

COMPARATIVE ANALYSIS OF THE DEVELOPMENT PROCESS OF MOSQUES IN TURKISH AND IRANIAN ISLAMIC ARCHITECTURE

TÜRKİYE VE İRAN İSLAMİ MİMARİSİNDE YER ALAN CAMİLERİN GELİŞİM SÜRECİNİN KARŞILAŞTIRILMASI

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Abstract

As old civilizations, Turkey and Iran are rich in architectural heritage. Islamic period has played a crucial role in emergencing a distinct type of Islamic architecture of them. Moreover, the similarities of the historical periods fostered cross-cultural relations and artistic interactions that produced, in particular, the architectural characteristics of each period, a phenomenon that is even more important when comparing the Seljuk period in Turkey and Iran. The reason for this lies in the richness of architecture of the Seljuk period that both countries have in common. In this regard, the mosque has played a significant role as a socio-political center in both countries. Therefore, the present study aims to better understand the mosque structure in the two countries and to convey the religious values and social functions of cross-cultural architectural design as a guideline for the design of contemporary mosques. The results reveal three patterns for mosques in both countries, highlighting similarities and differences between them. Turkish mosques were influenced by Byzantine and Iranian architecture, while Iranian mosques were inspired by the the ancient Sasanian architecture and pre-Islamic religious structures in Iran.

Keywords: Turkish mosques, Iranian mosques, Seljuk, Ottoman, Safavid.

Öz

Türkiye ve İran uzak geçmişten bu yana çeşitli medeniyetlere ev sahipliği yapmış olup mimari açıdan oldukça zengindir. İki ülkenin siyasi, ekonomik, sosyal ve kültürel güç açısından gelişmesinde önemli rol oynayan dönemlerden biri de İslam dönemidir. İslam'ın iki ülkeye gelişi ve İslami hükümetlerin kurulması, özel bir İslam mimarisi türünün oluşmasına yol açmıştır. Ayrıca, farklı devletlerde tarihi dönemlerin benzerliği, kültürlerarası ilişkiler ve sanatsal etkileşime sebep olmuştur; bu da özellikle mimarlık alanında her döneme ait farklı özellikleri ortaya çıkarmıştır. Bu, Türkiye'deki ve İran'daki Selçuklu dönemini karşılaştırırken daha önemlidir. Bunun nedeni, iki ülke arasında ortak olan Selçuklu dönemi mimarisinin ve kentleşmesinin zenginliğinden kaynaklanmaktadır. Bu bakımdan cami, her iki ülkede önemli bir üs olarak sosyo-politik alanda ve kentleşme sürecinde büyük rol oynamıştır. Dolayısıyla, hazırlanan çalışma iki ülkedeki cami yapısının iyi anlaşılmasını, kültürler arası mimari tasarımın dini değerlerini ve sosyal işlevlerini çağdaş camilerin tasarımına bir rehber kılavuzu olarak aktarılmasını amaçlamaktadır. Bu bağlamda, Selçuklu-Osmanlı dönemi camilerinin Selçuklu-Safevî dönemi camileriyle karşılaştırılacak bir analizi ele almıştır. Sonuçlar camilerdeki gelişim sürecinin her ülkede üç özel kalıba ayrıldığını, aralarında bulunan önemli benzerlikleri ve farklılıkları, Türkiye camilerinin Bizans ve İran mimarisinden etkilendiğini ve İran camilerinin İslam öncesi İran'da var olan dini yapılardan özellikle eski Sasani dönemi mimarisinden etkilendiğini göstermiştir.

Anahtar Kelime: Türkiye camileri, İran camileri, Selçuklu, Osmanlı, Safevî.

INTRODUCTION

In the 7th century AD, when Islam emerged as a dominant force, it had a profound influence on numerous nations and societies. This influence led to the gradual conversion of these regions to Islam and the emergence of a new civilization that became known as Islamic civilization. This spreading civilization stretched from the eastern foothills of China to the western foothills of Spain, and from the southern foothills of Africa to the northern climes beyond the Caucasus. In this vast context, the mosque occupied a prominent position within Islamic architecture. It served in many ways as a sanctuary for religious worship, a place for settling many disputes, and for performing various rituals. Consequently, the mosque occupied a unique and central place in the architectural landscape of Islamic societies, distinct from other building types (Osim, 2021). The mosque is involved a collection of various arts, and since the mosque in Islamic countries was considered a social base for Muslims (Triayudha et al., 2019, p. 143), special attention was paid to its decoration. But the early mosques of Islam were very simple and modestly built. The purpose of the mosque determined its layout: a square courtyard where worshippers sat, an ablution basin in the center, and a pillared porch. On one side of the courtyard, which served as a shelter, canopy, and place of study, on the other side, which faced Mecca, the main building of the mosque was built (Kaptan, 2013, p. 9).

With the spread of Islam, the need to establish large and solid buildings gradually arose, and to meet this need and reflect their power and sovereignty, large and adequate mosques were built by the great Islamic governments. With the arrival of Islam in both Turkey and Iran, mosques developed into the most important religious, cultural, and political bases. The early Anatolian mosques imitated Arabic types, and gradually some of them were influenced by Iranian mosques in terms of porches and entrances to the nave (Nusrat Poor et al., 2015, p. 88). Later, with the beginning of the 7th century, the emphasis on the separate domed room as a type of mosque was increased (Goodwin, 2003, p. 94). At that time, covered mosques without courtyards were very popular. In the early Ottoman period, mosques have a simple cube with side atriums very similar to the early mosques in Iran, so the central dome is larger and plays the main role in the spatial organization (Hillenbrand, 2004, p. 168). The similarities and commonalities of the historical periods lead to cross-cultural relations, cultural and artistic interactions in each period; they have revealed different characteristics of each period, especially in the field of architecture. This is even more important when comparing the Seljuk period in Turkey and in Iran. The reason for this lies in the richness of the architecture and urbanization of the Seljuk period, which both countries have in common. In the post-Islamic

period, the mosque as a place of worship played an important role in the architecture and urbanization process of the two countries. Therefore, this study aims to investigate the similarities and differences between the architecture of mosques from the Seljuk-Ottoman period in Turkey and the Seljuk-Safavid period in Iran using an analytical approach. So, this helps to better understand the historical and cultural context of the two countries.

In line with the above objective and considering the unique characteristics of mosques in Turkey and Iran, this study attempts to answer the following questions:

- 1- How has the development of mosques in Türkiye and Iran taken place?
- 2- What is the origin of the developed pattern of mosques in these two countries?
- 3- What are the similarities and differences between the mosques of these two countries?

