

SELJUK PERIOD INTERIOR ARCHITECTURAL STYLE: COMPARATIVE ANALYSIS OF CARAVANSERAI IN ANATOLIA**SELÇUKLU DÖNEMİ İÇ MİMARİ ÜSLUP: ANADOLU'DAKİ KERVANSARAY ÖRNEKLERİNİN KARŞILAŞTIRMALI ANALİZİ****Turgut KALAY,**

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Abstract

Caravanserais are structures built by the Anatolian Seljuk State to meet the accommodation and security needs of merchants traveling along trade routes. These buildings have conveyed valuable information about the advanced architectural and artistic understanding of their period to the present day. However, many caravanserais suffered damage over time due to various reasons and have undergone restoration in order to survive. This study systematically examines the current conditions of caravanserais from an interior architectural perspective. Although caravanserais have been addressed in the literature by different disciplines, they have not been comprehensively analyzed in terms of interior architecture. Therefore, the study aims to emphasize their interior architectural significance, comparatively examine examples with mixed and closed plan types, and contribute to the transmission of their artistic and spatial characteristics to future generations. The research seeks to identify both common and distinctive features of caravanserais regarding spatial organization, architectural style, construction techniques, and decorative elements. The study framework was developed using information obtained from various written sources. Selected structures were analyzed through a qualitative case study method. In this process, the spatial organization, architectural style, construction techniques, and decorative characteristics of the examples were documented through on-site observations and photographic records, followed by comparative analysis. The comparison of four caravanserais revealed that, in addition to shared architectural and interior architectural characteristics, each structure also exhibits unique spatial stylistic differences. As demonstrated by the Sarıhan example, the active use of these buildings supports the preservation and transmission of their spatial character to future generations.

Keywords: Seljuk Period, Caravanserai, Interior Architectural Style, Interior Architecture, Seljuk Ornamentation.

Özet

Kervansaraylar, Anadolu Selçuklu Devleti tarafından ticaret yollarını kullanan tüccarların barınma ve güvenlik ihtiyaçlarına cevap vermek için inşa edilmiş yapılardır. Bu yapıların dönemin yüksek mimari ve sanat anlayışı hakkında aktardığı bilgiler yirmi birinci yüzyıla ulaşmıştır. Ancak zaman içerisinde çeşitli sebeplerle yıkıma uğrayan kervansaraylar günümüze ulaşırken birtakım restorasyonlara tabii tutulmuştur. Çalışma kapsamında kervansaray yapılarının güncel hâlleri, iç mimari bir perspektifle sistematik bir biçimde ele alınmaktadır. Bu bakımdan farklı kervansaray yapıları literatürde çeşitli disiplinler tarafından ele alınmış olsa da iç mimari açıdan sistematik bir şekilde incelenmediği görülmüştür. Dolayısıyla bu çalışma, kervansarayların iç mimari önemine dikkat çekmek, karma ve kapalı plan tiplerine sahip örneklerini karşılaştırmalı bir şekilde incelemek ve bu yapıların içerdiği sanat ve mekânsal göstergelerin gelecek nesillere nasıl aktarılacağı hakkında yönelim belirlemek için betimleyici olması bakımından önem taşımaktadır. Çalışmada, kervansaray örneklerinin mekân organizasyonu, mimari üslup, yapım yöntemleri ve süsleme özellikleri bakımından ortak ve farklı özelliklerinin ortaya konması amaçlanmaktadır. Literatürdeki çeşitli yazılı kaynaklardan elde edilen bilgilerden yararlanılarak çalışmanın strüktürü oluşturulmuştur. Konuyla ilgili edinilen veriler çerçevesinde incelenen yapılar, nitel araştırma yöntemi olan durum analiziyle ele alınmıştır. Bu analiz yöntemiyle seçilen örneklerin mekân

organizasyonu, mimari üslubu, yapım yöntemleri ve süsleme özellikleri fotoğraf tekniği ile belgelendirilerek yerinde incelenmiş; ardından karşılaştırmalı analizi yapılmıştır. Dört kervansarayın karşılaştırmalı analizi sonucunda ortak mimari ve iç mimari özelliklerin yanında mekânsal üslubunun kendi içerisindeki farklılıklarının var olduğu sonucuna varılmıştır. Sarıhan örneğinde görüldüğü üzere, bu yapıların aktif olarak kullanılmasının, bu mekânsal üslubun gelecek nesillere aktarılmasını destekleyeceği görülmüştür.

Anahtar Kelimeler: Selçuklu Dönemi, Kervansaray, İç Mimari Üslup, İç Mimarlık, Selçuklu Süslemesi.

Introduction

In the Middle Ages, materials such as silk and spices, highly sought after from the East, held great importance for many civilizations since antiquity. One of the affluent civilizations of the time, Egypt, initially engaged in the silk trade, and later, the Roman Empire imported silk from China and spices from India. The trade of these materials led to the emergence of two major international trade routes known as the “Silk Road” and the “Spice Road,” which acted as bridges between the East and the West. Caravans utilized these routes to facilitate the transport of silk and spices from the Far East, thereby influencing international relations and contributing to cultural exchange. The Silk Road, a vast network of caravan routes spanning thousands of kilometers, served as a channel for trading materials such as porcelain, silk, spices, paper, and precious stones, alleviating trade intensity over centuries (Aycibin, 2018, p. 27-28). This trade route started in Xi’an, China, with one branch passing through Kashgar in Uzbekistan and traversing Eastern Turkistan, Mongolia, Kazakhstan, Uzbekistan, Kyrgyzstan, and Turkmenistan to reach the shores of the Caspian Sea; the other branch crossed the Karakorum Mountains to reach Iran and subsequently Anatolia. Before entering Anatolia, one branch of the Silk Road reached the port of Latakia in Syria, while another significant branch entered Anatolian territory. During the Anatolian Seljuk period, the Silk Road extensively crossed Anatolia, connecting key points such as Erzurum, Sivas, Kayseri, and Konya in the eastern regions, extending north to Sinop and south to Antalya, forming the main arteries of trade (Günel, 2010, p. 135). The trade infrastructure established by the Anatolian Seljuk State played a pivotal role in transforming Anatolia into a trade hub. Strategically positioned fortified caravanserais emerged as vital components of this trade infrastructure, serving as centers for economic activity and cultural exchange.

Polvonov (2021, p. 81-83) stated that many monuments discovered along the Silk Road in the last century need to be revisited, providing general information about caravanserais along this route, including Doyakhotin in Turkmenistan, Bukhara in Azerbaijan, and Raboti-Malik in Uzbekistan. Dabanlı and Şimşek (2023, p. 103-104) researched the typologies and histories of caravanserais along the Konya-Antalya/Manavgat route in Turkey

to examine their tourism potential. Darendeli and Binan (2021, p. 137) studied the spatial organization of Seljuk caravanserais in Anatolia. Ficarelli (2014, p. 348) explained the form of caravanserais concerning geography, morphology, and landscape architecture. Although these studies contribute to the English literature by providing information on the history, typologies, tourism potential, and spatial organization of caravanserais, they offer limited insight into their interior architecture. The comprehensive examination of the spatial style of Anatolian Seljuk caravanserais and the detailed comparative analysis of their interior architectural elements highlight the uniqueness of this study.

