Art is not the monopoly of any society. Only when a society stamps its character on an art can the art be claimed, and recognized, as an expression of that society’s identity.

The Ottoman Turks had such an art: calligraphy. This art was not Turkish in origin. But having adopted it with religious fervor and inspiration, the Ottomans created marvels. Turkish calligraphy is a unique artistic creation.

When we speak of “Turkish calligraphy”, we refer to writing of aesthetic value based on the letters of the Arabic alphabet, which the Turks had adopted after their conversion to Islam. The process by which the Arabic alphabet acquired its aesthetic characteristics was slow at first, but from the mid-eighth century that process began to accelerate. By the time the Turks joined the Islamic world in the tenth century, calligraphy was already an important art form. It is necessary, therefore, to review briefly the structure of the original Arabic alphabet and its development during the early centuries of Islam.

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FROM ALPHABET TO ART

“Calligraphy is a spiritual geometry produced by a material instrument.” This succinct aesthetic

dictum, found in early Islamic sources, has guided the development of calligraphy.

Before the advent of Islam, the North Arabian tribe called the Nabataeans lived in what is today Jordan and Syria. Their main cities were Hārām, Petra, and Bostra, and their writing system was called nabati. The Arabic alphabet originated with nabati, which itself originated with Phoenician. In its early form, the Arabic script consisted only of rudimentary shapes, giving no indication of its future potential as a powerful artistic medium. With the emergence of Islam, however, and especially after the hijra—that is, Muhammad’s flight from Mecca to Medina in 622 to escape persecution and preach the new religion—Arabic writing was ennobled, becoming Islam’s primary means of visual expression.

Calligraphy had its origins in religion, as Muslims searched for the most suitable way to make the sacred book of Islam, the Qur’ān, a volume or codex (muraqqa) whose physical beauty would reflect its spiritual beauty. In the Arabic writing system, most letters undergo a change of form according to their position at the beginning, middle, or end of a word, or when they stand alone. As this basic writing system was transformed into an art, the letters acquired highly supple shapes. A rich visual effect was achieved by writing the letters in strategic relationship to one another; the top sheet in figure 2 demonstrates many combinations, in nineteenth-century Ottoman nāsī, of the letter bā (B) with the letter mim (M). It was possible to write the same word or phrase in many ways, opening the door to an endless search for new styles and novel approaches. The letters varied to an astonishing degree, depending on which of various scripts was used and by which calligrapher.

The Arabic alphabet was adopted, primarily as a token of religious allegiance, by virtually all of the
peoples who converted to Islam. Within a few centuries after the hijra, the alphabet had become the shared property of the entire Muslim world. 'Arabic calligraphy', term appropriate to the early period when Islam was limited to the Arab lands, grew over time into what more accurately might be described as 'Islamic calligraphy'.

The number of people literate in Arabic multiplied rapidly, and in time the script was perfected into a vehicle suitable for recording the Qur’an—and hence the Arabic language itself, in which the sacred book was revealed—with precision. Vowel signs known as harakat were invented to accompany the all-consonantal alphabet (three of the consonants, however, can double as vowels). Letters identical in form but different in sound were distinguished by variously placed dots and groups of dots. As time passed, the use of these diacritics to differentiate letters became universal. Both the diacritics and the vowel signs, as well as the symbol indicating undotted letters (haruf-i mubâhâ), acquired decorative forms, which played a major role in the development of writing as an art. Meanwhile, the frequently used Arabic definite article, consisting of the letters alif and lam (al-), became an aesthetic balancing element.

In the pre-Islamic era, depending on the cultural center at the time, Arabic writing was known variously as arzâr, hirî, and mekki (Meccan). After the hijra, it was known as medîni (Medinan). Artistic considerations were not a concern for the original Qur’an copyists. The first Islamic text compiled in book form, the Qur’an was initially written in the mekki/međîni script, in black or dark brown ink on animal-skin parchment, without vowel signs or diacritics. In time, this early writing evolved into two forms. One was a sharply angled form reserved for the Qur’an and important correspondence; this form became known as kâfî (Kufic), after the city of Kufa, in Iraq, where it was most often used.

