

The Architectural Design of Seljuk Schools in the City of Konya (The Saracılı School as a Model)

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ABSTRACT

The integration of science and religion is embodied in the schools established in Konya. These schools combined the desire to disseminate knowledge and strengthen its foundations with a keenness to showcase the architectural beauty of Muslims. Seljuk schools combined the religious system, represented by the architectural elements adopted in mosques, such as the mihrab and minaret, with the educational character centered on classrooms designed to provide complete comfort for students and teachers. This is evident in our case study, the Saracılı Madrasa. The madrasa's name derives from the abundance of its ceramic decorations, which distinguished it from other Seljuk madrasas in Konya. Several artistic styles were used to decorate the interior walls of the madrasa, including hexagonal ceramic tiles, ceramic mosaics, and glazed bricks.

Keywords: Architectural, Seljuk, Konya, Saracılı, School

INTRODUCTION

If we contemplate the very structure of the Islamic message, we find that the first command addressed to the Prophet Muhammad (peace and blessings be upon him and his family) was the imperative to read — “Recite in the name of your Lord who created”). This summons was not a mere instructional directive, but rather a call to inaugurate a civilizational project founded upon knowledge, harmonizing the realms of learning and faith. This ideal was embodied in the schools established in the city of Konya, institutions that united the desire to disseminate knowledge and fortify its foundations with a dedication to showcasing the architectural aesthetics of the Muslim world.

The Seljuk schools, in particular, synthesized the religious framework—manifested through architectural elements inherited from the mosque, such as the mihrab and the minaret—with an educational character centered on lecture halls arranged within a design that ensured complete comfort for students and teachers alike. A distinguished example of these institutions is the Sırçalı Medrese (640 AH / 1242 CE), regarded as one of the most important Seljuk schools in Anatolia, also known as Sırçalı or al-Madrasah al-Muslihiyyah, named after its founder Badr al-Dīn Muşliḥ. It stands as one of Konya’s most splendid architectural landmarks⁽ⁱ⁾.

The Sırçalı Madrasa is situated in Konya Province, within the Meram district’s Ghazi Alemşah quarter. It stands to the right of the road leading to the Sahib Ata Mosque, positioned at the centre of an urban block enclosed by four surrounding streets, and is currently used as Konya’s Museum of Tombstones⁽ⁱⁱ⁾.

The madrasa derives its name from the abundance of its ceramic ornamentation, which distinguishes it from other Seljuk madrasas in Konya. The term Sirga denotes ceramics in central Anatolia, while Sırçah signifies “adorned with ceramics,” hence its Arabic designation, “the Ceramic Madrasa”⁽ⁱⁱⁱ⁾.

The name is entirely apt: nearly all of the interior surfaces—particularly the façades of the porticoes overlooking the courtyard—were once clad in ceramic revetments. Although much of this ceramic covering has disappeared, the remaining portions still provide a clear sense of the madrasa's decorative ceramic programme. Several artistic methods were employed in the interior wall decoration, including hexagonal ceramic tiles, ceramic mosaics, and glazed brickwork.

