

Radiating Inscription on Mamluk Metalwork

الكتابات المشعة على المنتجات المعدنية المملوكية

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ملخص

يتميز الفن الإسلامي عن غيره من الفنون باستخدام الخط كعنصر زخرفي. وتتميز المعادن بصفة خاصة عن غيرها من المنتجات باستخدام الكتابات كعنصر أساسي في زخارفها. ومن الكتابات اللافتة للنظر ما عرف بالكتابات المشعة، والتي ظهرت بصفة خاصة على المنتجات المعدنية. ويتميز هذا النوع من الكتابات الزخرفية بانتظام الكتابات داخل شكل دائري، وتمتد هامات الحروف باستطالة واضحة تجاه المركز فتبدو بشكل الشمس المشعة.

لذا يهدف البحث إلى دراسة هذا النوع من الكتابات الزخرفية للتعرف على نوع الخط المستخدم، ومحتوى النصوص، ونوع الزخارف التي تحتل مركز الدائرة، ونوع الزخارف التي تحيط بالكتابات، بالإضافة إلى الوقوف على الفترة الزمنية التي شاع فيها استخدام هذا النوع من الكتابات على المعادن. وقد اعتمد البحث على دراسة مجموعة من القطع المعدنية ذات الزخارف المشعة (26 قطعة) حيث تم قراءة نصوصها، وتحليل محتواها، وتفرغ زخارف بعضها، والمقارنة بينها.

وقد اتضح من الدراسة أن الكتابات المشعة ظهرت على المنتجات المعدنية المملوكية، وتحديدًا بداية من عصر الناصر محمد بن قلاوون. وقد شاع استخدامها بشكل واضح في عصر الناصر محمد وخلفائه، ثم تضاءل وجودها، إلا أنها لم تختف، بل ظلت قيد الاستخدام حتى نهاية العصر المملوكي الجركسي.

وقد كان خط النسخ وخط الثلث هما الأكثر استخدامًا في هذا النوع من الكتابات، في حين لم يستخدم الخط الكوفي إلا في مثال واحد. وقد حرص الفنان على التأكيد على امتداد هامات الحروف بحيث تشغل حوالي ثلثي الدائرة، بينما باقي الحروف تزدحم في ثلثها السفلي. وقد اتضح من الدراسة أيضًا أن الكتابات المشعة ظهرت في خمس صور أو طرز تختلف باختلاف مركز الدائرة. كما اتضح من تحليل النصوص أن القطع المملوكة للسلطين كانت نصوصها دعائية، يليها عدد من ألقاب السلطان وقد يرد اسمه في النص. أما القطع المملوكة لأمرأء أو شخصيات كبرى فقد يسجل عليها أيضًا نص لتعظيم السلطان أو عبارة دعائية للأمير تضم بعض ألقابه، وعادة ما يخلو النص من اسم صاحب القطعة.

واتضح من الدراسة أيضًا أن الكتابات المشعة صاحبها في بعض الأحيان زخارف البط الطائر وأزهار اللوتس والوريدات، وقد تناول البحث أسباب ظهور هذه الزخارف وتفسيرها. كما تناول البحث مناقشة تفسير الكتابات المشعة إجمالاً من حيث سبب ظهورها وانتشارها والفترة الزمنية التي ظهرت فيها.

The extensive use of inscriptions is one of the distinguishing features of Islamic art. Calligraphy occupied a place and gained importance in Islamic art unparalleled in any other culture. It gained its importance from the Muslims' need to write down the Quran and preserve it. Then calligraphy developed as a discipline with its own precise and strict rules to which proportion was mandatory. The art of calligraphy was not confined to the Quran or to books, it was rather used to adorn all kinds of objects and buildings. The Muslims developed within the art of calligraphy an unsurpassable variety of styles and ornamental inscriptions that became an essential element of decoration. That led Welch to describe Arabic script as 'the central form of Islam's arts and the foremost of its characteristic modes of visual expression.'¹

Doris Abouseif considered the extensive use of inscriptions on objects of daily use as a reflection of the taste of the Muslim society that regarded knowledge as of foremost value although literacy was widespread, especially among urban populations.² She added that the use of inscription in the arts freed the calligrapher's imagination to create ornamental devices and to transform the letters into ornament.³

Metal objects carrying inscriptions are certainly common all over the Islamic world. In the early period, Islamic metalworkers followed, and further developed pre-Islamic, particularly Roman and Byzantine traditions.⁴ Metal objects of the early period were usually decorated with a single line of inscription without dots and in many cases bear the date of manufacturing the object.⁵ By the tenth and eleventh century, inscriptions played a more important role in the decoration of Islamic metalwork. Inscriptions usually invoked blessings and good wishes on the owner or expressed dedication to him.⁶ It was in the twelfth or early thirteenth century when the practice of decorating metal objects with long inscriptions giving the name and titles of its owner have spread

from Upper Mesopotamia to Syria and Egypt, and reached its peak in the Mamluk period. In contrast to the Mesopotamian practice of using narrow, inconspicuous and well-integrated inscription bands, on the Mamluk metal objects, dedications often form the main, if not the only decoration.⁷

One of the ornamental inscriptions that were widely used on Mamluk metal objects is the radiating inscription. This form of inscription is used within a circular arrangement or medallion, in which the hastae or shafts of the letters point towards the centre of the medallion.⁸ This type of ornamental inscription was usually used in metal work, and despite its beauty and extensive use; no detailed study was devoted to it. Therefore, the present study will focus on the radiating inscription in an attempt to clarify its appearance, development, usage, meaning and the decorative motifs related to it. The study at hand will be divided into two main parts; the first will present various examples of metal objects with radiating inscription and the second will analyze these examples to shed light on the artistic features of that type of ornamental inscription.

Part I:

The first group of examples includes objects of metalwork -with radiating inscriptions- attributed to sultans of the Bahari Mamluk period. The earliest example of metal work with radiating inscription is the hexagonal table of al-Nasir Muhammad (dated 728 A.H./1328 A.D). It is made of brass inlaid with gold and silver and preserved in the Museum of Islamic Art in Cairo.⁹ The upper surface of the table is hexagonal in shape and its centre is occupied with concentric arrangement (fig. 1-A). The centre has a small circle bearing the word محمد 'Muhammad' written in 'naskh' script on a pierced background. It's surrounded with radiating inscription in kufic script that reads: عز لمولانا السلطان الملك الناصر ناصر الدنيا



(Fig. 1- A) Top of hexagonal table of Al-Nasir Muhammad

والدين ابن السلطان قلاون

‘Glory to our lord the Sultan, al-Malik al-Nasir, Nasir al-Dunya w’l-Din, son of the sultan Qalwun’

Each two of the vertical shafts of the radiating inscription are plaited together in knots and the upper parts of the shafts are pointed. The medallion is encircled with a ribbed frame which contains lotus flowers on a pierced background.