Answering these questions can help to better understand the artistic values and respect the authentic culture of both countries, because the architecture of mosques represents the history, artistic styles, and cultural influences in each country. On the other hand, knowledge of the differences and similarities between the patterns of mosques in two countries can promote cultural exchange and international cooperation in religious and cultural fields. Moreover, architects and designers can benefit from each other's experiences and ideas in developing and improving mosque architecture in the two countries.

1. Method

The study has been prepared qualitatively by first attempting to examine and categorize the historical period of mosque development from the Seljuk-Ottoman period in Turkey and the Seljuk-Safavid period in Iran by using the library method and reviewing the literature. In this context, various historical-architectural periods related to the post-Islamic period in both countries were studied, and the characteristics of mosques and their design patterns were examined. Then, through the description, analysis, comparison and contrast of examples, an attempt is made to show the differences and similarities between the mosques of the two countries through the analysis of the ground plan structure. At the end, the results are presented in the form of descriptive tables that contain significant information that can be provided to architects, designers and researchers interested in this field.

2. Theoretical Framework

The natives of Turkey, like most civilizations, have had different rituals. One of their most important religious habits was the worship of ancestral spirits, the worship of the sky spirit, and

the worship of the mountains (Shidaneh Morid et al., 2021, p. 103). They also accepted Buddhism, welcomed Christian missionaries who were Nestorian priests, and converted to Mani and Zoroastrianism (Güngör, 2007, p. 76). With the recognition of Christianity and its expansion, especially during the Byzantine era, there were tremendous changes in political, cultural, artistic and architectural aspects in the geography of Anatolia. Byzantine architecture began with the founding of Constantine I's imperial capital on the shores of the Bosphorus, Constantinople, a place where the art of numerous Eastern and Western artists came to be performed, whose art can be seen in churches and buildings known as the “Byzantine style”. Christian art and classical Roman art dominated at the beginning of the construction of this city. Over time, arches and domes were increasingly used under the influence of the culture and art of Asia Minor, Iran, and Syria (Yegül & Favro, 2023). After Islam and from the Seljuk to the Ottoman period, significant architecture and urban planning were developed in terms of ecological and formal features. In the post-Islamic period, significant architectural developments emerged in the regions ruled by the Seljuks and the Ottomans. While the Seljuk period represents a unique architectural style that emerged from the interaction of Central Asian, Islamic and Persian cultures, the Anatolian Seljuk period enriched this style by adding local elements (Davidson & Simpson, 2018, p. 51). The Ottoman Empire, on the other hand, built marvelous buildings, especially mosques, stand out for their aesthetics and functionality. The development of Islamic art and architecture of the Ottoman Empire is still of great cultural and historical significance today (Evliyaoğlu, 2022).

The history of religions in Iran changed greatly from ancient times to the advent of Islam. In ancient times, Zoroastrianism was one of the main religions of Iranians, and the sacred texts of the Avesta were written. This religion also believed in several sun and Mahdavi worships. During this period, architecture was also inspired by solar and religious patterns, and symbols related to these beliefs could be seen on buildings and religious facades. The history of religions in Iran thus not only shows religious developments, but also had a profound influence on architecture in this region. With the advent of Islam in the 7th century AD, this religion quickly supplanted the earlier religions of Iran, and Iranian architecture was also combined with Islam. Mosques and religious buildings were built in Islamic architecture, which usually included domes and minarets. During the Seljuk period, Iranian literature and architecture continued to develop and architectural preferences emerged. This period is famous for buildings that used bricks and ceramics with special designs and motifs (O'Kane, 2021). Although other periods of Iranian architectural history, from the Achaemenid to Safavid periods, are also considered

brilliant in their own way and are characterized by monumental dimensions, urbanism or artistry, the Seljuk period (11th–13th century) is widely regarded as a significant era in the history of Iranian architecture (Tosheva, 2021) from various points of view. As far as architectural innovations are concerned, for example, important architectural elements such as the pointed arch, the squinches and the domes on the pendentives were developed in the Seljuk period. The layout of the Four Iwan Mosque became famous and influenced Islamic architecture for centuries (Stierlin, 2005). In terms of materials and structure, the use of bricks, tile decoration and advances in construction techniques allowed for more ambitious and elaborate designs. Iconic buildings such as the Jameh Mosque of Isfahan, the Great Mosque of Kerman and the Alaeedin Hill bear witness to the architectural achievements of the Seljuks (Curatola, 2007). In the aspect of urban planning and infrastructure, it is noteworthy that the Seljuqs also made important contributions to urban planning, caravanserais and bridges, reflecting a broader development of the urban environment so that the cultural development, economic prosperity, and public security were maintained (Hillenbrand, 2004). After the year 1000 AD, Iran and Turkey followed a unique architecture in building mosques, which will be interpreted below:

2.1. The development process of mosques architecture in Turkey

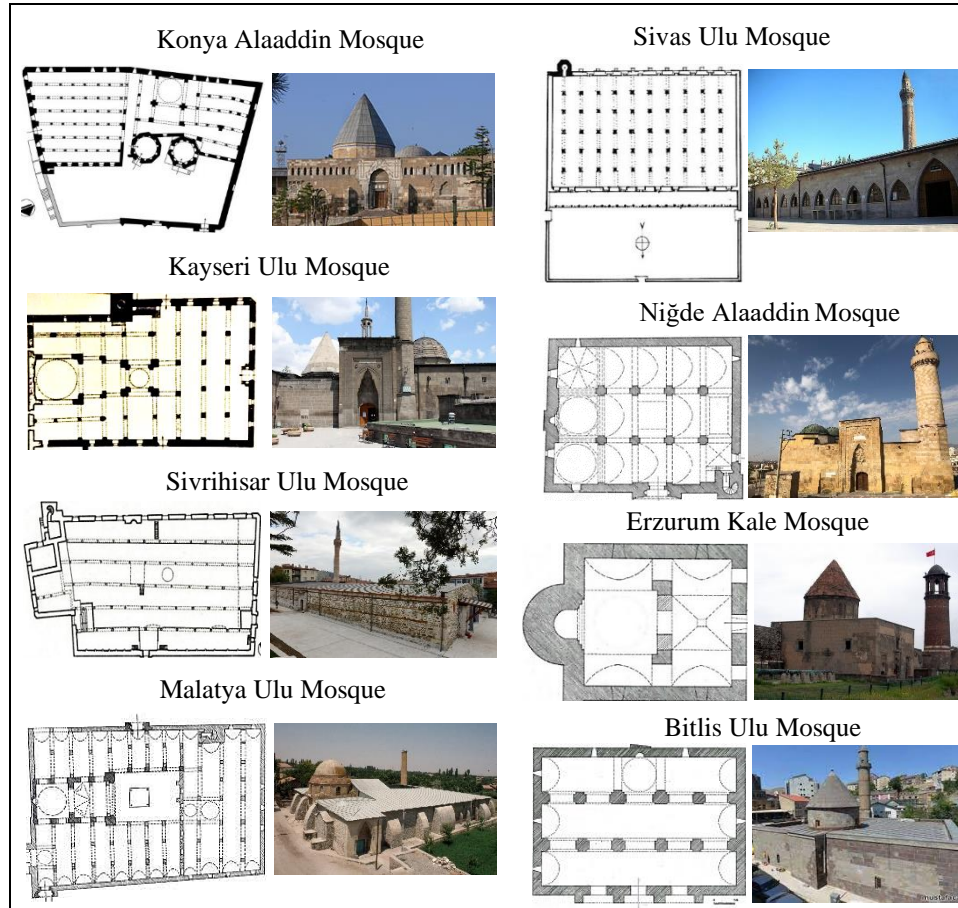
2.1.1. Early seljuk period mosques

The architecture of the early Islamic period in Turkey followed Iranian mosque patterns. The most enduring buildings constructed by the Seljuks in Turkey were mosques, schools, and monasteries, which used the highest quality materials and the finest arts (Hillenbrand, 2004, p. 59). Ancient Anatolian mosques, such as the Alaaddin Mosque in Konya and the Ulu Mosque in Sivas, were built on the model of the Prophet's first mosque; later they were built as enclosed mosques due to climatic conditions. Therefore, the ablution area was moved inside the mosque (Aslanapa, 2004, p. 107). During this period, closed and domed mosques without courtyards were built as a priority, such as Erzurum Kale Mosque, Kayseri Ulu Mosque, Niğde Alaaddin Mosque, Sivrihisar Mosque, Malatya Ulu Mosque, and Bitlis Ulu Mosque. Hillanbrand believes that Anatolian mosques imitate the form of Arab mosques and inspired by Iranian mosques. According to him, the origin of the dome shapes belongs to Anatolian architecture from the beginning, and they became more prominent in the Ottoman period as a sign of building technique and religious power (Hillenbrand, 2004, p. 153).

As shown in the Table 1, generally, mosques from this period have a simple and concise form, like the Prophet's Mosque. The interior was designed with the aim of aligning with and

emphasizing the qibla. Enclosed mosques without courtyard were preferred. Ornamental, geometric, and floral patterns in Byzantine style were used as decoration.

Table 1. Examples of early Seljuk mosques (Çobanoğlu, 2012; modified by the author)

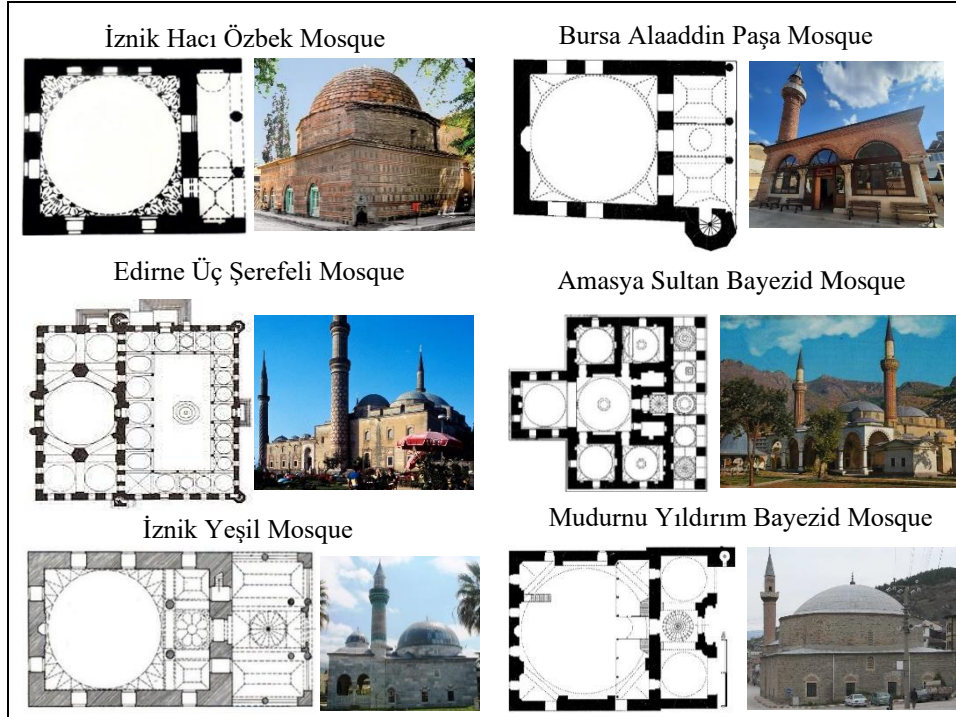


2.1.2. Early ottoman period mosques

Mosques from this period, such as the Alaaddin Mosque in Bursa, generally have simple design as a square plan, a portico on the side, a simple cube in the volume, and single-domed structures without minarets. They are characterized by their architectural simplicity and traditional Turkish motifs and wooden materials. Another example from this period is the cruciform (T) shape first seen in the Amasya Sultan Bayezid Mosque. The T floor plan connects the axis of the nave with the axis of the mihrab. In this way, besides the mihrab and the main nave, which is covered with a dome, the two side wings are also covered with a dome (Mustafa & Hassan, 2013, p. 447). The influence of Byzantine architecture can be seen in the mosques of this period. The greatest example of this is Hagia Sophia, which had not played a role in Turkish mosque architecture until then, was the use of a semi-dome along the axis of the mihrab, which supported the main dome from two sides (Spahic, 2008, p. 63). Hillenbrand emphasizes that