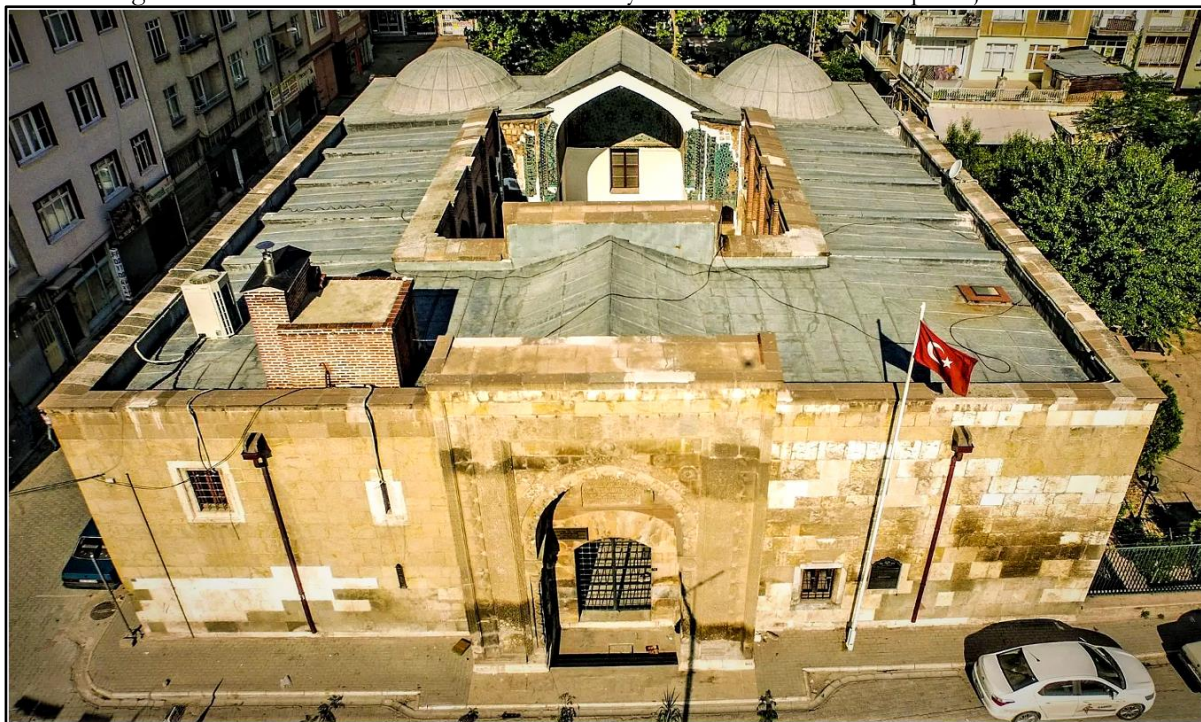
According to the foundation inscription carved above the main entrance—measuring 1.60×1.40 metres and written in Naskh script in seven lines on a marble panel set within a trilobed arch—the text includes the following:

- “The sultanic...”
- “Ordered the construction of this blessed madrasa.”
- “In the reign of the Great Sultan, the shadow of God on earth.”
- “The lord, Ghiyath al-Dunya wa'l-Din, ‘Ala’ al-Islam wa'l-Muslimin, Abu'l-Fath Kaykhusraw ibn Kayqubad, peer of the Commander of the Faithful; and the servant in need of his Lord's mercy, Badr al-Din Muslih—may God perpetuate his success—has endowed it to the jurists and the students of jurisprudence among the followers of Abu Hanifa, may God be pleased with him, in the year six hundred and forty”^(iv).

Within the inner arch of the madrasa's iwan, we also found the builder's or architect's signature inscribed within a hexagonal frame:

- “The work of Muhammad ibn Muhammad ibn ‘Uthman al-Banna al-Tusi”^(v).

As indicated by this inscription, as well as by Seljuk-period documents, the madrasa was constructed during the reign of the Seljuk sultan Kaykhusraw II, son of Kayqubad, by the tutor Badr al-Din Muslih in the year 640 AH / 1242 CE^(vi). It was dedicated to adherents of the Hanafi school, and indeed the Sirçalı Madrasa fulfilled this role, producing influential figures who defended the Hanafi madhhab in Anatolia^(vii). For this reason, the Qur'anic verses adorning the interior of the madrasa are thematically connected to the concept of jihad^(viii).



General Layout of the School:

This school was constructed on a rectangular plot encompassing a total area of 1,113 m². Its overall design comprises two floors, formed by four wings housing classrooms and lecture halls alongside the ancillary facilities of the institution. At its center lies a courtyard, with the layout reflecting the principle of symmetry and axial alignment—a hallmark of Islamic architecture that proliferated throughout the Islamic world^(ix).

The construction materials employed were primarily stone and brick, with plaster serving as the binding medium. The walls of the school generally measure approximately half a meter in thickness.

Main Façade:

The main façade is situated on the eastern wing of the school, extending over a length of 30.50 meters. It is dominated by the sole entrance to the school, which projects approximately 2 meters from the plane of the wall. The entrance rests on a threshold elevated 40 cm above ground level and is designed in the form of an iwan, distinguished by its recessed layers. The entrance comprises a series of nested frames, each set back slightly from the preceding one.

The first frame features repeated vegetal motifs culminating in a straight arch at the top. The second frame contains a half-flower ornament, leaving a 5 cm void before it, while the open half of the flower adheres to the third frame. This third frame, broader than the previous two, showcases a geometric decoration of intersecting bold lines forming a star, centered by a six-petaled rosette. Surrounding it are smaller rosettes of identical design but reduced size, and the motif is repeated throughout the third frame to cover it entirely.

