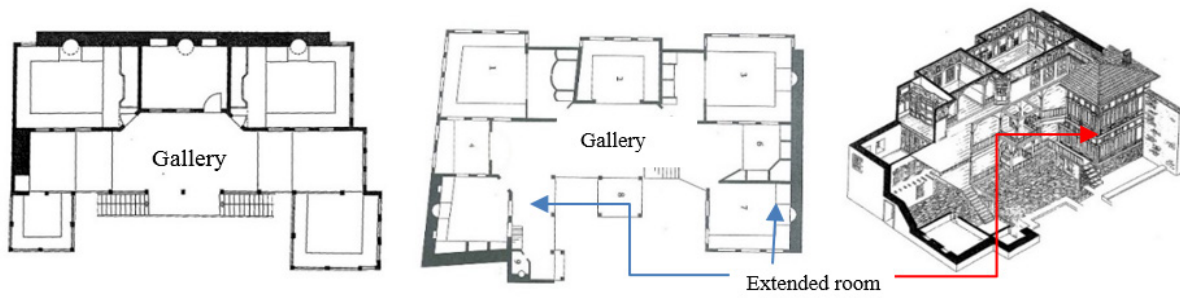


Fig. 18. (on the left). U-shaped Beyoglu house. Fig. 19. (in the middle). Cakiraga mansion. Fig. 20. (on the right). U-shaped Hayat house, semi-open layout

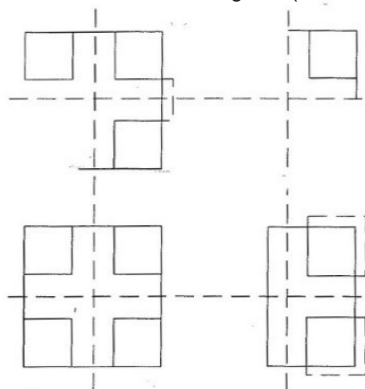


Fig. 21. Layout in the shape of a cross.

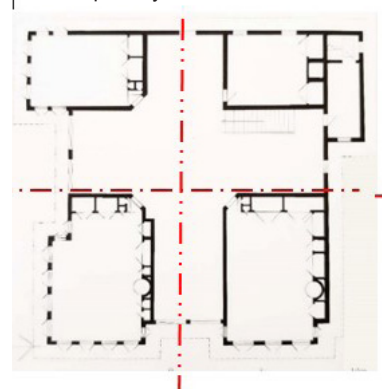


Fig. 22. Sipahi house with the layout in the shape of a cross

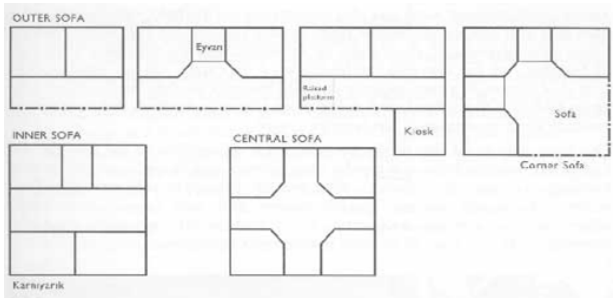


Fig. 23. Modification of the Hayat house layout

axis. Thus, the central space takes the shape of a cross (sometimes — an ellipse, much less often — a circle). The mansion is elevated from the ground, and the entrance has several steps, reflecting the influence of European architecture.

The layouts considered earlier were mostly used in large residential houses of wealthy people and merchants who conducted commercial activities at home, where privacy was a key factor.

All these case studies show that various layouts were actually based on the original Hayat house layout, where the basic components were altered, rearranged, or enclosed under religious, social, and cultural influences. The premises could be arranged along the horizontal or vertical axes. The sophisticated combination of premises in the Hayat house layout is reflected in the structure of buildings and is evident in the drawings of the Koceoglu palace or Saffet Pasha palace with stone as foundation material, sloped roofing, and walls with mudbrick between the timber frames.

The influence of the Turkomans is evident in many palaces and residential buildings. For instance, the ceiling of a living room may have a dome in the middle, imitating the shape of tents used by the Turkomans (Fig. 27). The use of the identical seating arrangement resulted in the development of a divan chamber (a room for male guests, or a spacious living room). The leaders of the tribe usually met people in huge tents, where legal cases were heard and other issues such as the needs of the tribe or future prospects were discussed (Fig. 28). Later, this was reflected in affluent residential buildings and palaces, with the divan space developed into a reception area.

In grander residential buildings and palaces, the divan space used as a reception area was a place where the Sultan would meet administrators and visitors. Later this resulted in a need to separate male and female sections to ensure privacy.

Conclusion

Prior to the establishment of the Ottoman Empire, architecture was heavily influenced by Seljuk, Islamic, and Byzantine approaches. After its foundation in the 13th century, Sultan Osman and his descendants conquered various provinces within and

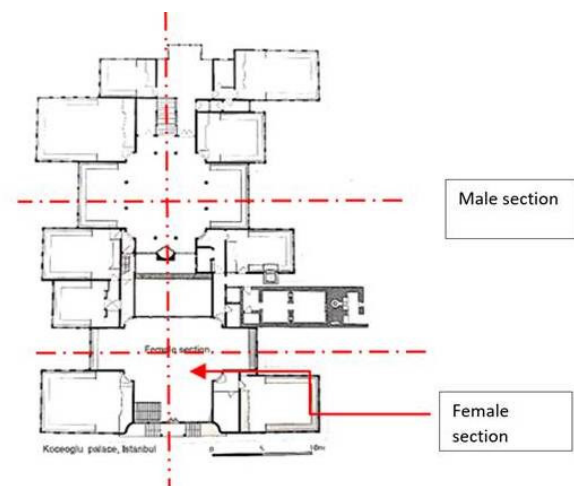


Fig. 24. Koceoglu palace

outside the borders of modern Turkey. The Ottoman Empire was named after Sultan Osman. Various Ottoman leaders occupied parts of Asia, Europe, and Africa, and those achievements forced them to create colossal buildings. For Ottoman Sultans who claimed to be leaders of Islamic nations, mosques were a symbol of political power rather than places of worship.

