



Analysis of Square Kufic Calligraphy at Some Historical Buildings in Istanbul

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Abstract

The square kufic (ma' qılı) calligraphy, frequently employed as early as the 11th century in the architecture of the Great Seljuks and Anatolian Seljuks periods, gradually yielded its place to other calligraphic styles and penwork embellishments in Ottoman constructions. Conversely, compared to other script forms, an insufficient body of scientific research is dedicated to the accurate comprehension and thorough recognition of ma' qılı calligraphic art. This unique calligraphic style, which is not traditionally imparted within conventional calligraphy education and is currently witnessing renewed interest in Islamic architecture and art across various countries, necessitates comprehensive studies to elucidate its nuanced reading and compositional logic.

This article undertakes a detailed exploration of some Square Kufic calligraphy from the era of Mimar Sinan in Istanbul to the period preceding Sinan's time. In addition to analyzing the content and compositions of the inscriptions, specific errors and interpretations are also addressed.

Keywords: Square Kufi, calligraphy, Islamic art and architecture, Ottoman architecture, Istanbul.

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İstanbul'daki Bazı Tarihi Yapıların Ma'kılî Hatları Üzerine

Öz

Büyük Selçuklu ve Anadolu Selçuklu eserlerinde sıkça kullanılan ma'kılî sanatı, Osmanlı yapılarında yerini diğeri hat türlerine ve kalem işi süslemelere bırakmıştır. Buna mukabil diğeri yazı çeşitlerine kıyasla, ma'kılî hat sanatının doğru okunması ve detaylarıyla tanınmasına yönelik bilimsel çalışmalar da yeterli seviyede değildir. Geleneksel hat eğitiminin icazet kültüründe de öğretilmeyen ve günümüzde farklı ülkelerdeki İslam mimarisi ve sanatında yeniden yaygın bir teveccüh gören ma'kılî hat sanatının detaylı okunuşu ve kompozisyon mantığına dair çalışmalara ihtiyaç duyulmaktadır.

Bu makalede Türk İslam sanatı ve mimarisinde tarihi 11. yüzyıla kadar geri giden ma'kılî hattın, İstanbul'daki Mimar Sinan devri ve öncesindeki örneklerini detaylıca incelenmektedir. Yazıların içerik ve kompozisyonlarının analizini yanı sıra bazı hatalara ve yorumlara işaret edilmiştir.

Anahtar Kelimeler: Makılî, hat sanatı, İslam sanatı ve mimarisi, Osmanlı mimarisi, İstanbul.

Introduction

The available evidence suggests that the historical evolution of the Arabic script can be traced back to at least the 6th century BCE. Inscriptions originating from the 3rd and 4th centuries CE and written materials from the 6th century provide substantial support for the similarities between the Arabic script and that of the Nabataeans, who had Aramaic roots. This perspective aligns with the viewpoints of Klehr and Nöldeke. Based on these archaeological discoveries, it is deemed that the Arabic script can be regarded as a continuation of the Nabataean script.¹

During the early centuries CE, the development of the Arabic script proceeded at a gradual pace. However, with the advent of Islam, it swiftly attained a standardized complexity through various forms of writing collectively referred to as “Aklâm-ı Sitte.” These forms of writing became of great significance within religious and political contexts. It can be asserted that the script known as Kufic was widely utilized during the initial years of Islam’s revelation. However, various appellations are encountered in contemporary literature from that period.

In his renowned work titled “Writing in the Civilized World and the Elegant Pen in Islamic Civilization,” Mahmud Bedrettin Yazır recounts that two distinct script types were employed during the early years of Islam in the Hijaz region: the “ma’qili” script, characterized by its upright and angular letters, and the “Damascus” script, distinguished by its use of rounded letters.² According to Ebu Ishak, the scripts before Islam were also called ma’qili.³ Bedreddin Yazır differentiates between “makili” and “kufi.” Kufi has both round and edged letters, while makili consists solely of edged letters. However, “makili” calligraphy is presently also referred to as “kufic” calligraphy, where experts often define it as “square kufic.”⁴ Conversely, Ali Alparslan defines the calligraphy employed during the first two centuries of Islam as “Kufic.” As Islam spread to regions where Arabic was not the native language, the Meccan/cezm calligraphy, composed of simplified letters, underwent enhancements through the addition of red and black dots, diacritical marks, and vowel indicators, all aimed at facilitating the recitation of the Quran. In the 11th century, the calligraphic script, named after the city where it

1 Yûsuf Zennûn - Muhittin Serin, “Kûff”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. XXVI, Ankara, Türkiye Diyanet Vakfı, 1999, p. 342.

2 Mahmud Bedrettin Yazır. *Medeniyet Âleminde Yazı ve İslam Medeniyetinde Kalem Güzeli I*, Diyanet İşleri Başkanlığı Yayınları.

3 Ibid., p. 79.

4 Ibid., p. 78-79.

originated, began to be recognized as “Kufic.”⁵ Presently, the term “Kufic” has gained widespread acceptance for describing the script used during the formative years of Islam. The Kufic script, characterized by varying definitions depending on regional and stylistic distinctions, is explored under the following categories⁶:

1. Pre-Islamic Period Kufi (cezmi)
2. Kufi of the Era of the Prophet (also known as Meccan and Medinan)
3. Celi Kufi: Umayyad Period
4. Ornamental and Floral Kufi / Leafy Kufi
5. Braided Kufi
6. Bennai Kufi (square kufi)

The Square Kufic Calligraphy

This research will focus on developing square Kufic calligraphy, well-known in Turkey under the name ma'qili. It is classified as a subcategory of the Kufi script, positioned sixth in the list. Square Kufic script, considered a form of Kufic script utilized in architecture, is also known as al-Kûfi al-murabba', bennâi, and satrancî (chess). In square Kufic, all letters are formed at right angles, and the basic unit of the entire script is a square, following classical conventions. Alphabetic characters and the spaces between them are constructed by aligning these squares. Variations in these proportions are evident in some interpretations, particularly in contemporary examples. For example, the width of the letters may be twice or multiple times the width of the spaces. In its early examples, square Kufic was created using geometric tools rather than by hand and pen, involving meticulous construction.