The fourth frame forms a square architectural embellishment enclosing the iwan element, consisting of two subtly recessed arches. The lower arch is pointed, its exterior adorned with a single row of seventeen three-petaled half-flowers, while the inner surface features ablaq decoration. The arch rests on two spiral columns, each richly decorated with prominent vegetal motifs resembling multi-petaled rosettes.

Flanking the entrance are recessed benches, rising approximately 81 cm above ground, set within niches extending 40 cm deep. Each side is supported by a spiral column embedded into the wall, adorned with decorations reminiscent of Iraqi palm fronds^(x). These columns uphold a semi-conical half-dome composed of five tiers of muqarnas. It evokes the Abbasid palaces in Baghdad^(xi), with the number of muqarnas diminishing progressively towards the apex until a single muqarnas crowns the top. Surrounding the niche is a three-sided rectangular frame, featuring five façades (an octagonal section) and five tiers of muqarnas arches. The corners of these openings are adorned with curved, spiral branches, creating a striking contrast with the twisted forms decorating the columns flanking the entrance. The entrance design adheres to the principle of symmetry and axial alignment in its decorative elements. On either side of the doorway are two ornamental panels shaped like mihrabs, beneath which is a small inward-curved seating area, likely intended for guards. This seating area is embellished with a decorative band on three sides and two matching, opposing columns, while above it are seven small aligned mihrab-shaped ornaments. The side niches are positioned 81 cm above ground on the northern and southern walls adjacent to the main door.

The main entrance itself is constructed of stone, measuring 2 meters in width and 7.10 meters in height, surmounted by a cylindrical arch made of stone voussoirs. Notably, the arch was originally straight in earlier periods, later transformed into its present cylindrical form, as evident from comparing historical photographs with the modern entrance. Above the arch is a stone façade within a frame forming a segmented arch, which, together with the pointed arch, supports a vaulted ceiling culminating in a pointed vault. This vault bears an inscription panel topped by a mihrab motif, while three recessed ornamental mihrabs, set 3 cm deep into the wall, are distributed above it. The central mihrab is circular with intersecting geometric lines inside, followed by a straight arch above the entrance opening.

Upon entering, one reaches a rectangular passage that can be considered the entrance iwan, through which visitors access the school. Its ceiling is constructed in the cradle vault style^(xii), a characteristic feature prevalent in the majority of corridor roofs.

Side and Secondary Spaces in Seljuk Architecture^(xiii)

Flanking the vault are two side entrances. The right entrance leads to a chamber containing the tomb of the school's founder and his descendants, while the left opens into an auxiliary room. Each side features a window topped by a low arch. On the right side, a raised platform is accessed via a two-step staircase, each step measuring 45 cm, beneath which a small doorway possibly leads to a cellar, though entry was not possible. This entrance area can be considered an iwan mirroring the main school iwan.

Eastern Wing:

The eastern wing comprises four rooms, two on each side. The two rooms facing the entrance corridor are identical in architectural layout and dimensions, both square in shape with wooden doors surmounted by pointed arches. The floors are stone, and each room contains a rectangular window measuring 1.37×0.92 m, fitted with a double-leaf iron grille. Two additional windows of the same dimensions open onto the central courtyard.

The room immediately to the right of the entrance houses the tomb of the school's founder and his descendants^(xiv), containing three graves arranged in a single row. The adjacent room served as an auxiliary space, likely for administrative purposes, kitchen use, or storage.

The two remaining rooms, located at the northeastern and southeastern corners, mirror the architectural layout and dimensions of the first pair. Each has a single-leaf wooden door, and their eastern walls feature triangular windows resembling a mashrabiyya, tapering outward and widening inward, allowing light and air while preserving privacy.

This type of window design reflects the environmental and climatic conditions of the region, particularly during the cold winter months when snowfall is common. The narrow exterior aperture helps to limit the cold air entering the rooms, while also minimizing external noise to provide a quiet atmosphere for the students. The ceilings of the two rooms are flat, and the floors are paved with polished stone.

Northern and Southern Wings:

The northern and southern wings are identical in terms of area, number of rooms, and layout across both the ground and first floors, each spanning 30.50 meters. The rooms are distributed along the inner façades of the courtyard on both floors in a balanced arrangement, reflecting a meticulous understanding of functional and architectural organization. Four rooms are arranged on each side of the courtyard per floor, totaling sixteen architectural units, each measuring 3.40×5.70 meters. Each wing also contains a staircase providing access to the first floor.