Political power (or will) was a key factor behind most monumental buildings in the Ottoman Empire. In fact, based on the research, it is possible to conclude that such intangible factors as architect Sinan's immense knowledge and willingness to challenge Christian engineering resulted in spectacular mosques. Due to the lack of funds in the early Ottoman era, churches were converted into mosques. At later stages, the accomplishments and triumph of the Ottoman army prompted Sinan to design monumental mosques surpassing Byzantine structures.

Byzantines were the first to use semi-domes around the central dome and arrange domes of different sizes near the main one, and Sinan embraced that method. Most of his proposals were heavily influenced by Byzantine and Greek architecture. Nevertheless, he made changes in the drum of domes, thus significantly improving the roofing framework in the Selimiye and Süleymaniye mosques. The connection between the dome and the supporting vertical wall is crucial, and Sinan ingeniously ensured a smooth transition between domes of different sizes.

Despite the use of rows of windows to soften strong lines, the buttressed side walls and the massive square space under the central dome of Hagia Sophia remained rigid. Sinan covered the massive walls by extending the domes along the side walls, forming a curved outline around the center of the mosque. In fact, the results of the



Fig. 25. Yasinci palace

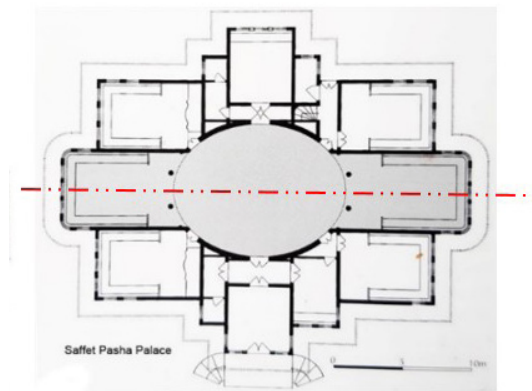


Fig. 26. Saffet Pasha palace. Male and female sections on the opposite sides of the sofa space in the middle



Fig. 27. Inner dome in a living room

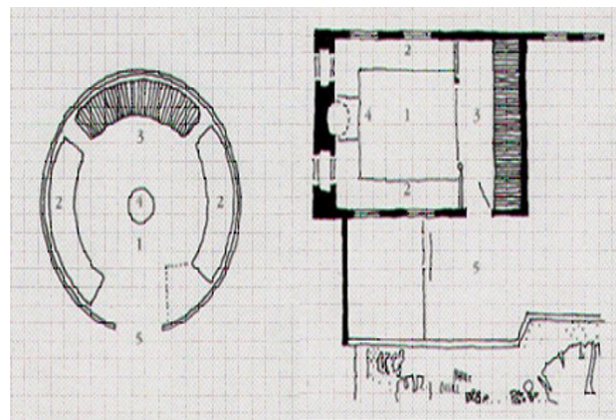


Fig. 28. Seating arrangement in a tent developed into the divan reception area

research show that Sinan and Ottoman sultans (or their remarkable success in expanding the empire’s territory) were key factors in shaping the features of Turkish architecture and creating iconic buildings that combined Islamic and Christian architecture.

Osman, the founder of the Ottoman Empire, descended from the same tribe (Turkomans) that designed the layout of the Hayat house to suit their way of living. In both types of architecture, residential and sacral, the influence of the clan is very evident. Turkish iconic sacral architecture reflects the accomplishments and triumphs of the tribe, whereas the Hayat house components formed based on the needs of the Turkomans and their rural lifestyle. Residential buildings, such as the Hayat house, were intended to emphasize the close relationship with the surroundings.

The culture of the Turkomans is as rich as their architectural heritage, and the Hayat house became a key component of Ottoman architecture by reflecting those.

Traditional houses are just as important in Turkish culture as monumental buildings. In particular, they were built in agricultural settings, with the Hayat

house emphasizing the close relationship with nature. According to several Turkish authors, the culture of the Turkomans is evident in strong ties with the surroundings. The open gallery of the Hayat house overlooking the countryside can serve as an example of that approach. During the Islamic period, a need for privacy became apparent, and the layout of the Hayat house was altered to ensure privacy. Now the gallery would overlook a private courtyard. With the development of that idea, the layout was later divided into male and female sections. The sophisticated combination of Hayat premises in Istanbul palaces of the 18th and 19th centuries followed Islamic rules while gradually incorporating elements of Western culture through the layout in the shape of a cross. Later, the Hayat house evolved in response to changing social and cultural needs, but its main components remained at the heart of various configurations. As a result, based on the centuries-old experience of ancient civilizations, Turks were able to handle those demands while also improving the elements and the concept of the Hayat house, which shaped a distinct Turkish style.

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