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Arabic Calligraphy in the Ornamentation of Architecture and Ottoman Arts

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Abstract:	Article info
<p>The abundant material and archaeological evidence characterizing Ottoman art across much of the regions once under Ottoman rule testifies to the grandeur of the empire, particularly in architecture and, more broadly, in its cultural achievements. Visitors to these monuments cannot help but sense the significance of Ottoman contributions to urban development and civilization. Among the most distinctive features of Ottoman heritage are the decorative arts that adorn these structures, with calligraphic panels holding a prominent place. This article aims to shed light on the art of “painting with words” and the use of Arabic calligraphy as a decorative element in Ottoman art, showing the Ottomans’ reverence for the Arabic script and their respect for its close connection with the Islamic faith.</p>	<p>Received: 07/10/2025</p> <p>Accepted: 30/03/2026</p> <p>Key words:</p> <ul style="list-style-type: none">✓ Ottoman Art✓ Arabic Calligraphy✓ Ornamentation✓ Ottoman Architecture

Introduction

The Ottomans were among the most significant Muslim peoples to devote great attention to Arabic calligraphy, using it across diverse cultural domains. The numerous Ottoman monuments found in regions historically connected to the empire provide clear evidence of the extensive use of Arabic script to decorate their architecture and artworks.

Arabic calligraphy has long been closely linked with Islam. Its unique flexibility and capacity for artistic expression distinguish it from other writing systems, making it a source of both spiritual meaning and aesthetic delight. The Ottomans' engagement with calligraphy went beyond mastering existing styles; they refined certain scripts, created new ones, and surpassed their Arab predecessors by innovating an art form previously unknown in the Arab world—an art tied to writing and calligraphy. This distinctive contribution, known in Islamic art as “painting with words” (kuftekârî / Guftkârî), exemplifies their artistic creativity and reverence for the written word.

1. THE FIRST TOPIC: GENERAL CONCEPTS

Writing and calligraphy hold great importance in Arabic, as in other languages, because they enable the reader to comprehend the written text. ‘Abd al-Ḥamīd al-Kātib advised scribes, saying: “... **O assembly of scribes, seek understanding in religion, begin with the Book of God, then study Arabic, and perfect your handwriting, for it is the tool of your craft.**” (Khaldun, 1977, p. 196)

Similarly, Ibn Khaldūn emphasized the significance of writing and calligraphy, noting:

“... Writing and the tasks associated with it, such as copywork, preserve human needs and immortalize the results of thought and knowledge in written form.” (Khaldun, 1977, p. 198)

Throughout Islamic history, the terms “writing” (kitāba) and “calligraphy” (khatt) have been closely linked. In the early centuries of Islam, those proficient in writing were called “scribes” (kuttāb), while the title “**calligrapher**” (khattāt) only came into common usage later, with the development of Islamic art. Ibn Khaldūn also affirms this, stating:

“**The excellence of calligraphy is found in cities, for it is one of the crafts, and crafts are connected to urban life; we find that the teaching of calligraphy is more perfect and refined in well-developed cities.**” (al-Azami, 1977, p. 55)

The development of Arabic calligraphy, along with its schools and related sciences, was closely tied to the cities and urban centers where various sciences, industries, and crafts thrived. The more advanced a city became, the more calligraphy flourished, schools were established, and people were drawn to this art. As a result, traces of its development are found mainly in the monuments of the capital cities that served as major centers of Islamic civilization.

The patronage of kings and rulers greatly contributed to the advancement of this art, leading to the rise of a generation of scholars and artists whose lasting contributions to Arabic calligraphy are still celebrated today.

First requirement: Writing Instruments

Arabic calligraphy could not have achieved such renown without the essential materials required for writing, such as paper (kāghad), pens, ink, and others. The most important of these materials and tools may be summarized as follows:

Section One: Paper

Humanity has passed through three major historical stages: the stage of oral communication, the stage of pictorial expression, and, finally, the stage of writing. (al-Azami, 1977, p. 55) The first stage lasted millions of years, while the latter two required thousands of years to progress from one to the next. (Dard, 1974, p. 8)