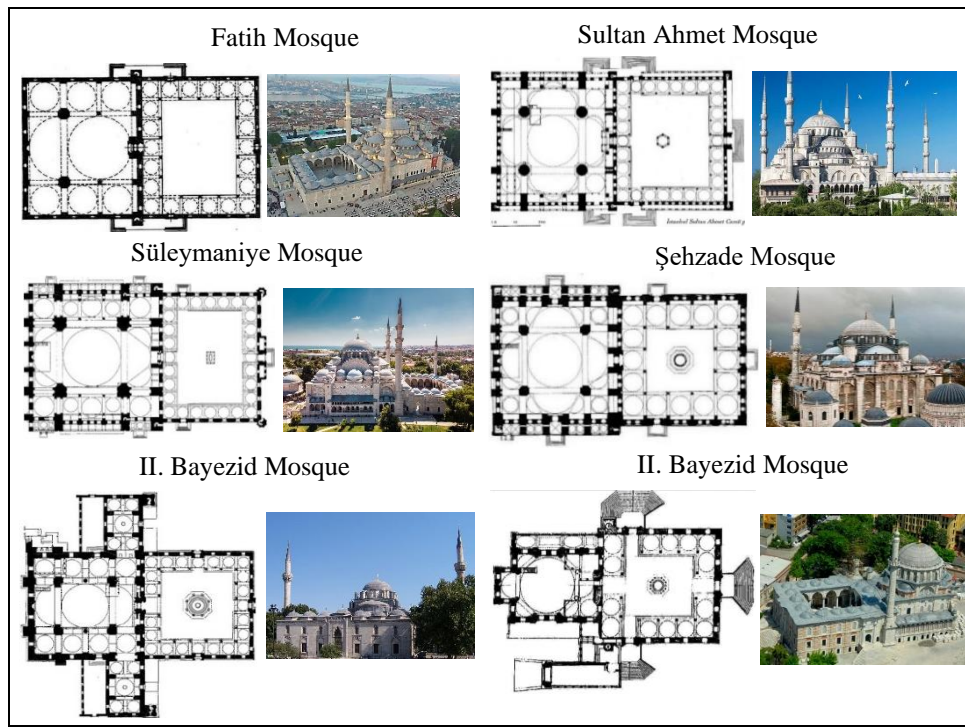
the mosques of this period show traces of the entrance form common in Middle Byzantium as well as the simple mausoleum form common in the Islamic world and the features of simple Persian mosques (Hillenbrand, 2004, p. 154-157).

Table 2. Examples of early Ottoman mosques (Çobanoğlu, 2012; modified by the author)



2.1.3. Late ottoman period mosques

As a result of the progress of the Ottoman Empire and the strong state it established in Istanbul, there were important and wonderful developments in religious buildings, especially mosques. One of the most important buildings representing the splendor of this period is the Fatih Mosque. The construction of semi-domes that reinforced and supported the main dome of the mosque and the arrangement of a large courtyard became an integral part of the architectural features of this period (Şahin, 2021, p. 500). Another feature is the widespread use of a huge *Shabestan* form, consisting of four massive columns in the central nave. In such a system, the balanced distribution and placement of four columns in the center of the mosque offers various possibilities in terms of spacing: providing a large area according to the number of worshippers, arranging the interior in accordance with the direction of the qibla and thus ensuring spatial hierarchy and diversity, adapting the *Shabestan* to human and modular proportions, continuity and combination of spaces and creating unity in the spaces of the *Shabestan*, narrowing the openings and easily ensuring the stability of the structure, widening the nave towards altar and ensuring the use of natural light and ventilation (Tuluk, 2006, p. 282).

Table 3. Examples of late Ottoman mosques (Çobanoğlu, 2012; modified by the author)

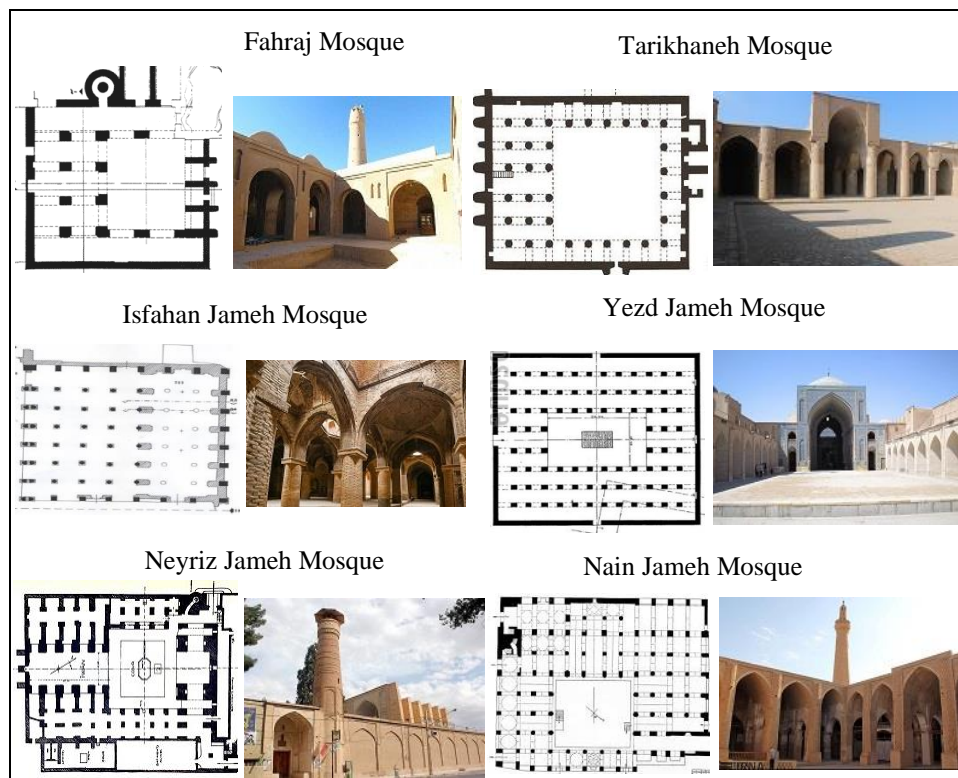
2.2. The development process of mosques architecture in Iran

2.2.1. Early islam period mosques

In the early years of the arrival of Islam in Iran, unique mosques were built. The mosques of the early Islamic period in Iran, known as *shabestan* (شهبستان)-based mosques, followed the model of the Prophet's Mosque in terms of the quality of the covered space inside and its connection with the courtyard, so they have columnar *shabestan* (naves) with equal openings and are covered with arches. The view of the courtyard that emerges from these naves is a round-arched view, where the view continues along each arch. The arches are built along the qibla direction and in odd numbers. To emphasize the direction of the qibla, the arch leading to the altar is higher and has a larger opening. One notable feature of these early Iranian mosques is the presence of columnar *shabestan* or nave, which were designed with equal openings and covered with arches. This architectural choice not only provided structural support but also created a visually appealing space. The naves are particularly noteworthy for their round-arched views, where each arch frames a unique perspective of the courtyard, forming a continuous visual journey along the arches. These architectural features, as observed in the early Iranian mosques, are a testament to the artistic and structural innovations that emerged during the early years of Islamic influence in the region. They not only reflect the aesthetics of the time but also

the spiritual and functional aspects of mosque design, making them significant historical and architectural landmarks (Taheri et al., 2019, p. 21).