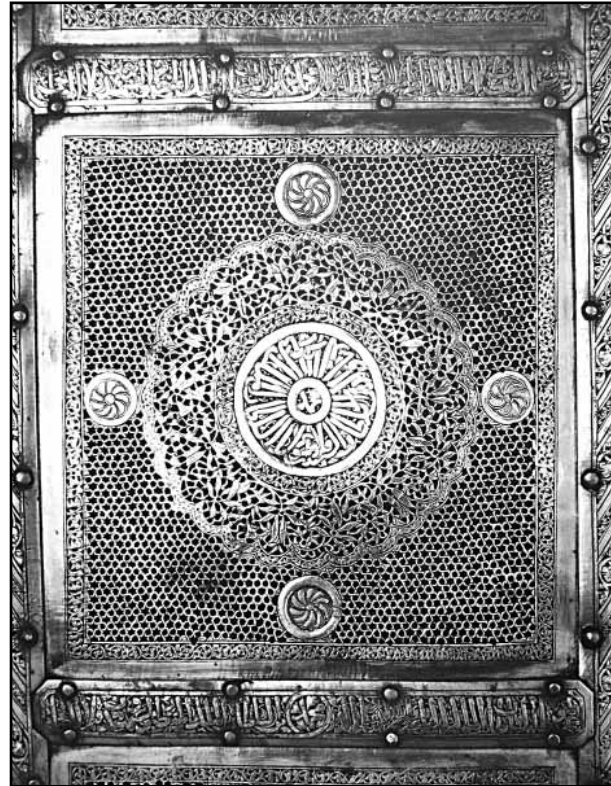
Four of the sides of the table are also decorated with radiating inscription (fig. 1-B). Each side bears a circular arrangement of four concentric circles: the central one bears the word: محمد ‘Muhammad’ written in naskh script, surrounded by radiating inscription also in naskh script and reads:

عز لمولانا السلطان الملك الناصر ناصر الدنيا والدين ابن
السلطان قلاون

‘Glory to our lord the Sultan, al-Malik al-Nasir, Nasir al-Dunya w’l-Din, son of the sultan Qalwun’

This circle is surrounded by a narrow circle with floral decorations and then a wide ribbed one containing lotus flowers.¹⁰

Another object attributed to al-Nasir Muhammad is a brass candlestick preserved in the Museum of Islamic Art in Cairo.¹¹ The body of the candlestick



(Fig. 1-B) One of the sides of the hexagonal table of Al-Nasir Muhammad

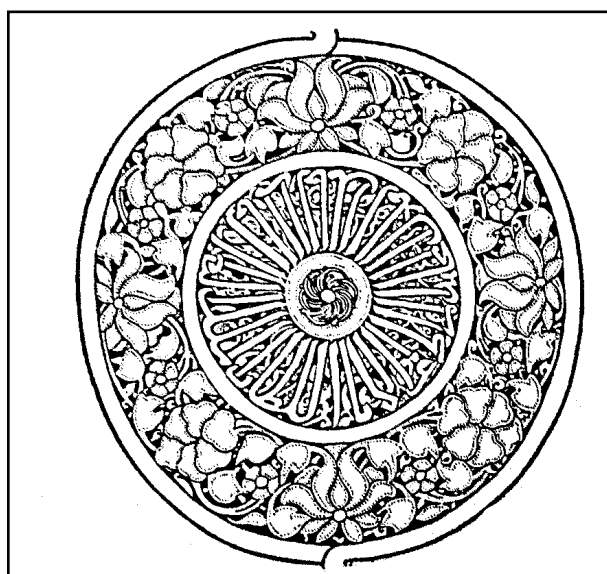
is decorated with a wide band of thuluth inscription which is interrupted by two large medallions, with radiating inscription written in thuluth script. It reads:

عز لمولانا السلطان الملك الناصر العالم العادل
المجاهد المرابط محمد بن قلاون

‘Glory to our lord the sultan, al-Malik al-Nasir, the learned, the just, the defender (of Faith) the warrior of the frontiers Muhammad son of the Sultan Qalwun’

The centre of the medallion is occupied with a cartouche.¹²

The candlestick of al-Nasir Muhammed in Museo Artistico Industriale in Rome was also decorated with radiating inscription (fig. 2-A). The base of the candlestick is decorated with a medallion that has a six-petaled whirling rosettes surrounded by radiating inscription on a floral background and it reads:



(Fig. 2-A) Medallion on the candlestick of Al-Nasir Muhammad in Museo Industriale in Rome. After: D. Rice, *Study IV*, fig. 8.

عز لمولانا السلطان الملك الناصر العالم العامل المجاهد
المجاهد المرابط ا

‘Glory to our lord the sultan, al-Malik al-Nasir, the learned the diligent the just the defender (of Faith) the warrior of the frontiers’

The outer circle is decorated with elegant slender lotus flowers.¹³

Among the best preserved examples of metal work with radiating inscription is the incense burner of al-Nasir Muhammad (fig. 2-B) that is now preserved in Nuhad Es-Said collection.¹⁴ The lid of the incense burner is decorated with a horizontal band of inscription interrupted with two lobed medallions with radiating inscription. It reads:

عز لمولانا السلطان الملك الناصر العالم العامل المجاهد
المرابط المثنغر ناصر الدنيا والدين محمد بن قلاوون ا

‘Glory to our lord the sultan, al-Malik al-Nasir, the learned, the diligent, the defender (of Faith), the warrior of the frontiers, the warden of the marches, Nasir al-Dunya w’l-Din Muhammad son of Qalawun’

The horizontal band of inscription on the cylindrical body of the incense burner is also interrupted by two lobed medallions with radiating inscription written in naskh script that reads:

عز لمولانا السلطان الملك الناصر العالم العامل المجاهد
المرابط المثنغر المؤيد المنصور ناصر الدنيا والدين محمد
بن قلاوون

‘Glory to our lord the sultan, al-Malik al-Nasir, the learned the diligent the defender (of Faith) the warrior of the frontiers the warden of the marches, the supported (by God), the victorious Nasir al-Dunya w’l-Din, Muhammad son of Qalawun’

The radial inscriptions on both the lid and



(Fig. 2-B) Incense burner of Al-Nasir Muhammad.

body were inlaid with gold and set against a floral background inlaid with silver. The centre of each medallion is occupied with a circle with the phrase: عز لمولانا السلطان 'Glory to our lord the sultan' and it is inlaid with gold.¹⁵

Some objects decorated with radiating inscriptions bear the name of Sultan Ahmad ibn Muhammad ibn Qalawun (742-743 A.H./ 1342 AD). A metal lamp (fig. 3-A) preserved in the Museum of Islamic Art in Cairo is one of these objects.¹⁶ The bulb of the lamp is decorated with a wide band of naskh script interrupted by three medallions with radiating inscription written in naskh script without dots and reads:¹⁷

عز لمولانا السلطان
... الملك الناصر
السلطان الملك الناصر

'Glory to our
lord the sultan, al-
Malik al-Nasir...
the sultan, al-Malik
al-Nasir'

What is unique about this lamp is that the inscriptions glorify both the sultan al-Nasir Ahmad and his father al-Nasir Muhammad.