The ma'qili script is characterized by arranging it in one or several lines, starting from one corner, following the outer outlines of a square or rectangular frame, gradually turning, and directing towards the center. During this process, gaps are left between the letters, which are only as comprehensive as the thickness of the pen point. In other words, the alphabetic characters' thickness equals the spaces between them. In a different application style, compositions are created

5 Zübeyde Cihan Özsayiner, “Mimar Sinan’ın İstanbul’daki Camii ve Türbelerindeki Yazı Düzeni ve Anlamı”, (Unpublished Doctoral Thesis), İstanbul Üniversitesi Sosyal Bilimler Enstitüsü Sanat Tarihi Bilim Dalı, İstanbul, 1993, p. 5

6 Yûsuf Zennûn - Muhiittin Serin, p. 343-344; Ömür Bakırer, “Kûfi Yazıda Geometrik Yorumlar Üzerine Bir Deneme”, *Sanat Tarihi Dergisi*, vol. 1, no. 1, 1982, p. 1-2; <https://dergipark.org.tr/tr/pub/std/issue/16504/172647> [Date of Access: 25.09.2023].

by rotating a single word in four directions from the same center (resembling a Swastika). In a third method, one or several words can be integrated within a geometric medallion, such as a hexagon, to form a geometric composition.

The art of calligraphy has played a defining role in shaping the identity of Islamic art and architecture, often complementing geometric patterns. Square Kufic, which evolved with different interpretations in regions such as Khorasan, Central Asia, Anatolia, North Africa, and Southern Spain, began to blend with local building techniques, especially brick and mosaic construction. The orderly rhythm of brickwork was utilized for the letter units, allowing words and sentences to be seamlessly integrated into the facades of buildings. To enhance the visual impact, the direction of the letters was adjusted by 45 degrees. Additionally, the lines of vertical letters like “Elif” and “Lam” transformed into interwoven compositions, drawing inspiration from geometric pattern designs. Square Kufic calligraphy was adapted by rotating it in four directions to create square, rectangular, and polygonal forms. In some instances, geometric shapes framed the calligraphy; in others, the calligraphy occupied the edges while geometric shapes took center stage.

During the Ghaznavid and Karakhanid periods, brick techniques underwent significant development. They became widespread⁷ Arabic letters, which became an integral part of Islamic architectural identity, and were incorporated into the brick technique, giving rise to a new style of ornamentation. It is reported that the first examples of square Kufic calligraphy were used in the tower of Ghaznavid Sultan Masud during this period. The initial, more straightforward instances of square Kufic in the cylindrical bodies of brick minarets have also survived to the present day in Khorasan and its surroundings. In Isfahan, the Sharaban Minaret, Friday Mosque, and Ali Mosque still bear square Kufic scripts dating back to the early 12th century.

In the cylindrical minaret of Mescid-i Ali, square Kufic could be more extensive. A band-shaped inscription of the phrase “Hu...” is inscribed at the base of the minaret, and the lower section of the first balcony is encircled by the inscription “Almulku lillah.” Beneath the second balcony, the word “Allah” is artistically adorned at the minaret’s pinnacle, with the calligraphic representation forming an interlaced pattern of reversed and upright script.

7 Metin Akar, “Eski Mimar Yazısı Sanatı Metinlerinin Restorasyonu”, *Aydın Türklük Bilgisi Dergisi*, year 7, no. 12 Spring – 2021, p. 9.

In the latter half of the 11th century, after declaring Isfahan the capital, the Great Seljuks made monumental additions and alterations to the Friday Mosque. During this renovation period, square Kufic emerged as a prominent element in the decorative enhancements.⁸ A small square stands above the mihrab, within the Mihrab section covered by a Seljuk-era dome. Inside this square, the Basmala (“In the name of Allah, the Most Gracious, the Most Merciful”) and Surah Al-Ikhlâs are inscribed in the square Kufic style.

The art of square Kufic calligraphy has continued for centuries in Iran, Central Asia, and Asia Minor, with distinguished examples.

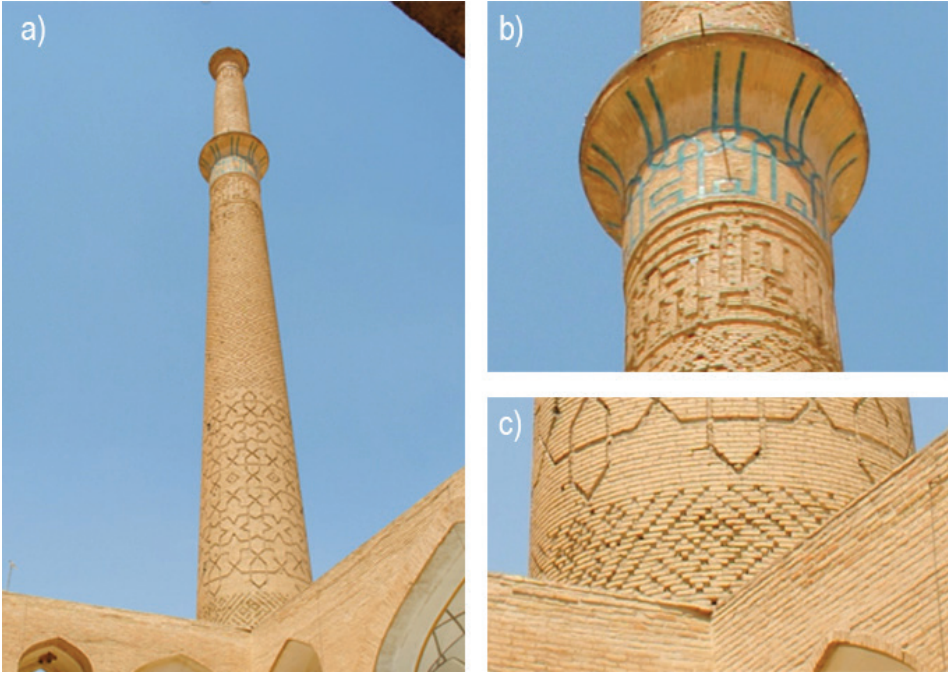


Figure 1. a) The Minaret of the Ali Mosque in Isfahan. b) Square Kufic script detail beneath the Sherefe (Balcony) c) Square Kufic script detail at the base.

8 Onur Şimşek, “Büyük Selçuklu Mimarisinde Avlu Kimliği”, *FSM İlmî Araştırmalar İnsan ve Toplum Bilimleri Dergisi*, no. 5, Spring 2015, p. 462.



Figure 2. Square kufic compositions at the Qibla-eyvan of the Isfahan Friday Mosque

Square Kufic Calligraphy in Anatolia and the Ottoman Period

In Anatolia, the ma' qili script is used in different regions. Following the Great Seljuks, who employed square Kufic in their capital structures, the Anatolian Seljuks embraced and enriched this script style. In the Seljuk architectural tradition, which produced masterpieces by combining various materials in architectural ornamentation, ma' qili script was predominantly used alongside ceramic tiles and bricks. An early example can be observed on the facade of the Sivas Keykavus Darüşşifa.⁹ The courtyards and interiors of Seljuk-era madrasas in Konya exhibit a broad spectrum of compositions in square Kufic ornamentation.¹⁰

During the Ottoman era, as other calligraphy styles gained prominence and significance, the use of square Kufic gradually declined. The Old Mosque (Eski Cami) in Edirne, the second capital of the Ottoman Empire, is one of the rare buildings where square Kufic was most extensively employed during the Ottoman period.¹¹

Upon arrival in Istanbul, the use of square Kufic diminished even further, in stark contrast to its central role in Seljuk ornamentation. It became a rarely

9 Zübeyde Cihan Özsayiner, "Makili Calligraphy in the Ottoman Architecture in the Context of Calligraphy in Ishak Pasa Mosque", *2. International Symposium of Mount Ararat and Noah's Ark. Conference book, Oct. 8th-10th 2008*, ed. Oktay Belli, Ağrı Valiliği Kültür Yayınları, 2009, p. 278.

