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A Structural and Spatial Investigation on Mimar Sinan's Mosques

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Abstract: It is difficult to distinguish between period and architect in constructions with globalization in developing countries and even this situation is impossible. However, it has been observed in the historical process that architects put forth unique technical and design properties. Structures of Architect Sinan have significant attributes which put forth the experience of the architect in Turkish architecture. Architect Sinan is the most important master who has imprinted his name on the classical period of the Ottoman Empire. It is obvious that his success has plenty of special place among monumental structures. It is thought that Mimar Sinan has taken part in the construction of many monumental structures either as an architect or leader during his apprenticeship, journeyman and mastery periods. In this study; The ten mosques in which the Kurşunlu Mosque, one of Sinan's the hardly known works, also took place are compared. Plans, obtained sections and views, construction materials, in the periods during which they were built were examined while making the comparison. Selatin mosques of Sinan, which are among the mosques studied, are known more than other mosques, and the provincial mosques have become an important part of the city with their modest identities. Sinan's selatin and provincial mosques generally have a classical Ottoman architectural plan understanding with courtyard, fountain and last narthex application. When the samples of Selatin mosque are examined, it is seen that the main space proportional to the scale of the building has also grown. Therefore, in addition to the body walls, large-scale carrier columns stand out in the main space. When the plan types of provincial mosques, which can be defined as small-scale, are examined, four facades rise with their main walls and the narthex is connected to the main wall at the entrance facade. Within the scope of this study, Kurşunlu Mosque, which was not worked on although it was in the city where Sinan was born, is the structure that stands out among Sinan's provincial mosques. It is important that the works handled are in harmony with each other and that the Kurşunlu cami is in this harmony. It is hoped that the study will contribute to future studies related with the subject.

Mimar Sinan Camileri Üzerine Yapısal ve Mekânsal Bir İnceleme

Anahtar Kelimeler:
Yapıların Karşılaştırması,
Mimar Sinan,
Cami

Özet: Gelişmekte olan ülkelerde küreselleşme ile birlikte yapılarda dönem ve mimar ayrımına varmak zorlaşmakta hatta imkânsızlaşmaktadır. Ancak tarihsel süreçte mimarların kendine has teknik ve tasarım özelliklerini koydukları görülmüştür. Türk mimarisi içerisnde Mimar Sinan'ın yapıları da mimarın kendi tecrübesini ortaya koyduğu belirgin özelliklere sahiptir. Mimar Sinan, Osmanlı İmparatorluğu'nun klasik dönemine imzasını atan büyük ustadır. Döneminde, pek çok anıtsal yapıda imzasının olduğu açıktır. Mimar Sinan'ın çıraklık, kalfalık ve ustalık dönemlerinde mimar veya öncü olarak birçok anıtsal yapının inşasında yer aldığı düşünülmektedir. Bu çalışmada;

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Sinan'ın pek bilinmeyen eserlerinden olan Kurşunlu Cami'nin de yer aldığı on camisi karşılaştırılmıştır. Karşılaştırma yapılırken yapıların plan şemaları, elde edilen kesit ve görünüşleri, yapı malzemeleri, yapıldıkları dönemler ele alınmıştır. İncelenen camiler arasında yer alan Sinan'ın selatin camileri diğer camilere göre daha fazla bilinmekte ve taşra camileri mütevazı kimlikleriyle şehrin önemli bir parçası haline gelmiştir. Sinan'ın selatin ve taşra camileri genel olarak avlu, çeşme ve son narteks uygulaması ile klasik Osmanlı mimari plan anlayışına sahiptir. Selatin Cami örnekleri incelendiğinde, yapının ölçeğiyle orantılı olarak ana mekânın da büyüdüğü görülmektedir. Bu nedenle ana boşlukta gövde duvarlarının yanı sıra büyük ölçekli taşıyıcı kolonlar öne çıkmaktadır. Küçük ölçekli olarak tanımlanabilecek taşra camilerinde plan tipleri incelendiğinde ise dört cephe ana duvarları ile yükselmekte ve narteks giriş cephesinde ana duvara bağlanmaktadır. Bu çalışma kapsamında Sinan'ın doğduğu şehirde olmasına rağmen üzerinde çalışılmayan Kurşunlu Cami, Sinan'ın taşra camileri arasında ön plana çıkan yapısıdır. Ele alınan eserlerinin birbiriyle uyumu ve Kurşunlu camisinin de bu uyumda yer alması önemlidir. Çalışmanın konu üzerinde yapılacak çalışmalara katkı sağlaması umulmaktadır.

1. INTRODUCTION

The word mosque means that which gathers and brings together. In this regard, it is the sanctuary where Muslims gather together for worship. The word *mescit* is used in the first historical sources instead of the word mosque. Whereas *mescit* is the name given to the location where muslims "kotow" during prayer, it can be generally stated that mescits are constructed in neighborhoods, mosques in districts and grand mosques in cities (Cami, 2016).

Many different types of structures were constructed during the transformation of the Ottoman from chiefdom to kingdom in order to meet the demands of the society. Mosques are which indicators of the economic wealth of the state as well as a religious symbol stand out among these architectural works. When the mosques of the Ottoman era are examined, it is clear that there has been a period of development in terms of architecture reaching its pinnacle with the contributions of Mimar Sinan.

The mosques built during the reign of sultans in the Ottoman Empire are known as "Selatin Mosques". There are certain conditions for the construction of selatin mosques in the Ottoman palace tradition. First of all, a sultan had to win an important military victory and lay hold of a significant spoil of war to be able to order the building of a selatin mosque (Selatin Cami, 2017).

In this study, Classical Ottoman period structures built by Architect Sinan were compared with respect to various properties such as plan typologies, construction materials. Among the grand, large-scale Selatin mosques by Architect Sinan, his apprenticeship period piece Şehzadebaşı, qualification period piece Süleymaniye and master period piece Selimiye Mosque were taken into consideration. The periods known as apprenticeship, qualification and master put forth the development of the structures as well as the architectural development of Sinan.

Within the scope of the study, 6 mosques, namely Bali Pasha, Hadım İbrahim Pasha, Rüstem Pasha, Tekirdağ Rüstem Pasha, Behram Pasha, Pertev Pasha, which are close to the scheme of the Kurşunlu Mosque, described as the provincial mosque of Mimar Sinan, were determined. When the carriers of the selected buildings of the Classical Ottoman period of Mimar Sinan are analyzed comparatively, it is seen that the main walls are similarly constructed. In this context, it is aimed to reveal the structural similarities between the 7 mosques determined typologically. In addition, it is aimed to reveal Sinan's development in the architectural process by comparing the plan

schemes, building materials and the periods they were built among the 6 provincial mosques determined by Sinan's selatin mosques.

Significant mosques of Architect Sinan and his applications and (most known works) similar to the plan of Kurşunlu Mosque were examined based on plan, cross-section, appearance and technical drawings. The analyses carried out put forward the similarities of the mosques of Sinan as well as the position of the Kurşunlu Mosque among these works. Including small scale mosques by Sinan was important for putting forth the importance given by him to the small scale structures as well as his style of approach.

2. MATERIAL AND METHOD

Within the scope of the study, the life and mosques of Mimar Sinan were mentioned, and the mosques determined from the works of the Classical Ottoman Period were discussed in detail. Three mosques, namely Şehzade, Süleymaniye, Selimiye, were selected from Sinan's Selatin Mosques. 7 mosques, namely Bali Pasha, Hadım İbrahim Pasha, Rüstem Pasha, Tekirdağ Rüstem Pasha, Behram Pasha, Pertev Pasha, Kurşunlu Mosque, which we can call as provincial mosques, were examined. Accordingly, literature surveys were carried out on 3 mosques in large scale and 7 mosques that we can define as small scales.

Ten mosques examined within the scope of the article; historical, formal, spatial fictions and architectural features were evaluated separately. Therefore, the plan, section and view data of the 10 mosques determined were accessed from various sources. In order to better read the developments in the building, the data obtained were tabulated. A typological comparison was made by classifying the architectural drawings of the mosques from the table. Structural interpretation were made on Sinan mosques determined by evaluating the analyzes. Similar and different aspects of structural development in Mimar Sinan's mosques are tried to be revealed.

Sinan Mosques have preserved their importance from the time they were built until today. Sinan's technical and design approaches are the characteristics that make mosques unique. The mosques discussed as a result of the examinations reveal Sinan's development in the architectural process. It has been determined that there is no examination on the Kurşunlu Mosque in Kayseri, which is one of the rare mosques of Sinan in Anatolia, and is discussed in detail within the scope of this study.