The second object that was attributed to the same sultan and was decorated with radiating inscription is a brass tray-stand.¹⁸ Each of the two conical parts of the stand were decorated with two ribbed medallions



(Fig. 3-A) Mosque lamp of al-Nasir Ahmad Ibn Muhammad. After: G. Wiet, *Objets en cuivre*, pl. IX

with radiating inscription set on a floral background and surround the epigraphic emblem of the sultan that reads: المملك الناصر 'al-Malik al-Nasir'.¹⁹

A candlestick in the Keir collection also bears the title: 'al-Nasir' in its radiating inscription who could be al-Nasir Muhammad or his son al-Nasir Ahmad. The body of the candlestick is decorated with a large band of naskh script against a scroll background and interrupted by two large medallions with a rosette in its centre and radiating inscriptions that read:

عز لمولانا السلطان الملك الناصر

'Glory to our lord the sultan, al-Malik al-Nasir'.²⁰

Al-Salih Isma'il ibn Muhammad ibn Qalawun (743-746 A.H./1342-1345 AD) also had his share of metal objects with radiating inscriptions. The first object is a cylindrical container with a pointed cover²¹ preserved in the Museum of Islamic Art in Cairo (fig. 3-B). The body of the container is decorated with a band of naskh inscription interrupted by three large lobed medallions bearing radiating inscription that reads:

عز لمولانا السلطان الملك الصالح العالم العامل العادل
المجاهد المرابط عماد الدنيا والدين ا

'Glory to our lord the sultan, al-Malik al-Salih, the learned, the diligent, the defender



(Fig. 3-B) Radiating inscription on a cylindrical box of Salih Isma'il. After: Izzi, 'Objects', pl. 6

(of Faith), the warrior of the frontiers 'Imad al-Dunya w'l-Din'

This inscription radiates from the praise of the sultan that reads: عز لمولانا السلطان 'Glory to our lord the Sultan'.²² The second object attributed to al-Salih Ismail is a rose water sprinkler with a bulbous body.²³ The body is decorated with a band of inscription, interrupted by three large medallions with radiating inscription and reads:

عز لمولانا السلطان الملك الصالح عماد الدنيا والدين
إسماعيل

'Glory to our lord the sultan, al-Malik al-Salih 'Imad al-Dunya w'l-Din Isma'il'

These inscriptions radiate from the central circle with the epigraphic emblem of the sultan which reads:²⁴ الملك الصالح.

Similar to the metal lamp of al-Nasir Ahmad another metal lamp was attributed to al-Kamil Sha'ban²⁵ (746-747 A.H./ 1345-1346 AD). It followed the same tradition of the lamp of Sultan Ahmad in glorifying both the ruling sultan; al-Kamil Sha'ban, and his deceased father al-Nasir Muhammad. The bulb of the lamp was decorated on its upper part with a band of inscriptions bearing the name of al-Nasir Muhammad interrupted by small medallions with his first name. While, the lower part of the bulb is decorated with a wide band of inscriptions bearing the name of al-Kamil and interrupted with three large medallions with radiating inscription that reads:

عز لمولانا السلطان الملك العالم العامل العادل الكامل
سيف الدنيا والدين شعبان

'Glory to our lord the sultan, al-Malik, the learned, the diligent, the just al-Kamil Seif al-Dunya w'l-Din, Sha'ban'

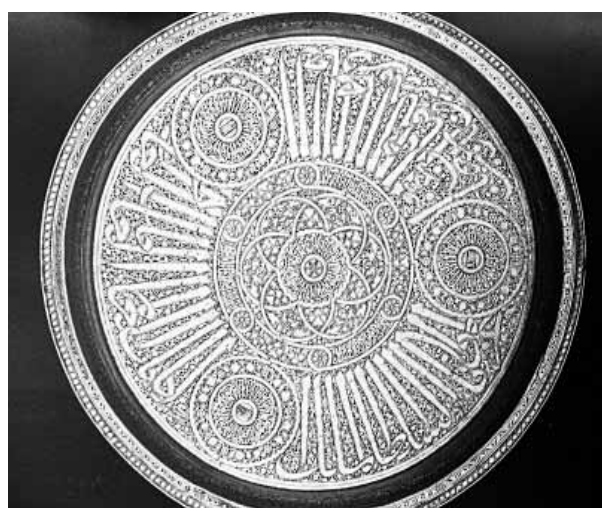
The centre of the medallions bears the words: عز لمولانا السلطان الملك 'Glory to our lord the sultan' written in naskh script.²⁶

Al-Kamel Sha'ban had another object with radiating inscription which is a unique brass tray²⁷ (fig. 4-A). It's one of the most sumptuous of its kind because of its elaborate work and unique layout of the decoration. The whole surface of the tray is occupied with concentric circles; the central one with radiating inscription, surrounded by interlacing circles forming a large petaled flower, surrounded by a circular band of inscriptions, surrounded by another wide band of inscriptions that is broken with three medallions with radiating inscriptions. The central lobed medallion has a flower in its centre, surrounded by radiating inscription set on a floral background and reads:

عز لمولانا السلطان الملك الكامل العالم العادل سيف
الدنيا والدين شعبان

'Glory to our lord the sultan, al-Malik al-Kamil, the learned, the just, Seif al-Dunya w'l-Din, Sha'ban'

The other three medallions with radiating inscriptions bear the same text but the medallion has the epigraphic emblem in its centre and it reads: الملك الكامل 'al-Malik al-Kamil'. Each medallion is surrounded by a circular band of flowers and a lobed frame.²⁸



(Fig. 4-A) Tray of Al-Kamil Sha'ban.



(Fig. 4-A) Rose water sprinkler of Al-Nasir Hassan.

The well-known rose water sprinkler that was attributed to al-Nasir Hasan (748-752 A.H./1348-1351 AD and 755-762 A.H./1354-1361AD) is also decorated with radiating inscription²⁹ (fig. 4-B). Its bulbous body is decorated with a band of naskh script interrupted by three lobed medallions with radiating inscriptions in naskh script reads:

عز لمولانا السلطان الملك الناصر ناصر الدنيا والدين

‘Glory to our lord the sultan, al-Malik al-Nasir, Nasir al-Dunya w’l-Din’

The frame of the medallion is wide and its centre is occupied by a circle containing a flower. The radiating inscription is inlaid with gold and set on a floral background inlaid with silver.³⁰

The pen box of al-Mansur Muhammad³¹ (762-764 A.H./1361-1363 AD) also bears radiating inscriptions on its interior (fig. 5-A). It bears four lobed medallions



(Fig. 5-A) Pen box of al-Mansur Muhammad.

with radiating inscription set on a floral background and it reads:

عز لمولانا السلطان الملك العالم العامل العادل المجاهد
المربط

‘Glory to our lord the sultan al-Malik, the learned, the diligent the just, the defender (of faith), the warrior of the frontiers’

The centre of the medallion contains a whirling rosette.³² Each medallion is framed with a wide lobed frame and the inscriptions are inlaid with gold.

Another object was attributed to al-Malik al-Mansur who could be al-Mansur Muhammad or al-Mansur Ali (778-783 A.H./1377-1381 AD). It’s a brass tray inlaid with silver and preserved in Victoria and Albert Museum³³ (fig. 5-B). It followed the decorative style of the tray of al-Kamil Sha’ban. The whole surface of the tray is occupied with concentric circles; the central one with radiating inscription, surrounded by interlacing circles forming a large petaled flower, surrounded by a circular band of inscriptions, which in its turn is surrounded by another wide band of inscriptions that is broken with three medallions with radiating inscriptions too and the frame of the tray or the rim is floral.³⁴

The radiating inscription on the central medallion reads:

عز لمولانا السلطان الملك العالم العامل العادل الغازي
المجاهد

‘Glory to our lord the sultan al-Malik, the learned, the diligent, the just, the vanquisher, the defender (of Faith)’

And the radiating inscription on the three medallions reads:

عز لمولانا السلطان الملك العالم العامل العادل الغازي
المجاهد المرابط المثنغر

‘Glory to our lord the sultan al-Malik, the learned, the diligent, the just, the vanquisher the defender (of Faith), the warrior of the frontiers, the warden of the marches’.