In this context, the study aims to reveal the common and differing characteristics of caravanserais, significant commercial structures built during the Anatolian Seljuk period, in terms of their spatial organization, architectural style, construction techniques, decorative features, restoration processes, and current functions. To highlight similarities and differences, the study focuses on four caravanserais in Central Anatolia: Sarihan (Saruhan), located in Avanos on the Aksaray-Kayseri road; Sultanhanı, located in Tuzhisar Village at the 46th kilometer of the Kayseri-Sivas road; Alayhan, located on the Aksaray-Nevşehir road; and Öresin Han, located on the Aksaray-Nevşehir-Kayseri road. These examples were chosen because they represent two different plan types, courtyard-centered (mixed) and courtyard-less (enclosed), and all four have undergone extensive restoration. Another aspect of the research is to provide suggestions for preserving these restored structures for future generations, considering the historical and architectural significance of Anatolian Seljuk caravanserais and proposing their use for cultural and artistic activities.

Within the scope of the study, a literature review was conducted on both the commercial conditions during the construction period of Anatolian Seljuk caravanserais and their architectural approaches. Based on the data obtained, specific examples were selected, photographed, and visually archived. The study employs a case study method, defined as “a qualitative research approach in which the researcher collects detailed information about one or more bounded cases over time using multiple sources of data collection tools (observations, interviews, visual-audio research, materials, reports) and identifies the themes and contexts related to these cases” (Creswell, 2013, p. 97). Subsequently, a comparative analysis was conducted on the spatial organization, architectural style, construction techniques, and decorative features of the selected four caravanserais.

The Commercial System of The Anatolian Seljuk Period

The Anatolian Seljuk State strategically expanded its empire's borders throughout history to protect its economic interests and secure trade routes and key ports. Starting with Süleyman Shah's conquest of Antakya, they established control over important Mediterranean trade centers such as Antalya and Samsun, which facilitated maritime trade with regions like the Black Sea, Egypt, and other parts of the Mediterranean. The Seljuk dominion over the Mediterranean was further solidified with Sultan Alaeddin Keykubad's conquest of Alanya. Later, Sultan İzzeddin Keykavus secured the northern port by conquering Sinop, and Hüsameddin Çoban reinforced control over the Black Sea region by capturing Crimea to protect northern trade activities. The Anatolian Seljuk State carried out these conquests with a clear understanding of the importance of trade routes for reviving commerce alongside their political, administrative, and military power in Anatolia. By strategically capturing key cities and ports along the Silk Road, they prioritized the security and revitalization of these routes, contributing to the development of the national economy. Their efforts established strong trade connections between Anatolia, Southern Russia, Europe, Central Asia, and the Middle East, attracting wealthy merchants to the region (Usul, 2023, p. 1789).

Another significant factor affecting trade and transportation networks in Anatolia was the rise of large-scale states across Eurasia. These states encouraged the exchange of goods and facilitated increased demand for both bulk and valuable items (Malkov, 2014, p. 16). The Anatolian Seljuk State was among these powers, implementing various protective and incentivizing measures to promote economic and commercial growth while ensuring the security of trade routes during their conquests (Turan, 1946, p. 473). In line with these objectives, the Seljuks built caravanserais, large, fortified structures designed to protect caravans carrying valuable goods from the threats of bandits and nomadic attacks. These structures also provided food, shelter, and other services to travelers during their journeys. Caravanserais were strategically positioned along trade routes, typically 35-40 kilometers apart, ensuring regular stops for caravans (Kayaoğlu, 1981, p. 365; Günel, 2010, p. 139). Thus, Anatolian Seljuk caravanserais hold historical significance as key elements of the Seljuk Empire's trade and transportation networks in Anatolia. (Malkov, 2014, p. 16).

An Overview of Caravanserai Structures

The term caravanserai is defined in the Architectural Pocket Dictionary as "a large inn built along main roads for caravans to stay" (Hasol, 2019, p. 113). Osman Nuri Ergin describes caravanserais as "large buildings where travelers transporting goods with camels, horses, and mules would stay temporarily" (Ergin, 2013, p. 81). The most prominent

architectural works reflecting the Seljuk elite culture in Anatolia are exemplified by caravanserais located along routes spanning from Denizli to Erzurum and Kütahya to Bitlis. Thus, these structures serve as indicators of the power, cultural advancement, and organizational capacity of the Anatolian Seljuk State (Aslanapa, 1991, p. 112).

In his book, Ergin describes caravanserais as being built on rectangular or square plans, typically featuring a central courtyard referred to as the harim. According to his depiction, one side of the courtyard housed areas for both camels and their owners, while the other side was dedicated solely to camels for overnight stays. Caravanserais had large and sturdy gates, resembling fortress doors, which were guarded for security and remained closed except when necessary. Additionally, a smaller door, referred to as a “yavru kapı” (small door), was located within one wing of the main gate for essential use (Ergin, 2013, p. 86). Most caravanserais included prayer spaces (mescit), baths (hamam), veterinarians and doctors for camels and other animals, and repair personnel for maintenance when needed. Furthermore, the monumental architecture of caravanserais, adorned with inscriptions, intricate stone carvings, and functional design elements, conveys significant information about the art, culture, and architectural understanding of the Anatolian Seljuk period (Aslanapa, 1991, p. 112).

In general, Anatolian Seljuk caravanserais were designed to withstand the harsh climatic conditions of the region and to meet the needs of travelers and merchants. These structures, typically built with local stone, featured prayer spaces, ablution baths, enclosed areas for merchants and their animals, and marketplaces.

Spatial Analysis of Caravanserai Examples

This section analyzes the architectural style, decorative elements, and spatial organization of the Anatolian Seljuk period through selected caravanserai examples. The structures examined include Alay Han, Sultanhanı, Sarihan, and Öresin Han (Tepesi Delik Han), built during the reigns of different rulers. These structures were chosen for analysis because they were constructed in different periods, showcasing diversity in architectural and interior design styles, decorative elements, and construction techniques. Additionally, their spatial organization varies with different plan types, offering a strong basis for comparison.

Alay Han

Alay Han, located on the Nevşehir road, is known to have been built in 1192 by Sultan Kılıçarslan II and is recognized as the first caravanserai constructed in Anatolia (Gümüş & Karaman, 2016, p. 381). The structure was restored by the General Directorate of Foundations

and reopened to visitors in 2019 (Dinçer, 2021, p. 578). This caravanserai consists solely of a winter accommodation space and lacks a courtyard, classifying it as an enclosed plan type (Fig. 1). Its rectangular plan is symmetrically oriented along the north-south and east-west axes. Its distinction as the first caravanserai built in Anatolia makes Alay Han particularly significant. Initially in a state of ruin, the structure was reopened after extensive restoration.

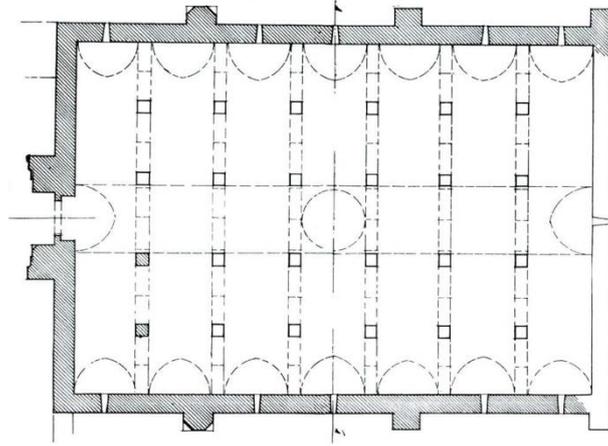


Figure 1. The Plan of Alay Han Caravanserai (Özgüç & Akok, 1957).