The other form, which was more rounded and flexible and could be written more quickly, was used for day-to-day purposes. Under the Umayyad caliphate (661–750), this form of writing spread and evolved rapidly in Damascus, the capital of the Arab empire. Following the development, in the eighth century, of pens whose nibs were cut to different widths, this style of writing gave rise to new scripts, named for the pens with which they were written. Among the earliest of these scripts were cellî, reserved for large-scale lettering, and tânûr (a very large script, and pen, for use on scrolls), which was the standard in official correspondence. Some of the new scripts were based on tânûr (Turkish tımar) and written with pens whose nibs were in specific proportion to the tânûr pen. Pens with nibs two-thirds as wide as the nib of the tânûr pen were known as sâliyân (two-thirds), and those with nibs one-third as wide were known as sâliyân (one-third). As the pens were scaled down, the scripts took on specific features of their own. Other new scripts that emerged, only to fall later into disuse, included riqâ‘i, kalâmîn-nasîf, hafî‘n-nasîf, and hafî‘n-sâliyân.

At the same time, the word kalâm, or pen, which referred to the writing instrument, came to be used for the writing itself. For example, the script kalâmîn-nasîf literally means 'half-size pen', because the nib employed is half as wide as the tânûr nib. The term hat, or calligraphy, was used for scripts such as kâfî and medîni, which were devised for special uses and did not involve the proportional scaling down of the pen.

Under the Abbasid caliphate (750–1258), learning and the arts flourished, leading to a
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Under the Abbasid caliphate (750–1258), learning and the arts flourished, leading to a swelling demand for books in Baghdad, the main capital, and in other major cities. To meet this demand, the number of copyists and stationers, called ‘samm, also rose; the script they used for copying was variously known as ‘samm, ‘muhakkak (no relation to the modern ‘muhakkak), ‘nashi, and ‘qasmi.

From the end of the eighth century, the practice of writing letters in accordance with specific proportions and symmetry became known as ‘ali, or fundamental calligraphy, and ‘masni, or balanced calligraphy. The outstanding calligrapher of this period was Ibn Muqla (d. 918/919), who composed rules for proportioning and ordering writing. Writing done according to these principles was called ‘mawwab, or proportioned writing.

While these developments were taking place, the ‘kuf script was flourishing, especially for copying Qur’ans. Within ‘kuf there were regional variations, especially in Andalusia and North Africa, where the script took on a more rounded form called maghrib. In Persia and the East, meanwhile, a ‘kuf variant called ‘maghrib ‘kuf (Eastern ‘kuf) was used until it was superseded by the ‘ahlam-un-sitt, or six scripts, discussed below. The large-scale form of ‘kuf known as ‘rijmi, which is mainly used on monuments, was primarily decorative.

The form of ‘mawwab known as ‘samm was generally reserved for copying books and was therefore referred to as ‘nashi, from the verb ‘istiksh, to copy. This script was the prototype for the modern ‘muhakkak, ‘ryhmi, and ‘samm scripts that emerged in the eleventh century. The finest calligrapher of this period, Ibn al-Bawwab (d. 419/1024), amended the rules promulgated by Ibn Muqla, establishing a method that was widely used until the mid-thirteenth century. The calligrapher Ibn al-Khazin (d. 518/1124) contributed to the development of the ‘teki’ and ‘rha’ scripts. Finally, Yaquti al-Mustasimi (or ‘Yaqt, d. 658/1263), working in Baghdad, further developed the style elaborated by Ibn al-Bawwab and wrote the finest thirteenth-century examples of ‘salis, ‘nashi, ‘muhakkak, ‘ryhmi, ‘teki’, and ‘rha’, which are together known as the ‘ahlam-un-sitt, or six scripts. The idea of cutting the nib of the reed pen at an angle instead of straight across was his, and it was an innovation that brought a great deal of elegance to calligraphy. Once the six scripts, with all their rules, had taken their place in the art of calligraphy, other scripts were abandoned. Today no traces remain of these lost scripts except their names, among them, ‘sicillus, ‘disib, ‘zubur, ‘nufussu, ‘harem, ‘ludh, ‘muallik, and ‘mirful.