10 M. Uğur Derman, "Osmanlı İstanbul'unda Hat Sanatı", *1.Uluslararası Osmanlı İstanbulu Sempozyumu Bildiriler Kitabı, 29 Mayıs-1 Haziran*, ed. Feridun Emecen - Emrah Safa Gürkan, İstanbul, İstanbul Büyükşehir Belediyesi, 2013, p. 2013, , M. Hattstein - P. Delius, *İslam Sanatı ve Mimarisi*, İstanbul, Literatür, 2017, p. 373.

11 Hüsametdin Aksu, *İstanbul Yapılarındaki Bazı Dekoratif Küfi Hatlar*, İstanbul, 2001, p. 38

employed element, unlike its status as a primary decorative feature during the Seljukid era.

Square Kufic at the Çinili Köşk

The earliest remaining Makili calligraphy in Ottoman architecture in Istanbul can be found at the Çinili Köşk (English: The Pavilion with mosaics) within the walls of the Topkapı Palace.¹² Fatih Sultan Mehmed commissioned the building to Architect Atik Sinan. Çinili Köşk features near square Kufic calligraphy and other elements from the Seljukid architectural tradition, such as an Asian central plan, eyvan, stalactite vaults, and a dome with Turkish triangles. The building was completed in 1472, and it is well-known that many Persian masters were involved in its construction.¹³ They may have probably played a role in using square Kufic calligraphy at this kiosk. There are four ma ‘qili compositions with mosaics at the entrance of this kiosk.

The square Kufic calligraphies of the Çinili Köşk are created with detailed and precise mosaic work. The swastika Muhammad composition is a uniquely sophisticated design. The circular medallions on both corners above the pointed arch are divided into four equal quarters with the same design. With the orange mosaics, “Muhammad” is written, and the spaces between these letters can be read as “Ali.” These quarters with the Muhammad and Ali combination are rotated four times to form a swastika composition.

The other two square Kufic calligraphies are embedded within the floral Rumi motifs and connected with continuous white lines to the flower motif. In the lower one, “Allah” is written, and the upper word means “Akbar.” (i.e. God is the only great)

12 Semavi Eyice, “Çinili Köşk”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. VIII, Ankara, TDV, 1999, p. 338-340; Ali Alparıslan, *Osmanlı Hat Sanatı Tarihi*, İstanbul, Yapı Kredi Yayını, 1999, p. 20.

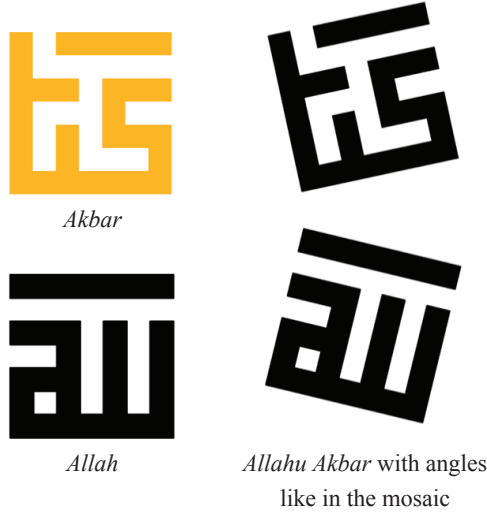
13 Ibid., P.48, p. 338.



Figure 3. Çinili Köşk: a) Pointed arch on the right side of the entrance. b) Square kufic composition on the left corner above the arch. c) Square kufic composition on the right corner above the arch. d) Detail of the square kufic mosaic with Muhammad and Ali composition. e) Mosaic detail with square kufic calligraphy on the right side of the entrance.

Table 1. Analysis of the square kufic calligraphy in the round mosaic

<p><i>Muhammad</i> in the top Quarter</p>	<p><i>Ali</i> in the top Quarter</p>	<p><i>Muhammad + Ali</i> Unit of the swastika</p>	<p><i>Muhammad + Ali</i> Rotated four times clockwise</p>

Table 2. Analysis of the square kufic words in the figure. 3 e)

Square Kufic Calligraphy at the Firuzağa Mosque

The Firuzağa Mosque, located on the northwestern corner of Sultanahmed Square on Divanyolu Street, was built in 1491 under the patronage of Firuzağa, who served as the treasurer during the reign of Beyazıt II.¹⁴ The small mosque displays well-proportioned architectural elements of classic Ottoman architecture. Three arches, supported by four original columns, lead to the entrance of the small domed mosque.

The square Kufic composition is situated beneath the muqarnas of the entrance portal and appears twice in a swastika composition above the entrance. A swastika composition named Prophet Muhammad is engraved on limestone and adorned with gold leaf. In this refined design, the space between the letters of “*Muhammad*” is read as “*Ali*,” the fourth khalif after the Prophet. However, the swastika composition has one minor mistake: at the bottom, the letter Mim in the Muhammad script is not linked to the letter “*Ha*.”

14 Semavi Eyice, “Firuzağa Camii”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. XIII, İstanbul, TDV, 1996, p. 136.



Figure 4. Entrance of the Firuzağa Mosque (a), Focus on both square kufic scripts under the muqarnas (b), Detail of the left square kufic composition

Table 3. Analysis of the square kufic composition at Firuzağa Mosque

Turning <i>Muhammed</i> four times clockwise	Turning <i>Ali</i> four times clockwise	Turning <i>Muhammed + Ali</i> together four times clockwise
<i>Muhammed</i> , from center to bottom left corner	<i>Ali</i> , from center to left	<i>Muhammad + Ali</i> , from center to left
<i>Muhammad</i> from center to top left-hand corner	<i>Ali</i> , from center to top	<i>Muhammad + Ali</i> , from center to top