Table 4. Examples of Early Islam Mosques in Iran (Haji Qassemi, 2004; modified by the author)

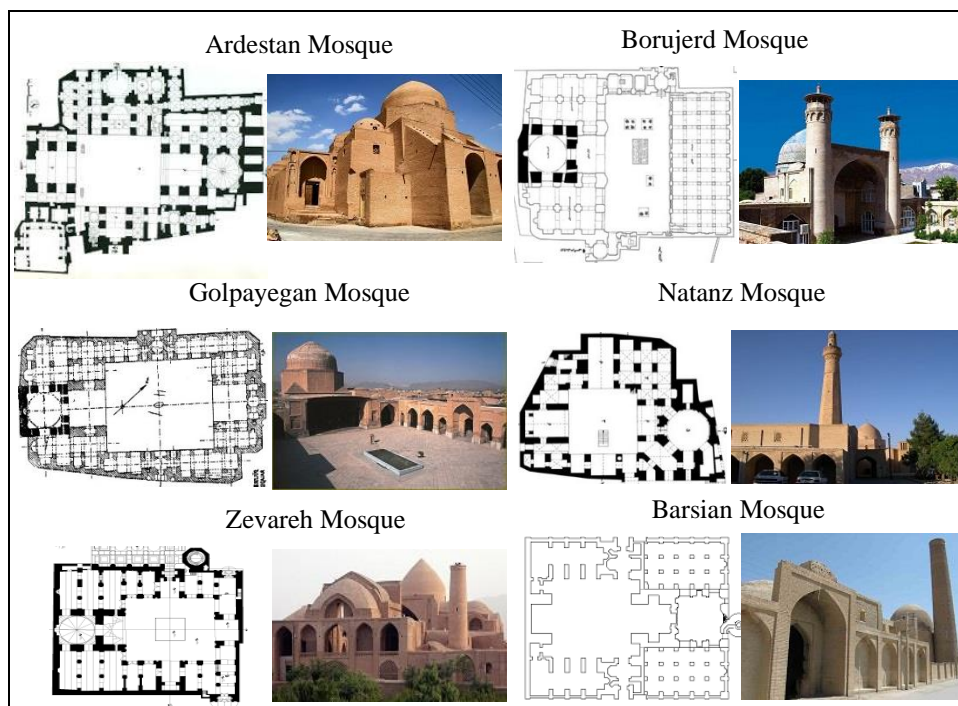


2.2.2. Seljuk period mosques

The groined vault (Chahar Taq) structure was the most important spatial unit of Iranian architecture in the pre-Islamic period. It had a religious function, was the symbol of the Zoroastrian religion and the place where the sacred fire was kept. This construction system, often used in places of worship (fire temples) in the pre-Islamic Zoroastrian religion, continued to be used in mosque buildings after the conquest of Iran by Islamic armies (Moradi & Keall, 2019, p. 27). These vaulted structures, sometimes with gardens and sometimes without gardens, represent the primitive structural form of most Iranian mosques (Dariush et al., 2020, p. 66). The groined vault (Chahar Taq) is considered the main core of Iranian mosques (Shokoohi, 2003, p. 15). In fact, the introduction of a quadrilateral at the core of Iranian mosques, the direction of the qiblah and the importance of the mihrab hall became so great that this pattern has remained unchanged for centuries. Simple mosques with porches and single domes, while emphasizing the Iranian features of mosques, are an example of the movement towards the qiblah, which was also used in the Seljuk period mosques in Anatolia. From a geometric point

of view, the nature of the dome has no sides and is centered, but since it creates a covered and pillarless space, they used this type of mosques for prayer. Compared to the porch, the dome had more potential to become a mosque because it completely covered the space from four sides and compared to the uniform and extensive quality of the nave, it was unique and centralized. Therefore, the role of the mihrab inside the dome is geometrically crucial, and without it, it will be difficult to determine the direction of the qibla. Therefore, the dome and the mihrab were connected and the ‘dome on the mihrab’ became one of the most common architectural elements of mosques (Hojjat & Maleki, 2013, p. 11).

Table 5. Examples of the Seljuk Period Mosques in Iran (Haji Qassemi, 2004; modified by the author)