After Yaquti’s death, the master scribes who had studied under him carried his style of writing the six scripts from Baghdad to Anatolia, Egypt, Syria, Iran, and Transoxiana in Central Asia, where the art continued to attract interest. New generations of calligraphers in these lands dedicated themselves to the Yaquti’s style. But as time passed, that method lost its originality. It remained for the Ottoman Turks to rescue the six scripts and develop them to their fullest, a story we shall continue after a brief look at the tools and materials used in the art of calligraphy.

TOOLS AND MATERIALS

The primary requisites for the tools employed in calligraphy are soundness and usability. But in the Ottoman period, artisans lavished more care and attention on these tools than on the tools of other trades, creating objects of great beauty. Many are of museum quality.

Used as both musical instrument the ney, or flute) and pen, the reed evokes the mystical
atmosphere of the Oriental Islamic world. Yellowish white reeds are harvested from the marshy banks of lakes and rivers in warm regions. They are not usable as pens in their natural state but first must be seasoned by burial (traditionally, for a period of four years) in horse manure, which maintains a constant moist warmth. During burial, the reeds harden and change color, becoming reddish brown, light or dark brown, or even black, depending on the type of reed (fig. 3).

When the reed is seasoned, the end is cut into an angled nib, which must be recut regularly as it wears. Even the slightest deviation in the width of the nib after recutting noticeably alters the appearance of the writing. This is considered a serious artistic flaw, especially in the case of nash and other fine scripts. Therefore, in the case of long texts, such as the Qur’an, calligraphers use pens made from the hard, straight, slender thorn of a palm tree native to Indonesia and Malaysia. (Ottoman calligraphers discovered these pens in the early nineteenth century among Javanese Muslims who carried them on pilgrimages to Mecca.) These pens, which are called cavo kalemi, are extremely durable and require little recutting. For ease of use, the cavo kalemi is affixed to a normal reed pen, which serves as a handle (fig. 3).

As the thickness of the writing increases, correspondingly thicker reeds are required. These are called kargo kalems, or spear pens (fig. 3). Hard
of the Oriental Islamic world. Yellowish bamboo is harvested from the marshy banks of rivers in warm regions. They are not usable in their natural state but first must be buried (traditionally, for a period of 100 days) in horse manure, which maintains a 15° warmath. During burial, the reeds change color, becoming reddish brown, brown, or even black, depending on the species (fig. 3).

As the reed is seasoned, the end is cut into a V-shaped notch, which must be recut regularly as it he slightest deviation in the width of the cut noticeably alters the appearance of the reed. This is considered a serious artistic flaw, especially in the case of nesh and other fine scripts. Therefore, in the case of long texts, such as the Qur’an, calligraphers use pens made from the hard, straight, slender thorn of a palm tree native to Indonesia and Malaysia. (Ottoman calligraphers discovered these pens in the early nineteenth century among Javanese Muslims who carried them on pilgrimages to Mecca.) These pens, which are called cava kalami, are extremely durable and require little recutting. For ease of use, the cava kalami is affixed to a normal reed pen, which serves as a handle (fig. 3).

As the thickness of the writing increases, correspondingly thicker reeds are required. These are called horg kalem, or spear pens (fig. 3). Hard bamboo may be used. Even these pens, however, cannot accommodate some of the celi (large) scripts; in such cases, calligraphers use pens carved from wood, called qiyq kalem or taht kalem (wooden pens, fig. 3). Extremely large celi inscriptions cannot be written directly by hand at all, as a pen big enough to produce the letters would be too heavy to hold. Such inscriptions are written first on a smaller scale and then enlarged by means of squaring.