The grand portal (taç kapı) of Alay Han showcases the distinctive features of Anatolian Seljuk architecture, with its muqarnas-decorated niche (kavsara) and interlaced patterns on the frame. The kavsara of the portal is adorned with seven rows of scallop shell-patterned muqarnas, and the entrance opening is designed with a flattened arch. The pointed arch framing the kavsara is embellished with a single interlaced band, enhancing the aesthetic appeal of the door. On the right and left sides of the arch frame, two medallions are located, each containing floral motifs enclosed within their borders. The geometric composition of the portal's frame is complemented by a row of star motifs on the outer edge. A single interlaced band above the flattened arch continues along the side walls, beneath which mihrabiye niches are positioned. These niches feature kavsara decorated with two rows of muqarnas. Some of the original decorations of the niche on the right wall are still visible (Fig. 2). The semi-octagonal form of these niches harmonizes with the overall rhythm of the portal.

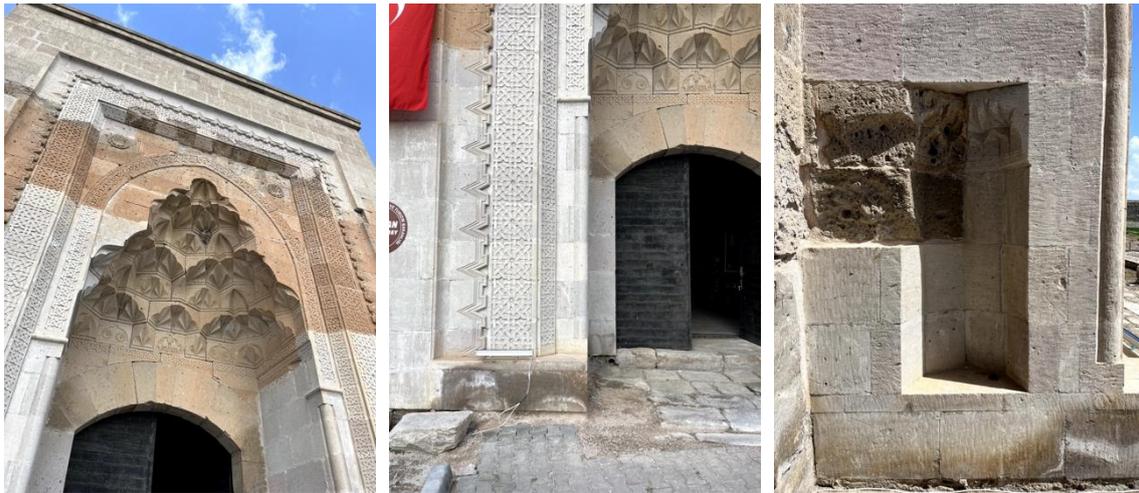


Figure 2. The Entrance Portal of Alay Han (From the Archive of the Authors).

The rectangular winter hall of Alay Han, constructed using ashlar stone, features vaulted ceilings that have been plastered. This plastering partially obscures the visibility of the construction material and stone craftsmanship, which are more prominently observed in other caravanserais. The winter hall is divided into five aisles, with the central aisle aligned with the entrance portal. This central aisle is covered by a barrel vault, and at its very center lies a dome. The dome, symmetrically positioned within the plan of the caravanserai, forms the focal point of the winter hall, creating a monumental atmosphere. The dome is supported by four-pointed arches, and the transition from the arches to the dome is achieved through a system of stalactite-decorated squinches (tromps) adorned with five rows of muqarnas. Unlike the scallop shell motifs typically seen in other examples, these muqarnas feature a more simplified “winged almond” motif. While this motif is more commonly associated with Ottoman-era structures, it is possible that the design was altered during the restoration process. The aisles to the right and left of the central aisle are divided into seven sections by vaults, with pointed barrel vaults covering the sections. These vaults are also plastered. Additionally, the floor levels of the aisles immediately to the right and left of the entrance aisle are raised above ground level (Fig. 3).



Figure 3. The Views from the Winter Hall of the Caravanserai (From the Archive of the Authors).

As the first caravanserai built in Anatolia, Alay Han reflects the distinctive characteristics of Anatolian Seljuk architecture through its unique architectural style, which is evident in its grand portal (taç kapı) adorned with muqarnas and interlaced patterns, as well as its dome, accessed via muqarnas-decorated stalactite squinches (tromps). These features collectively highlight the architectural and decorative sophistication of the Seljuk period.

Sultanhanı

Located in the Bünyan district of Kayseri, Sultanhanı is one of the best-preserved examples of Anatolian Seljuk caravanserai architecture and has given its name to the village where it is situated. It was commissioned by Sultan Alaeddin Keykubad I and completed between 1232 and 1236 (Özgerin 2011, p. 162). Sultanhanı underwent restoration between 2006 and 2007 and has since been leased to the municipality for tourism-related use (Karakuş 2022, p. 103). The caravanserai's plan type features a rectangular layout with a central courtyard, similar to Sarihan, and its design is symmetrically arranged (Fig. 4). As a mixed-plan type caravanserai, Sultanhanı includes both a courtyard and a covered winter hall. The entrance opens directly into the courtyard, flanked on the left by a double-arched arcade leading to intermediary spaces and, on the right, by a single-arched arcade connecting to enclosed rooms. The most distinctive feature of the plan is the elevated mosque pavilion (köşk mescid) located at the center of the courtyard.

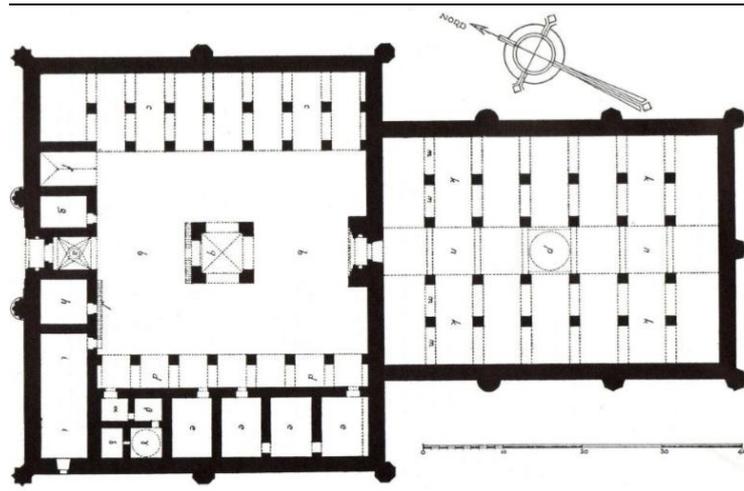


Figure 4. The Plan of Sultanhanı Caravanserai (Nonnamed, 2019).