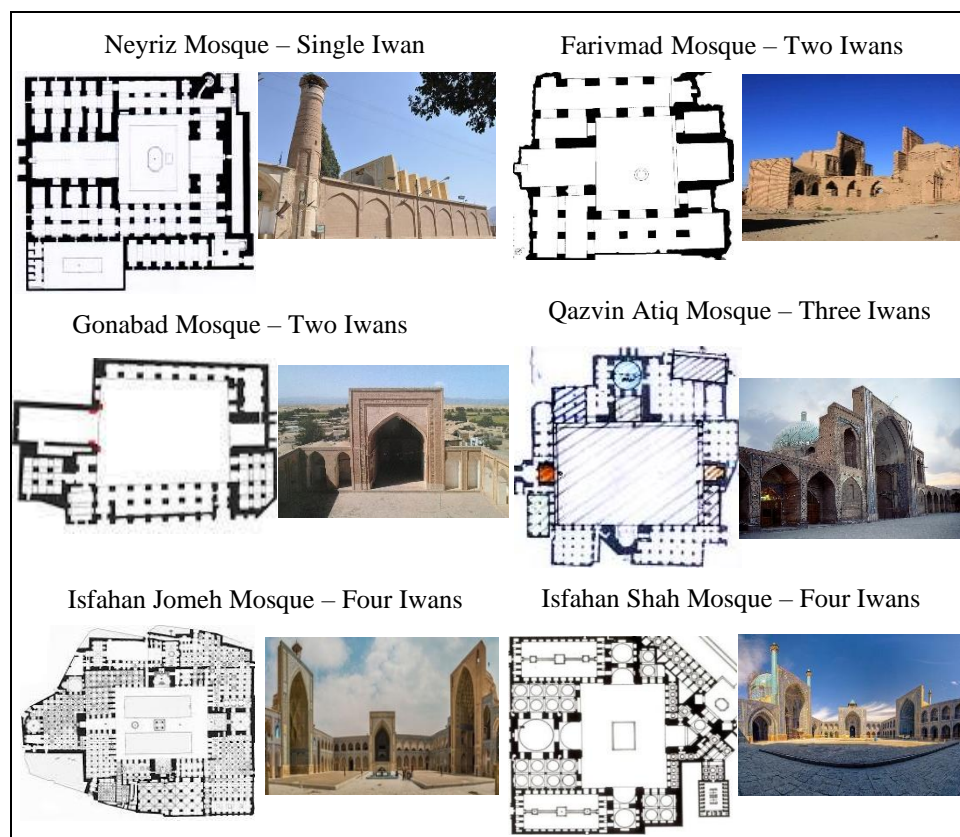


2.2.3. After seljuk to late safavid period mosques

The Safavid era witnessed a remarkable fusion of art and architectural innovation in the construction of Iwani mosques. These architectural marvels not only showcased the splendor of Iranian art but also reflected the deep-rooted cultural and climatic considerations of the region. his synthesis of art, climate consciousness, and architectural brilliance in the Safavid era continues to inspire awe and admiration among scholars and architecture enthusiasts alike. The emergence of iwans, the most important open space is the courtyard, in mosques at the beginning of the sixth century is described as a major change. A half-open porch (Iwan) plays as a connection between the main dome and the courtyard. During this period, mosques were built with one, two and three porchs. During the Safavid period (16th and 18th centuries),

especially in the eighth century, mosques were built with four iwans. In the light of the iwans the proportions were changed and the height increased. The development of mosque architecture reached its peak in the Safavid era, and the Iwani mosques were considered outstanding representatives of Iranian art (Hojjat & Maleki, 2013). Experts believe the iwan of the mosque first arose in the east of Iran, in Khorasan. The earliest Islamic iwans were erected in the south and in front of the mosque's main dome, and the northern porch was created to mimic the southern porch and to take advantage of the winter sun. The south porch may be used to avoid the summer heat because it faces the sun and is in the shadow (Nemati & Shahlaei, 2015, p. 77).

Table 6. Examples of the after Seljuk to Safavid Period Mosques in Iran (Haji Qassemi, 2004; modified by the author)



3. Findings and Discussion

The purpose of this research was to examine the developmental progress of mosque architecture from the Seljuk-Ottoman period in Turkey to the Seljuk-Safavid period in Iran. In this context, the formation and origin patterns of mosques and their similarities and differences were explored. Accordingly, mosques in Turkey were studied from the aspect of three different

periods. As a result, the developmental progress of mosques was divided into three main patterns (Table 7). For the early Seljuk period, the closed and domed pattern should be mentioned. This pattern follows the pattern of the primitive Prophet's Mosque and Iranian *Shabestan*. Covered and columnar spaces without courtyards are preferred, and a simple and single dome is used to emphasize the qiblah. The pattern of mosques in the early Ottoman period consists of a simple dome-shaped cube form, the addition of an iwan at the entrance and naves next to the main dome (Edirne Üç Şerefeli and Amasya mosques), and a T-shaped organization. Unlike the previous period, the central dome is emphasized and preferred instead of the qiblah. In the late Ottoman period, the model of the groined vault with a courtyard should be mentioned. Under the influence of Byzantine domes in mosques, two semi-domes are used as the back of the main dome along the qibla axis. Therefore, these domes create an undulating design on the facade of mosques. The succession of semi-dome spaces around the main dome and along the main axis makes the organization of the interior spaces stronger and more permeable. On the other hand, it divides the interior space and increases the emphasis and focus on the main dome.

Table 7. Patterns, characteristics, and effectiveness of Turkish mosques (Author)

Period	Early Seljuk	Early Ottoman	Late Ottoman
Mosque CoteORIZATION	<i>Shabestani & Simple Covered</i>	<i>Cubic & Simple Domed</i>	<i>Groined Vault with a courtyard</i>
Characteristics	<ul style="list-style-type: none"> - Inspired by the Prophet's Mosque and Iranian Shabistan Mosques - Installing a porch for the front door of the nave - Emphasis on the qibla direction by using a single and simple dome - Preferring covered mosques without courtyards - Use a simple dome 	<ul style="list-style-type: none"> - Simple domed cube - The addition of iwan to entrance and naves next to the main dome space - T-shaped plan - Emphasis on the central dome and not on the qibla direction 	<ul style="list-style-type: none"> - Using two semi domes along the axis of the qibla as a support for the main dome - A sequence of semi-domed spaces around the main dome and along the main axis - Huge arches to divide the space - Using four-columned system (Chahar Taq) naves - The wavy appearance created by multiple domes
Effectiveness	<ul style="list-style-type: none"> - Iranian Chahar Taq (groined vault) - Iranian <i>Shabestan</i> - Prophet's <i>Shabestan</i> Mosque 	<ul style="list-style-type: none"> - Inspired by Islamic shrines - Inspired by Iranian simple domed mosques (Chahar Taq) - Inspired by Bizantine entrnace 	<ul style="list-style-type: none"> - The form of Byzantine domes

Like the mosques in Turkey, the Iranian mosques were studied from the aspect of three different periods. Accordingly, the course of development of Iranian mosques was divided into three main patterns (Table 8). For the early Islamic period, simple covered *Shabestani* pattern should be mentioned. This pattern follows the pattern of the primitive Prophet's Mosque. Covered and columned spaces with an inner courtyard are preferred, and the cradle arch is used to emphasize the direction of the qiblah. The pattern of mosques in the Seljuk period consists of a single dome emerging from a groined vault (Sassanid Chahar Taq), a vestibule (Iwan) at the entrance, and *Shabestan*. The single dome plays a significant role in emphasizing the direction of the