Muhammad from center to
top right-hand corner



Ali, from center to right



Muhammad + Ali, from
center to right



Muhammed, from center to
bottom right corner



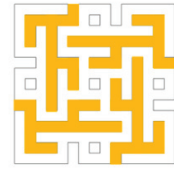
Ali, from center to bottom



Muhammad + Ali, from
center to bottom



Muhammed, complete
swastika composition



Ali, complete swastika
composition



Muhammed and Ali, complete
swastika composition

Square Kufic Calligraphy at the Beyazıt Mosque

The Beyazıt Mosque was constructed between 1501 and 1505 during the reign of Beyazıt II at today's Beyazıt Square, which was the largest forum in the city during the Byzantine period, known as Forum Theodosiacum or Forum Tauri. The complex, comprising a mosque, tomb, soup kitchen, primary school, hammam, caravanserai, madrasa, and guesthouses, was designed by the architect Yakup Shah bin Sultan Shah.¹⁵

There are two interesting square Kufic scripts with square compositions at the base of the minarets, each with different texts, created by embedding colored limestones into the Kufic limestone wall. One composition with the word "Elhamdulillah" (Praise to Allah) is placed on the right facade of the right

15 Semavi Eyice, "Beyazıt II Camii ve Külliyesi", *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 6, İstanbul, TDV, 1992, p. 45-49.

minaret’s base and the right and west facades of the left minaret. The Arabic word is rotated clockwise on the four edges of the square, and the long letters “Elif” and “Lam” are joined in the center of the composition to create an octagonal geometrical pattern in the center. This composition is called “braided Kufic,” where the letters are interwoven through geometrical patterns. The second square composition is situated on the left facade of the right minaret’s base and contains the entire Surah Al-Ikhlâs.¹⁶ The Surah begins in the bottom right corner and rotates clockwise like a spiral towards the center.

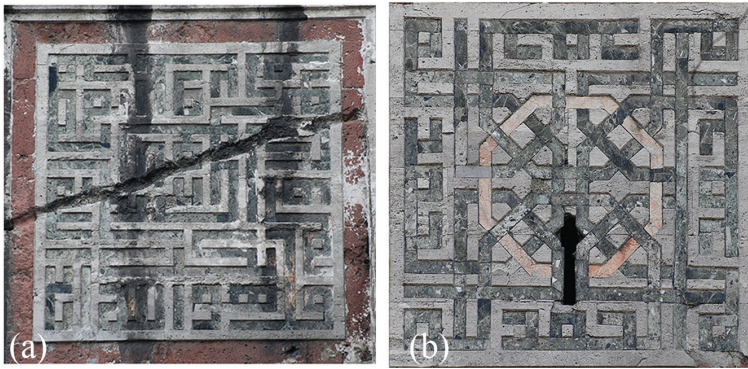


Figure 5. Surah Ikhlas (a), Elhamdulillah (b)

Table 4. Analysis of Surah Ikhlas Composition at Beyazıt Mosque

Qul	Huwa	Allahu	Ahad
Allahu	Assamad	Lam Yalid	Wa lam Yulad

16 Idib., P. 48.

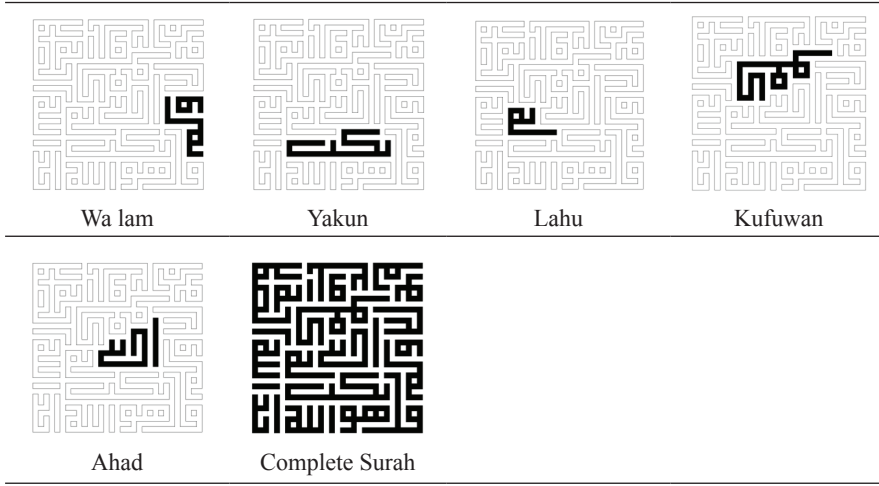
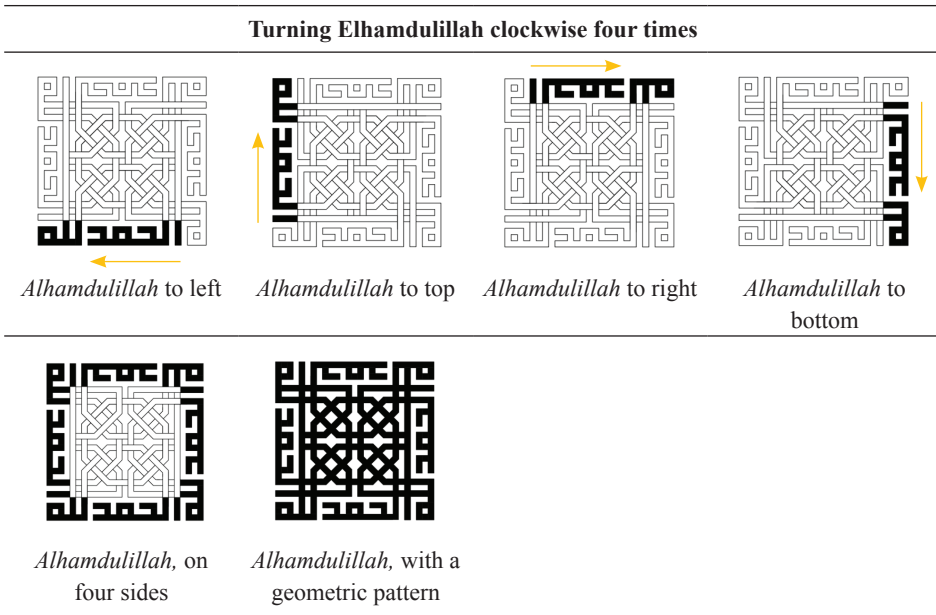


Table 5. Analysis of Alhamdulillah Composition at Beyazit Mosque



Square kufic calligraphy at the Haseki Mosque

The Haseki Complex, including a mosque, madrasa, primary school, fountain, soup kitchen, and a hospital, was ordered by Haseki Hürrem Sultan, the wife of Sultan Suleyman. It was built as the famous architect Sinan's first project after becoming the court architect (*başmimar*). The construction of the domed mosque

started in 1538 and finished in 1539. In 1612, the mosque was extended to the double size.¹⁷

There are two square kufic calligraphies in ma' qili, written on küfeki stones. On both sides of the entrance above the niches. The Muhammad composition shows similarities to the calligraphy at the Firuzağa mosque, whereby in the Firuzağa Mosque, the first letter *mim* of the word Muhammad at the center of the composition was used for all four Muhammad scripts. In contrast, each Muhammad script starts with its letter in the Haseki Mosque. The spaces between the letters of Muhammad show the name of the fourth Khalif *Ali*.¹⁸ In the Kalima i Tawhid composition, the point in the first raw draws attention. Usually, the composition of the Kalima-i Tawhid does not have any letters with points. Thus, this point must have been set to complete the space between the letters. But it is also possible to fill the space by turning the letter Elif towards the right, as shown in Table 6, with the orange point.