The structure of Sultanhanı utilizes ashlar stone, a characteristic feature of Anatolian Seljuk architecture. Observing the exterior façade, it is evident that the stone used during restoration can be easily distinguished from the original material. The grand entrance portal (taç kapı) reflects the distinctive features of Seljuk architecture through its design and decorations. The kavsara (niche) of the portal is adorned with nine rows of scallop shell-patterned muqarnas. The entrance opening is formed with a flattened arch, where the use of two-toned stones adds aesthetic value to the door. Additionally, the caravanserai features a smaller auxiliary door (yavru kapı), which, while not part of the original structure, resembles those commonly used in caravanserais for security purposes. On the parts of the moldings (silmeler) that were not subjected to restoration, interlaced patterns and two rows of star motifs can be observed. However, much of the entrance portal underwent restoration, resulting in the absence of these original decorations in the restored sections. The remaining original parts of the portal show corner columns (köşe sütunçeleri) with geometric motifs, though these motifs are missing in the restored sections. The arch framing the niche employs the kaşkemer technique, with the composition above the niche continuing over the adjacent niches. Below this composition, on the side walls are mihrabiye niches, almost all of which have undergone restoration. The current version of the kavsara is decorated with three rows of scallop shell-patterned muqarnas (Fig. 5). At the junction of the arch framing the kavsara, traces of the original interlaced patterns can still be seen. On either side of the portal, half-fluted columns are embedded in the wall, enhancing the grandeur of the entrance.



Figure 5. The Entrance Portal of Sultanhanı (From the Archive of the Authors).

Inside Sultanhanı, facing the courtyard, there is a hall covered with a star vault. The upper sections of the walls on the right and left sides of this hall are decorated with geometric forms. The arch above the entrance door supporting the vault features a different decorative motif compared to the wall decorations. Opposite this entrance, the elevated mosque pavilion (köşk mescid) is prominently positioned in the center of the courtyard, accessible via stone stairs. The point where the stairs converge is adorned with muqarnas, adding to the aesthetic richness and uniqueness of the mescid. The right staircase has seven steps, and the left has six, both of which have been restored, while the uppermost steps have been left in their original state. The mescid features a lintel door, above which the kavsara (niche) is decorated with five rows of muqarnas. The arch framing the kavsara is adorned with interlaced geometric patterns (zencerek). On either side of the door are corner columns (sütunçeler), but the motifs on these columns have been damaged and are no longer legible. The door frame is decorated with a broken-line geometric composition, while the outermost molding features a row of star motifs. The mescid, designed on a square plan, is supported by four-pointed arches, and beneath these arches lies a ribbed vault, forming a covered area below the mescid. One of the distinctive features of Sultanhanı is the dragon motif positioned at the apex of the pointed arch across from the winter hall. This motif depicts two dragons with sharp teeth facing each other, a powerful decorative element of this caravanserai (Fig. 6).



Figure 6. Sultanhanı Courtyard Entrance (Left); Köşk Mescid (Right) (From the Archive of the Authors).

The mescid, designed on a square plan, is covered with a star vault. On the wall opposite the door, there is a window opening, which is likely a later addition, as it is not indicated in the original plan of the structure. The mihrab's kavsara (niche) is adorned with five rows of scallop shell-patterned muqarnas, complemented by a composition of decorative elements on the frame, creating an elegant and striking design (Fig. 7). Unlike typical examples, the mihrab does not feature corner columns (sütunçeler); instead, the transition from the niche to the kavsara is achieved with beveled edges (pahlı geçiş).

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Figure 7. The Views from the Interior of Sultanhanı Köşk Mescid (From the Archive of the Authors).

On the right side of the courtyard, the arcade space preceding the entrances to the rooms is divided into seven sections by six-pointed arches, a design frequently encountered in Anatolian Seljuk architecture. These seven sections are covered with pointed barrel vaults. The relatively new appearance of the stones in the arcades suggests that this section was previously in a ruined state and was almost entirely reconstructed during restoration. Access to the enclosed spaces behind the wall is provided through doors with lintels. However, the

lintels are slightly curved to create the appearance of a flattened arch (Fig. 8). This design element combines functionality with an aesthetic that aligns with the Seljuk architectural style.

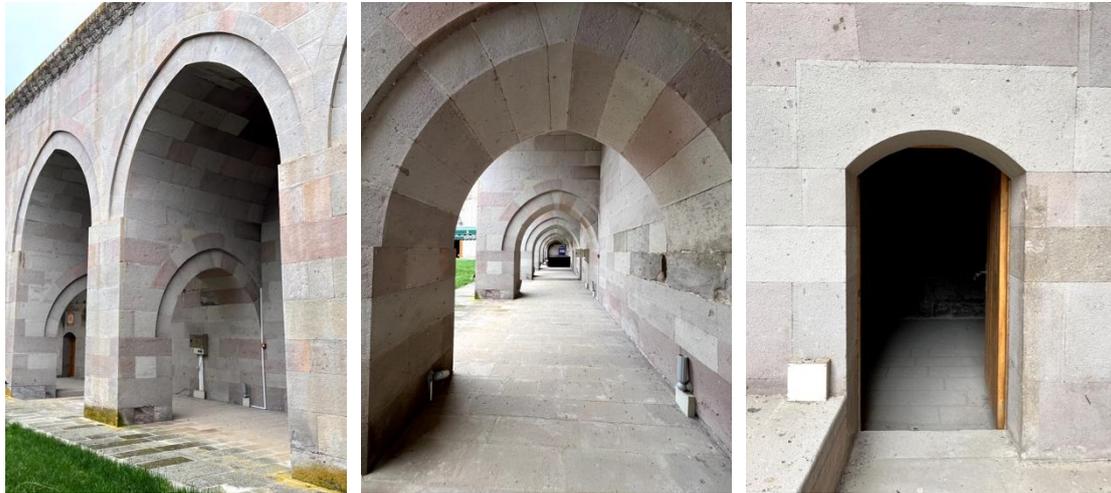


Figure 8. Sultanhami Arcade Gallery (Left); Entrance to the Bath (Right) (From the Archive of the Authors).

From the first door on the right side of the arcade, one enters the bath (hamam) section. The bath is covered with a dome, which includes ventilation holes at its apex. While the dome remains original, the walls have been patched during restoration (Fig. 9). Another door opens into a room featuring a square skylight at the center. The transition from the vertical walls to the ceiling is achieved with pendentives, a common architectural technique. This room is thought to have served as a dressing area, indicating its functional connection to the bath complex. The harmonious design of these spaces reflects the integration of practicality and elegance characteristic of Seljuk architecture.



Figure 9. Sultanhami Bath (Left); Dressing Area (Right) (From the Archive of the Authors).

The rooms accessed from the arcade are covered with pointed barrel vaults. The outer walls of these rooms feature one or two skylight windows, which taper inward. Known as

abajur windows, these are a common feature in Anatolian Seljuk architecture and significantly enhance the illumination of the interior spaces. The entrance portal (taç kapı) of the winter hall is another striking element, showcasing the distinctive features of Seljuk architecture through its design and decorations. The kavsara (niche) is adorned with nine rows of scallop shell-patterned muqarnas, and the entrance opening is formed with a flattened arch. The decorative composition above the kavsara extends to the kavsara's framing arch, which features a sequence of interlaced patterns, followed by a row of star motifs and another interlaced pattern. The corner columns (sütunçeler) of the portal, resembling three interwoven cylinders, are present in the original design but were not continued in the restored sections. The outermost moldings of the portal's frame are decorated with a composition of closed geometric forms set between two rows of interlaced patterns. The geometric composition above the arch continues onto the side walls of the portal, where mihrabiye niches are located. The niches, partially damaged, were restored with plain stones, making it difficult to determine the original number of muqarnas rows. However, the surviving portion of the niche on the right suggests it originally had three rows of muqarnas. The pediment of the mihrabiye is decorated with geometric compositions, while the surrounding frame features a row of star motifs (Fig. 10).



Figure 10. The View from the Enclosed Room (Left); Portal of the Winter Hall (Center); Mihrabiye Niche of the Portal (Right) (From the Archive of the Authors).