During the stage of writing, it became necessary to devise a medium lighter than stone or clay tablets and easier to transport. After many experiments, the Chinese invented a suitable writing material in 105 CE, thanks to Ts'ai Lun, during the reign of Emperor Ho Ti. This material was made from tree bark and scraps of old linen cloth. (Sindal, 1908, p. 6) When the Muslims conquered the city of Samarkand, they learned the secrets of papermaking from Chinese prisoners skilled in the craft in 751 CE (134 AH). (Afifi, 1970, p. 214) This knowledge spread throughout the Islamic world, and in 794 CE (178 AH), (Reychman, 1976, p. 40) Hārūn al-Rashīd established the first paper mill in Baghdad. The industry continued to develop in later periods, reaching its height during the Ottoman era. The Ottomans used various types of paper for different purposes, the most prominent of which were:

- Devlet Abadi: Produced in India, specifically in the cities of Ahmedabad and Hyderabad, this paper was made from silk and known for its white color.
- Sultani Semerkandi: Manufactured in Samarkand from silk, this paper was noted for its black color and thickness. (Bedreddin, 1964, p. 154)
- Guni Tebrizi: Produced from silk in the city of Tabriz, this paper was white.
- Sam Kagitlari: This paper was rarely used by calligraphers because of its lower quality and was reserved for local consumption. (Ibrahim, 1939, p. 198).

One observation that can be drawn from this survey of paper types is that production took place outside the Ottoman capital. However, researchers in this field note that paper mills were established in Istanbul, specifically in the district of Kâğıthane, during the reign of Sultan Ahmed III (1606–1633 CE). (Ersoy, 1963, p. 16).

Section Two: The Pen (*Kalem*) (Kutukoglu, 1970, p. 19).

The pen was used for writing. The term comes from the Latin *kalamos*, meaning a reed or bamboo pen, and was borrowed by the Ottomans from Arabic. The reeds chosen for this purpose were those growing along the shores of the Caspian Sea, valued for their superior quality compared to those found in Anatolia. To prepare the reed for writing, it had to undergo several processing stages. While a detailed description is beyond the scope of this article, the main stages may be summarized as follows: (Saduddin, 1978, p. 76).

Cutting Process: The reed is cut about one centimeter from the node. To test its quality, it is thrown onto the ground before purchase — if it bounces on impact, it is considered good.

- **Shaping the Nib:** The nib is carved from top to bottom in the shape of an almond. The length of the nib's tongue affects both writing speed and the style of script produced.
- **Trimming the Tongue:** A small piece is cut from the tip of the nib to allow proper ink retention, and the tongue is split into two slits.
- **Attaching the Pen Rest:** This piece, made of ivory, mother-of-pearl, or tortoiseshell, helps ensure smooth and steady writing.

Section Three: The Pencil Sharpener (Kalem Tras)

The pencil sharpener consists of three parts: the blade (Namlu), the handle (Sap), and the joint or meeting point (Parazvana). Pencil sharpeners vary according to the shape of the blade and their intended function. (Inal, 1928, p. 169).

Section Four: Ink (Mürekkeb)

Ink was considered one of the essential tools of writing. It was made from various substances, including wool, gum, hair, and bezir (flaxseed oil vapor).

The notable quality of this latter ingredient was that it did not spoil, even when stored for a long time. (al-Masoud, 1971, p. 17) Black ink was the most commonly used, but the Ottomans employed other colors as well. These included red ink, which existed in two types — Lal and Gulguni, the latter referred to by the Turks as Kırmızı (crimson). They also used blue ink, produced from lapis lazuli pigment (Hind Laciverdi), as well as a sky-blue ink (Asumani Mürekkeb), made from a mixture of white lead, grape vinegar, and gum arabic. Additionally, they prepared gold ink from gold leaf, and writing executed with this ink was known as Zerendud. (al-Masoud, 1971, p. 19).

Section Five: The Inkwell (Hokka)

The inkwell is a container for holding ink. It came in various shapes—conical, oval—and was made from materials such as clay, glass, metal, or wood. Inkwells were typically covered, and many were inlaid with gold or silver. Those belonging to senior state officials and renowned calligraphers were often adorned with precious stones. (al-Masoud, 1971, p. 27).

Section Six: Lika

Lika is a piece of silk placed inside the inkwell. It prevented ink from spilling when the inkwell was tilted during writing. It also protected the pen's tip from hitting the bottom and allowed it to absorb enough ink. (al-Masoud, 1971, p. 29).