To make the nib, the reed is laid on the palm of the left hand (if the calligrapher is right-handed), with the tip extending toward the wrist. The tip is cut with a penknife called the kalem toyard, held at a slant. The blade, known as the fig, is mounted in a handle that is often made of valuable materials, such as gold-inlaid steel, enameled gold, ivory, coral, mother-of-pearl, or ebony. The bolster that connects the blade to the handle is known as the parazima. The penknife is commonly between four and eight inches in length. The master knife maker generally embosses his name on the blade; the makers’ stamps are visible on the blades of the penknives in figure 4.

The pen is cut until the cavity of the hollow reed appears almond-shaped. The projecting tip that results is called the kalem döl (pen’s tongue). The edges of the tongue are cut to obtain a nib of the desired width. The nib is then split to a depth of one-half to one and one-half inches. It is essential that the split (qulit) be exactly parallel to the pen...
shallow. The opening thus formed becomes a reservoir that contains a small store of ink, which flows down to the nib as the calligrapher writes.

The nib is cut against the cutting surface of the maktu, a small, flat piece of wood, ivory, tortoiseshell, or mother-of-pearl. These materials are hard enough to cut against but will not damage the edge of the penknife. (Figure 4 shows an engraved maktu, made of silver and black polyester resin, with an inlaid ivory cutting pad, by the contemporary artist Salih Balakbahalar [b. 1950].) At one end of the maktu is a small grooved protrusion. In cutting or recutting the nib, the calligrapher sets the pen in this groove, holds the handle of the pen securely, and brings the sharp blade of the penknife down to snap off the end of the nib. In cutting the qalak, the calligrapher holds the knife parallel to the pen and presses down against it.

The angled nib results in writing that slants toward the calligrapher, who holds the pen so that the edge of the nib rests fully on the paper. Moving the pen from top to bottom, the calligrapher produces a fine perpendicular line. Moving the pen from right to left results in a thick line. Sometimes the calligrapher alters the angle of the pen to the work, to achieve a subtle effect. The proper size of the letters in each script is measured in dots, and the size of the dot depends on the width of the nib. Thus the pen is the most vital element in the aesthetic quality of calligraphy.

Pens are sometimes kept in a case containing an inkwell at one end, known as a divit (fig. 5), and sometimes in cylindrical or rectangular boxes called kalemdans, which may be plain or decorated. The cylindrical kalemdan is also called a kubur (fig. 7).

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The nib is cut against the cutting surface of the *makta*, a small, flat piece of wood, ivory, tortoiseshell, or mother-of-pearl. These materials are hard enough to cut against but will not damage the edge of the penknife. (Figure 4 shows an engraved *makta*, made of silver and black polyester resin, with an inlaid ivory cutting pad, by the contemporary artist Salih Balakbabalar [b. 1950].) At one end of the *makta* is a small grooved protrusion. In cutting or recutting the nib, the calligrapher rests the pen in this groove, holds the handle of the pen securely, and brings the sharp blade of the penknife down to snip off the end of the nib. In cutting the *makta*, the calligrapher holds the knife parallel to the pen and presses down against it.

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Pens are sometimes kept in a case containing an inkwell at one end, known as a *dast* (fig. 5), and sometimes in cylindrical or rectangular boxes called *kalemdans*, which may be plain or decorated. The cylindrical *kalemdan* is also called a *khubur* (fig. 7).

In the past, paper was not ready to be used as soon as it was procured from the factory. Because this raw paper was normally white and tired the eyes, it was first dyed. Then it was sized with a substance called *dhir*, and finally burnished with a tool called a *çekmek mühr* to smooth the surface and stabilize the *dhir* coating. This process, still used by calligraphers today, results in a paper that is as glossy and smooth as though it had been calendared between rollers.

Vegetable dyes are generally used to color the paper. The dye material is boiled in water, which

![Figure 7](image_url)

Tools and materials. Clockwise from the top: Kişler (container for *zah* powder), from disassembled *kabak*; *zah* powder; feathers in *nol* script; *kabak* from the leaf; *zah*; *kabak* brush and pens.