2.1. Mosque of Mimar Sinan

Sinan was born at the Ağırnas Village of Kayseri but his date of birth is not known for sure. However, majority of the opinions indicate the birth year as 1489. He is known as “Mimar Sinan”, “Chief Architect Mimar” and “Koca Sinan” due to his contributions to architecture as well as the expert solutions he put forth especially for dome architecture during a time when technical abilities were very limited (Mimar Sinan-Eserleri, 2016). Sinan passed away in 1588 leaving behind many mosques built during the Ottoman empire for a total of 375 works comprised of 81 Mosques, 51 mescits, 55 medrasahs, 26 darül-kurra, 17 mausoleums, 17 almshouses, 3 hospitals, 5 aqueducts, 8 bridges, 20 caravanserais, 36 palaces, 8 cisterns and 48 Turkish baths (Benian, E., 2011). However, his greatest desire was to build a bright and spacious mosque with full unity of space that encompassed the congregation much like the sky. The hills reigned supreme over the city with social complexes including mosques. His first important work was the Şehzade Mosque in Istanbul. He has characterized this as the work during his apprenticeship period. Süleymaniye Mosque which was built during his

qualification period. Selimiye Mosque in Edirne was defined by him as a master stage work (Mimar Sinan-Eserleri, 2016). In this study, the three works characterized by Sinan as mosques of apprenticeship, qualification and master stage works were taken into consideration and the mosque typology was examined. Among these, Kurşunlu Mosque which corresponds to the Ottoman classical period was examined with regard to material cost.

2.1.1. Şehzade Mosque Structural and Spatial Analysis

Şehzade Mosque located at the Fatih District, Laleli Quarter of Istanbul was the first step of the three main stages of the architectural genius of Mimar Sinan (Figure 1). Şehzade Mosque was ordered to be built in 1543 by Kanuni Sultan Süleyman in the name of his son Şehzade Mehmet who passed away when he was 22 and there is a mausoleum in the garden of the mosque for Şehzade Mehmet. Şehzade Mosque which is one of the most beautiful mosques of art by Mimar Sinan which he characterizes as one of his apprenticeship stage pieces was completed in 1548 within a period of 4 years. Şehzade Mosque is also the first monumental structure within the Ottoman Classical Architecture (Şehzade Cami, 2016). The mosque has a square form (Figure 2, Figure 3 and Figure 4). There is a central dome with a diameter of 18.42right at the center of this square plot of land. This dome is carried by four main crowns on which four semi-domes rest. This four semi-dome mosque type that was to be applied in many mosques later on was first tried for the Şehzade Mosque. This structural plan was later used in the Eminönü Yeni Valide Mosque, Sultanahmet Mosque ve Fatih Mosques (Saraçhane Şehzade Mehmet Cami-Mimari Yapı, 2016).

Figure 1. Şehzade Mosque (Saraçhane Şehzade Mehmet Cami-Mimari Yapı, 2016)

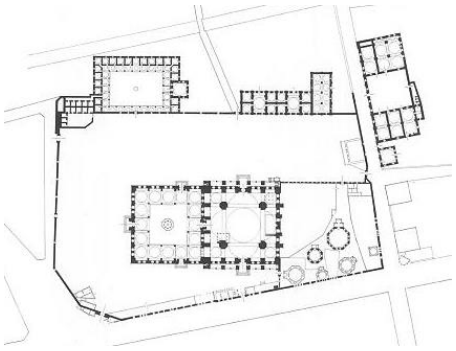


Figure 2. Şehzade Külliye Plan (Şehzade Cami, 2016)

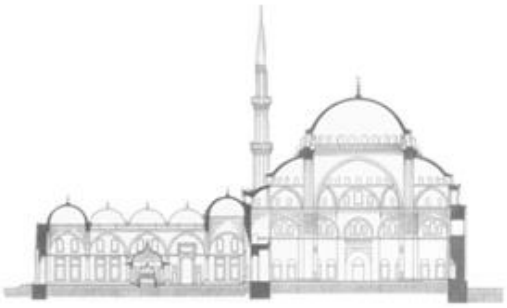


Figure 3. Şehzade MosqueCross Section (Gurlitt, 1912)

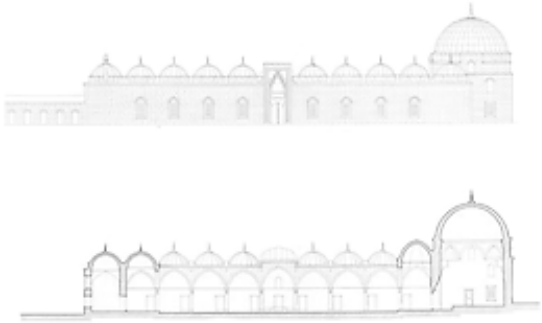


Figure 4. Şehzade Külliye Cross Section and Appearance (Ülgen, 1989)

2.1.2. Süleymaniye Mosque Structural and Spatial Analyses

Süleymaniye Mosque is located at the city of Istanbul in Turkey, Fatih District, Süleymaniye quarter. The mosque was ordered by Mimar Sinan during the 16th century in the name of by Kanuni Sultan Süleyman who was the ruler at the time. The construction work was started in 1550 and was completed in 7 years. Süleymaniye Mosque is one of the qualification stage mosques by Mimar Sinan and is one of the most important examples of Classical Period Ottoman Architecture (Figure 5). Süleymaniye Mosque has been built on four pillars calculated to be 30 tons each. The main dome and upper masonry shell transfer the weight of about 1000 tons to the foundation via two semi-domes and the pillars (Figure 7). There are four main arches between the pillars. "*The main arches have been constructed without tie rods. However, tension ha s been used for the smaller arches at the clearances between the primary semi-domes and secondary semi-domes for the structure that covers the central inner space of the Süleymaniye Mosque*" (Eruyar, 2016).

The main dome of the mosque is located above the main arches and elephant pillars (fil ayakları). There is a total of 32 windows on the dome frame. Two semi-domes support the main dome from the sides. The semi-domes are supported by two smaller domes each which are called exedra. There are five domes of various sizes at sections where there are no semi-domes. In addition, there are twenty eight small domes at the courtyard and four minarets in the mosque (Aslan, 2016) (Figure 8). Many structures were built around the Süleymaniye Mosque located at the center of the külliye. Kanuni and Hürrem mausoleums, medrasahs providing education at different levels, a hadith school, a school of medicine, elementary school, hospital, guesthouse, a structure for Qur'an education, a souphouse called imaret, Turkish bath, inn, library, Sinan's mausoleum and many shops (Figure 6).

Figure 5. Süleymaniye Mosque (Süleymaniye Cami'nin Yapılış ve Özellikleri, 2016)

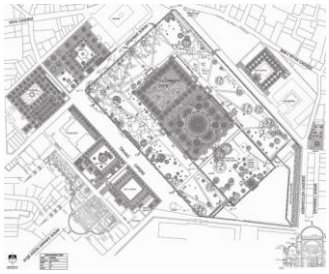


Figure 6. Süleymaniye Mosque Layout Plan (Süleymaniye Cami'nin Yapılış ve Özellikleri, 2016)

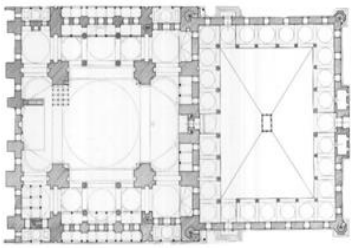


Figure 7. Süleymaniye Mosque Ground Floor Plan (Süleymaniye Cami'nin Yapılış ve Özellikleri, 2016)

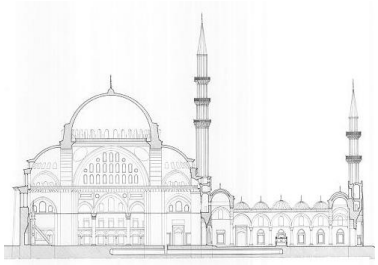


Figure 8. Süleymaniye Mosque (Süleymaniye Cami, 2016)

2.1.3. Selimiye Mosque Structural and Spatial Analyse

The monumental structure built by Mimar Sinan at age 80 which he characterized as "my master stage work" is one of the masterpieces of the Ottoman-Turkish art and history of world architecture (Figure 9) (Ekinci, 2009). It is not known for certain the date when the construction for the Selimiye Mosque was started. However, it has been recorded in the mosque tablet located on the Selimiye Mosque door that the construction work was started in 1568. The mosque, madrasah and Dar-ül Hadis have been placed in a symmetrical manner inside the 190x130 meter courtyard with the mosque at the center and the twin educational structures at the corners. It attracts attention with its four minarets that attract attention from a distance (Köse, 2013).

The mosque located at the center of a courtyard surrounded by walls is comprised of a praying area with a length of about 40 meters and width of 60 meters along with a şadırvan (courtyard with a fountain) that has almost the same dimensions (Köse, 2013). The mosque built of cut stone covers an area of 1.620 m² with its inner section and 2.475 m² in whole. Selimiye Mosque is characterized as a structure that has been built on the widest area of land in architectural history and attracts attention with its dome that has a height of 43.28 m. and a diameter of 31.30m. The dome rests on 8 large pedestals connected together by 6 m wide arches. Four semi-domes at the corners and one semi-dome at the mihrab support the central dome (Ekinci, 2009). It has four minarets (Figure 10).