The radiating inscription is surrounded by a wide circular band of lotus flowers and a lobed frame.³⁵

The second group of examples represents objects of metalwork -with radiating inscriptions- that belong



(Fig. 5-B) Tray of al-Mansur.

to amirs of the Bahari Mamluk period. Among these examples is a bowl in the Aron Collection.³⁶ The bowl has a round base which is decorated from the outside with a central whirling rosette and radiating inscriptions surrounding it. The inscription reads:

المقر العالي المولوى العالمى المرابطى الناصرى

‘His exalted excellency, the lordly, the learned, the warrior of the frontiers, al-Nasiri’

The radiating inscription is set against a floral background. It’s surrounded by six pointed shapes that made the whole design look like a large flower with six petals. The petals were decorated with arabesques and between each two petals there is a whirling rosette surrounded with flying ducks.³⁷

A lamp stand³⁸ in the same collection also bears radiating inscription. The tray of the lamp stand is circular and slightly concave. It had a small circle in its centre surrounded by radiating inscription that reads:

المقر العالي الأميرى الكبيرى الملكى الناصرى

‘His exalted excellency, the great amir al-Malaki al-Nasiri’

The radiating naskh script is set against a floral background.³⁹

Another object also attributed to one of the officers of al-Mailk al-Nasir is the tray preserved in The Freer Gallery of Art⁴⁰ (fig. 6-A). The centre of this tray is occupied with a six-petaled rosette surrounded by radiating inscription in thuluth script. It reads:

المقر العالي المالكى العادلى الملكى الناصرى

‘His exalted excellency, the lord, the high, the just, al-Malaki al-Nasiri’

Around it is a band divided into eight units, filled with large lotuses flanked by five-petaled blossoms alternating with two pairs of flying ducks.⁴¹

A cylindrical brass box (fig. 6-B) attributed to an officer of al-Malik al-Nasir was also decorated with



(Fig. 6-A) Part of a tray of of an officer of al-Malik al-Nasir.



(Fig. 6-B) The lid of a cylindrical box of an officer of al-Malik al-Nasir.

radiating inscription.⁴² The lid of the cylindrical box has a six-petaled whirling rosette that is surrounded by radiating inscription in thuluth script. It reads:

المقر العالی المالکی العالمی العاملی

‘His exalted excellency, the lord, the learned,
the efficient’

The inscription is set against a floral background.⁴³

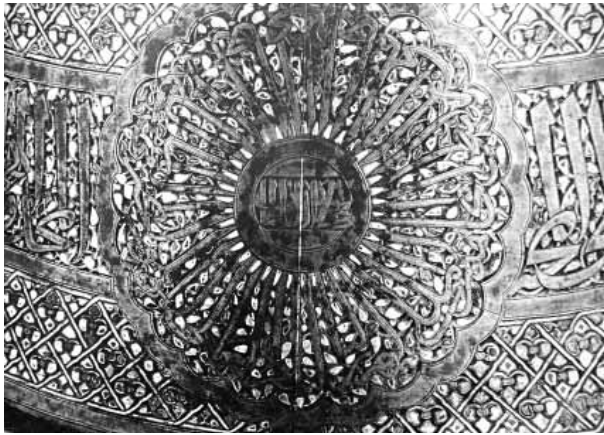
A tray stand in the Nuhad Es-Said Collection⁴⁴ (fig. 7-A) was also attributed to an officer of al-Malik al-Nasir.⁴⁵ Each of the two conical parts of the tray stand is decorated with a band of naskh inscription interrupted by two medallions with radiating inscriptions. The circle in the centre of each medallion contains inscription that reads: الملك الصالح ‘al-Malik al-Salih’ surrounded by radiating inscriptions in naskh script that reads:

المقر الکریم العالی المولوی الأمیری الکبیری الغازی
المجاهدی المتأغری العونی

‘The generous authority the high the lordly, the
great amir, the conqueror, the defender (of the



(Fig. 7-A) Tray stand of an officer of al-Malik al-Nasir.



(Fig. 7-B) Detail from the base of a candlestick belonging to an officer of al-Nasir Hassan.

Faith), the warden of the marches, the helper'

The inscription is set against a floral background.⁴⁶

The same treatment of the radiating inscription is present in the candlestick that was also attributed to an officer of al-Malik al-Nasir. Each of the polylobed medallions that decorate the base of the candlestick (pl.7-B) contains a circle with the inscription: عز لمولانا السلطان surrounded by radiating inscriptions on a floral background. Esin Atil suggested that the candlestick was made for one of the officers of al-Malik al-Nasir Hasan.⁴⁷

The tray of amir Tybugha preserved in the Museum of Islamic Art in Cairo⁴⁸ is another example of the use of radiating inscription on objects made for amirs. The layout of the decorations on the tray is very similar to that of the tray of al-Kamel Sha'ban. It is decorated with concentric circles; the central one bears graffiti surrounded by radiating inscription, surrounded by interlacing circles forming the shape of petals, surrounded by a wide band of inscription interrupted by three medallions. The difference between this tray and that of Sha'ban is that the radiating inscription was used only in the central medallion and not in the other three medallions and the inscription in the wide band is set inside lobed compartments.

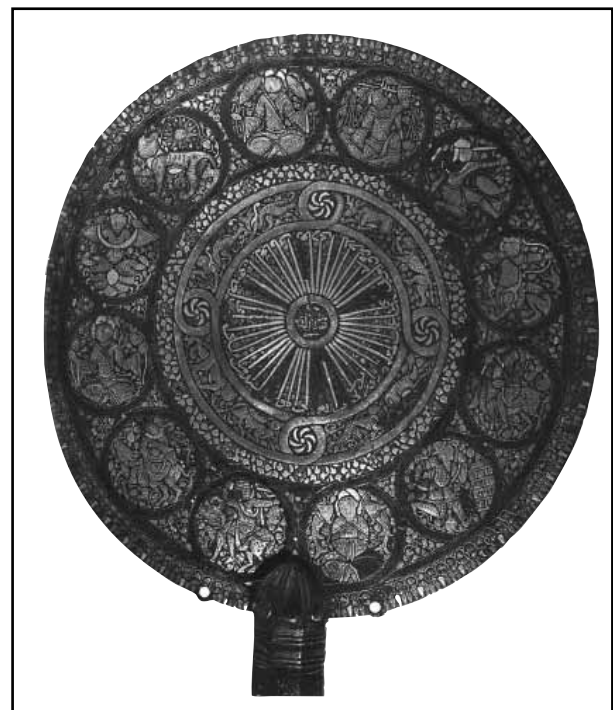
A cylindrical brass box attributed to Aydemir al-Ashrafi⁴⁹ was decorated with radiating inscription. The centre of the lid is occupied with the emblem of the owner. It's a three-fielded emblem with a cup charged with a napkin in the middle field and a red cup in the lower field.⁵⁰ The blazon or emblem of the amir is surrounded by radiating inscription (fig. 13) that reads:

المقر الأشرف العالى المولى المالكي المخدومي
العزى أيدمر الأشرفى كافل المممل(ك)ة الشريفة بحلب
المحروسة