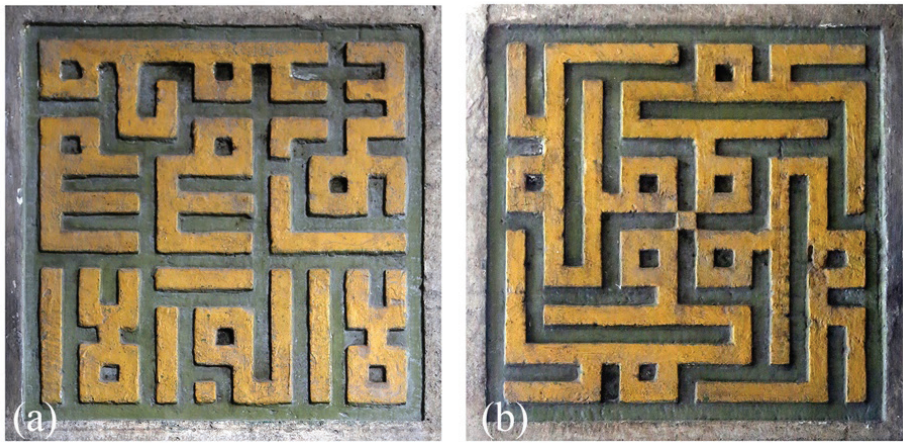


Figure 6. Word of Tawhid on the right wall (a), Muhammed on the left wall (b)

17 Sema Doğan, “Haseki Külliyesi”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 16, İstanbul, TDV, 1997, p. 370.

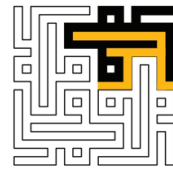
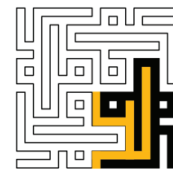
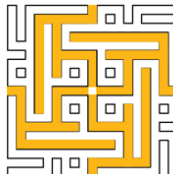
18 M. Baha Tanman, “İstanbul Haseki Camii’ne İlişkin Bazı Gözlemler”, *YILLIK: Annual of Istanbul Studies*, 3, 2021, p. 16; Mamoun Sakkal, “Square Kufic Tesselations,” *Abgadiyat*, 14 (1), 2019, p. 52.

Table 6. Analysis of the Word of Tawhid at Haseki Mosque

La ilahe illa Allah Muhammedun Rasullah	1. La	2. Ilahe	3. illa (orange: by turning to the right, the letter Alif could fill the space instead of unnecessary points)
4. Allah	5. Muhammedun	6. Rasul	7. Allah

Table 7. Analysis of the square kufic swastika composition at Haseki Mosque

Turning Muhammed four times clockwise	Turning Ali four times clockwise	Turning Muhammed + Ali together four times clockwise
<i>Muhammed to the left</i>	<i>Ali, between the letters of Muhammed to the left</i>	<i>Muhammed + Ali together to the left</i>
<i>Muhammed to top</i>	<i>Ali between the letters of Muhammed to the top</i>	<i>Muhammed + Ali together to top</i>

*Muhammed to right**Ali between the Letters of
Muhammed to the right**Muhammed + Ali together to
the right**Muhammad to bottom**Ali, between the Letters of
Muhammad to the bottom**Muhammed + Ali together
to top**Muhammad four times**Ali four times**Muhammed + Ali four times*

Square Kufic Calligraphy at the Yavuz Sultan Selim Tomb

The Tomb of Yavuz Sultan Selim is located within the Selimiye complex in the Fatih district of Istanbul. The complex, situated on a hill overlooking the Golden Horn, includes a mosque, the tombs of Sultan Selim, Hafsa Sultan, and the Sehzades, a school, and a soup kitchen. The tomb of Selim was constructed in 1522 by the court architect Mimar Acem Ali. The domed tomb with an octagonal plan is built from stone.¹⁹

There are two square Kufic calligraphies on the wooden door of the tomb.

The rectangular Kufic compositions are situated above two masterpieces of geometric patterns with the künde-kari technique at the top of both wings. The

19 İ. Aydın Yüksel, "Sultan Selim Camii ve Külliyesi", *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 37, İstanbul, TDV, 2009, p. 513-516.

square Kufic scripts contain two Names of Allah: “Hannan” (Merciful to His servants) and “Mannan” (Tremendous in giving). The Names are connected to L-forms, with the L-form repeated twice within a rectangular frame. The letter “Elif” in both names is interwoven with each other, enriching the composition with a geometrical figure. The composition is created using künde-kari and mother-of-pearl inlaid techniques around a second wooden calligraphy in the center of the composition.

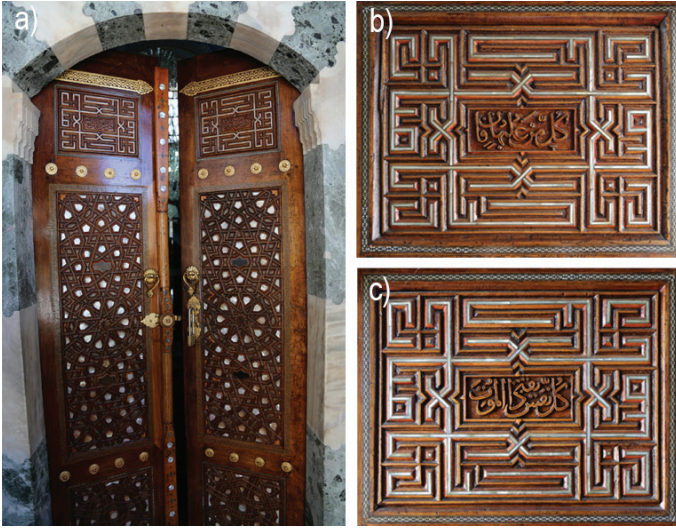
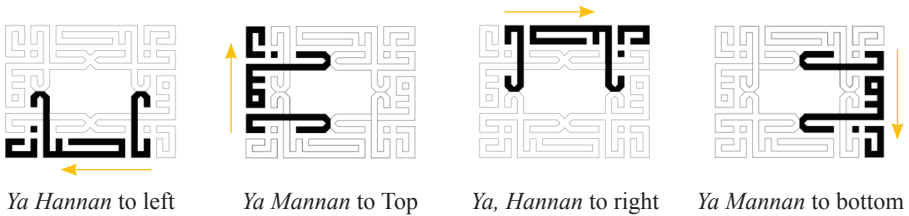