The outer courtyard of Selimiye surrounds the mosque from three sides. Dar-ül Kur-a and Dar-ül Hadith structures are located in the wide outer courtyard of the Selimiye Mosque surrounded by stone walls. Porticos covered with domes surround the courtyard. The porticos are in total 18 domes over 16 columns (Figure 11, 12). The columns have been built as single piece (Köse, 2013).

Figure 9. Selimiye Mosque (Ekinci, 2009)

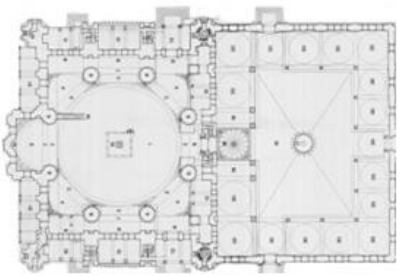


Figure 10. Selimiye Mosque Ground Floor Plan (Köse, A., 2013)

Figure 11. Selimiye Mosque Façade (Çetintaş, 1935)

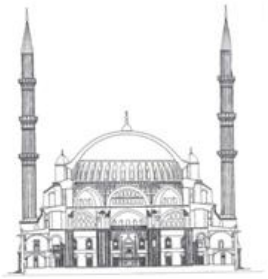


Figure 12. Selimiye Mosque Section (Ekinci, 2009)

2.1.4. Bali Pasha Mosque Structural and Spatial Analysis

The structure located at the Hoca Üveyz Quarter at the Fatih district of Istanbul was built by Architect Sinan during the years of 1546-1548. Bali Pasha started the construction of the mosque which was completed by his wife Hüma Hatun following the death of Bali Pasha (Ekinci, 2009). Hence, it is also known as Hüma Hatun Mosque (Figure 13) (Bali Paşa Cami, 2017). The kiblah main gate of the mosque is located on the Hoca Efendi Street with Battal Gazi Street to the east and Balı Pasha Street to the west. The mosque has a square plan and is surrounded by external walls on an area of 900 square meters (Figure 16) (Bali Paşa Cami, 2017). The mosque has been built using cut stone and is covered with a dome of 12 m diameter. Verses by poet Kenan Hüdai are written on the 1504 dated inscription (Bali Paşa Cami, 2017). Bâli Pasha Mosque is comprised of a five unit square plan narthex covered with five small domes enveloped in turn with a dome of 11.80 m^2 diameter (Bali Paşa Cami, 2017).

Classical Ottoman style can be observed in all aspects of the mosque excluding its proportions put up by using cut sandstones as well as the vertical grooved rails on the portico of the narthex (Figure 17). There is a square planned minaret pedestal at the northwestern corner and a stairwell tower with the same dimensions at the northeastern corner. Two feet placed on the northern, eastern and western main walls each and three lancet arches combining these carries the upper story mahfil (gathering place) covering the sanctuary from three sides. The upper section of the tower including the stairs to the mahfil (gathering place) has been used as a cross vaulted cell (Figure 18).

Columns were used on the walls in 3 directions outside the Kiblah wall. The sections between the columns are also connected by pointed arched niches. There is a mahfil on the niches that surrounds the space from 3 directions. Corner parts on the Kiblah wall are overflowing towards the outside. The way out to mahfil is provided by a ladder located in the last congregation place (Çobanoğlu, 2019) (Figure 14). The upper part of the protrusion made for Mahfil stair was made as a cross vault (Bali Paşa Cami, 2020).

The interior dome of the mosque has been decorated with inscription and writings the minbar of which is made of marble and the mihrab of plaster (Figure 15). It is known that the wooden lectern has been brought in from the Hagia Sophia museum. The rods decorating the single balcony made of stone provide traces of the art of Architect Sinan. The mosque with an interior area of about 300 m^2 has a courtyard, garden and hazier (Bali Paşa Cami, 2017).

Figure 13. Bali Pasha Mosque (Bali Paşa Cami, 2017)

Figure 14. Bali Pasha Mosque (Çobanoğlu, 2019)

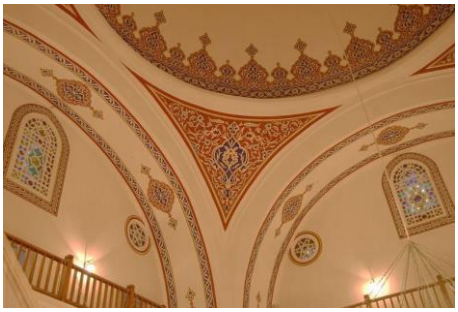


Figure 15. Bali Pasha Mosque
(Bali Paşa Cami, 2017)

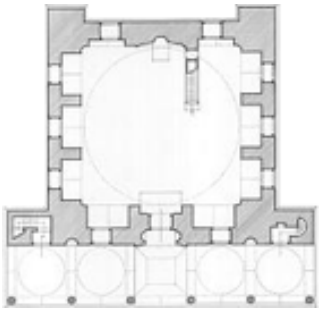


Figure 16. Bali Paşa Mosque Ground Plan
(Ülgen, 1989)

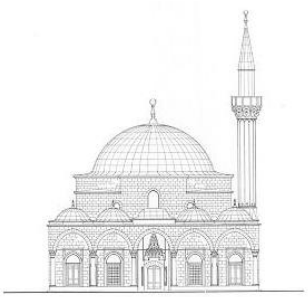


Figure 17. Bali Paşa Mosque Façade
(Ülgen, 1989)

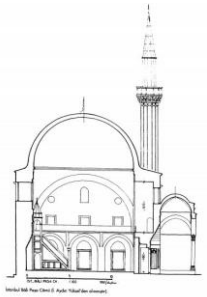


Figure 18. Bali Paşa Mosque Section
(Ülgen, 1989)

2.1.5. Hadım İbrahim Pasha Mosque Structural and Spatial Analysis

Hadım İbrahim Pasha Mosque is located at Silivrikapı, Fatih district of Istanbul in Turkey. It was ordered in 1551 by Hadım İbrahim Pasha, one of the viziers of Kanuni Sultan Suleyman, to be built by Architect Sinan. No traces outside of the wall remains have been left of the Turkish bath and school of the structure built as a small social complex with its mosque, shrine and Turkish bath (Kocamustafa Hadım İbrahim Paşa Cami, 2017). The mosque that is a classical period Ottoman architecture piece has a square plan with a central dome in addition to a modest structure (Figure 19). The main walls of the mosque; southern, eastern and western facades have been built alternatively by cut sandstone and bricks with only sandstone used on the northern facade.

The 12 m diameter dome of the mosque is placed on a cylindrical hoop divided by windows. This hoop has been supported at the corners by a pair of squinches. The dome is placed directly on the mihrab wall in the kiblah direction and on prop feet extending about 2 m from the wall surfaces while is divided by three main walls (Figure 22). Clam shaped squinches have been used at the corners for the passage to the dome (Figure 20). The niches that appear between the prop feet provide a movement and richness to the interior. The interior of the dome and the pediments have been decorated by hand-carvings.

The wooden main gates of the mosque are important examples of xylography (Figure 23). The inner section of the sanctuary entrance along with the columns to the side is covered with marble. There is a small muezzin mahfil to the right of the sanctuary entrance. However, there is no mahfil for women in the mosque. Maksure, which is the high muezzin mahfil close to the mihrab, minbar, mihrab and the muezzin mahfil have been built of marble with a fine workmanship (Figure 21). The narthex extends to both sides outside the square plan of the mosque. Of these extensions, the western minaret with a single balcony comprises the lectern of the minaret, in the eastern section

there is a cell covered with a vault (Hadım İbrahim Paşa Cami, 2017). Of the domes of the narthex carried with six marble columns and five lancet arches, the middle dome is higher with a sliced exterior. This dome sits on consoles with muqarnas on the inside and is fixed to the other domes with transit pendentives (Figure 24). Glazed tiles that are rare to find can be seen above the windows inside the sanctuary and the windows inside the narthex (Çobanoğlu, 2019).