The winter hall has a rectangular plan type. It is divided into five aisles by pointed arches, and the central aisle is aligned with the entrance portal. This central aisle is covered entirely by a pointed barrel vault; however, there is a dome in the very center of this aisle. The transition to the dome is achieved through pendentives, which are decorated with geometric medallions. These medallions, a type of decoration employed in Anatolian Seljuk

architecture, are also found in the elevated mosque pavilion (köşk mescid) in the courtyard, but they bear different motifs. The dome has a magnificent design with two rows of muqarnas on its drum, openings with skylights below a row of decorations, and a row of interlaced patterns followed by a row of star motifs just above the pendentives. The second and fourth aisles are elevated compared to the others (Fig. 11). The aisles on the right and left sides of the central aisle, meaning those outside the central aisle, are divided into seven sections by vaults. These sections are covered with pointed barrel vaults.

On the left side of the courtyard, the summer section consists of two rows of arcades, forming an intermediary space. This area is divided into eight sections by pointed arches, which are also covered by pointed barrel vaults. In this part of the building, which, like the others, has undergone restoration, the original stone material of the structure can still be observed.

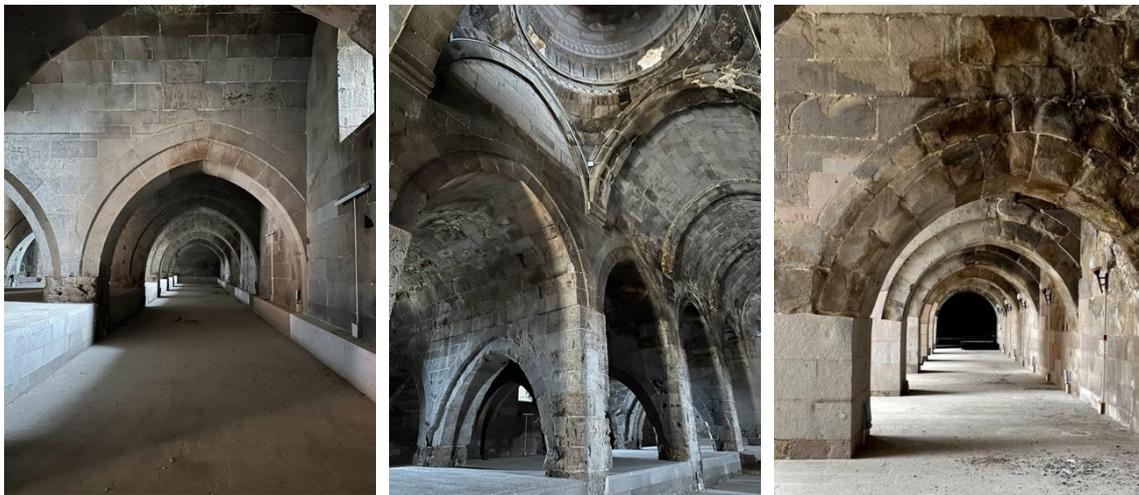


Figure 11. The View of the Winter Hall (Left); Dome Area of the Winter Hall (Center); Summer Section (Right) (From the Archive of the Authors).

Sarıhan

Located in Avanos on the Nevşehir-Kayseri road, Sarıhan (Saruhan) was commissioned by İzzettin Keykavus and completed in 1249 (Yetiş Ardıç & Çullu Kaygısız, 2017, p. 525). The restoration of the caravanserai, which had partially fallen into ruin, was completed in 1991 (Şahin & Halaç, 2023, p. 1551). Sarıhan is an example of a caravanserai with a rectangular plan centered around a courtyard. The plan exhibits a symmetrical design surrounding the courtyard (Fig. 12). With its covered winter hall and courtyard, Sarıhan features a mixed plan type. The entrance opens into the courtyard, with enclosed rooms on the right side and arcade spaces, referred to as the “summer section,” on the left.

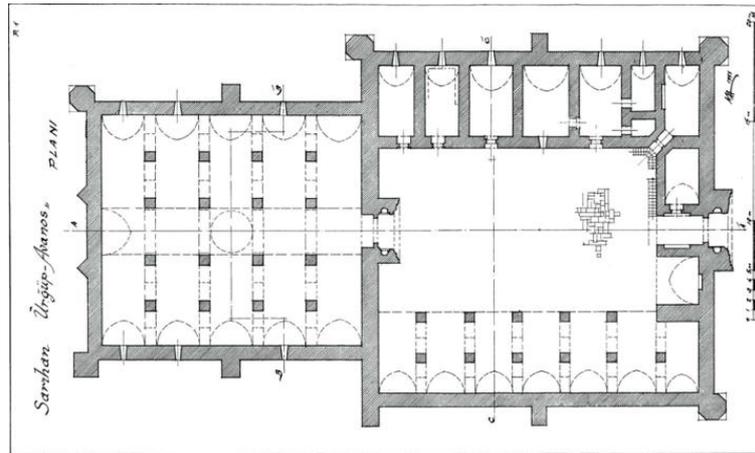


Figure 12. The Plan of Saruhan (Akok & Özgüç 1956).

Saruhan exemplifies the characteristic use of ashlar stone, a defining feature of Anatolian Seljuk caravanserais. The ashlar stone used in its construction reflects the advanced stone craftsmanship of the period, evident in the monumental entrance portal. Restoration also employed ashlar in accordance with the original structure, preserving material authenticity. The stones in the structure, which give Saruhan its name, display hues of yellow and brown. The caravanserai features a monumental entrance portal (taç kapı). At the center of the portal, the kavsara is adorned with muqarnas, an Islamic decorative element with early examples in Iran. This richly decorated niche mediates the transition from exterior to interior while enhancing the entrance's aesthetic. The flattened entrance arch is built with interlocking stones of different colors, and the geometric interlaced composition above it extends along the side walls. Each side wall features a mihrabiye niche, whose niche has a concave, shell-like form. Outside these niches, corner columns (köşe sütunçeler) are decorated with knotted geometric motifs (Fig. 13). The moldings on the upper restored sections transition to octagonal motifs toward the base, preserving the structure's original decorative elements.



Figure 13. The Construction Material of Sarihan (Left); Portal of Sarihan (Center) (From the Archive of the Authors).

At the entrance of Sarihan, there is a hall covered with a flattened barrel vault. On the right and left sides of the hall are pointed arches, with the right one leading to a room currently used as an administrative office. Above this entrance, the prayer room (mescid) is situated, accessible via stone stairs. The door of the prayer room is surrounded by moldings featuring octagonal motifs, and a small column (sütunçe) is visible as one move inward. The niche of the door is decorated with muqarnas, and interlaced patterns are present on the arch framing the kavsara.

The mescid has a rectangular plan, transitioning to its polygonal covering-giving it a star-like form-through four tromps. However, the use of reinforced concrete in the covering elements has moved the current state of the prayer room away from its original form. Despite this, the decorative elements on the tromps, particularly the muqarnas, enhance the aesthetic quality of the space. Similar muqarnas designs are also found in the mihrab's niche. The interlaced patterns on the entrance door of the mescid are echoed on the arch, framing the mihrab's kavsara, with the mihrab's frame also adorned with interlaced patterns (Fig. 14).