Figure 7. a) Wooden door of the Yavuz Sultan Selim Tomb b) Calligraphy Detail of left-wing c) Calligraphy detail of right-wing

Table 8. Analysis of the square kufic composition at the wooden door of the Yavuz Sultan Selim Tomb



Ya Hannan Ya Mannan together

Square Kufic Calligraphy at the Defterdar Mosque

As the mosque's founder, Defterdar (Provincial Treasurer) Nazlı Mahmud Çelebi ordered its construction in 1542 during the rule of Kanuni Sultan Süleyman. Although Mimar Sinan is mentioned as the architect in some publications, the mosque is not listed in the works attributed to Mimar Sinan.²⁰ Nevertheless, this small mosque became famous because of the *hokka* and the *divit* placed on the top of the dome next to the *alem* at the top of the minaret. These two calligraphic elements symbolize the calligraphy interests of the founder, Mehmed Efendi, who was also a calligrapher and a student of Sheikh Hamdullah.²¹

The small but unique square Kufic script is engraved in marble without coloring. The composition with the name of the Prophet Muhammad is situated at the leading portal under the pointed arch and above the inscription. The 45-degree rotated calligraphy becomes prominent due to the different ratios of the composition. The space between the letters is not as thick as the letters but designed only as a line, and the space in the center of the letters, "mim," appears as points instead of the usual square.

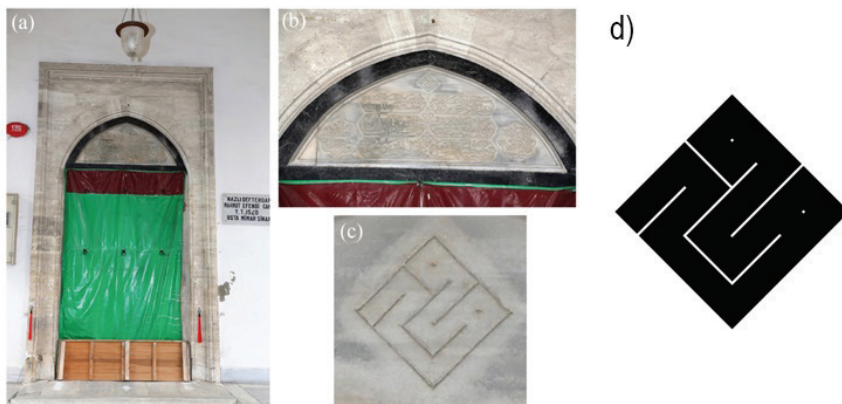


Figure 8. a) Portal of the Defterdar Mosque. b) Inscription at the portal
c) Detail of the square kufic calligraphy. d) Drawing of the composition

Square Kufic Calligraphy at the Şehzade Mosque

The Şehzade (Prince) Mosque is the first comprehensive project of Mimar Sinan for a sultan. The mosque is situated on Şehzadebasi Street between the famous Valens (Bozdoğan) Viaduct and the Municipality Building of Istanbul.

20 Semavi Eyice, "Defterdar Camii ve Türbesi", *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 9, İstanbul, TDV, 1994, p. 97.

21 Ibid., p. 97.

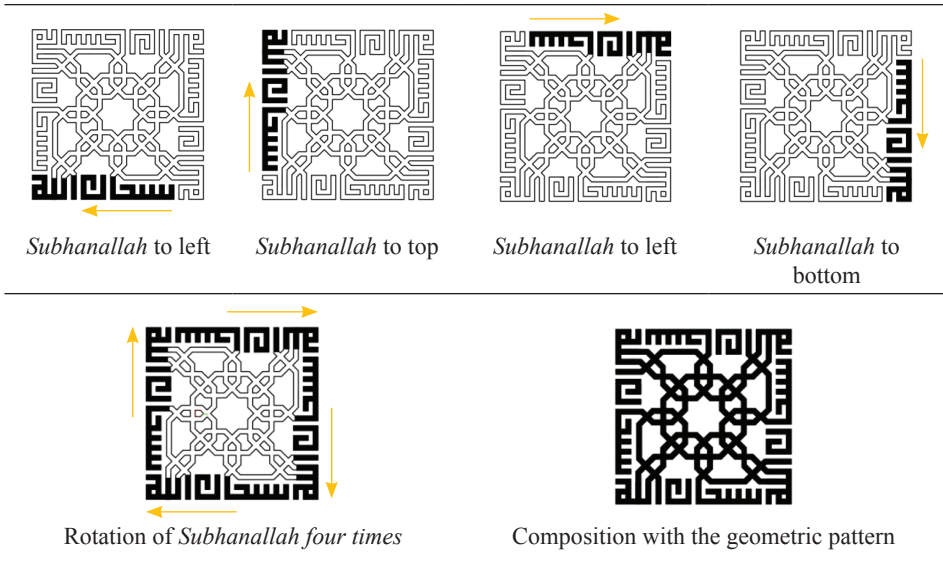
Kanuni Sultan Süleyman ordered the complex after his beloved son Şehzade Mehmed's death in 1543. The first building of the külliye was the tomb. Construction of the Mosque began in 1544, and with its rich repertoire of ornaments and calligraphy, the mosque was opened in 1548. Meanwhile, a madrasa, soup kitchen, primary school, and guest rooms were added to the complex.²²

Two equal braided square Kufic scripts with a swastika design around a geometric pattern are situated above the main entrance of the prayer hall (harem) on both sides. The script is engraved in limestone and colored with black mortar. The word "Subhanallah" (Allah is free from all kinds of shortcomings and evil) is written with square Kufic letters without points and rotated four times. The vertical letters "Elif" and "Lam" are extended to the center, creating eight tiny octagons. A more oversized octagon in the center of the composition links the small octagons together. The central octagon completes the design but is not related to the characters.



Figure 9. a) The portal of the Şehzade Mosque with the calligraphies from inside b) calligraphy on the right side of the portal c) b) calligraphy on the left side of the portal

22 İsmail Orman, "Şehzade Külliyesi", *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 38, İstanbul, TDV, 2010, p. 483-485.

Table 9. Analysis of the square kufic calligraphy at the Şehzade Mosque

Square Kufic Calligraphy at the Şehzade Mehmed Tomb

The second square Kufic composition in the Şehzade Complex is situated on the inner entrance wall of the Şehzade Mehmed Tomb. The walls of the octagonal tomb are covered with mosaics, referencing the Asian tradition of Turkish architecture.²³ The square Kufic compositions with green and white mosaics are integrated into the rich mosaic decorations on both sides of the portal. A swastika composition of the name of Prophet Muhammad is mirrored to a muthenna design, which is repeated on the other side of the portal.