Figure 19. Hadım İbrahim Pasha Mosque (Hadım İbrahim Paşa Cami, 2017)

Figure 20. Hadım İbrahim Pasha Mosque Interior (Kocamustafa Hadım İbrahim Paşa Cami, 2017)

Figure 21. Hadım İbrahim Pasha Mosque Interior (Necipoglu, 2005)

Figure 22. Hadım İbrahim Pasha Mosque Ground Floor Plan (Necipoglu, 2005)

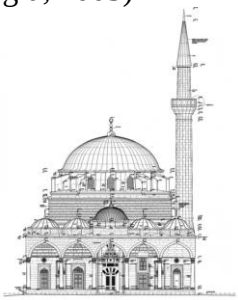


Figure 23. Hadım İbrahim Pasha Mosque Façade (Hadım İbrahim Paşa Cami, 2017)

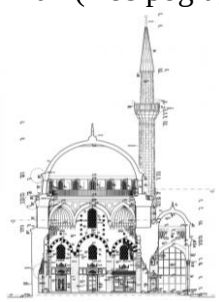


Figure 24. Hadım İbrahim Pasha Mosque Section (Hadım İbrahim Paşa Cami, 2017)

2.1.6. Tekirdağ Rustem Pasha Mosque Structural and Spatial Analysis

The structure which was built in 1552-1553 is located on the Mimar Sinan Street in Tekirdağ city center, across the Tekirdağ municipality building. The autobiographies of Mimar Sinan state that the building was constructed by him. The structure is inside Rustem Pasha Social Complex which has a madrasah, caravanserai, mosque and imaret. The Complex also has a double bath, leather tannery, shops and a school (Figure 25) (Tekirdağ Rüstem Paşa Cami, 2017).

The top of the square planned mosque is covered with a single dome which enables access with trombes. In front of the building constructed with regular cut stone is a double portico narthex and a single balcony minaret on

the northwestern side. The structure is entered through a crown gate located on the mihrab axis with polygon niches on the sides, muqarnas and rectangular edging (Figure 28). Between the suppressed circular arch and the kavsara with muqarnas is the construction book of the building.

Interior of the luminous and spacious structure is also rich with decorations. There are plaster embossment on the sides and center of the dome which has baroque character flowers and garlands. These decorations that are known to belong to the Sultan Abdulmecid period have destroyed the original hard carvings of the mosque. Side backboard and stair railings of the very plain marble minbar are decorated with hemstitch geometric motives.

Five niched narthex is covered with a mirrored vault in the center and double domes on the sides. The external portico has a lead covered sloped wooden roof on columns and round arches. The minaret of the mosque is made of cut stone and polygonal shape as well as covered with a lead cone. The railings of the balcony with muqarnas is carved stone. Entrance to the courtyard of the mosque which is surrounded by walls is through a large gate on the north, with a marble fountain (Figure 29). Lead covered pentagonal roofed fountain that sits on five marble columns with garland heads is understood to be added during the repair in Sultan Abdulmecit period (Rüstem Paşa Külliyesi, 2017).

Of the social complex that was built in 1550's, only the mosque, the rebuilt bath and the partial madrasah has survived to this day. Since 1552 when it was built to this day when it's surrounded by high rise buildings, it still has an impressive sight on its hill, commandeering the Tekirdağ Harbor. The mosque which was in fact built in a modest size is interestingly surrounded by a double line monumental portico on the front facade (Figure 26). The interior of the mosque is plain but impressive with its large size dome (Cambaz, 2014).

Figure 25. Tekirdağ Rüstem Pasha Mosque (Cambaz, 2014)

Figure 26. Tekirdağ Rüstem Pasha Mosque (Cambaz, 2014)

Figure 27. Tekirdağ Rüstem Pasha Mosque (Tekirdağ Rüstem Paşa Cami İç Mekan Fotoğrafı, 2017)

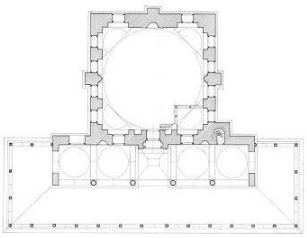


Figure 28. Tekirdağ Rüstem Pasha Mosque Ground Plan (Ülgen, 1989)

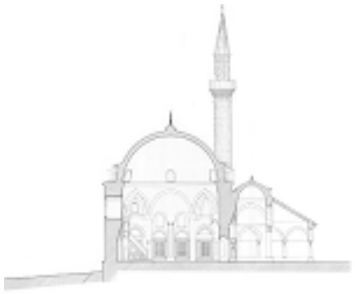


Figure 29. Tekirdağ Rüstem Pasha Mosque Section (Ülgen, 1989)

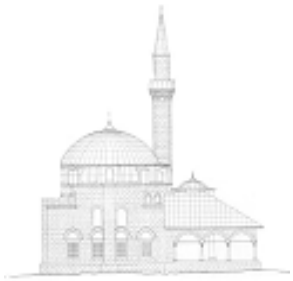


Figure 30. Tekirdağ Rüstem Pasha Mosque Façade (Ülgen, 1989)

2.1.7. Rüstem Pasha Mosque Structural and Spatial Analysis

Rüstem Pasha Mosque was commissioned by Rüstem Pasha, one of the viziers of Kanuni Sultan Süleyman, to Mimar Sinan in 1561 in Istanbul Eminönü (Eminönü Rüstem Paşa Cami, 2017). The mosque that was built 6 meters above the street level had storages and stores under, which enabled better utilization of the sloped area and made the silhouette of the mosque look better (Figure 31). The U-shaped courtyard is accessed by two stairs on the east and west directions. The narrow stairs access is illuminated by windows with iron bars. The narthex with a five domed and six columned portico is covered with a large eaves. The mosque fountain was built on the street level. Minaret is built on the northwestern side of the courtyard after the construction date of the mosque.

The mosque has a rectangular architectural plan (Figure 34). The width of the rectangle is 26.80 meters, and the height is 19.60. The diameter of the great dome is 15.20 meters, with a height of 22.80 meters (Erçağ, 1987). The central dome sits on four elephant pillars via arches. The ceiling cover is shaped with a 15.20 meter diameter middle dome and smaller half and full domes that support this middle dome. These spaces are covered with a vault that is divided by three (Figure 35). Rüstem Pasha Mosque is surrounded by a double line monumental portico on the front facade (Figure 32).

The mosque which was commissioned to Mimar Sinan is a far shot to the simplicity of the period and Sinan himself. What makes this a far shot to simplicity is the decorative elements and of course the İznik tiles (Figure 33). Rüstem Pasha Mosque is covered in tiles up to the dome skirting. Especially the tiles with lily motives are considered to be among the most successful tile examples of the Ottoman period. Hand carvings inside the mosque are in the 18th century baroque style. The tomb is in the courtyard of Şehzade Mosque. Rüstem Pasha Tomb is a single domed octagonal planned structure made with cut stone (Eminönü Rüstem Paşa Cami, 2017).

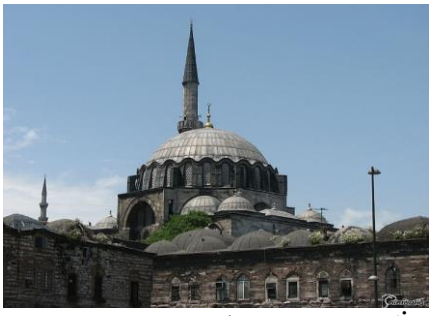


Figure 31. Rustem Pasha Mosque (İstanbul Rüstem Paşa Cami, 2017)

Figure 32. Rustem Pasha Mosque (Rüstem Paşa Cami, 2020)

Figure 33. Rustem Pasha Mosque (İstanbul Rüstem Paşa Cami, 2017)

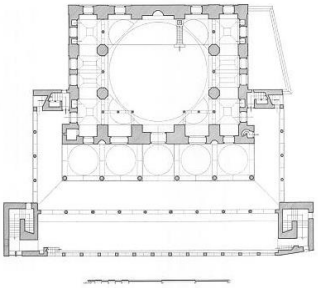


Figure 34. Rustem Pasha Mosque Ground Floor Plan (Ülgen, 1989)

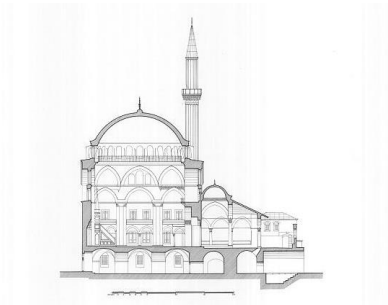


Figure 35. Rustem Pasha Mosque Section (Ülgen, 1989)

Figure 36. Rustem Pasha Mosque Façade (Özdemir, B., 2017)

2.1.8. Behram Pasha Mosque Structural and Spatial Analysis

Behram Pasha Mosque is located near the Mardin Gate of diyarbakir. It was built by the thirteenth governor of Diyarbakr, Behram Pasha. According to the inscription on the sentence door, the construction began in 1564 and was completed in 1572. It is one of the important mosques of Mimar Sinan outside Istanbul (Bali Paşa Câmi, 2020) (Figure 37).

The mosque, built entirely of cut stone, is a single-domed and single-minaret building (Figure 40). The dome sits on an octagonal pulley and the dome is attached to the walls with trombes. There are two iwan-shaped spaces in the north and south and three in the east and west in the square planned harim (Figure 38). These iwan-shaped spaces are covered with pointed arched vaults. Inside the iwan-shaped spaces, there are two windows with flat lintels and two semi-circular mihrab niches on the Kiblah walls (Behram Paşa Câmi, 2020). With these niches in the form of iwan and the wall decorations, the mobility brought

to the harim walls has made the mosque unique (Bali Paşa Câmi, 2020). With the stairs on both sides of the sentence door lead up to the mahfil. The mahfil continues in the form of "U" on 3 fronts except the qibla wall (Figure 41).