Section Seven: Rik Rikdan

This was a substance sprinkled over freshly written text to make the ink dry more quickly. It was made of gold-colored or pinkish particles, which were removed once

the ink dried to prevent them from sticking to the paper. The substance was kept in a special container called a Rikdan, which resembled a salt shaker. (Sirin, 1993, p. 158)

Section Eight: Scissors (*Makas*):

Scissors were used for cutting and had elongated blades. They were made of iron or steel, and those belonging to scribes and prominent calligraphers were polished and sometimes gilded. (Sirin, 1993, p. 159)

Topic Two: the Role of Arabic Calligraphy in Ottoman Art and Architecture. (see Figure 7)

Most Islamic civilizations paid significant attention to Arabic calligraphy, and under their patronage, the art reached a remarkable level of refinement. It was used to adorn Qur'anic manuscripts, vessels, palaces, residences, and a wide range of cultural artifacts. After the fall of Baghdad, Arabic calligraphy spread to major cities of the Islamic East, such as Tabriz, Mashhad, and other regions of Persia. There, local calligraphers—under the influence of the renowned master Yāqūt al-Musta'ṣimī—developed scripts that reflected their own aesthetic sensibilities and perfected others, such as ta'līq and nasta'līq. (Sirin, 1993, p. 161).

The students of Yāqūt al-Musta'ṣimī transmitted the art of calligraphy to Anatolia, where a new generation of calligraphers emerged with the goal of continuing his artistic legacy. Among the most notable were Shaykh Ḥamd Allāh al-Amasī and Aḥmad Qarahisārī, whose reputations spread widely. In the 10th century AH / 16th century CE, as the Ottoman state expanded into a vast empire, Istanbul became a major center of art and culture, attracting leading scholars and calligraphers from across the Islamic world. (Chaghatia, 1974, p. 1026).

One of the most important Ottoman innovations in calligraphy was the creation of the *hilya*, a calligraphic panel devised by Ḥāfiẓ 'Uthmān in the late 11th century AH. (Thurayya, 1311 H, p. 143).

Ottoman calligraphers expanded the uses of Arabic script across various artistic domains. Among the most celebrated was the art of “painting with words,” known in Turkish as *kuftekârî* (Guftkâri). (al-Azami, 1977, p. 146) This art form involved creating small compositions out of Arabic letters, words, or religious and literary phrases, arranged in the shapes of human figures, animals, plants, and other motifs (see Figure 1). Calligraphers also excelled at producing refined compositions of Qur'anic verses, proverbial sayings, and philosophical or poetic maxims. (Thurayya, 1311 H, p. 142).

Particularly noteworthy is the Ottoman calligraphers' fascination with writing special phrases in *thuluth* and *jalī ta'līq* scripts, often using mirror symmetry. The *basmala* was a favored text, rendered in a wide variety of scripts and symmetrical arrangements. To demonstrate their virtuosity, calligraphers frequently manipulated the form of the script, interweaving letters in complex and inventive ways. However, researchers generally do not

classify these as new scripts, since they were executed in pre-existing styles; rather, they are regarded as specific arrangements or geometric forms. These took on distinctive shapes, including:

1. Mirror Writing (Aynalı Yazı): A geometric arrangement in which each word has a mirrored reflection, as though the composition were placed before a mirror (see Figure 2). (Akasha, 1994, p. 25).

2. Figurative Writing (Resim Yazı): A form in which the calligrapher writes words or phrases so they take on the outline of a particular image or figure (see Figure 3).

Since the 13th century AH / 19th century CE, the art of word painting among the Ottomans developed significantly. Calligraphers excelled at producing intricate, interwoven compositions using thuluth mutarākib (interlaced thuluth) and thuluth mathnā (double thuluth) scripts, in which letters and words overlapped without following the conventional horizontal sequence of writing. (Ibrahim I. A., 1998, p. 239).

The Tughra (Tugra): The tughra represents the highest achievement of word painting and ornamental calligraphy in Ottoman art. Reserved exclusively for the sultans, it was one of the most distinguished forms of calligraphic design, reaching a point where it conveyed the abstract, symbolic meanings of Arabic script (see Figure 4).

The early Ottoman tughras were simple and unornamented compared to other artistic forms. However, the art of the tughra soon evolved, incorporating diverse decorative and geometric elements. It was typically executed in either diwani or thuluth script, whose flowing, intersecting lines created a harmonious, fluid composition. Notably, the tughra of Sultan Süleyman the Lawgiver (Suleiman the Magnificent) differed from other Ottoman tughras in both the script used and its overall arrangement and form. (Marzuq, 1973, p. 175)

The inscriptions within the tughra generally included phrases and honorific titles such as al-‘Adil (“the Just”), al-Ghazi (“the Warrior for the Faith”), and al-Muzaffar Da’iman (“the Ever Victorious”). (Hazam, 1975, p. 115).