'His excellency, the most noble, the high, the lordly, the royal, the well-served, 'Izz al-Din Aydemir al-Ashrafi, the governor of the noble province of Aleppo'

The inscription is surrounded, on the bevel, by a circle of flying ducks, flowers and whorls.⁵¹

The ninth example is a bronze mirror preserved in Topkapi Sarayi Museum⁵² (fig. 8). The example is unique in bearing the name of the amir, to whom the



(Fig. 8) Tray of Amir Altanbugha.

tray was made, in the central circle of the tray. This circle contains the word: علاء الدين 'Alaa al-Din'.⁵³ The radiating inscription surrounding it reads:

الجناب العالي المولى السيدى المالكى المخدومي
العالمى العاملى العادلى الذخرى العونى الغياثى النظامى
عمل المعلم محمد بن الوزيرى

'The honorable authority, the high, the lordly, the royal, the well-served, the learned, the efficient, the just, the treasure house (of excellence), the helper, the savior, made by the master Muhammad ibn al-Waziri'

The circular band around the previous one contains prowling animals interrupted by four whirling rosettes. It's surrounded by a wide circular band containing circles with the signs of the Zodiac and their associated planets.⁵⁴

The third group of objects represents metal objects dating to the Circassian Mamluk period. One of these examples is the remains of a metal lamp attributed to Sultan Khushqadam (865-872 A.H./1461-1467 AD).⁵⁵ The lamp bulb is decorated with a wide band of inscriptions interrupted by three medallions with radiating inscription that read:

عز لمولانا السلطان الملك العالم العامل العادل المجاهد
المرايط الملك الظاهر أبو سعيد خشقدم عز نصره

'Glory to our lord the sultan al-Malik, the learned, the diligent, the just, the defender (of Faith), the warrior at the frontiers, al-Malik al-Zahir Abu Said Khushqadam, May his victory be glorious'

The centre of the radiating inscription contains the epigraphic emblem of the sultan that reads: عز لمولانا السلطان 'Glory to our lord the sultan' written in naskh script.⁵⁶

The second example is a basin in the Museum of Islamic Art in Cairo.⁵⁷ The basin is decorated with a wide band of naskh script interrupted by four lobed

medallions; two of which bear radiating inscription and the other two have lotus flowers. The radiating inscription is written in naskh script and reads:

عز لمولانا السلطان الملك العالم العامل العادل الملك
الأشرف

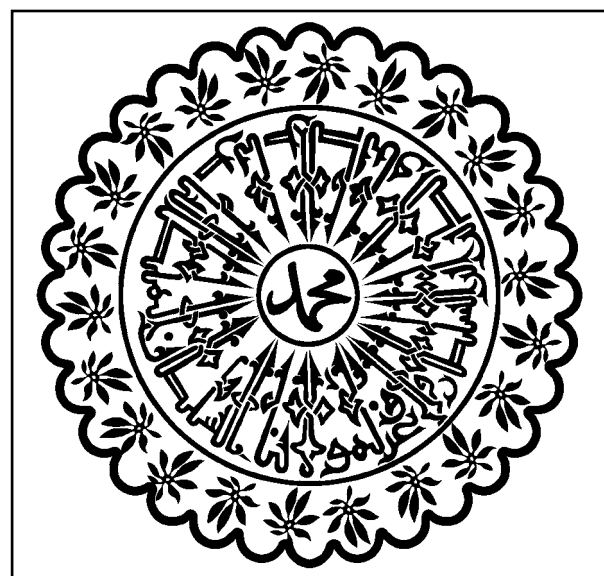
'Glory to our lord the sultan al-Malik, the learned, the diligent, the just, al-Malik al-Ashraf'

The centre of the medallion contains the phrase: الملك الأشرف 'al-Malik al-Ashraf' which is written in naskh script.⁵⁸

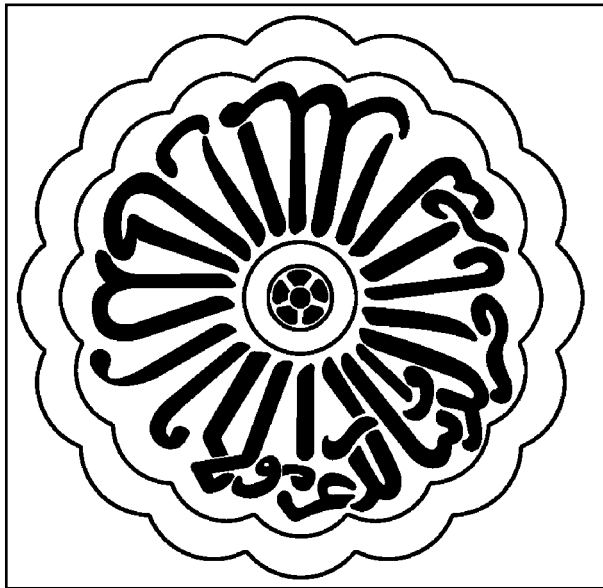
The third example is a lamp of sultan Al-Ghawri (906-922 A.H./1501-1516 AD) which is also decorated with radiating inscription.⁵⁹ The lower tray of the lamp is decorated with a central large star shape surrounded by fourteen circles, four of which contain radiating inscription. It's written in naskh script without dots and reads:⁶⁰

عز لمولانا السلطان الملك الأشرف أبو النصر قانصوه
الغورى عز نصره

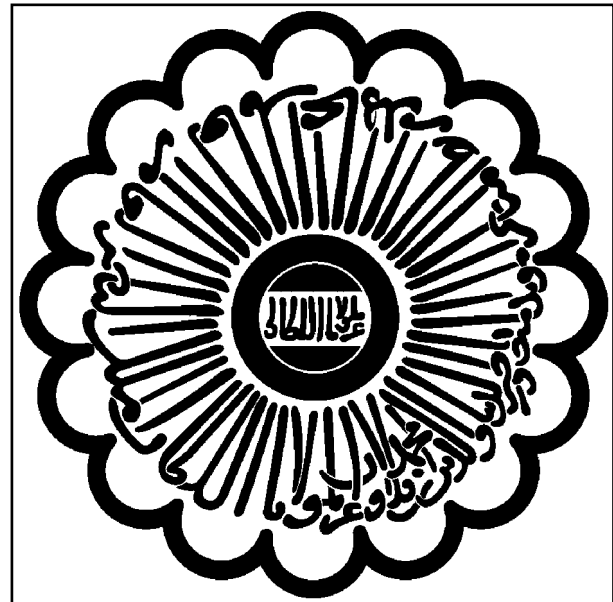
'Glory to our lord the sultan al-Malik al-Ashraf Abu al-Nasr Qanswa al-Ghuri, may his victory be glorious'



(Fig. 9) Center Styles: 1.



(Fig. 10) Center Styles: 2.



(Fig. 11) Center Styles: 3.