The last congregation place of the mosque is double portico. There are two mihrab protrusions on the right and left of the sentence door in the last congregation place. The windows in the last congregation place are framed with a lintel made of two-colored stones and three-slice arches (Behram Paşa Câmi, 2020). The crown door was made with a pointed arch and a muqarnas frame made of two colored stones from the outside. The crown door is also highlighted with a sliced arch and muqarnas on the door (Figure 39).

Only the octagonal fountain and bathhouse have survived from the building, which is thought to have been built as a complex. The fountain is covered with a wide pramidal cone carried by eight columns. Cylindrical columns are made of two colored stones. The minaret is located to the northwest of the building, behind the last congregation place. Minaret has a square base and a cylindrical body (Melek; Demir, 2009).

The fact that two colored stones were used including the last congregation place and fountain of the mosque brought mobility to the mosque. In the harim, the muqarnas on the feet pressed by the trombes have made the mosque remarkable as an architectural decoration element. In addition, the XVI. century Iznik tiles used in the harim walls also join the two-color image at the sentence door.

Figure 37. Behram Pasha Mosque (Yıldız, 2011)

Figure 38. Behram Pasha Mosque (Behram Paşa Cami, 2020)

Figure 39. Behram Pasha Mosque (Çobanoğlu, 2019)

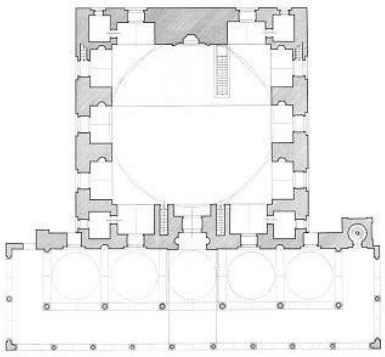


Figure 40. Behram Pasha Mosque Plan (Ülgen, 1989)

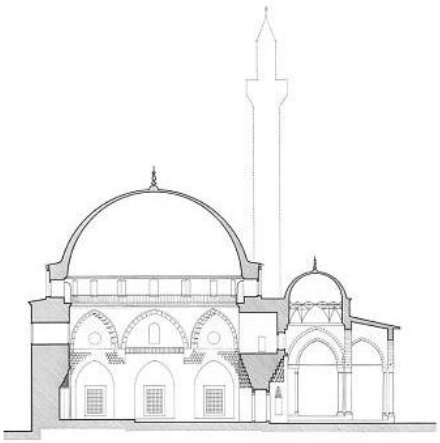


Figure 41. Behram Pasha Mosque Section (Ülgen, 1989)

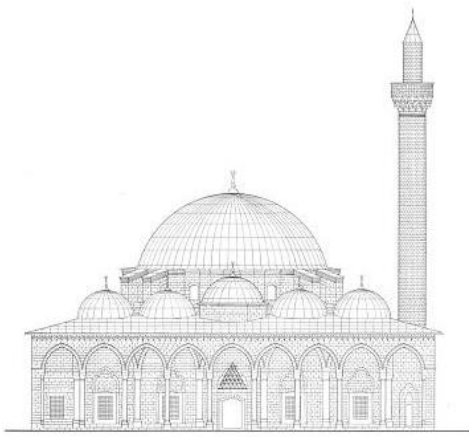


Figure 42. Behram Pasha Mosque Façade (Ülgen, 1989)

2.1.9. Pertev Pasha Mosque Structural and Spatial Analysis

Pertev Pasha Complex, which is a reach complex, was built in 1579 in Izmit by Mimar Sinan. The mosque consisted of a mosque, caravanserai, Turkish bath, primary school, and fountain-water reservoir. However, only mosque, fountain-water reservoir have survived to the present day (Figure 43) (Pertev Paşa Külliyesi, 2020).

The mosque, built of cut stone, has a single minaret and a single dome. The dome of the mosque, which has a nearly square rectangular plan, sits on an octagonal frame and the passage of the dome is provided by pendentive (Figure 46). The central dome is supported by semicircles. It is one of the original features of the mosque that the trombes in the interior are shown on the hoop front (Figure 44). Writing and pen decorations on the harim walls and stained glass on the windows enriched the building (Kishalı; Türkmenoğlu; Şener, 2019). With the help of the octagonal pulley made of two floors, 24 windows were made on the pulley walls. A bright and spacious atmosphere was provided within the structure by adding the daylight provided by the windows on the pulley walls to the height of the mosque body walls (Figure 45).

The last congregation place of the mosque has a double portico structure (Figure 47). The portico, which surrounds the last congregation place consisting of three domes and 2 mirrored vaults, is covered with a sloping roof. It has an outgrow as much as a minaret base on the east and west facades. The use of local Karamürsel stone on the facade walls gave the mosque a unique feature (Kishalı; Türkmenoğlu; Şener, 2019). The dodecagonal planned fountain on the north of the courtyard of the mosque is covered with a wide eave roof. Columns with muqarnas heads are connected with two colored arches and marble stone are placed on each facade (Gündoğdu; Işık, 2017).

Figure 43. Pertev Pasha Mosque (Çobanoğlu, 2019)

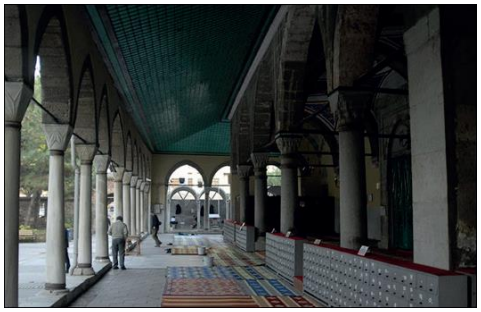


Figure 44. Pertev Pasha Mosque (Çobanoğlu, 2019)

Figure 45. Pertev Pasha Mosque (Çobanoğlu, 2019)

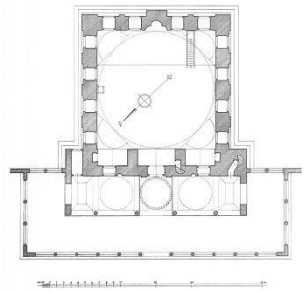


Figure 46. Pertev Pasha Mosque Plan (Ülgen, 1989)

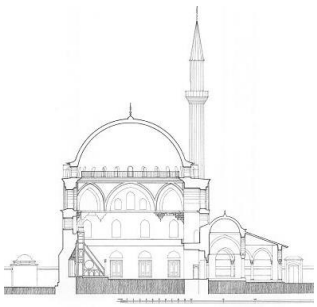


Figure 47. Pertev Pasha Mosque Section (Ülgen, 1989)

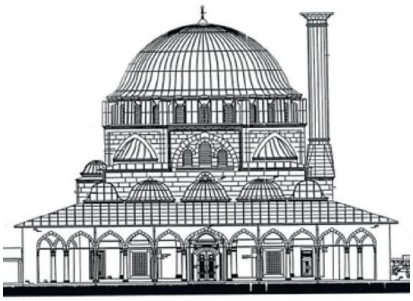


Figure 48. Pertev Pasha Mosque Façade (Sönmez, 2010)

2.1.10. Kurşunlu Mosque Structural and Spatial Analysis

It is located inside the Mimar Sinan Park to the west of the Cumhuriyet Square at the Kocasinan district in the city of Kayseri. Its plan typology is similar to those of the Bali Paşa Mosque and Hadım İbrahim Paşa Mosque which are Beyazıt the Second period structures. In this regard, it is considered to be a Mimar Sinan structure. Kurşunlu Mosque is the only structure by Mimar Sinan that has reached our day from among the two mosques built by him in Kayseri (Figure 51). The structure that has taken its current name from the lead coating of its dome is also known as Hacı Ahmet Paşa Mosque (Özbek; Arslan, 2008).

In 1394-1395, I. Bayezid added Kayseri to the Ottoman lands. Timur took control of Anatolia in 1402 with the Ankara War and passed to Kayseri Karamanoğulları. Fatih Kale Mosque, Yeşilyurt Melik Arslan Mosque (1465) and Merzifonlu Kara Mustafa Paşa Kulliye, which were dated to the last quarter of the 15th century in the city, which was

definitely taken over by the Ottomans in 1515, were built during this period. Kurşunlu Mosque is also thought to have been built between 1585-86 (Solak, 2013).

The last line of the text in the inscription of the mosque was determined as H.994 / M.1585–86 with the ebced account. However, it was stated that Sinan was 97 years old and there were conflicts about whether he built this mosque in person (Solak, 2013).