The tughra reached the height of its artistic refinement through the work of the calligrapher Mustafa Râkım at the beginning of the 19th century, when he designed a magnificent tughra that became the official signature emblem of Sultan Mahmud II. (al-Baba, 1994, p. 147).

The Ottoman *tughra* consists of three main parts:

- Al-Surra or Al-Kursi (Sere–Kursu): The base of the tughra, consisting of the main text, which includes the sultan’s name, his father’s name, the title “Khan,” and a supplicatory phrase for the sultan, usually rendered as “Ever Victorious.” (Marzuq, 1973, p. 172).
- Tug – Flama: The arms extending from the head of the kursi (the throne-like base of the tughra), rising vertically with a slight inclination to the left. (Aslan, 1987, p. 314).

- Beyze: The shape formed by the two arms extending from the names of the sultan and his father, curving to create an egg-like figure. This form is divided into two sections, representing an inner and outer “egg,” both emerging from the words *khan* and *bin*.
- Hançere: Two arms flowing from the inner and outer “eggs,” intersecting with the arms of the tug. They are extended and slightly curved, resembling the blade of a sword. (Bayoumi, 1985, p. 183).
- Mahlas: A circular shape on the right side of the tughra, which originally contained the word *ghazi* at the dawn of this art form but was later replaced by the *basmla* as the tradition developed. (al-Safsafi., 2004, p. 144).

Throughout the history of the Ottoman Empire, the tughra remained a distinctly Turkish tradition, appearing prominently on all official documents. Each sultan designed a unique tughra for himself, and at times, a ruler might adopt more than one. (Bayoumi, 1985, p. 186).

The art of calligraphy and writing in the Ottoman tradition included a number of technical terms used by Ottoman calligraphers and cited by scholars of Arabic calligraphy throughout the empire’s history. (Unver, 1967, p. 42) The most significant of these terms, presented in Turkish along with their Arabic translations and concise definitions, are compiled in the following table to aid researchers seeking further insight.

Ottoman Term	Arabic Translation	Definition
Ebrulu Kâğıt	الورق المزخرف بالأبرو	Paper decorated with colorful marbled patterns, resembling clouds and waves, similar to the veins of marble stone.
Icâzet Nâme	الإجازة	The authorization text granted by master calligraphers to their students after successfully completing the calligraphy proficiency examination. (See Figure No. 5)
Istif	النسق	The calligraphic arrangement according to which a calligrapher composes and aligns the letters of words.
Altlık	التسميكة	The support board on which the calligrapher places the paper during writing, allowing easy adjustment of its position.
Ahâr	طلاء الأهار	A glutinous paste used to coat writing paper, giving it a white surface, concealing flaws, and increasing its thickness.

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Yumurta Ahâr	أهار البيض	A paste made from a mixture of duck and chicken eggs combined with alum, applied to writing paper.
Niçasta Ahâr	أهار النشا	A mixture of several substances applied to writing paper to facilitate the execution of large and clear calligraphy.
Tilmiz	المتعلم	The pupil who receives training in calligraphy under the supervision of a teacher.
Cilbend	الحافظة	The holder or case used for preserving written texts from the lessons.
Hilye	الحلية	A calligraphic composition often in the shape of a human figure, bird, or fruit, or in a specific decorative format—containing descriptions and attributes of the Prophet Muhammad. Calligrapher Ḥāfiẓ ‘Uthmān was the first to introduce this art form. (See Figure No. 6)

Source: Hassan al-Massoud. 1971, p,17.

Table to aid researchers seeking further insight.

Conclusion

The Ottoman artistic school succeeded in calligraphic design and writing by developing innovative elements and techniques, creating features unique to Ottoman art.

Over nearly five centuries—beginning in the fifteenth century and lasting until the abolition of the Arabic script in 1927—schools of calligraphy flourished and evolved. Ottoman calligraphers excelled in their craft, establishing rules specific to the Arabic script and going further by inventing new styles such as Diwani (in its various forms), Ta‘liq, Nasta‘liq, and Ruq‘ah. These contributions marked a significant leap forward in the art of Arabic calligraphy.