Part II: Analysis

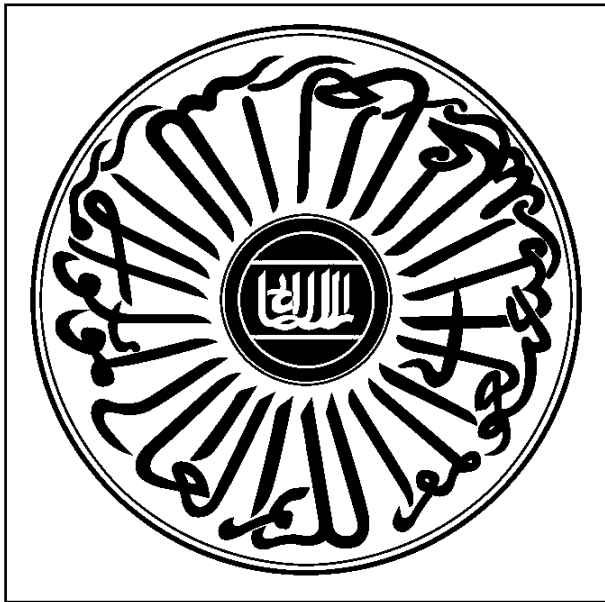
From the above mentioned examples we can realize that ornamental radiating inscriptions were widely used to decorate metal objects during the Mamluk period. We have no evidence that this style of inscription was used earlier than the reign of al-Nasir Muhammad ibn Qalawun, particularly his third reign 709-741 A.H./1310-1340 AD

The design:

In all the examples of radiating inscriptions, the words were arranged inside a circular shape or a medallion and the shafts of the letters, which were elongated, pointed towards the centre. The comparison between the centers of these compositions betrays five main trends or styles:

- In the first style (fig. 9), the centre of the medallion contains a circle with the name of the object owner. Al-Nasir Muhammad ibn Qalawun is the only sultan whose name 'Muhammad' is written in the centre of the radiating inscription on his hexagonal table⁶¹ and one of his candlesticks.⁶²

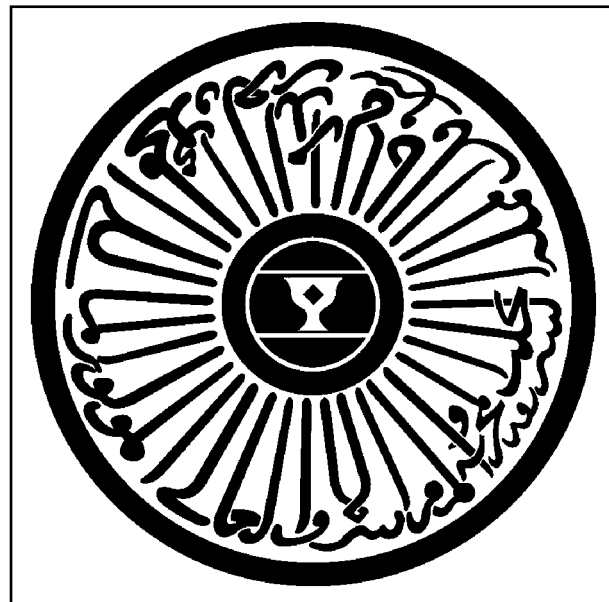
- In the second style (fig. 10), the centre of the medallion contains a circle with a rosette or a whirling rosette. The whirling rosette was more frequently used. It was sometimes a six-petaled whirling rosette such as that on al-Nasir Muhammad's candlestick in Museo Industriale in Rome,⁶³ the bottom of a bowl of one of his amirs⁶⁴ and the lid of a cylindrical box of another.⁶⁵ In other cases it was an eight-petaled whirling rosette such as that on the pen box of al-Mansur Muhammad.⁶⁶ Moreover, the simple flower was used in the centre of radiating inscription such as that on the centre of the tray of al-Kamil Sha'ban⁶⁷ and the rose water sprinkler of al-Nasir Hassan.⁶⁸
- In the third style (fig. 11), the centre of the medallion has a circle with three fields; the upper and the lower are plain while the middle contains the phrase: عز لمولانا السلطان 'Glory to our Lord, the Sultan'. That style was used on the incense burner of al-Nasir Muhammad,⁶⁹ the cylindrical box of al-Salih Isma'il,⁷⁰ the lamp of al-Kamil Sha'ban,⁷¹ the candlestick of



(Fig. 12) Center Styles: 4.

an officer of al-Nasir Hasan⁷² and the lamp of Khushqadam.⁷³

- In the fourth style (fig. 12), the centre of the medallion contains the epigraphic emblem of the sultan. It is in the form of a circle divided into three fields; the upper and lower are plain while the middle contains the title of the sultan. It's worth noting that whether the owner of the object was a sultan or an amir, the title inscribed in the centre was that of the ruling sultan. The title 'al-Malik al-Nasir' was inscribed in the centre of the radiating inscription on the tray stand of Sultan Ahmad,⁷⁴ while the title 'al-Malik al-Salih' was inscribed on the rose water sprinkler of al-Salih Isma'il⁷⁵ and on the tray stand of an amir.⁷⁶ In the same treatment, the title 'al-Malik al-Kamil' was inscribed on the tray of al-Kamil Sha'ban⁷⁷ and 'al-Malik al-Ashraf' on the basin of the Qaytbay's wife.⁷⁸ In the latter example, the metalworker followed the traditions of that style rather than using the common form of the epigraphic emblem of Qaytbay.⁷⁹



(Fig. 13) Center Styles: 5.

The only exception of that rule is the use of the title of an amir, who was called 'Alaa al-Din', in the centre of the radiating inscription on his tray.⁸⁰

- In the fifth style (fig. 13), the radiating inscription contains in its centre the emblem of the owner. The example of that style could be seen on the lid of the cylindrical box of Aydumer which contains a cup in its middle field.

The Inscriptions

Naskh or thuluth scripts were generally adopted in radiating inscriptions, while kufic script was used only once in the radiating inscription on the top of the hexagonal table of al-Nasir Muhammad. In that example, plaited kufic was adopted and the letters alif and lam were knotted. The upper top of each shaft takes the form of a pointed spear. The single strokes were also knotted at one side of the shaft, except for the letter lam of the word li-mawlana which bears two knots and ends with two pointed ends. (fig. 9)

The naskh and thuluth scripts used in the rest of the examples are extremely creative. The shafts of the letters are elongated and point towards the centre of the medallion. The number of strokes, or shafts, is usually an even number varying between eighteen⁸¹ up to forty eight.⁸² Sometimes an additional letter, alif, is added at the end of the text to form an upright stroke that matches the lam of *li-mawlana* at the beginning of the text. This practice is used in the radiating inscription of the incense burner of al-Nasir Muhammad, his candlestick in Museo Industriale in Rome and the cylindrical box of al-Salih Isma'il.⁸³

The shafts of the letters alif, lam, taa, kaf occupied most of the space inside the medallion, leaving only its lower part for the rest of the letters. Sometimes, important words, usually the name of the sultan, were written above the rest of the words intersecting with the strokes. The word 'Muhammad' intersects the strokes of the radiating inscription of the incense burner of al-Nasir Muhammad⁸⁴ and the same practice was used with the word 'Sha'ban' on the tray of al-Kamil Sha'ban⁸⁵ and the word 'Aydumer' on the lid of a cylindrical box.⁸⁶ Moreover, words were sometimes crowded in part the text such as the word 'Qalwun' in the radiating inscription on the sides of the hexagonal table of al-Nasir Muhammad.⁸⁷ Also the word 'seif' was crowded with 'al-Dunia wa al-Din' on the tray of al-Kamil Sha'ban.⁸⁸

Not only are the layouts inventive, but also are the letter forms themselves. The eye of the letter sad, for example, was pierced by the upright of the letter alif like a ring on a skewer.⁸⁹ This practice could be seen in the word 'al-Nasir' on the hexagonal table, the incense burner and the candlestick of al-Nasir Muhammad.⁹⁰

The analysis of the texts of the radiating inscriptions revealed several facts. First: all the

radiating inscriptions on metal objects made for a sultan started with 'Glory to our lord, the Sultan al-Malik...' followed by various titles of the sultan. No particular titles were chosen and no particular order was adopted for the titles. Probably the metalworker chose titles that could provide a large number of strokes -usually alif and lam- such as al-'alim, al-'amil, al-'adil...Titles added to al-Dunya w'l-Din were also frequently used such as 'Seif al-Dunya w'l-Din', 'Nasir al-Dunya w'l-Din' and 'Imad al-Dunya w'l-Din'. The name of the sultan was not necessarily mentioned. In few cases the name of the sultan together with the name of his deceased father were mentioned in the text such as the radiating inscription on both the top and sides of the hexagonal table of al-Nasir Muhammad and that on his incense burner.