Aziz Doğanay interprets this muthenna (mirrored) composition differently: Instead of reading the shifted script as the mirror image of Muhammad, he reads it as the word ‘ameluhu,’ which means “the work of him.” So, the composition would mean “the work of Muhammad” and signify the calligrapher’s signature.²⁴ One argument contradicting this opinion is that the letter “ha” at the end of the suggested word “ameluhu” in square Kufic calligraphy does not continue with a line but ends with a square. A second argument would be that the word “amelu” (the work of) is traditionally written on the right side.

23 Ibid., p. 484.

24 Aziz Doğanay, “Şehzâde Mehmed Türbesinde Bulunan Bir Sanatkâr İmzası ve Bu Sanatkârın Türk Tezyînâtına Getirdiği Yenilikler, *Divan, Disiplinlerarası Çalışmalar Dergisi*, no. 12, June 2002, p. 293; <https://dergipark.org.tr/pub/divan/issue/25941/273291> [Date of Access: 25.09.2023].

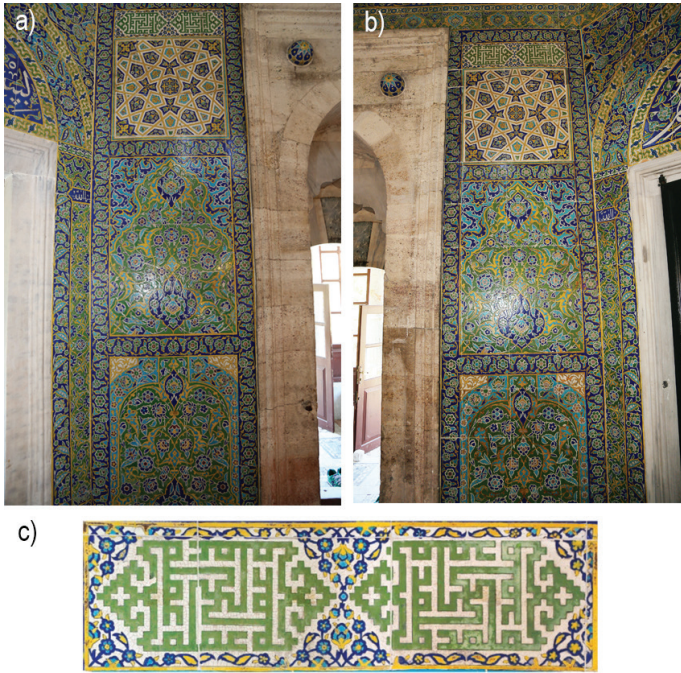
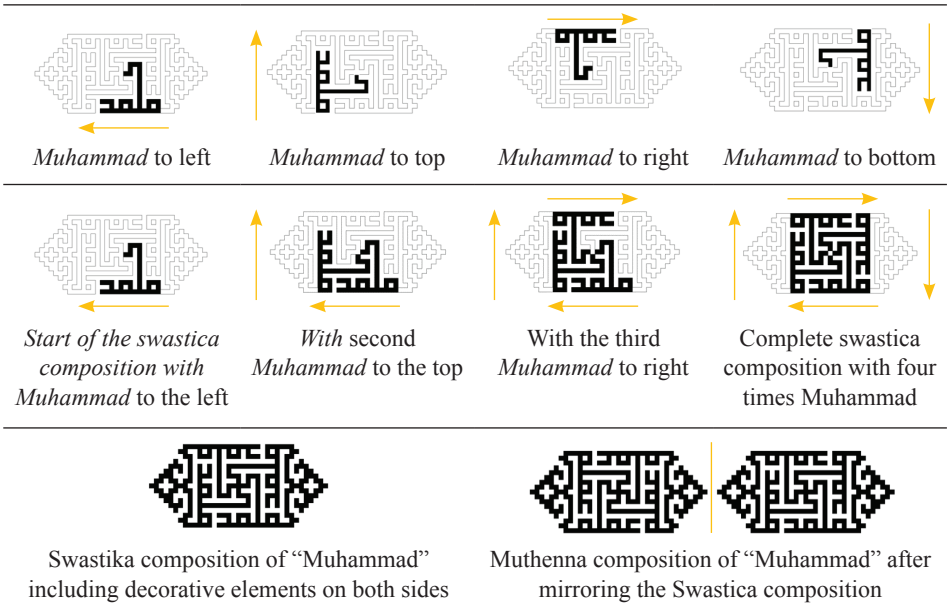


Figure 10. Muthenna composition of Şehzade Mehmed Tomb a) Left side of the gate. b) Right side of the gate. c) Detail of muthenna swastika composition

Table 10. Analysis of the square kufic calligraphy Şehzade Mehmed Tomb



Square kufic calligraphy at the Rustempasha Mosque

The Rustempasha complex, including a mosque, shops, depots, two hans (commercial buildings), and a fountain, was ordered by Rustempasha in 1555, who served as the grand vizier and groom of Sultan Suleyman the Magnificent.²⁵

The mosque is situated on top of the shops on the ground floor. With this strategy, the small mosque becomes visible from the shore of the Golden Horn despite the dense urban fabric. Architect Mimar Sinan handed over the key after he finished the mosque in 1561. The mosque became very famous through its rich mosaic decoration. The interior walls are entirely covered by the most beautiful mosaics with developed motifs from the classical period.²⁶

The square Kufic calligraphy is situated above the portal of the backside gate. A Muthanna composition of the Shahada is painted on the wall. Given the simplicity of the technique, it is assumable that this calligraphy might have been added later to the mosque.

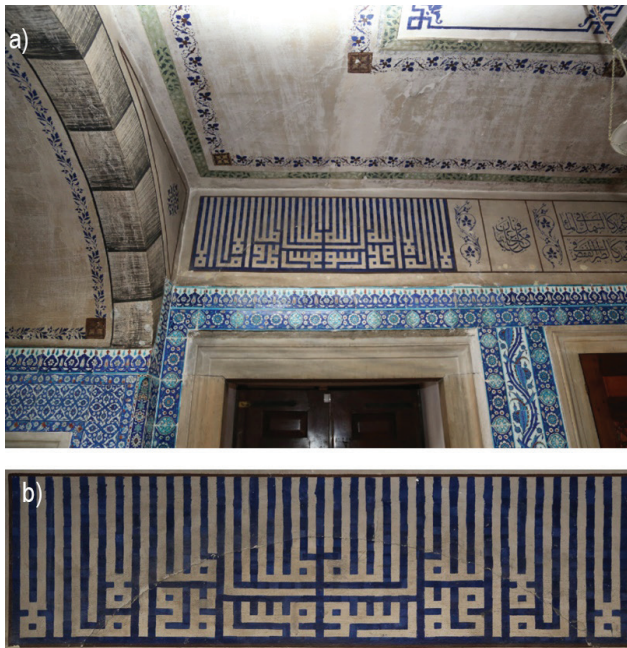


Figure 11. a) Square kufic calligraphy above the portal of the backside gate of Rustempasha b) Detail of the word of Shahada.