The political circumstances of the Ottoman Empire, at the height of its power and territorial expansion, played a key role in bringing Arabic calligraphy and its associated arts to full artistic maturity—what is often referred to in art history as “speaking ornamentation.” The Ottomans’ deep interest in Islamic teachings, combined with the patronage of their sultans, led to the extensive integration of calligraphy into architecture and the arts. Buildings in the capital and throughout the empire were adorned with inscriptions whose surviving examples still attest to the magnificence of this decorative tradition. They adapted the art form to meet expressive needs, producing eloquent visual compositions on the walls of civic, religious, and even military structures.

Ottoman calligraphers also mastered and innovated techniques in book and manuscript production, enriching them with illustration, gilding, and binding. This dedication to

perfecting writing and calligraphy ultimately gave rise to an Ottoman school distinguished by its unique artistic character, renowned among the traditions of Islamic calligraphy.

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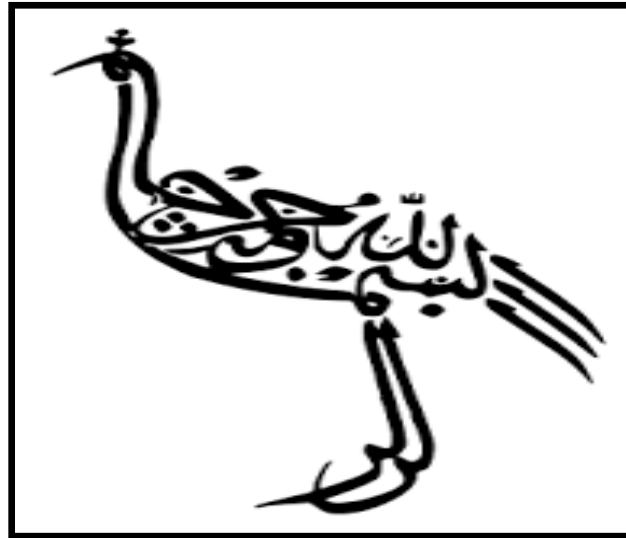


Figure 1: The shape of the kufta in Ottoman art, from:
Hassan al-Masoud, op. cit., p. 46

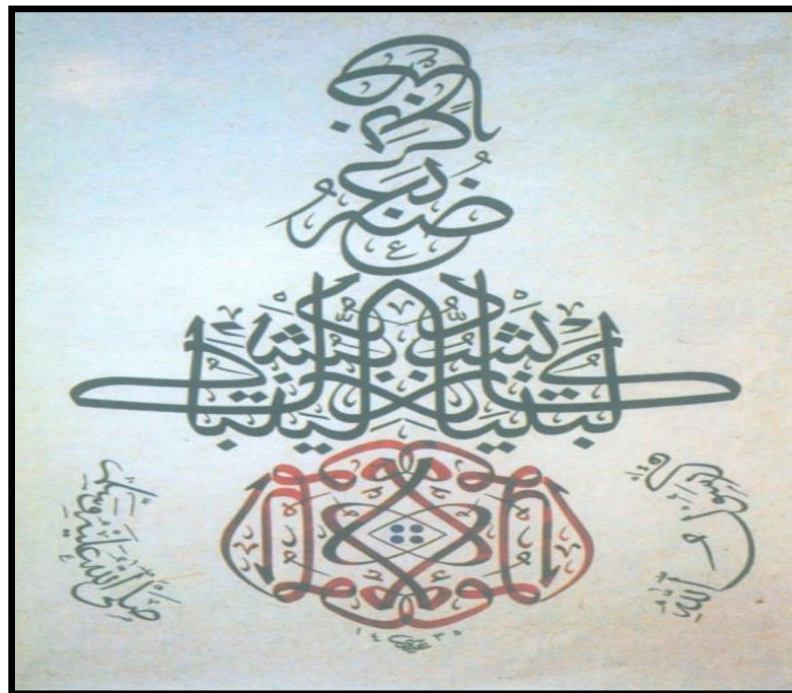


Figure 2: The mirrored (double) line in Ottoman art, from:
Ihab Ahmad Ibrahim. (1998), p.87.