Derman Collection, Istanbul
is then poured into a trough. The paper is soaked in the dye until it reaches the desired color, then set aside to dry. A cream or tan color produced from tea is the most popular. Among the other substances used to dye papers, and the colors they produce, are pomegranate skins and the green outer skins of walnuts (brown); seeds of cebri, or dyer’s buckthorn (yellow); red logwood (red); purple logwood (purple); the dark brown soot formed in the chimney of a confectioner’s stove during the production of caramel (yellowish white); and onion skins (reddish). If desired, the margins of the paper can be dyed a different color from the writing area. A paper prepared this way is called akhıl (fig. 13).

After dying, according to the ancient rules, a coating of çahir size is applied over the paper surface to prevent the soot-based ink from penetrating the fibers of the paper. Because the ink remains on the surface, imperfections in the writing, such as the ragged edges that are sometimes produced on letters during the pen stroke, may be removed by wiping the area with a bit of cotton, licking the surface, or scraping it with a special knife called the taşlık kalıntıyağı (correction knife; fig. 4). Papers prepared with çahir also improve with age. The most common size is egg whites mixed with alum and applied with a sponge. Starch or flour boiled with water into a thin paste can also be used. If the raw paper is not burnished within a week after being sized, the size will crack during the burnishing process, and the paper will be ruined.

The paper is burnished with the çakmak mühr (fig. 4), a wooden tool with handles on either end and a protruding piece of polished flint in the center. The paper is laid on a large, smooth panel of wood. To ensure that the mühr glides evenly over the surface of the paper, the paper is rubbed first with a piece of woolen fabric that has itself been rubbed over a bar of soap. Then, holding the mühr by its two handles, stone down, the calligrapher exerts pressure on the stone and moves it forward and backward over the paper, which is free to move on the wooden panel. Soon the paper begins to acquire a bright sheen. The paper is then stored for at least a year, until it is ready for use. Only when the paper has been sized, burnished, and aged will the pen glide easily over it. And only then is it possible to correct errors by wiping or scraping. (Official documents of the Ottoman Empire, however, were written on burnished but unsized paper—which absorbed ink—so as to prevent forgery or alteration.)

To write on sized paper, it is necessary to wipe the paper lightly first with a piece of woolen fabric dusted with chalk. The chalk removes the slippery finish created by the soap that was used when the paper was burnished. It also removes any trace of oil transferred to the paper by handling, as ink will not take on an oily surface.

The palette in calligraphy is generally black lines, produced with lampblack ink, on a light background (see fig. 1). The soot that is the principal ingredient of lampblack ink (is mürekkeb) is obtained by burning such substances as linseed oil, beeswax, naphtha, or kerosene. Gum arabic, the other ingredient, serves to bind the carbon particles to the paper. From the many formulas for producing this ink that have been preserved, it is clear that the process has changed over time. The final, most-developed formula calls for soot, dissolved gum arabic, and distilled water, which are mixed and ground together for a long time. This ink never fades.
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- pomegranate skins
- seeds of cedre, or henna
- horn (yellow)
- red logwood (red)
- indigo (purple)

If desired, the margins can be dyed a different color from the body of the paper. A paper prepared this way is called a “dark” size.

Inking, according to the ancient rules, a fine, smooth ink is applied to the surface of the paper using a brush and inkstone. The ink must be of the finest quality, and the process is delicate. The ink is then wiped clean with a soft cloth to remove excess ink from the surface, and the paper is allowed to dry. The ink should not be too wet, as it will cause the ink to feather and not adhere properly to the paper.

The paper is then polished with a soft cloth or a special polishing cloth. This step is crucial in achieving the desired finish, as it helps to seal the ink and protect the surface from fading over time.

In the case of artistic calligraphy, the ink was left to dry naturally. But for official correspondence, a fine, colored sand called नेम or रोक was sprinkled over the writing to prevent smudging (fig. 7). Literate people carried lampblack ink with them wherever they went, in portable inkwells.

In Ottoman calligraphy, the most commonly used ink was lampblack, produced from lampblack ink, on a light background (see fig. 1). The calligrapher uses a fine, colored sand called नेम or रोक, made of opomint (a compound of sulfur and arsenic); red, or लाल, white, or बाल, made of white lead, and gold, or ज्वर.