Second: the radiating inscription on metal objects owned by amirs or other dignitaries could be classified into two types of inscriptions. The first represents inscriptions that glorified the sultan not the owner and in that case the text started with the phrase 'Glory to our lord the Sultan al-Malik...'. That could be seen on the basin in the third group of examples.⁹¹ The second type of inscriptions included honorific titles of the owner himself that started with 'His exalted excellency' or 'The most Noble and High Excellency' or other titles depending on the rank of the owner. Although the text glorifies the owner, the centre of the radiating inscription could be the prayer for the ruling sultan: 'Glory to our lord the Sultan'⁹² or his title.⁹³

The name of the amir was not mentioned in most of the metal objects with radiating inscription.

The frame and related motifs

The medallions with radiating inscriptions were either framed with a simple circular frame

or a polylobed one. Sometimes the ribbon of the outline is twisted at the top and bottom of the medallion and connected with the upper and lower bands of decorations.⁹⁴

Some motifs appeared together with the radiating inscriptions such as the lotus flower. The flower pattern was repeated in a wide circular band that surrounded the frame of the medallion on the top and sides of the hexagonal table of al-Nasir Muhammad, two of his candlesticks,⁹⁵ in addition to the tray of Freer Gallery.⁹⁶ The lotus flowers had eight petals and the flowers were arranged facing inwards and outwards alternately and were connected with scrolls (fig.9). Generally speaking, the use of lotus flowers represents one of the Far Eastern, particularly Chinese, influences that left a marked imprint on the flora of the Islamic decoration.⁹⁷ The lotus flowers brought by the Mongols to Iran were later introduced to Syria and Egypt and made their appearance on metalwork in Egypt at the beginning of the fourteenth century.⁹⁸ The lotus flower survived, together with other motifs, until the end of the Mamluk period.⁹⁹

The second motif that appeared together with some medallions with radiating inscriptions is the flying ducks. The ducks were represented in pairs, usually affronted and with their wings spread. That motif was seen around the central medallion on the tray of al-Kamil Sha'ban and around the central medallion of the tray in Freer Gallery and in both cases, the ducks were alternating with flowers.¹⁰⁰ The flying ducks were also seen close to the radiating inscriptions, not surrounding it, on other metal objects such as the top of the hexagonal table of al-Nasir Muhammad and the rose water sprinkler of al-Nasir Hasan.¹⁰¹

The association between the Qalawun family and the flying ducks was discussed by many

scholars. Some scholars wrongly considered the duck one of the emblems of Qalawun family, based on the suggestion that the word Qalawun itself means duck in Turkish. But other scholars proved that the representation of ducks was never associated with the name 'Qalawun'. The ducks were also represented in various forms and numbers which deny that they were an emblem. Moreover, the representations of ducks were used before and after the Qalawun family's reign and that proves that it was a mere decorative element and has no specific association with the Qalawun family.¹⁰²

The third motif that was frequently seen with radiating inscriptions is the rosette which was used in the center of the radiating inscriptions. The rosette was among the plants that were used as emblems such as the five-petaled rosette adopted by the Rasulids of Yemen and the six-petaled rosette adopted by the Qalawun family.¹⁰³ But none of the rosettes that were used in the center of the radiating inscriptions could be considered an emblem. They were either a six-petaled whirling rosette or an eight-petaled one, as previously discussed. Even the rosette on the tray of al-Kamil Sha'ban and that on the rose water sprinkler of al-Nasir Hassan were both with five petals and therefore cannot represent the emblem of the Qalawun family.

The fourth and last motif is the representation of the signs of the Zodiac and their associated planets that was seen on only one example; the tray of al-Tanbugha. The astrological images and representations of the Signs of the Zodiac were present in Islamic art since the twelfth century and were more popular in the eastern regions extending from the Jazira to Khurasan.¹⁰⁴ They generally signify protection for the owner of the object in addition to good fortune.¹⁰⁵ But it

is obvious that this was not a theme frequently associated with radiating inscriptions.

The meaning of radiating inscriptions: symbolism or decoration

Radiating inscription with elongated letter shafts pointing to the center of a circular medallion evokes the image of the sun. The circular center resembles the sun disk and the elongated shafts of the letters resemble the rays of the sun. That visual effect was emphasized in many cases by the use of gold for inlaying the inscription, contrasting with the use of silver for other decorative elements on the object.

Some scholars suggested a symbolic meaning for the radiating inscriptions. Eva Baer suggested that the radiant letters which spell out the names and titles of the sultan were symbols intended to call up the light that emanated from the ruling personage.¹⁰⁶ Esin Atil added that the circular inscriptions, rosettes, lotuses and ducks are associated with solar symbolism. She suggested that those motifs may have had astrological meanings and were used as charms for their magical and protective values.¹⁰⁷ James Allen agreed with Atil in considering the lotuses and ducks as solar symbols.¹⁰⁸ As for the radiating inscription itself, he suggested that the artist and the patron desired the viewer to conceive some sort of similarity between the ruler and the sun. The sun disk bears the first titles of the sultan and symbolizes him as the sun.¹⁰⁹

To the sultan's officers of state, to his mamluks and all who were ushered into his august presence, such objects with radiating inscriptions proclaimed the presence before them of the Sun himself.¹¹⁰ Allen went even further when he mentioned that al-Nasir Muhammad attributed to himself divine eminence by using the radiating inscription. He explained that in the circular inscription in the Quran box -of al-Nasir Muhammad- God entitles himself 'al-Malik al-Qudus' and in the radiating inscriptions on his objects the sultan entitles himself 'al-Malik al-Nasir'.