In the book "Kayseri Turkish Monuments" written by French architect Albert Gabriel in 1954, the construction date of Kursunlu Mosque was specified as 1585. Gabriel also reports that there are some historical documents showing that the mosque was built by Sinan during his researches. Even if the mosque was not built by Sinan himself, it is stated that the mosque plan was passed by the approval of Mimar Sinan because it was built during the his chief architectural period (Solak, 2013).

Yıldıray Özbek and Celil Arslan determined that this mosque was dated H.981 / M.1573 in the letter of concession given to Ahmet Pasha by II. Selim. Özbek and Arslan stated the date of the building as H.981 / M.1573 in the Kayseri Immovable Cultural Heritage Inventory they prepared (Sönmez, 2010).

Even if controversial information was given about the construction date of the building, it was accepted that the building is one of the examples of Classical Ottoman architecture of the *16th* century. The courtyard, the fountain and the last congregation place match the Classical Period Ottoman mosque typology (Orbeyi, 2016).

The mosque is the only structure that has reached our day from the Hacı Ahmet Paşa Külliye comprised of imaret, inn, school and Turkish bath and consists of a single site sanctuary covered with a dome and the narthex at the north façade. The dome that covers up the single site rests on the feet at the corners and pendentives are used to support the dome (Figure 52, 53). There is a minaret with a single balcony at the northwestern corner (Figure 54, 55). The courtyard walls of the mosque have been built later.

The mosque, which has classical Ottoman mosque plan, is surrounded by a wide courtyard and there is a fountain in the center of the courtyard. Harim is reached by passing through the ornamental detail door in the double-stage last congregation place in the south of the courtyard. There is a domed fountain in the courtyard supported by arches on eight pillars (Kurşunlu Cami, 2017). The harim area is covered with a pulley dome carried by pendentives by four columns hidden inside the wall (Figure 56). The feet placed on the south front are supported by outriggers in the outside. Reflecting the style of the Ottoman classical mosque architecture with its simplicity in the harim, the engravings of the mosque and the stained glass windows in the dome of the mosque slightly break the simplicity of the mosque (Photograph 28). The most spectacular part of the mosque is the north facade and the sentence door. The mihrab and minbar of the mosque are simple and made of marble.

The narthex of the mosque has two porticos much like the Üsküdar Mihrimah, Atik Valide and Eminönü Rüstem Paşa, Tekirdag Rüstem Pasha, Pertev Pasha, Behram Pasha Mosques which are other structures by Sinan (Figure 58). The southern section of the narthex is covered by five domes with pendentives supported by six marble columns and sharp arches on the northern wall (Drawing 26). The dome at the entrance axis is larger than the other domes. The sides of this section of the narthex are open. The southern section of the narthex has been encompassed in a U shape by the second narthex. This portico made by sharp arches on 24 columns is covered by a hipped roof resembling a lean-to (Figure 59).

There is one mihrab each on the outer facade of the northern wall of the mosque with one to the east and the other to the west.

The crown gate of the mosque made of marble has five lines of muqarnas. Two pillars have been placed to the eastern and western facades within the width of the supporting arches carrying the dome in the harim space after which they were connected via lancet arches thus making a gallery surrounding the interior space at all three facades excluding kiblah. The rear side of the crown gate has been protruded inside like two props for supporting these galleries (Figure 59). The transition between the galleries was provided through pendentives that carried the dome from the northwest and northeast corners. There are pointed arched iwan shaped spaces at the bottom of the galleries that surround the harim walls from 3 directions. There are these spaces in the form of iwan, which are two on the north and south facades and three on the east and west facades. Similar iwan arrangements were applied in Behram Pasha, Bali Pasha and Pertev Pasha Mosque of Mimar Sinan. Access to the mahfil is provided by the arched opening on the northeastern part of the last congregation place. On the southern facades of the eastern and western facades of the mahfil, there are a mihrab carved into the wall (Figure 60, 61).

There are two windows each at the lower sections of the southern and northern walls and three windows each on the eastern and western walls (Figure 61, 62, 63). These windows have a rectangular form with lancet arch pediments. There are six more windows at the upper section of the southern wall. The same arrangement can be seen on the eastern, western and northern walls. All upper windows are leaded. The eastern and western facades have the same appearance but a different application was made on the southern facade. There are buttresses that are not used in other fronts, raised up to the level of eaves in the east and west directions. There are nine windows in different forms and sizes on the facades. The minaret base in the northwest corner of the mosque continues to the top cover of the last congregation place (Figure 65)

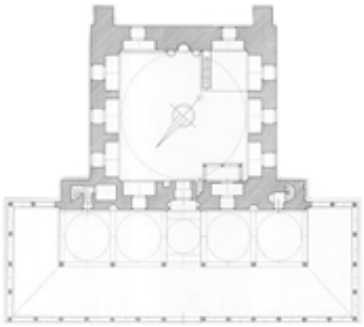


Figure 49. Kursunlu Mosque Ground Floor Plan (Ülgen, 1989)

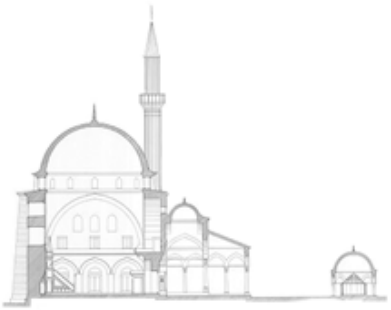


Figure 50. Kursunlu Mosque Section (Ülgen, 1989)

Figure 51. Kurşunlu Mosque Quad (Hasözhan, 2016)

Figure 52. Kurşunlu Mosque Interior (Hasözhan, 2016)

Figure 53. Kurşunlu Mosque Southern Façade (Hasözhan, 2016)

Figure 54. Kurşunlu Mosque Garden Wall and Enterance (Çopuroğlu, 2016)

Figure 55. Kurşunlu Mosque Northern Façade (Çopuroğlu, 2016)

Figure 56. Kurşunlu Mosque Interior (Kayseri Vakıflar Genel Müdürlüğü Arşivi, 2019)

Figure 57. Kurşunlu Mosque Dome (Kayseri Vakıflar Genel Müdürlüğü Arşivi, 2019)

Figure 58. Kurşunlu Mosque Northern Façade (Hasözhan, 2016)

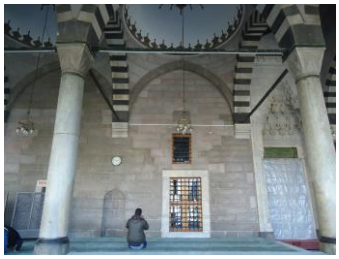


Figure 59. Kurşunlu Mosque Northern Façade (Hasözhan, 2016)

Figure 60. Kurşunlu Mosque Interior (Kayseri Vakıflar Genel Müdürlüğü Arşivi, 2019)

Figure 61. Kurşunlu Mosque Interior (Kayseri Vakıflar Genel Müdürlüğü Arşivi, 2019)

Figure 62. Kurşunlu Mosque Western Façade (Çopuroğlu, 2016)

Figure 63. Kurşunlu Mosque Eastern Façade (Çopuroğlu, 2016)

Figure 64. Detail from Kurşunlu Mosque Façade (Çopuroğlu, 2016)

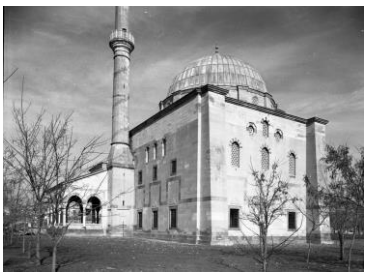


Figure 65. Kurşunlu Mosque Façade (Kayseri Vakıflar Genel Müdürlüğü Arşivi, 2019)

Figure 66. Kurşunlu Mosque Eastern Façade (Kayseri Vakıflar Genel Müdürlüğü Arşivi, 2019)

3. RESULTS

The study was carried out in ten mosques that Mimar Sinan built on different periods. Through these mosques, Sinan shows the developments in his architectural approach stage by stage. The changes are not observed just in the plan schema, but all of his new works strive to surpass his previous one from a structural point of view. This progress can be felt from what he called his apprenticeship period piece Şehzadebaşı, qualification period piece Süleymaniye and master period piece Selimiye Mosque. The attention and diligence he paid to the selatin (built for sultans) mosques is possible to observe in his smaller work. Each one of his works have been a small scale trial piece for him to test his new ideas for his next selatin mosque.

The plans, sections and views of the selatin and provincial mosques discussed within the scope of the article were reached and turned into Table 1. In the table, floor plans, sections and facades are arranged for each building. Thus, different data obtained from 10 mosques have been overlapped and made comparable. When Selatin and provincial mosques are compared among themselves; It is observed that the dimensions and fiction of the space in the plan plane, the height in the space dimensions in the cross-section plane, and the vacancy rates in the facades are similar in appearance. It is seen that the dimensions and positions of the bearing elements are similar in all three planes.