To make yellow ink—according to Ottoman tradition—the natural pigment called opomint was combined with gum arabic and mixed with water. (Amsab ज्वर, or realgar, was sometimes used instead of opomint, producing a more orange yellow.) Ruby red ink required mixing a substance called राम, which has not been identified, with soapwort, alum, and water, and then boiling them. Pulverized cochineal was then added to the liquid. This ink was boiled again, yielding an extremely attractive red color. White ink was made using the same method as yellow ink, substituting white lead for the opomint. This white ink was primarily used for writing the सुन, or chapter, headings in illuminated Qur’ans. Gold ink was made by pulverizing high-karat gold leaf (fig. 8) into a fine powder in a thick solution of gum arabic or honey in a porcelain dish. Once this laborious task was accomplished, the substance was rinsed in water to remove the gum or honey, and the gold strained into another dish, leaving the finest gold dust. Gelatin dissolved in water was added (fig. 8). The gold ink was applied to the nib of the pen with a special brush as needed. This was the basis of the ज्वर-ends, or gold-painted, method.

In an age when all writing was done with reed pens and lampblack ink, the inkwell, or यहह, was a...
part of every ceramic writing set, wooden writing casket, and portable pen case. Inkwells could be ceramic or glass, but more frequently they were made of metal, such as brass, copper, or silver (figs. 6–7). The ink was not poured directly into these inkwells. Rather, a small wad of raw-silk fiber called lika (fig. 7) was inserted into the inkwell and the ink poured over it. The lika absorbed the ink like a sponge, ensuring that the pen would take up just the right amount of ink. The lika also ensured that the ink would not spill should the inkwell be overturned.

How letters and words are positioned, how they are arranged in relation to a straight line, and how far apart the lines are spaced are all dictated by calligraphic rules. To aid in his writing, the calligrapher created guidelines on the paper using a simple tool called a mutar—a piece of cardboard with strands of thread stretched taut across it at regular intervals (fig. 9).

To make the mutar, the calligrapher first calculated the proper spacing of lines on the manuscript page, according to the size of the measuring dot produced by the reed pen he was to use. He then drew the lines on a piece of cardboard the same size as the page, and, using a needle and a single strand of fine silk thread, made holes at the end of each line and drew the silk through the hole at one end and across the cardboard to the hole at the other. The thread was also used to create guidelines indicating right and left margins. To use the mutar, the calligrapher placed the prepared paper on the thread side of the cardboard and traced the threads with his finger, pressing hard enough to leave subtle impressions of the lines.

In Ottoman times, calligraphers did not sit on chairs and write at tables. They sat on sofas or
part of every ceramic writing set, wooden writing case, and portable pen case. Inkwells could be ceramic or glass, but more frequently they were made of metal, such as brass, copper, or silver (figs. 6–7). The ink was not poured directly into these inkwells. Rather, a small wad of raw-silk fiber called liku (fig. 7) was inserted into the inkwell and the ink poured over it. The liku absorbed the ink like a sponge, ensuring that the pen would take up just the right amount of ink. The liku also ensured that the ink would not spill should the inkwell be overturned.

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To make the mutar, the calligrapher first calculated the proper spacing of lines on the manuscript page, according to the size of the measuring dot produced by the reed pen he was to use. He then drew the lines on a piece of cardboard the same size as the page, and, using a needle and a single strand of fine silk thread, made holes at the end of each line and drew the silk through the hole at one end and across the cardboard to the hole at the other. The thread was also used to create guidelines indicating right and left margins. To use the mutar, the calligrapher placed the prepared paper on the thread side of the cardboard and traced the threads with his finger, pressing hard enough to leave subtle impressions of the lines.

In Ottoman times, calligraphers did not sit on chairs and write at tables. They sat on sofas or cushions with their right knee raised and with the paper resting against the knee, a position that kept the paper perpendicular to the calligrapher’s line of sight. To support the paper against the knee, the calligrapher used an oluk, a flexible pad of rough paper approximately eight inches by ten inches in size. Unlike a hard surface, a flexible pad allowed for movements of the hand. A special, differently shaped oluk was employed for writing tâhri script (fig. 10).