Each room opens through a private doorway directly onto the surrounding gallery, measuring 2.10 meters in height and 1 meter in width, topped by a straight arch. The doors are wooden, single-leaf, with a window above opening onto the gallery, crowned by a pointed arch and glazed for light. The ceilings of the rooms are vaulted in a pointed style using brick, while the floors are of polished red stone. Notably, the partition wall between two rooms in the northern wing is not perfectly aligned and contains no windows—a feature mirrored in the corresponding room on the southern wing. The staircases adjacent to the eastern walls of these rooms are constructed from vertically laid stone slabs, each measuring 40 cm, forming straight stairways of 40 cm per step leading to the first floor.

Western Wing:

The western wing, also 30.50 meters in length, houses the school's most significant architectural units, with the main iwan positioned opposite the entrance iwan. On either side of the iwan, to the northwest and southwest, two classrooms were constructed, presumably for instructional purposes.

The iwan rises through both floors, rectangular in shape (6.60×8 m), with its floor elevated 60 cm above the courtyard level, approached by three stone steps (each $90 \times 30 \times 20$ cm). The iwan façade features a pointed arch, supporting a sharply pitched gabled roof^(xv) divided into three sections by three pointed arches for structural reinforcement, built using stone. The interior walls of the iwan are adorned with intricate ceramic decorations in geometric and vegetal motifs, dominated by deep turquoise and glossy black, executed in glazing techniques, imparting a sacred and imposing character that underscores its symbolic prominence within the school's layout. The floor is paved with polished stone.

It is evident that the iwan functioned as the school's mosque, indicated by the presence of a mihrab and the elevated floor level, which separates the prayer space from the rest of the school's auxiliary areas.

At the center of the western wall (the rear of the iwan) is a rectangular window measuring 1.30×2 m, elevated 60 cm above the floor, fitted with a two-leaf iron grille divided into small squares. Originally intended for lighting or ventilation, the window was later closed during restoration. Above it is a recessed arch, set deep into the wall plane, serving both as a decorative and structural element that accentuates the window.

The southern wall of the iwan contains a recessed mihrab measuring 2.60×2.30 m, extending nearly from floor level to a moderate height. It terminates in a ribbed conical half-dome composed of five tiers of spherical triangles, decreasing in number toward the apex until only a single triangle crowns the top. The interior of the mihrab is richly ornamented with colored ceramic frames, the first frame measuring 26 cm and the second also 26 cm, though much of the decoration, particularly in the lower section, has been removed. Nevertheless, deep turquoise and dark blue hues, along with hexagonal and star-shaped geometric motifs, remain visible in the upper portion and side frames. These elements exemplify typical Islamic decorative principles of precise repetition and balanced distribution, bearing the marks of time that merge eroded beauty with enduring sanctity. The mihrab floor is slightly lower than the surrounding tile level, and its outer frame is adorned with ceramic tiles featuring intertwined geometric inscriptions, some of which have been lost or damaged over time. Fragments of tiles on the side walls suggest that the mihrab was once a fully integrated artistic masterpiece.

The iwan is flanked on both sides by massive piers defining the central space of the school. Each pier features two vertical windows arranged on two levels: the lower window is square, and above it is a rectangular window with a pointed arch, single-leaf, a common feature in Islamic architecture for vertical ventilation and graduated light distribution.

To the north and south of the iwan are two symmetrically planned classrooms of identical dimensions, located in the northwest and southwest corners. Each measures 6.60×8.60 m and has an entrance at the eastern corner of the wall, 1.80 m wide, currently without doors. Adjacent to each entrance is a rectangular window (1×2 m) with a two-leaf iron grille. Both rooms feature hemispherical domes supported by four walls, with each corner filled with diminishing tiers of spherical triangles ascending toward the apex. One classroom is distinguished by the addition of a half-barrel vault at its northwest corner, resting on a bridging structure separating it from the primary dome.

This classroom also includes a recessed, non-ventilated niche on its southern wall measuring 1×2 m, topped with a pointed arch. The floors are paved with polished stone, consistent with the rest of the school's spaces. On the façades of both classrooms adjacent to the iwan, verses 284–286 of Surah Al-Baqarah are inscribed, alongside phrases such as “The Kingdom belongs to Allah,” “Glory belongs to Allah,” and “Praise be to Allah,” displayed on the windows of the domed rooms.