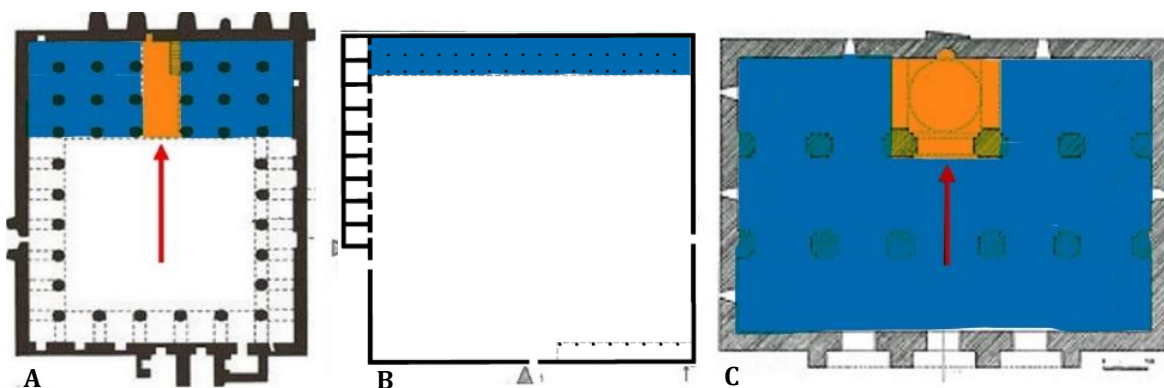
qiblah. The period between the post-Seljuk and late Safavid periods should be called the Iwani pattern. In this period, the porch of pre-Islamic buildings and the porch of Seljuk buildings are further developed, modified, and used as one, two, three, and four large iwans in mosques, which are semi-open spaces that perform a connecting function between dome and courtyard.

Table 8. Patterns, characteristics, and effectiveness of Iranian mosques (Author)

Period	Early Islam	Seljuk	After Selcuk to Late Safavid
Mosque CoteORIZATION	Shabestani & Simple Covered	Single Domed	One, Two, Three, Four Iwani
Characteristics	<ul style="list-style-type: none"> - Inspired by the Prophet's Mosque - Creating a deep perspective towards the inside and qibla by using the cradle arch system - Arching between two columns and emphasis on the qibla direction by using the cradle arch system 	<ul style="list-style-type: none"> - The addition of the pre-Islamic dome (Chahar Taq - groined vault) to Shabestan mosques - The addition of iwan to entrance - Sassanid Zoroastrian pattern (fire temple) became the main character of the mosque - Emphasis on the qibla direction by using domed groined vault 	<ul style="list-style-type: none"> - The pattern of single-porches (Seljuk) leading to the dome - The pattern of pair-porches leading to the dome - The pattern of four-porches (Safavid) leading to the dome - The combination of secondary courtyards (Safavid)
Effectiveness	<ul style="list-style-type: none"> - The form of the Prophet's Mosque - Pre-Islamic architecture of Iran 	<ul style="list-style-type: none"> - Inspired by Sassanid pattern (Chahar Taq of fire temple) 	<ul style="list-style-type: none"> - The porch form of pre-Islamic buildings in Iran and the porch form of Seljuk period buildings

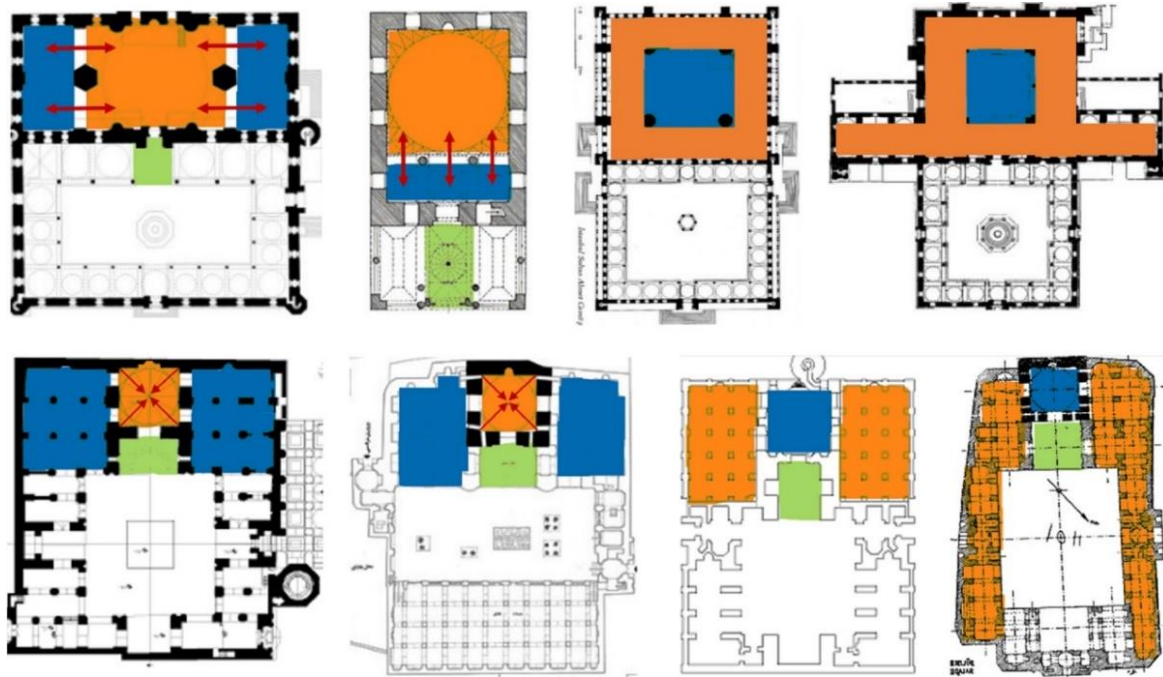
Based on the classification of the relevant patterns, several similarities and obvious differences between the mosques of the two countries can be identified. The pattern of the early mosques in both countries is inspired by the Prophet’s Mosque, the *Shabestani* covered and columned mosques. Iranian *Shabestani* mosques usually have a courtyard, while in Turkey they do not. Instead, Turkish *Shabestani* mosques have a simple dome, which Iranian mosques do not have. In Iranian *Shabestani* mosques, the orientation of the qibla is emphasized by the cradle arches, while in Turkish mosques this is done by a dome (Figure 1).

Figure 1. A) Tarikhaneh Mosque in Iran, with courtyard, without dome, emphasizing qibla direction by using cradle arches (Haji Qassemi, 2004; modyfied by the author). B) Prophet’s Mosque (Urey, 2010; modyfied by the author). C) Bitlis Ulu Mosque in Turkey, without coutyard, with a dome, emphasizing qibla direction by using a sigle and simple dome (Çobanoğlu, 2012; modyfied by the author).