Ottoman scissors are handsome implements with long blades, designed for cutting sheets of paper evenly from larger sheets. Some pairs of scissors were produced with their owner’s name in openwork on the handles (fig. 4). It is a great pleasure to use such a tool. Indeed, calligraphers relied on the high quality of all their tools and materials to produce the finest work.

THE EARLY TURKISH CONTRIBUTION TO CALLIGRAPHY

The Turks converted to Islam and adopted the Arabic alphabet by the tenth century, a century before the Turkish migrations into Anatolia. No artworks that would demonstrate an interest in calligraphy at this early date have survived. The earliest examples of the Turks’ use of Arabic writing date from the Anatolian Seljuk period (1092–1308). During this time, the küfî script was largely abandoned in favor of the ‘six scripts’. Küfî was reserved for book headings and monuments, where foliated or interlaced versions of it are found. In its architectural application, a geometrical version called sarpant (chequered) or mahorra (squared) küfî was used; some sources call these scripts mahalli (architectural). During the Beylik period (thirteenth to fourteenth century),
when independent Turkish principalities succeeded the Seljuks, and from the beginning of the Ottoman Empire until the conquest of Constantinople (1299–1453), calligraphy in Anatolia appears to have been a continuation of the Abbasid school. The calligrapher Şeyh Hamdullah (893/1489–926/1520; see cat. nos. 1–2) marks the beginning of the Ottoman predominance in calligraphy. Thereafter, the art followed a steady course of development into the twentieth century.

Before discussing the great masters who contributed to the evolution of the art, let us look at the scripts used in Ottoman calligraphy.

The six scripts can be divided into three groups, each consisting of two natural partners: sâlis and neših; muhakkak and rehâni; and tekeš and nkiš. The first partner in each group (sâlis, muhakkak, and tekeš) is written with a pen whose nib is approximately 2 millimeters in width. The second partner (neših, rehâni, and nkiš) is written with a pen whose nib is approximately 1 millimeter in width. Muhakkak and tekeš are larger-scale versions of rehâni and nkiš, respectively. Sâlis and neših, however, do not fit this scheme, diverging substantially in form as well as in style. The very fine version of neših is called gubairi (like dust), because the letters appear as small as motes of dust.

Of the six scripts, sâlis and neših were especially compatible with Turkish taste. Sâlis, which is called the ‘mother of calligraphy’ in historical sources, is the most amenable of the six scripts to artistic treatment. Its rounded and taut letters can attain
The six scripts can be divided into three groups, each consisting of two natural partners: sülüs and nesîh; muhakkak and reyhâni; and "tecki" and "rikû". The first partner in each group (sülüs, muhakkak, and "tecki") is written with a pen whose nib is approximately 2 millimeters in width. The second partner (nesîh, reyhâni, and "rikû") is written with a pen whose nib is approximately 1 millimeter in width. Muhakkak and "tecki" are larger-scale versions of reyhâni and "rikû", respectively. Sülüs and nesîh, however, do not fit this scheme, diverging substantially in form as well as in style. The very fine version of nesîh is called gahâri (like dust), because the letters appear as small as motes of dust.

Of the six scripts, sülüs and nesîh were especially compatible with Turkish taste. Sülüs, which is called the 'mother of calligraphy' in historical sources, is the most amenable of the six scripts to artistic treatment. Its rounded and taut letters can attain great richness. Moreover, this script gives calligraphers the greatest scope for creating istîfâ, or compositions (fig. 11). The advantages of sülüs are especially striking in the case of celi sülüs (celi means 'large' here), which can be written with a broad-nibbed pen or enlarged for architectural inscriptions by means of squaring. A sülüs or celi sülüs line in which words or groups of letters are joined is known as müceell (like a chain). An istîfâ that uses a word or group of words written twice as a symmetrical mirror image, interlocked down the center, is known as gahâri or as a müceell. The terms are also applied when the two sides of a visually symmetrical composition have different texts, one side written normally and one in reverse. As for nesîh, even though its letters are curved, they must be arranged in lines, making the script unsuitable for istîfâ. Instead, it is used for long texts. Muhakkak are commonly written in nesîh, and early printing fonts were based on it.