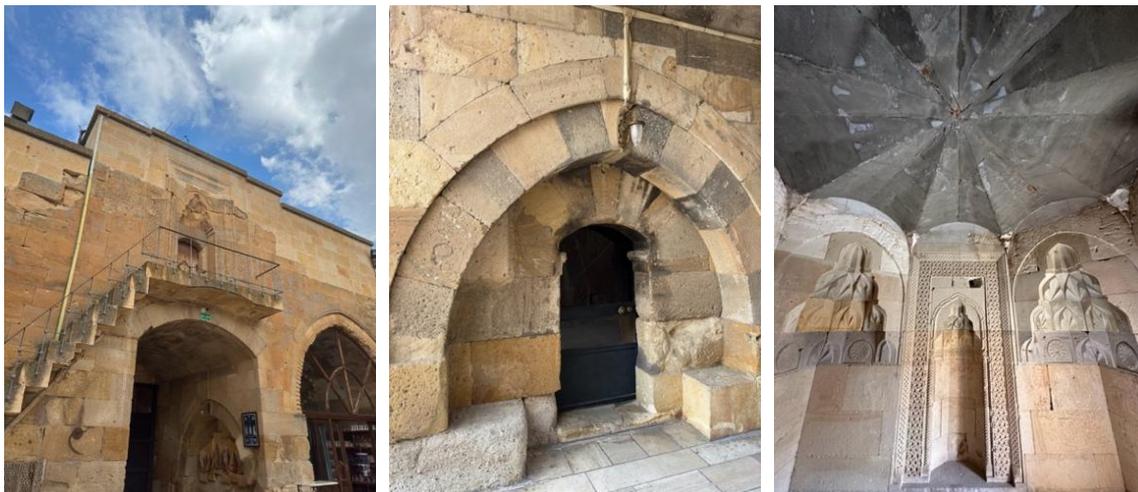


Figure 14. The Entrance Hall and Mescid Stairs (Left); Passage from the Entrance Hall to the Administration Office (Center); Interior of the Mescid (Right) (From the Archive of the Authors).

The courtyard, accessed through a small hall connected to the main entrance, occupies a central position within the plan. This layout highlights Sarihan's characteristic feature of having a central courtyard, a defining element of Anatolian Seljuk caravanserais. The yellow and brown tones of the stones are more prominently visible in the courtyard. On the right side of the courtyard, there are rooms accessed through two doors with niches (niches), two doors with lintels, and one lintel door with a blind arch above it (Fig. 15). Additionally, there are rooms with various functions that lack direct courtyard access but can be entered through

interior doors connecting the other rooms. The taç kapı (monumental portal) at the far end of the courtyard leads to the winter hall, a space where camels and their owners stay overnight. On the left side of the courtyard lies the arcade space, which serves as a transitional area.

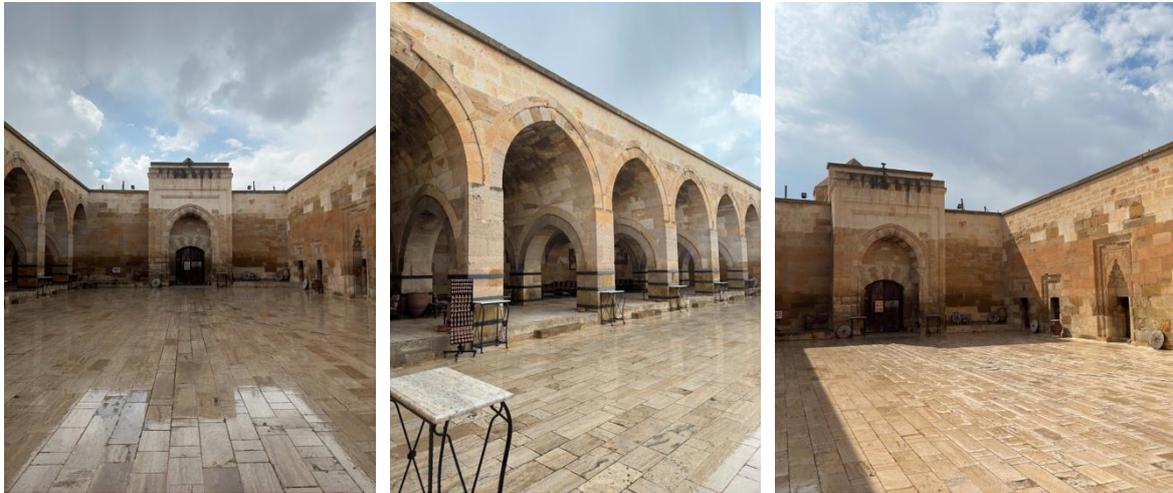


Figure 15. The Views from Sarihan's Courtyard (From the Archive of the Authors).

The first door on the right side of the courtyard leads to the caravanserai's bath. This lintel door is located within a pointed blind arch. However, as the door is locked, the interior could not be documented with photographs. The second door, which opens to the bath attendant's room, is adorned with five rows of muqarnas and is similar in decoration to the prayer room door. However, it differs from the prayer room door in having a star-motif composition on its frame. Upon entering, one encounters a space covered with a pointed barrel vault, a common structural element in Anatolian Seljuk architecture. The room is illuminated by a skylight designed in the outer wall. This skylight is inwardly widening with a sloped form to facilitate light entry (Fig. 16).

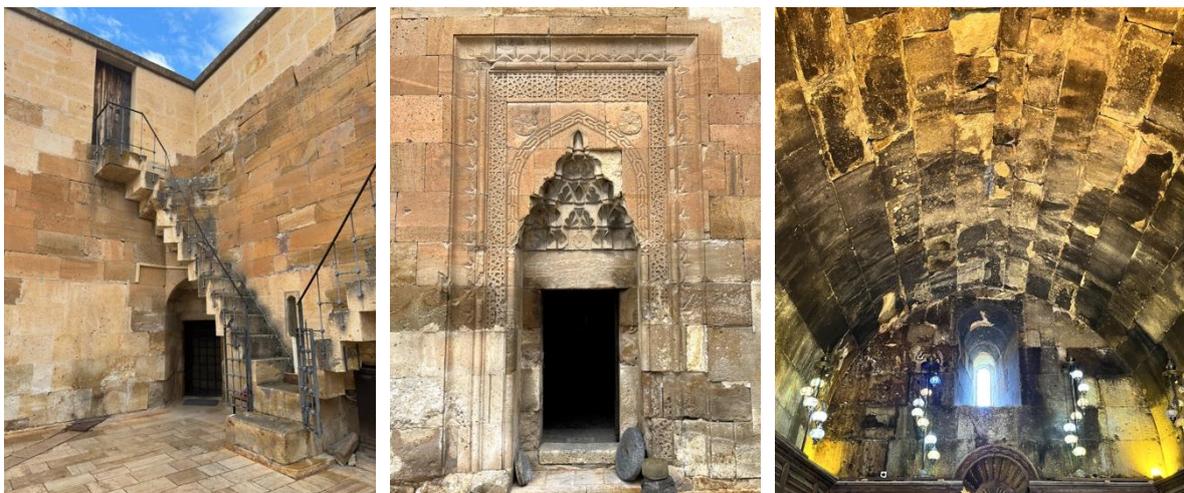


Figure 16. The Entrance to the Bath (Left); Decorated Door of the Enclosed Room (Center); Interior of the Enclosed Room (Right) (From the Archive of the Authors).

From the bath attendant's room, the bedroom is accessed through a flattened-arch doorway. Covered with a pointed barrel vault, it lacks a skylight or other natural light openings. Another door leads to the attendant's private bath, the smallest and most confined space of the caravanserai (Fig. 17). Currently, both rooms serve as storage. A door on the left opens into a space without direct courtyard access, indicating a secluded and possibly specialized function.