The Arcade:

The school rooms are surrounded by a covered arcade that wraps around three sides—the eastern, northern, and southern wings—and overlooks the central courtyard. The arcade measures 5 m in width and 2.95 m in depth. It rests on a row of square stone columns, each measuring 4×1.20 m, with four columns allocated to each of the three sides. These columns support a series of semi-cylindrical arches, truncated at their centers, rising approximately the thickness of a single brick above the arch ends. The eastern wing contains three arches, while the northern and southern wings each contain four. The arcade features a flat ceiling, and its floor is paved with polished stone.

Central Courtyard:

At the heart of the school lies an open rectangular courtyard, measuring 19.50×12.50 m. A stone fountain or water basin (1.30×3 m) is situated at its center, originally supplied by pipes connected to a reservoir behind the iwan. However, the fountain is currently non-operational^(xvi). All three wings of the school and the two iwans—the entrance iwan and the qibla iwan—overlook the courtyard, whose surface is paved with large stone slabs.

First Floor:

It is worth noting that the first or upper floor does not extend over all wings of the school; rather, it is limited to the northern and southern wings. This design choice likely reflects the elevated level of the eastern wing, which serves as the main façade.

The same applies to the western wing, which rises to the height of both floors, as well as to the two side classrooms that reach the height of the iwan. Naturally, the layout of the upper floor mirrors that of the ground floor in terms of room distribution, architectural arrangement, and dimensions. The northern wing contains four rooms, directly opposite four corresponding rooms in the southern wing. Their architectural design replicates the layout of the ground-floor chambers, featuring flat ceilings, polished stone floors, and windows overlooking the exterior with dimensions consistent with the rooms below. These rooms also open onto a gallery located above the lower arcade.

From the foregoing, it is evident that the Seragli School stands out among Seljuk-era schools due to its distinctive planning, architectural, and decorative features. Its two-story construction is a rare characteristic among Seljuk schools. The architecture incorporates essential elements such as arches, columns, and domes covering the classrooms, imparting both aesthetic elegance and structural sophistication. The intricate decorative motifs extend

from the façade deep into the interior walls, culminating in a Seljuk architectural masterpiece that remains fully open to scholars of architectural aesthetics and planning.

SOURCES AND REFERENCES

The Holy Quran.

Aba and Qutay Aslan, *Fanon al-Turk wa 'Imarahum* (The Arts and Architecture of the Turks).

Ibrahim, Fahim Fathi, *Texts of Construction in Seljuk Religious Architecture in Anatolia*.

Ibrahim, Fahim Fathi, *Seljuk Schools in Anatolia: An Architectural and Documentary Study*.

Ben Qwaider, Samia, *The Function of the Vault in Algerian Architecture during the Ottoman Era*, Algeria, 2022.

Al-Jubouri, Star, *Vegetal Ornamentation in Abbasid Palace Architecture in Baghdad*, *An-Najah University Journal for Humanities*, Vol. 33, 2019.

Studies in Turkish Art, Nahda Library, Cairo, 1st edition, 2007.

Al-Zubaidi, Hussein Ghadban Ibrahim, *Roofing Methods in Arab-Islamic Architecture in Iraq until the End of Ottoman Rule (1334H–1914)*, Unpublished Master's Thesis, University of Baghdad, 2024.

Zakaria, Fatima Yahya, *The Impact of Waqf on Educational Renaissance in Anatolian Schools during the Seljuk Sultanate (470–708H / 1077–1308 CE): A Documentary Study through Waqf Deeds and Seljuk Records*, *Jordan Journal of History and Archaeology*, Vol. 5, No. 3, 2011.

Saleh, Laila Mahmoud, *Independent Schools in Mosul from the Ottoman Period*, Unpublished Master's Thesis, University of Baghdad, College of Arts, 2013.

Al-Subihawi, Haider Farhan, *Symbolism in Islamic Art*, *Journal of Historical and Archaeological Studies*, University of Baghdad, No. 67, 2018.

Abdel-Hafiz, Abdullah Atiyah, *Islamic Monuments and Arts*.

Abdel-Hafiz, Abdullah Atiyah, *Ceramic Ornamentation at the Sırçalı School in Konya: An Archaeological and Artistic Study*, *Journal of the Faculty of Arts*, No. 24, Mansoura University, Egypt, 1999.

Erdemir (Yaşar), *Karatay Medresesi*.

Erdemir (Yaşar), *Sırçalı Medrese*, in *Metin Sözen, Anadolu Medreseleri*, Vol. I, Istanbul, 1970, p. 160; Mehmet Önder, op. cit.