**FIGURE 12.** Mehmed Hüsâni Yağzâ (1286/1869-1335/1917)  
Lüfu, 1335/1917  
Çal'â'î, ink on paper, 38.7x30 cm  
SEM 130-0082 - MSY

Muhakkak and reyhâni are also suited to arrangement in lines, due to the predominance of straight lines in their letters. Until the sixteenth century, large-format Qur'ans were written in muhakkak, and smaller ones in reyhâni. These scripts were, however, for the most part eventually forgotten. Yet in order to improve their dexterity, calligraphers continued to copy the old masters' works in these scripts, which were found in kitâb (see pages 27-29) and albums. In addition, muhakkak has continued to be used for writing the bismillah, the Qur'anic formula 'In the name of God,
the Compassionate, the Merciful'. The beznele, which occurs at the beginning of each chapter of the Qur'an except chapter 9 (Rehab), is without doubt the phrase most often written in Ottoman calligraphy. (The beznele at muhakkak can be seen in the top line of the hijie in figure 19.)

The tekm'i and riki' scripts were mainly used for official purposes and rarely for copying manuscripts. Riki' was developed into a more attractive form called hatt-i icaz, used especially by calligraphers to write their signatures and diplomas for their students.

The vowel signs and other marks that aid in the reading of Arabic can be used in all six of the scripts, although with Turkish-language texts, tekm'i, tekm'i, and riki' are sometimes written without these signs.

A version of tekm'i that originated in fourteenth-century Persia, where it was used primarily for writing official documents, was called ta'llik. Later, it evolved into a different script named nezhe-ta'llik; in time, this name was changed to the more easily pronounced nesta'llik. Although it bore no relationship to the original Persian ta'llik script, nesta'llik became known as ta'llik after it arrived in Istanbul, in the second half of the fifteenth century. This graceful, delicately formed script is written without vowel signs, which are optional in Persian and Turkish. It has a light and poetic air, in comparison to the majesty of vâlide. A small version of Ottoman ta'llik, called hurde or hofsi, was used for literary works and collections of poetry. Hurde ta'llik was also the official script used by kâdis (judges) and by muftis, judges entitled to write a fetvia, or fatwa (an opinion on periat, or Islamic canon law), in the fetviahane, or fetvia department of the office of the highest Islamic authority of the state. Hurde ta'llik, as well as nezhe and riki', was used to write zakkfyes (endowment deeds; cat. no. 26), which were an important feature of Ottoman social life. Celi ta'llik was, after celi vâlide, the most common celi script used on monuments and lehsas (large paper and cardboard panels that can be framed and hung on the wall). The difference between the two scripts can be gauged by comparing the celi ta'llik lehsa in figure 12 with the celi vâlide lehsa in figure 11; both lehsas use the same text: 'He [God] is the First and the Last, the Manifest, the Hidden' (Qur'an 57:3). Regular-size ta'llik, written with a nib 2 millimeters wide, was largely used for writing hat'as.

The original ta'llik script used for official correspondence in Persia was also brought to Ottoman Turkey, by the Akkoyunlu Turkomans (1467–1501), at some point after 1473. Within a short while, changes were introduced, and because the script was restricted to use in the Imperial Council of State (Divan-i Hümâyûn), it became known as divânî. In the sixteenth century, a new variety of the script was derived from the unvocalized divanî script. The new version was called celi divânî. (In calligraphy, the term celi generally means 'large', but here it means 'clear' or 'evident'.) This majestic version of divânî was written with vowels, reading signs, and decorative features and was used to write only the most significant documents and proclamations. Both forms of the script are written in lines that curve up toward the left, and both require considerable skill to read and write. Moreover, it is almost impossible to add extra words or letters to a line of text. Those characteristics made divânî and celi divânî useful for official documents, as they prevented forgeries and ensured confidentiality.