Figure 17. The Views from the Bath Attendant's Private Bath and Room (From the Archive of the Authors).

The door of the third covered room has the same decorations as the second door. This room also features a sloped skylight window, and unlike the second room, there is a niche to the left of the wall where the skylight is located. Additionally, there is a shelf attached to the left wall. As the shelf appears to have been added to the stone wall later, it is thought not to be part of the original structure. The fourth and fifth rooms also have skylight windows of the same type and are covered with pointed barrel vaults. Unlike the other rooms, the fourth room features shelves attached to both the right and left walls (Fig. 18). The fifth room has only one blind-arched niche on its right wall. Its door lacks an arch or kavsara and is accessed through a lintel opening, though the molding features a row of star motifs.

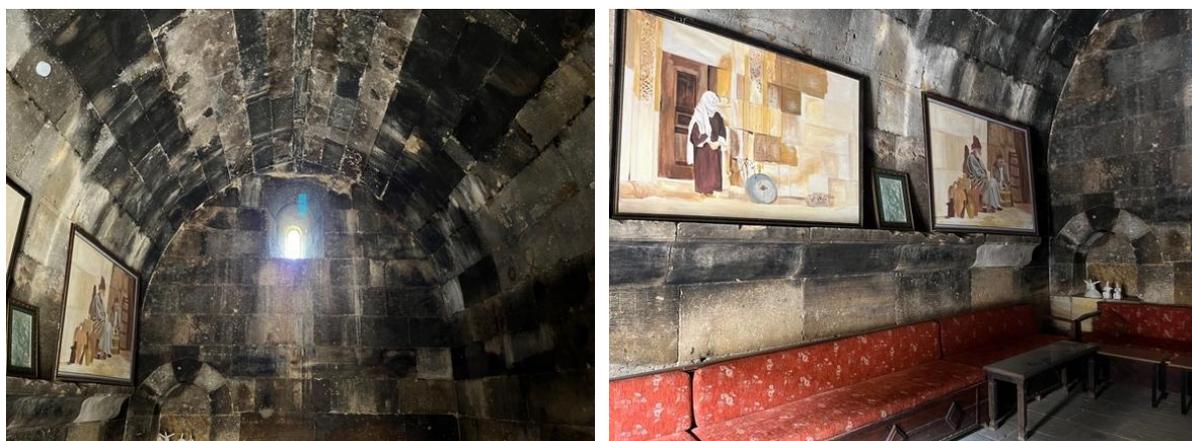


Figure 18. The Views from the Dark Rooms (From the Archive of the Authors).

Inside the courtyard is another large grand portal aligned with the caravanserai's main entrance. The winter hall can be considered one of the key elements of the caravanserai, to the extent that some caravanserais were built solely as winter halls. The fact that the hall is accessed through a taç kapı underscores its significance. The entrance to the winter hall features a pointed barrel vault and a niche. The positioning of the door within the arch adds depth to the entrance, giving it the impression of an iwan, a characteristic feature of Seljuk architecture. Compared to the main portal of the caravanserai, the niche of this door is more modestly designed, emphasizing the hierarchical difference between the two portals. However, the use of differently colored stones in the vault enhances the aesthetic appeal of the winter hall's portal. This use of two-toned stones is also evident in the curved stones of the flattened arch within the door. Although the main niche of the taç kapı lacks decoration, the kavsaras of the side niches are adorned with five rows of muqarnas, contributing to the richness and splendor of the portal's aesthetic. The arch framing the kavsara is decorated with interlaced patterns, while its surrounding frame features a geometric composition. The section referred to as the winter hall served as a shelter and accommodation during the harsh conditions of the winter season. The existence of this space illustrates the functional and utilitarian approach of the Anatolian Seljuk State. As with the rest of the caravanserai, the ashlar stone constructed the winter hall. Since no applications, such as plaster, were made that would damage the original state, the material is clearly visible. Like the other enclosed spaces in Sarıhan, the winter hall's entrance area is covered with a pointed barrel vault (Fig. 19).

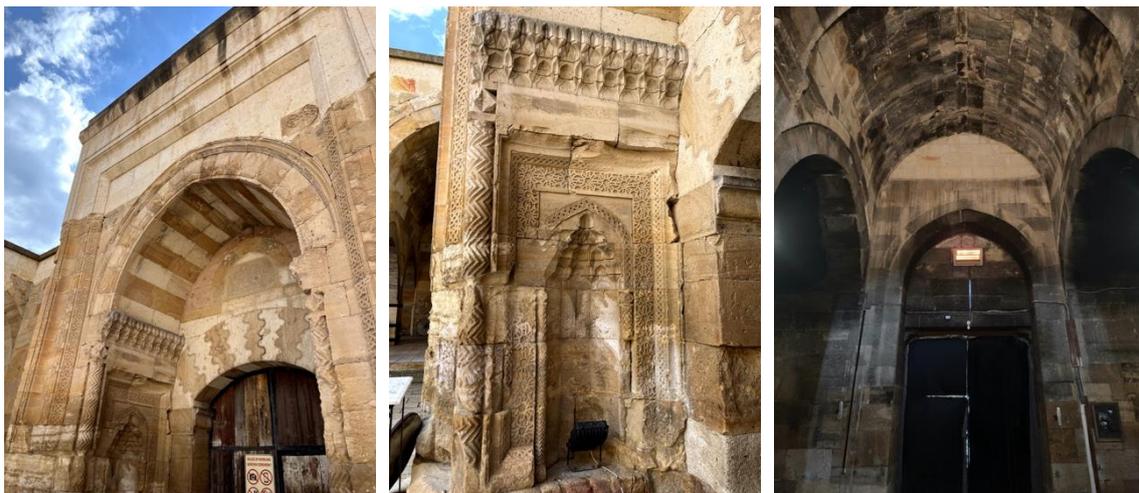


Figure 19. The Winter Hall's Taç Kapı (Left); Mihrabiye Niche of the Taç Kapı (Center); Entrance to the Winter Hall (Right) (From the Archive of the Authors).

The winter hall has a square plan and is divided into five aisles by pointed arches, numbered sequentially from left to right. The central, or third aisle, contains the entrance. Directly in front of the entrance, indentations on the piers can be observed, which were used for tethering camels. Upon entering the hall, the aisles to the right and left of the central aisle are further divided into five sections by pointed barrel vaults. The second and fourth aisles are elevated compared to the others. The central area of the square-plan structure is covered by a dome, which is supported by four pendentives serving as the transition elements from the vertical walls to the dome (Fig. 20). The spandrel stones of the arches beneath the dome are also decorated. Additionally, the dome features skylights that enhance the lighting of the space and positively influence air circulation. On the outer walls, there are three skylights on both the right and left sides, similar to those in the pointed vaulted rooms, with sloped designs that contribute to the illumination of the hall.