F. Sarre, *Denkmäler persischer Baukunst: Geschichtliche Untersuchung und Aufnahme muhammadanischer Backsteinbauten in Vorderasien und Persien*, Berlin, 1910.

Hasan Özönder, *Epigraphic Features in Seljuk Monuments in Konya*, Prepared by Feyzi Halıcı, Ankara, 1984.

Sauvaget (J.), Combe (E.T.), Wiet (G.), *Répertoire Chronologique de l'Épigraphie Arabe*, Vol. 15, Cairo, 1931–1944.

Footnotes

⁽ⁱ⁾ Abdel-Hafiz, Abdullah Atiyah, *Ceramic Ornamentation at the Sırçalı School in Konya: An Archaeological and Artistic Study*, *Journal of the Faculty of Arts*, No. 24, Mansoura University, Egypt, 1999, p. 159.

⁽ⁱⁱ⁾ Aba and Qutay Aslan, *Fanon al-Turk wa 'Imarahum*, pp. 104–251; Abdel-Hafiz, Abdullah Atiyah, *Islamic Monuments and Arts*, pp. 263–274; *Studies in Turkish Art*, Nahda Library, Cairo, 1st edition, 2007, pp. 210–243; Abdel-Hafiz, *Ceramic Ornamentation at the Sırçalı School in Konya*, p. 161; F. Sarre, *Denkmäler persischer Baukunst*, Berlin, 1910, pp. 125–128.

⁽ⁱⁱⁱ⁾ Abdel-Hafiz, *Ceramic Ornamentation at the Sırçalı School in Konya*, p. 159.

^(iv) Ibrahim, Fahim Fathi, *Texts of Construction in Seljuk Religious Architecture in Anatolia*, p. 1465; Erdemir (Yaşar), *Sırçalı Medrese*, p. 25; Metin Sözen, *Anadolu Medreseleri*, Vol. I, Istanbul, 1970, p. 160; Mehmet Önder, op. cit., p. 66.

^(v) Ibrahim, Fahim Fathi, *Texts of Construction in Seljuk Religious Architecture in Anatolia*, p. 1465.

^(vi) Zakaria, Fatima Yahya, *The Impact of Waqf on Educational Renaissance in Anatolian Schools during the Seljuk Sultanate (470–708H / 1077–1308 CE)*, *Jordan Journal of History and Archaeology*, Vol. 5, No. 3, 2011, p. 116.

^(vii) Sauvaget (J.), Combe (E.T.), Wiet (G.), *Répertoire Chronologique de l'Épigraphie Arabe*, Vol. 15, Cairo, 1931–1944, pp. 140–141.

^(viii) Hasan Özönder, *Epigraphic Features in Seljuk Monuments in Konya*, Prepared by Feyzi Halıcı, Ankara, 1984, pp. 15–22.

^(ix) Saleh, Laila Mahmoud, *Independent Schools in Mosul from the Ottoman Period*, Unpublished Master's Thesis, University of Baghdad, College of Arts, 2013, p. 181.

^(x) Al-Subihawi, Haider Farhan, *Symbolism in Islamic Art*, *Journal of Historical and Archaeological Studies*, University of Baghdad, No. 67, 2018, p. 356.

^(xi) Al-Jubouri, Star, *Vegetal Ornamentation in Abbasid Palace Architecture in Baghdad*, *An-Najah University Journal for Humanities*, Vol. 33, 2019, p. 1517.

^(xii) The Mihd Vault is a semi-cylindrical vault resembling the cradle in which a child is placed; it consists of a continuous series of arches aligned along a single axis. – Ben Qwaider, Samia, *The Function of the Vault in Algerian Architecture during the Ottoman Era*, Algeria, 2022, p. 8.

^(xiii) Ibrahim, Fahim Fathi, *Seljuk Schools in Anatolia: An Architectural and Documentary Study*, p. 9.

^(xiv) The tombs contain no headstones.

^(xv) Gabled roofs, shaped as right triangles without a base, were employed in mountainous regions with heavy rainfall and snow in northern areas to prevent snow accumulation that could damage or collapse the roof. – Al-Zubaidi, Hussein Ghadban Ibrahim, *Roofing Methods in Arab-Islamic Architecture in Iraq until the End of Ottoman Rule (1334H–1914)*, Unpublished Master's Thesis, University of Baghdad, 2024, p. 55.

^(xvi) Erdemir (Yaşar), *Karatay Medresesi*, p. 33.