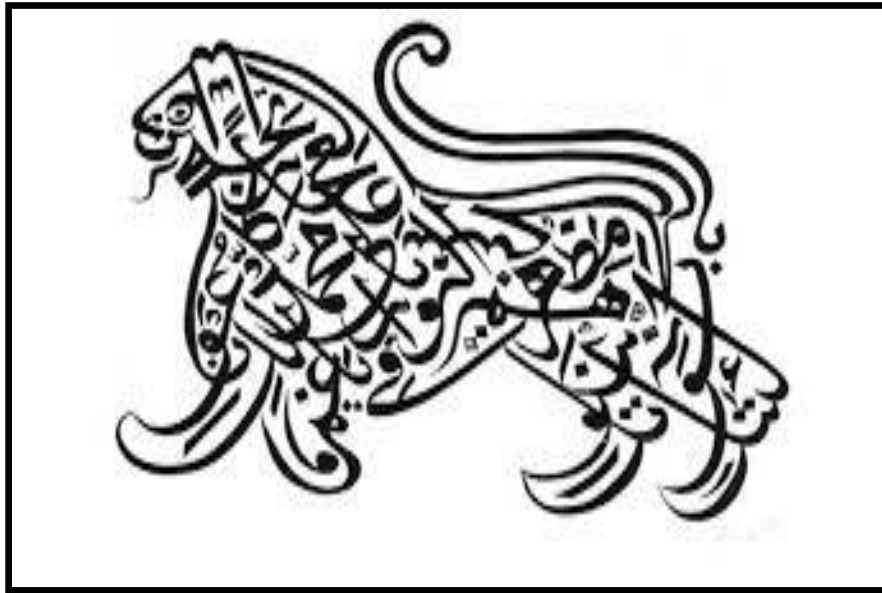


Figure 3: The form of pictorial writing in Ottoman art, from: Hassan Al-Masoud, (1971), p. 43.

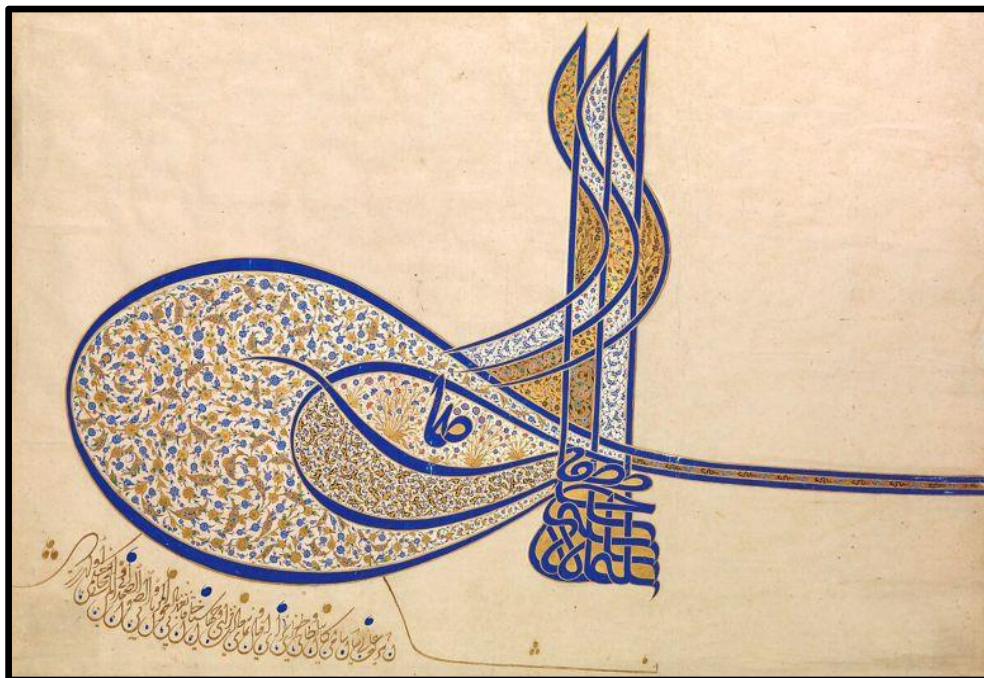


Figure 4: The form of the taghri in Ottoman art From: Hassan al-Masoud, (1971) ,p,45