Şehzade Mosque has a main space with a half done that sits on four large feet completed by four quarter domes around this half dome. The two main carrier walls next to the mihrab wall is supported by elegant columns. The porticos that surround the mosque courtyard and the narthex is covered by small half domes. Süleymeniye, which follows Şehzade mosque and is a selatin mosque, is a higher design of Şehzade mosque with a very large space. It is a larger scale application of what's been learned in Şehzade. Sinan also put a great half dome on top of four great carrier feet supports this dome with two quarter domes in this work. By managing to cover a larger rea with a lesser number of carriers, he manages to surpass Şehzade. Here, again the two carrier walls are supported by elegant columns. But the column sections of Şehzade have been applied with elegance and in twos in Süleymaniye. He also got rid of the thick carrier walls of Şehzade Mosque by putting window openings created on the walls in the Süleymaniye mosque. Larger spaces have been passed by using lesser and more elegant carriers.

Although Selimiye Mosque is a selatin mosque built outside of Istanbul, it is grander than the selatin mosques in Istanbul. Using the teachings from the Süleymaniye Mosque, the carriers in Selimiye Mosque have smaller sections and can cross larger spaces. In Selimiye, now a single large half dome covers the entire space and eight feet with smaller sections carry this great dome. Now also the main carrier walls are thinner in sections and are lighter with the opened window spaces.

Bali Pasha Mosque which is chronologically in between Şehzade and Süleymaniye and the Hadım Pasha Mosque which is chronologically in between Süleymaniye and Selimiye have similar plan schemes and section creations. The main space, which is covered by a single half dome, has main carrier walls are made of think stones. The tranquality and simplicity of the space is striking. The efforts to make the carrier main wall sections thinner are visible in both mosques. This is a small trial for Selimiye as well. Subsequently constructed Rüstem Pasha Mosque again was created by covering a single space with a half dome. But what sets is apart from Bali Pasha and Hadım İbrahim Pasha is that the existence of four delicate columns that help carry the dome. Again, it can be seen as a sub-scale of the Selimiye Mosque plan scheme. In fact this is a proof of how the schemes develop as well as Sinan giving the same attention and diligence to his other work as he does to his selatin mosques.

Close to the time of his death, Mimar Sinan also constructed a piece in his hometown Kayseri. Kurşunlu Mosque is among Sinan's farthest work from Istanbul, the capital of Ottoman Empire. The planning scheme of Kurşunlu Mosque is the same with Bali Pasha, Hadım İbrahim Pasha Tekirdağ Rüstem Pasha and Rüstem Pasha Mosques. Even more, it is identical to the plan typology and carrier system of Tekirdağ Rüstem Pasha Mosque. In both Tekirdağ Rüstem Pasha and Kurşunlu Mosques, it can be seen that a single space is covered by a single dome. The carrier main walls were attempted to thin down and lighten up by using window spaces on the interior. The most significant difference between Tekirdağ

Rüstem Pasha and Kurşunlu Mosque from other similar work is the portico sections added to the narthex. Tekirdağ Rüstem Pasha and Kayseri Kurşunlu Mosques are their twins in every way. Tekirdağ Rüstem Pasha Mosque is placed as an example close to the capital city. On the other hand, Kurşunlu Mosque is among the rare examples in the rural parts of the Ottoman Empire. As a great architect in his master years, Mimar Sinan's humble approach in the Kurşunlu Mosque is a proof that the architect did not only develop himself in the architectural schemes but also as a person too.

As an architect who exceeds himself in every one of his mosque, Mimar Sinan's approach in Kurşunlu Mosque greets us as a humble example of classical Sinan schemes in a faraway land of the Ottoman Empire.

Table 1. Chronological Analysis Table of Mimar Sinan Mosques

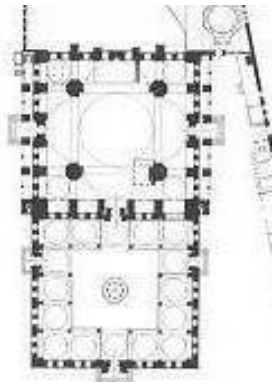
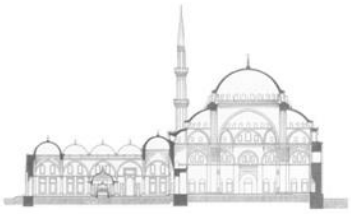
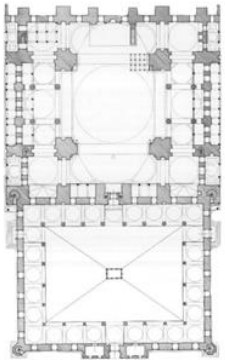
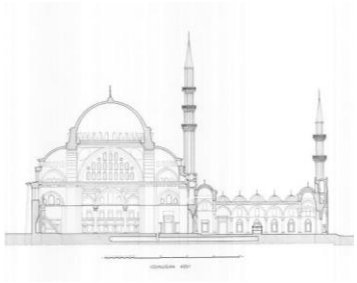
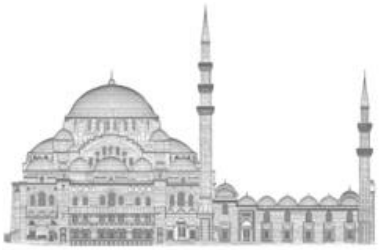
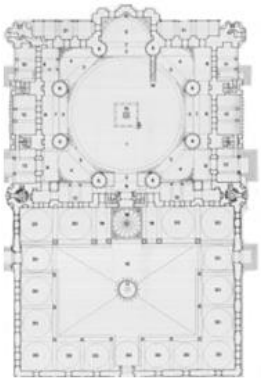
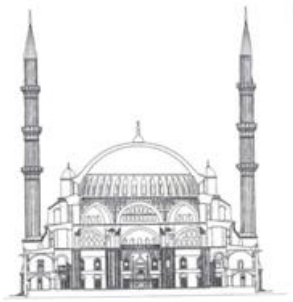
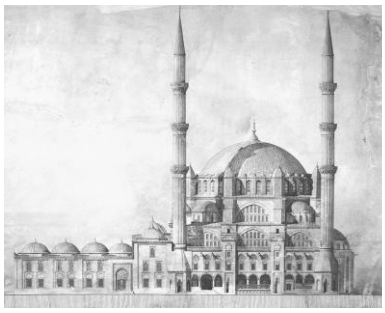
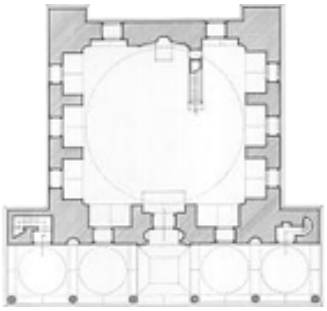
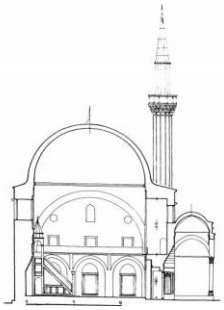
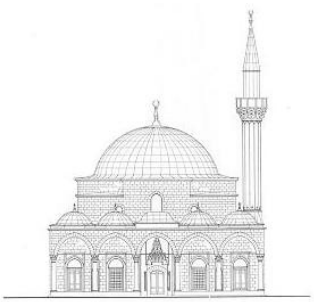
NAME	DATE	PLAN	SECTION	FACADE
Şehzade	1543			
Süleymaniye	1550			
Selimiye	1568			
Bali Pasha	1548			