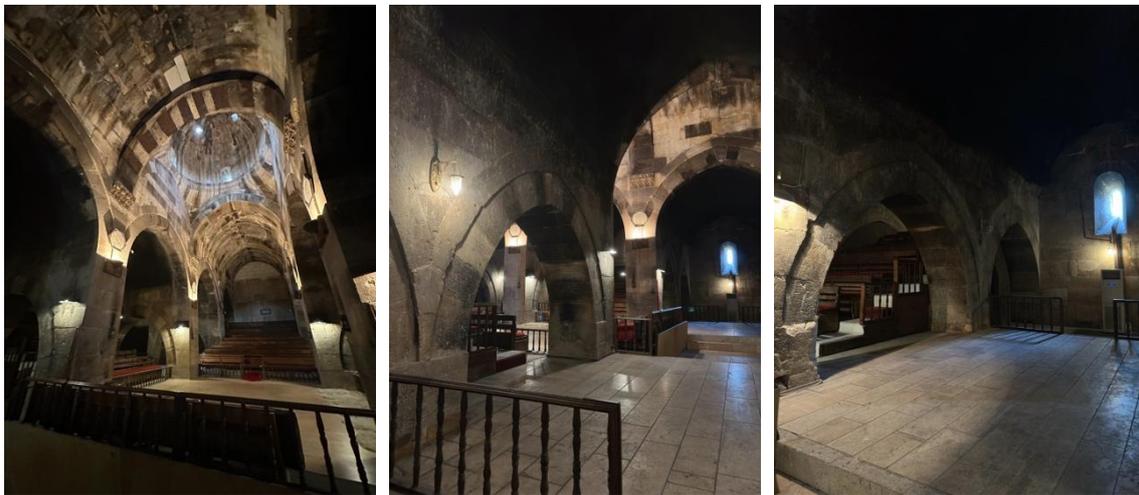


Figure 20. The Views from the Winter Hall (From the Archive of the Authors).

On the left side of the courtyard, the summer section/part is encountered. This area consists of a double-row arcade gallery with pointed arches resting on piers. The seven sections formed by the pointed arches are covered with pointed barrel vaults, a design element frequently used in Anatolian Seljuk architecture (Fig. 21). These features contribute to the harmony of the summer section with the other parts of the caravanserai. The arcade gallery allows air circulation through the spaces between the piers, creating a microclimate. This feature provided a shaded and cool resting area for caravans, their goods, and camels, offering protection from the summer sun. The space between the caravanserai entrance and the summer section includes an iwan covered with a pointed barrel vault, forming a transitional architectural element between the two areas. The front of this iwan has been enclosed with a wooden-framed showcase, and the space is currently used as a gift shop. This later

intervention obscures its original spatial character, suggesting that the iwan was originally designed as an open, semi-public area in its authentic state.



Figure 21. The Views from Sarihan's Summer Section/Part (From the Archive of the Authors).

Today, Sarihan is operated by a private institution and remains open to visitors. Additionally, events such as whirling dervish performances are held in the caravanserai during evening hours.

Öresin Han (Tepesi Delik Han)

Located on the Aksaray-Nevşehir-Kayseri road, the construction of Öresin Han was completed in the late 13th century (Karaköy, 2005, p. 45). The caravanserai underwent restoration in 2008 (Baş, 2010, p. 73). Before its restoration, the dome of the structure had collapsed, which led to its colloquial name, Tepesi Delik Han (Han with a Hole in the Roof). Öresin Han consists solely of a winter hall and lacks a courtyard, classifying it as a caravanserai with a closed-plan type. The caravanserai has a rectangular plan, symmetrically aligned along the north-south and east-west axes (Fig. 22). The structure is built primarily of ashlar stone. The taç kapı (monumental entrance portal) features a simple kavsara (niche) design. The entrance has a flattened arch, while the kavsara arch is pointed. Moldings on the door frame add subtle decoration to the otherwise simple design.



Figure 22. The Plan of Öresin Han (Özgüç & Akok, 1957) (Left); Öresin Han's Grand Portal (Center); Entrance to the Winter Hall (From the Archive of the Authors).

The winter hall of Öresin Han is divided into five aisles by barrel arches, with the central aisle aligned with the entrance door. All five aisles are covered with barrel vaults, but the central aisle also features a dome at its midpoint, equipped with small skylights for illumination. The dome is supported by four arches, and the transition between the arches and the dome is achieved through pendentives. The height of these arches contributes to the hall's monumental appearance. The side aisles to the right and left of the central aisle are accessed through arches. These side aisles are further divided into seven sections, each covered by pointed barrel vaults. Skylights are strategically placed to enhance the hall's illumination: one on the wall opposite the entrance door and two on each side exterior wall. These skylights are designed with an inwardly widening form, effectively bringing light into the interior (Fig. 23).

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Figure 23. The Views from the Winter Hall (From the Archive of the Authors).

Discussion and Conclusion

The Anatolian Seljuk State constructed caravanserais to ensure the safety of major trade routes, promote economic growth and cultural exchange, and attract merchants from various countries, ranging from Europe to Central Asia to Anatolia. These caravanserais, built directly under state sponsorship, serve as significant structures providing insights into the intersections of trade, architecture, and culture during the period. The architectural significance of caravanserais such as Alay Han, Sultanhanı, Sarihan, and Öresin Han, analyzed within this study, highlights their pivotal role in facilitating trade and travel in Anatolia. These structures, with their complex designs, functional spatial organization, and strategic locations, exemplify Anatolian Seljuk's commitment to commerce and cultural progress. Through extensive restoration and ongoing preservation efforts, these caravanserais continue to stand as testaments to the cultural and architectural heritage of the Anatolian Seljuk State. The study of these structures has contributed to an understanding of their architectural and historical importance.

When examined in terms of spatial organization, it is observed that Alay Han and Öresin Han feature an enclosed plan type without courtyards, while Sultanhanı and Sarihan follow a mixed plan type with courtyards. The mixed-plan structures include a dedicated space used as a mescid (prayer room). In Sarihan, this prayer space is located above the entrance hall, whereas in Sultanhanı, it is an independent köşk mescid situated at the center of the courtyard. Summer spaces are only present in structures with courtyard plans, while winter halls are a feature in all examples. The winter halls are divided into five aisles in all cases. In Sarihan, the aisles on the right and left of the central aisle are divided into five sections covered with vaults, while in the other examples, they are divided into seven sections. The winter halls of all the structures, along with their domes and the skylights in their walls, contribute to the lighting of the interiors. The enclosed rooms of Sultanhanı and Sarihan also feature skylights. All the structures studied are built with ashlar stone sourced from the local region, reflecting a masonry construction style.

In terms of decorative features, the portals (taç kapı) of the caravanserais reveal notable differences. Öresin Han's portal employs a simple kavsara (niche) design, while the portals of Alay Han, Sultanhanı, and Sarihan are adorned with scallop shell-patterned muqarnas specific to the Anatolian Seljuk period, with their frames decorated with interlaced patterns. These three structures also feature two corner columns (sütunçeler) and muqarnas-adorned mihrabiye niches on either side of their portals. Unlike Sarihan, Alay Han and Sultanhanı have kavsara-framing arches decorated with interlaced patterns. All the structures

include a central dome in their winter halls, but the decorative features of these domes vary. Sultanhanı stands out with its pendentives featuring medallions and drums adorned with muqarnas and geometric compositions, differentiating it from Sarihan and Öresin Han. Alay Han's dome, on the other hand, features a stalactite muqarnas design, distinguishing it further from the other examples.

Of the caravanserais analyzed, Alay Han and Öresin Han are open to visitors for tourism purposes after their restorations, while Sarihan serves an additional function as a Culture and Congress Center. Sarihan continues to be an active cultural structure, hosting events that reflect Anatolian traditions and artistic expressions. This example demonstrates that caravanserais, as enduring symbols of Anatolian Seljuk culture and architectural style, can realize their tourism potential through cultural activities. Preserving and actively utilizing these structures is crucial for transmitting their architectural and historical heritage to future generations.

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