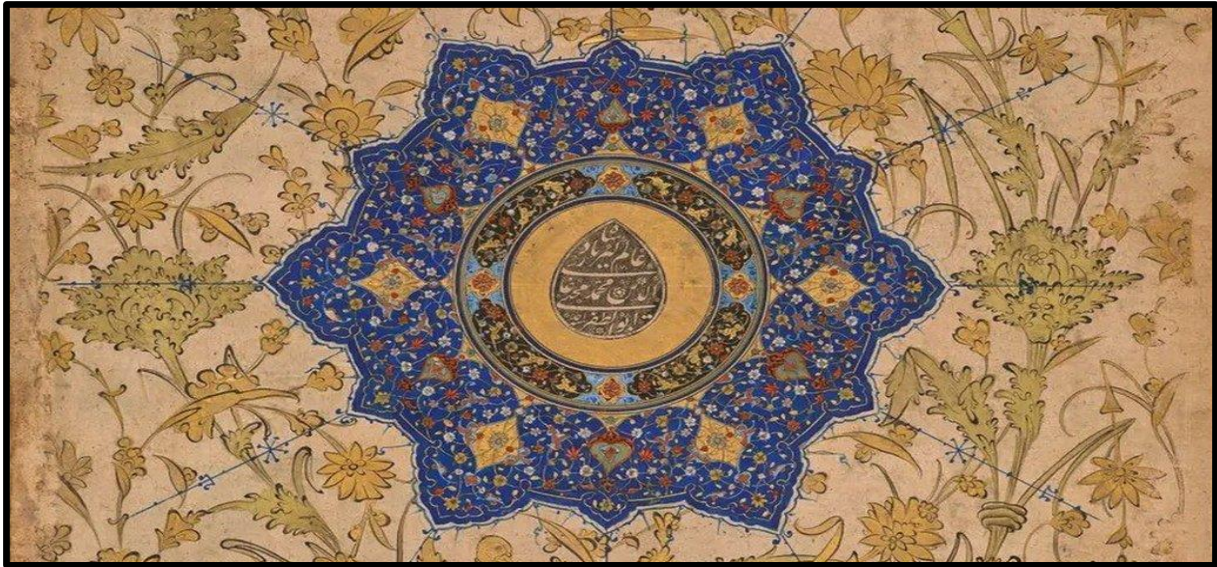


Figure 5: Ornamentation in Ottoman art About:
Nefes _ Zâde Ibrahim (1939) p,37

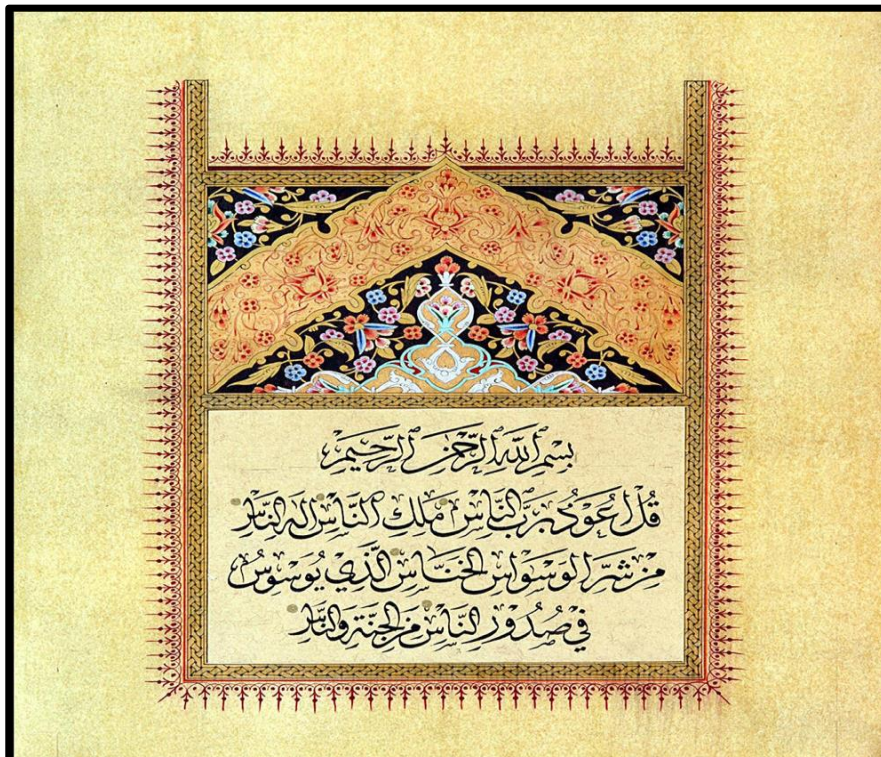


Figure 6: The shape of the Ottoman calligrapher's leave of absence from:
Nefes _ Zâde Ibrahim (1939) p,67



Figure 7: The influence of Arabic calligraphy on Ottoman architecture
From: Walid al-Azami.(1977),p, 129.

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