Table 1. Chronological Analysis Table of Mimar Sinan Mosques

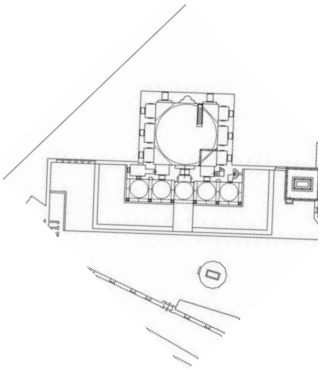
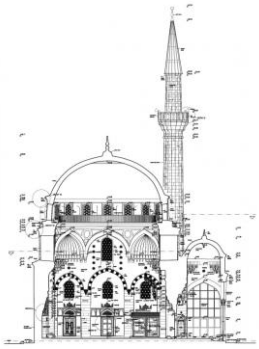
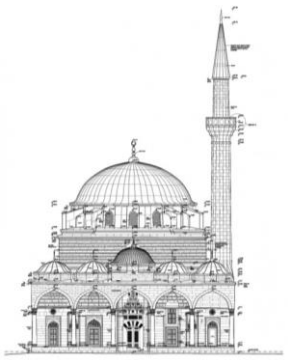
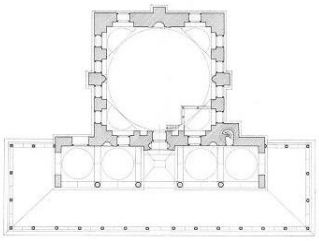
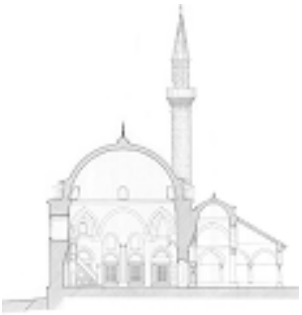
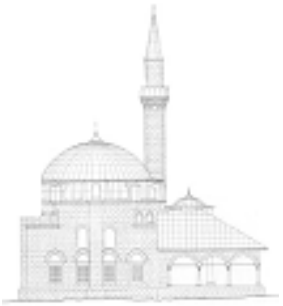
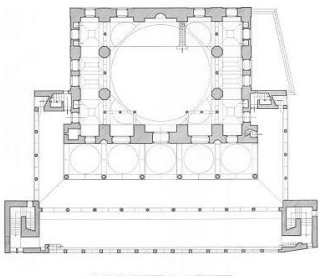
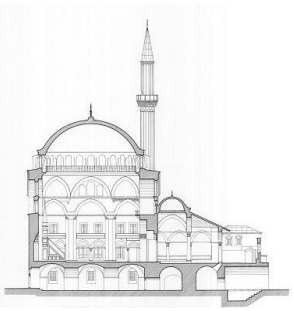
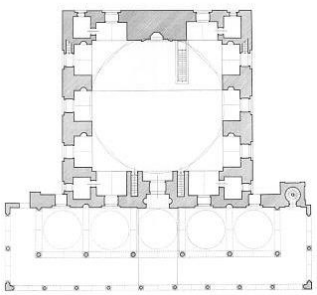
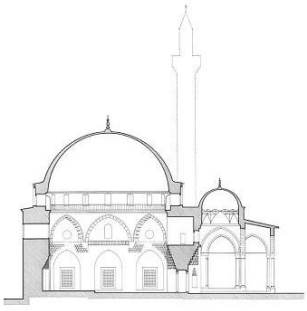
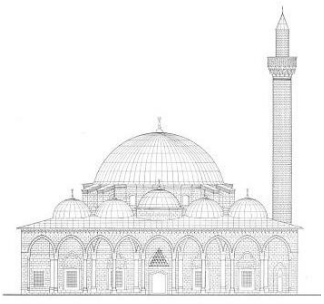
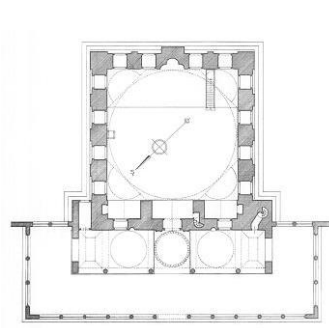
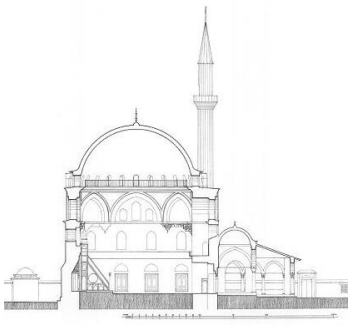
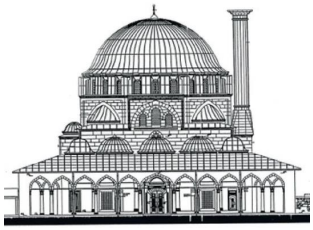
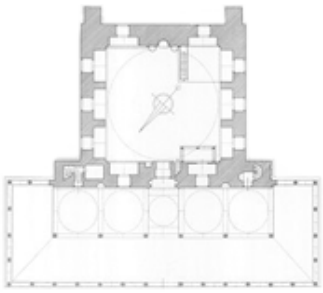
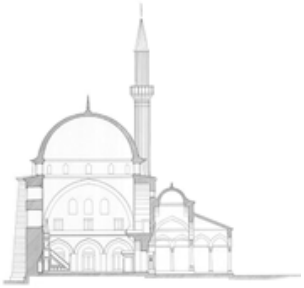
NAME	DATE	PLAN	SECTION	FACADE
Hadım İbrahim Pasha	1551			
Tekirdağ Rüstem Pasha	1552-1553			
Rüstem Pasha	1561			
Behram Pasha	1572			

Table 1. Chronological Analysis Table of Mimar Sinan Mosques

NAME	DATE	PLAN	SECTION	FACADE
Pertev Pasha	1579			
Kurşunlu	1586			

4. DISCUSSION AND CONCLUSION

In many monumental structures across the Ottoman Empire, such as mosques, manufacturing facilities, bridges, dams and more, Mimar Sinan acted in various capacities, such as designer, builder, design/builder. It was also observed that in constructions that he was not directly present, he managed to leave his mark through his approvals and interventions or by the education he provided to the architects that learned from him. In fact, Mimar Sinan's influence on his pupils was so great that some of the works done by his pupils are attributed to Mimar Sinan as well. The largest discussion about this subject is on how it was possible to see Mimar Sinan's mosques across the incredibly vast domains of the Ottoman Empire. During his period, Mimar Sinan designed and personally attended most of the works. But it is also known that in projects that were on the far ends of the Empire, the design of the piece was created in a single center by Mimar Sinan and was managed by architects guided by Sinan. This is understood from the official records of the period.

One of Mimar Sinan's mosques is the Kurşunlu Mosque in Kayseri. The distance of Kayseri and the capitol Istanbul, the fact that it was built during Mimar Sinan's master years and still having a very humble layout makes Kurşunlu even more significant. Mimar Sinan is from Kayseri and his work he left in his hometown is the Kurşunlu Mosque. The reason to why Kurşunlu Mosque is ranked high among Sinan's mosque is understood following a comparison with his previous work.

The comparison shows that his apprentice, qualified and master period works are monumental structures that are improved versions of each other. It was observed that Şehzade Mosque guided Süleymeniye Mosque and in return, Süleymaniye Mosque guided Selimiye Mosque. Within this period, four

mosques of Sinan that rank among his more humble pieces have interesting attributes. These are the Bali Pasha, Hadım İbrahim Pasha, Tekirdağ Rüştem Pasha and Rüstem Pasha Mosques. Looking at their plan schemes, it can be seen that the main walls that define the single main space and carry the dome transform into narrower and more elegant carriers. Another common attribute of these four mosques is to have a narthex covered by 5 small domes right in front of the main space. It is possible to see a similar plan scheme in Kurşunlu Mosque that resembles these four. But it is clearly visible that Kurşunlu has exactly the same scheme with Tekirdağ Rüstem Pasha Mosque. Similar to the Tekirdağ Rüstem Pasha Mosque, Kurşunlu Mosque has a portico instead of the narthex.

The studied selatin and provincial mosques are generally in the sense of classical Ottoman architectural plan with the application of courtyards, fountains and last narthex. On the other hand, when the structures of the mosques designed at different scales on the plan plane are examined, it is seen that they are constructed differently. While the Bali Pasha, Hadım İbrahim Pasha, Tekirdağ Rüştem Pasha, Behram Pasha, Pertev Pasha and Kurşunlu mosques, which are handled in the provincial mosques, rise with their body walls, it is seen that the Rüştem Pasha mosque rises with carrier columns in the main space. The factor that caused this difference; While the main walls in the rectangular plan scheme close to the square are in the beaerer state, the columns in the Rüştem Pasha mosque with the rectangular plan scheme are also added as the bearer. When the samples of Selatin mosque are examined, it is seen that the main space proportional to the scale of the building has also grown. Therefore, in addition to the body walls, large-scale carrier columns stand out in the main space. Depending on Sinan's mosque design setup, it is also seen that column sizes, forms and positions within the building vary.

It is seen that the examples of the classical Ottoman period provincial mosques, which are considered in the study, have a rectangular plan of nearly square. When the plan types of the mosques of Sinan, which can be defined as small scale, are examined, the four facades rise with their main walls, and the narthex is attached to the main wall on the entrance facade. At the same time, it is observed that the narthex, which was gradually placed on the facades of the mosques, formed a corridor on the door axis with this rise.

The mosques built in accordance with the determined Classical Ottoman architectural style were examined comparatively on their structural, formal and technical features. Selatin mosques of Sinan, which are among the mosques studied, are known more than other mosques, and the provincial mosques have become an important part of the city with their modest identities. Within the scope of this study, Kurşunlu Mosque, which has not been worked on even though Sinan was located in the city where he was born, was brought to the fore by addressing the provincial mosques of Sinan. Among these mosques, the distance of Kayseri from Istanbul, which is a dignitary, and the fact that the building was so modest despite the period of mastership of Mimar Sinan increases the importance of Kursunlu.

It is clear that Kurşunlu Mosque, located in a small town in a remote part of the Ottoman Empire with the classic Sinan attributes of the time, has an important place among Sinan’s mosque.

This study determines that Sinan 's simpler and smaller works are related to each other in terms of scale and structure. It also aims to increase awareness by bringing these features to the fore. It is hoped that the study will contribute to future studies to be done on this subject.

5. ACKNOWLEDGMENT

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