25 Z. Hale Tokay, "Rüstempaşa Külliyesi", *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 35, İstanbul, TDV, 2008, p. 291.

26 Ibid., p. 292.

Table 11. Analysis of the square kufic composition at the Rüstempasha Mosque

La ilaha	İlla Allah
Muhammedun	Rasul
Allah	La İlahe İlla Allah Muhammedun Rasulullah
With the orange points ha of Allah could link to two surplus lines	Muthanna composition after mirroring (orange line is mirroring axis)

Conclusion

Square Kufic calligraphy is undoubtedly one of the most significant elements of Turkish Islamic art and architecture. The Asian roots of the Turkish architectural tradition, the developed brick technique, and the high creativity of the masters enabled the rich repertoire of Square Kufic calligraphy in Central Asia, Khorasan, and Asia Minor. The Anatolian Seljuks continued the tradition of Square Kufic (ma'qili) calligraphy, especially in their capital, Konya. However, the shift from brick to stone as a building material also influenced decoration methods. The development of calligraphy disciplines further contributed to the decreased use of Square Kufic calligraphy in Ottoman architecture. Nevertheless, the art of Square Kufi continued, even in rare examples. The calligraphy content over the centuries within Ottoman architecture underwent cultural transformations.

Due to the solid Sunni identity of the Ottoman state, the name of Khalif Ali was predominantly invoked in the context of the four Khalifs rather than in isolation alongside the name of the Prophet Muhammad. In contrast, the name of Prophet Muhammad was most frequently associated with the name of Allah. Notably, the “Kalima-i Tawhid” persisted as one of the favored texts for Kufic calligraphy in subsequent architectural developments.

The increasing interest in Square Kufic calligraphy in contemporary architecture necessitates an in-depth analysis of historical examples. Although Square Kufi may appear more straightforward than other classical types like Thuluth, it is essential to study this tradition carefully to avoid the mistakes often seen in recent works. To support the revitalization of this tradition in a scientific manner, more research should be conducted on traditional examples, analyzing their compositions in historical buildings in Istanbul and Anatolia.

Bibliography

Akar, Metin, “Eski Mimar Yazısı Sanatı Metinlerinin Restorasyonu”, *Aydın Türklük Bilgisi Dergisi*, year 7, no. 12 Spring 2021.

Aksu, Hüsamettin, *İstanbul Yapılarındaki Bazı Dekoratif Küfi Hatlar*, İstanbul, 2001.

Alparslan, Ali, *Osmanlı Hat Sanatı Tarihi*, İstanbul, Yapı Kredi Yayını, 1999.

Bakırer, Ömür, “Kûfi Yazıda Geometrik Yorumlar Üzerine Bir Deneme”, *Sanat Tarihi Dergisi*, vol. 1, no. 1, 1982, p. 1-2; <https://dergipark.org.tr/tr/pub/std/issue/16504/172647> [Date of Access: 25.09.2023].

Derman, M. Uğur, “Osmanlı İstanbul’unda Hat Sanatı”, *1.Uluslararası Osmanlı İstanbulu Sempozyumu Bildiriler Kitabı, 29 Mayıs-1 Haziran*, ed. Feridun Emecen - Emrah Safa Gürkan, İstanbul, İstanbul Büyükşehir Belediyesi, 2013.

Doğan, Sema, “Haseki Külliyesi”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 16, İstanbul, TDV, 1997.

Doğanay, Aziz, “Şehzâde Mehmed Türbesinde Bulunan Bir Sanatkâr İmzası ve Bu Sanatkârın Türk Tezyînâtına Getirdiği Yenilikler”, *Divan, Disiplinlerarası Çalışmalar Dergisi*, no. 12, June 2002, p. 293; <https://dergipark.org.tr/tr/pub/divan/issue/25941/273291> [Date of Access: 25.09.2023].

Eyice, Semavi, “Çinili Köşk”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 8, İstanbul, TDV, 1993.

_____, “Firuzağa Camii”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 13, İstanbul, TDV, 1996.

_____, “Beyazıt II Camii ve Külliyesi”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 6, İstanbul, TDV, 1992.

_____, “Defterdar Camii ve Türbesi”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 9, İstanbul, TDV, 1994.

Hattstein, M. - Delius, P. *İslam Sanatı ve Mimarisi*, İstanbul, Literatür, 2017

Mülayim, Selçuk. “Süleymaniye Camii ve Külliyesi”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 38, İstanbul, TDV, 2010.

Orman, İsmail, “Şehzade Külliyesi”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 38, İstanbul, TDV, 2010.

Özsayiner, Zübeyde Cihan, “Makili Calligraphy in the Ottoman Architecture in the Context of Calligraphy in Ishak Pasa Mosque”, *2. Internaitonal Symposium of Mount Ararat and Noah's Ark. Conference book, Oct. 8th-10th 2008*, ed. Oktay Belli, Ağrı Valiliği Kültür Yayınları, 2009.

_____, “Mimar Sinan'ın İstanbul'daki Camii ve Türbelerindeki Yazı Düzeni ve Anlamı”, (Unpublished Doctoral Thesis), İstanbul Üniversitesi Sosyal Bilimler Enstitüsü Sanat Tarihi Bilim Dalı, İstanbul, 1993.

Sakkal, Mamoun, “Square Kufic Tesselations”, *Abgadiyat*, 14 (1), 2019.

Şimşek, Onur, “Büyük Selçuklu Mimarisinde Avlu Kimliği”, *FSM İlmî Araştırmalar İnsan ve Toplum Bilimleri Dergisi*, no. 5, Spring 2015.

Tanman, M. Baha, “İstanbul Haseki Camii'ne İlişkin Bazı Gözlemler”, *YILLIK: Annual of Istanbul Studies*, 3, 2021; <https://doi.org/10.53979/yil-lik.2021.8>

Tokay, Z. Hale, “Rüstempaşa Külliyesi”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 35, İstanbul, TDV, 2008.

Yazır, Mahmud Bedrettin, *Medeniyet Âleminde Yazı ve İslam Medeniyetinde Kalem Güzeli I*, Diyanet İşleri Başkanlığı Yayınları.

Yüksel, İ. Aydın, “Sultan Selim Camii ve Külliyesi”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)*, vol. 37, İstanbul, TDV, 2009.

Zennûn, Yûsuf - Serin, Muhittin, “Kûfî”, *Türkiye Diyanet Vakfı İslâm Ansiklopedisi (DİA)* vol. XXVI, Ankara, TDV, 1999.

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