In both countries, after the *shabestani* pattern, the pattern of simple domed mosques became popular. Their similarity lies in the fact that a porch (iwan) is used at the beginning of the domed space. The difference between Iranian and Turkish domed spaces is that in Iranian mosque architecture, the domed space behind the iwan is separated from the rest of the mosque spaces, while in the Turkish examples, the domed space tends to merge with the side spaces. The reason for this could be that in Iran, the domed space was added to the existing *shabestani* mosque, while Turkish mosques were built with domes for this purpose from the beginning. However, the obvious difference is that in the architecture of Iranian mosques, the naves are always placed separately on either side of the central dome, while in Turkish mosques the space of the dome and the nave are merged and a four-column nave is placed in the center (Figure 2).

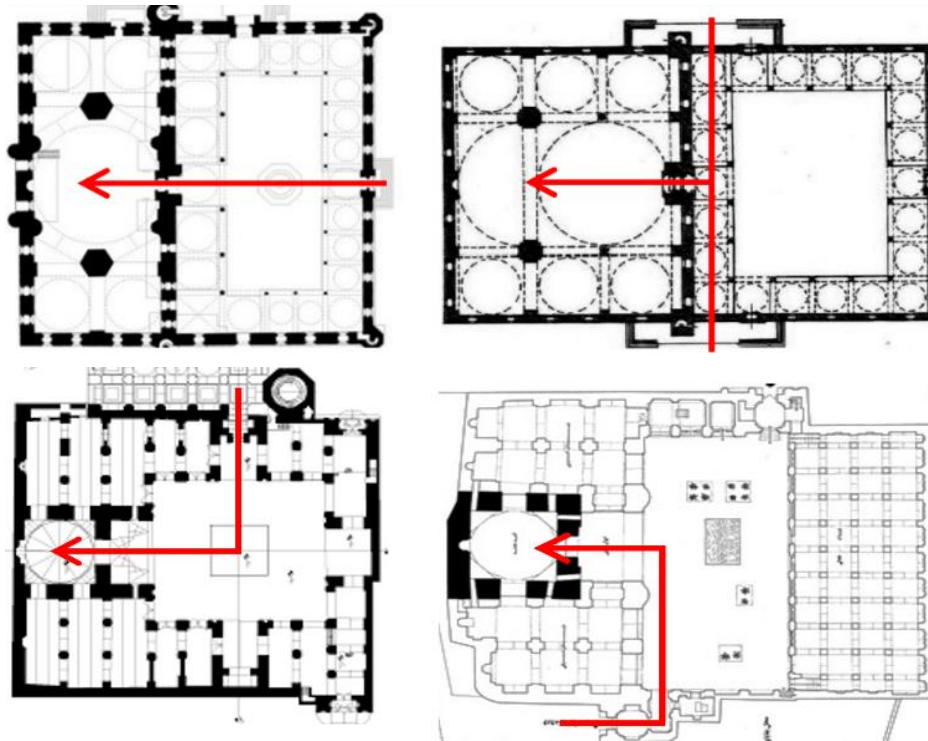
Figure 2. Top row: Turkish domed mosques (Çobanoğlu, 2012; modified by the author); Bottom row: Iranian domed mosques (Haji Qassem, 2004; modified by the author).



In Turkish mosques, when entering the courtyard, the hierarchy runs entirely in a straight axis, and entering the domed *Shabestan* is sometimes through the courtyard and the porticoes surrounding it, sometimes from outside the mosque area and directly into the *Shabestan*. In Iranian mosques, this is done through one of the side doors in the corner of the courtyard or behind one of the side porches. In this case, after the entrance gate and the porch behind the

porch, a visual connection is made with the mosque area. The entrance from the courtyard to the domed room is along the central axis (Figure 3).

Figure 3. Top row: Hierarchic approach to Turkish mosques (Çobanoğlu, 2012; modified by the author);
Bottom row: Hierarchic approach to Iranian mosques Iranian domed mosques (Haji Qassemi, 2004; modified by
the author).



CONCLUSION

In this particular research, the focus was on exploring the evolution of architectural patterns in Turkish and Iranian mosques. The overall goal was to scrutinize both the similarities and differences in mosque architecture of the Seljuk-Ottoman era in Turkey and the Seljuk-Safavid era in Iran, using an analytical methodology. In answering the first and second questions of the study, it became clear that the development of the architecture of Turkish mosques has its roots in the ancient architecture of this country. The influences of Byzantine architecture on the one hand and the influences of Iranian and Sasanian architecture on the other hand, as well as Islamic concepts against the background of Asia Minor architecture, eventually shaped the architecture of the Ottoman period. On the other hand, Iranian mosques are among the richest mosques in the Islamic world in terms of age, structure, content, form and function. In this

regard, generally, it is concluded that the mosques in Turkey and Iran evolved from the Seljuk to the Ottoman and Seljuk to Safavid periods, reflecting a mixture of regional and dynastic styles affected by cultural, religious and political developments. The Anatolian Seljuks were characterized by the use of courtyards, four iwan constructions (derived from Iranian traditions) and domed prayer spaces. The central dome has become a distinguishing characteristic of Ottoman mosques, which are often surrounded by semi-domes and smaller domes. The interior is usually one large, continuous area under the large central dome, demonstrating their aspiration to colossal size. The Seljuqs in Iran created their unique Persian-Islamic architectural style, which had a lasting influence on subsequent dynasties. They spread the four iwan floor plan (with iwans facing a central courtyard), in which a massive vaulted hall (iwan) serves as the entrance to the mosque. The central domed chamber above the prayer hall is a characteristic feature. The design of Safavid mosques incorporates Seljuk advances but remains deeply rooted in Persian-Islamic forms. The four iwan pattern remained popular, but the Safavid mosques were larger and more impressive. The iwans tend to be taller and majestically frame the entrance area.

Regarding the third question of this study, the results obtained, highlighting both the similarities and differences in mosque architecture between these two countries, can be significant from both academic and cultural perspectives. Both the Ottoman and Safavid mosques represent a further development of Islamic architecture that was affected by local cultural influences and political objectives. While the Ottomans emphasized grandeur with central domes and integration into the urban structure, the Safavids refined decorative beauty and the Iwan tradition. Mosques in both places show a dynamic interaction between form, function and symbolism that has shaped Islamic architecture over time. This article can contribute to a better understanding of the historical and cultural diversity within the Islamic world and to an evaluation of the influence of mosques in these two countries on religious and cultural life. In addition, it can contribute to our understanding of the religious and social functions of architectural design and serve as an important guide for future mosque construction and restoration projects.

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