Therefore, the sultan deliberately was setting himself and his own greatness against that of his creator.¹¹¹

In fact, I disagree with the above-mentioned points of view suggesting symbolic meaning to radiating inscriptions or suggesting intended equation between the ruler and the sun. This disagreement is based on certain reasons which are:

- 1- The sun motif was used in Islamic art as early as the twelfth or early thirteenth century in Iran¹¹² and was used on Mamluk metal objects produced in Egypt or Syria by the end of the thirteenth century and during the fourteenth century.¹¹³ It was also used at the bottom of many metal objects surrounded with fish.¹¹⁴ That means, the sun motif was frequently used in Islamic art and its appearance was prior to the radiating inscriptions and its usage continued till the fourteenth century. The shape of the sun motif made it appropriate to be used as a central motif around which decorations were arranged in circular bands. Therefore, the radiating inscriptions could have been an alternative to the sun motif. It must have been an innovative motif that looks like the sun but using letters for its rays. It must have gained appreciation too and that explains its spread together with the still existing pictorial motif of the sun.
- 2- The association between rosettes, lotuses and ducks and solar symbolism is not proven in Islamic art. Neither Atil, nor Allen who adopted that idea explained that association or mentioned what these motifs symbolize. Moreover, if these motifs were truly associated with solar symbolism, they should have been present in all objects with radiating inscription. But on the contrary, they were present only on few of them, disproving such association.
- 3- The idea that al-Nasir Muhammad was setting himself and his greatness against that of his

Creator is denied based on another Quranic text on the same Quran box. The box bears the verse:

قُلْ اللَّهُمَّ مَالِكُ الْمُلْكِ تُؤْتِي الْمُلْكَ مَنْ تَشَاءُ وَتَنْزِعُ
الْمُلْكَ مِمَّنْ تَشَاءُ وَتُعْزِزُ مَنْ تَشَاءُ وَتُذَلِّ مَنْ تَشَاءُ بِيَدِكَ
الْخَيْرُ إِنَّكَ عَلَىٰ كُلِّ شَيْءٍ قَدِيرٌ

This Quranic text asserts the omnipotence of God and that only God gives, or takes, sovereignty. That means the ruler is assuring the ultimate power to God and not to himself.

Moreover, many other sultans used their titles in the center of the radiating inscription such as al-Malik al-Salih, al-Malik al-Nasir and al-Malik al-Ashraf. And it's hard to believe that they all were setting themselves against God.

- 4- The above mentioned opinions were probably based on the study of one or few objects with radiating inscriptions. But the present study proved that radiating inscriptions were used on objects made for sultans, amirs of various ranks and other dignitaries. Therefore, it's hard to believe that all those people were intending to liken the patron to the sun.

If the idea of associating a great sultan -such as al-Nasir Muhammad- with the sun could be accepted, how can we explain that association for a young sultan who ruled for a year or two?¹¹⁵

And how can we explain such association for an amir? And if the amir was intending to associate himself with the sun, emphasizing his personal prestige, why would he write the name of the ruling sultan in the center of the radiating inscription?

The answers to such questions would probably lead us to believe that the radiating inscription was an ornamental inscription that looks like the sun motifs but carries no symbolic meaning. It was probably appreciated by al-Nasir Muhammad and frequently represented on his metal objects. His successors; his

sons and grandsons, followed his tradition and used the same motif to decorate their metal objects. Also high officials, who were generally fascinated to imitate their ruler, followed the same practice. The radiating inscription was probably a fashionable motif at that time. Moreover, the workshops usually produced objects for the sultans together with other objects, which were mass produced ones, to fulfill the demand of the high officers.¹¹⁶ Such workshops used similar motifs for the objects of the sultan and those of the amirs. The radiating inscriptions were less frequently used during the Circassian Mamluk period but they never disappeared.

To sum up, the radiating inscription is an ornamental inscription that appeared in the fourteenth century and continued to be used till the beginning of the sixteenth century. It was adopted to decorate metal objects of sultans and amirs. The radiating inscription was set inside a circular or polylobed medallion and the shafts of the letters were elongated and point to the central circle which bears a rosette, the title of the sultan or a praise for him or the emblem of the amir. The naskh or thuluth scripts were generally adopted for the radiating inscription.

Notes

- 1 A. Walch, *Calligraphy in Arts of the Muslim World* (New York, 1979), 22.
- 2 Doris Behrens-Abouseif, *Beauty in Arabic Culture* (Princeton, 1999), 139.
- 3 Doris Abouseif, *Beauty in Arabic Culture*, 140.
- 4 Eva Baer, *Metalwork in Medieval Islamic Art* (Albany, 1983), 209.
- 5 Sheila Blair, *Islamic Inscriptions* (Edinburgh, 1998), 117- 118.
- 6 Baer, *Metalwork in Medieval Islamic Art*, 209; Blair, *Islamic Inscriptions*, 118.
- 7 Baer, *Metalwork in Medieval Islamic Art*, 211.
- 8 David Rice, 'Studies in Islamic Metal work IV', *BSOAS* XV/3 (1953), 498; Geza Fehervari, *Islamic Metalwork of the Eighth to the Fifteenth Century in the Kier*

- Collection* (London, 1976), 123; Baer, *Metalwork in Medieval Islamic Art*, 192; *Islamic Ornament* (1998), 69; Esin Atil, W.T. Chase, P. Jett, *Metalwork in the Freer Gallery of Art* (Washington, 1985), 24; Blair, *Islamic Inscriptions*, 123; Robert Hillenbrand, *Islamic Art and Architecture* (London, 2004), 155.
- 9 Height 70 cm., diam. 39 cm.
 - 10 Ernst Grube, *The World of Islam* (New York-Toronto), 1967, pl. 67; *Islamic Art in Egypt 969-1517 A.H.: An Exhibition* (Cairo, 1969), 69, pl. 10; Gaston Wiet, *Objets en Cuivre* (Cairo, 1983), 14-18, pl. I-II; R. Hillenbrand, *Art & Architecture*, pl. 117; Nasser Khalili, *Islamic Art and Culture: A Visual History* (New York, 2005), pl. 119; Bernard O'kane, *The Treasures of Islamic Art in the Museum of Cairo* (Cairo, 2006), pl. 137.
 - 11 Height 34 cm., diam. 30 cm.
 - 12 Wafiyya 'Izzi, 'Objects Bearing the Name Of An-Nasir Muhammad and his Successors', *Collque international sur l'histoire du Caire* (Cairo, 1969), 235- 236, pl. 1. She probably means by the cartouche the epigraphic emblem of the sultan which was عز لمولانا السلطان .
 - 13 D. Rice, 'Studies IV', 497, fig.8, but he didn't mention the reading of the radiating inscription.
It's worth mentioning that Rachel Ward mentioned another candlestick attributed to al-Nasir Muhammad the base which was also decorated with two circular medallions with radiating inscription. The centre of each medallion contains the word 'Muhammad', surrounded with radiating inscription, Followed by a circular band of lotus flowers: Rachel Ward, *Islamic Metalwork*, (1993), 26, n.14.
 - 14 It's made of brass and inlaid with gold, silver and a black compound, h. 36.5 cm., diam. 16.5 cm.
 - 15 Wiet, *Objets en cuivre*, 204, n.195; James Allen, *Islamic Metalwork: the Nuhad Es-Said Collection* (London, 1982), 86, n.15; Baer, *Metalwork in Medieval Islamic Art*, fig.170; *Islamic Ornament*, fig. 89.
 - 16 Dimensions of the bulb: h. 50 cm., diam. 40 cm.
 - 17 Wiet, *Objets en cuivre*, 46-47, n.1482, pl. IX; Doris Abouseif 'Mamluk and Post-Mamluk Metal Lamps', *Supplement aux Annales Islamologiques* 15 (1995), 44, pl. 28.
 - 18 Height of the stand 29cm, diam.31cm.
 - 19 Wiet, *Objets en cuivre*, 160,n.445, pl. LXXIV but he didn't mention the text of the radiating inscription.
 - 20 G. Fehervari, *The Keir Collection*, 129, n.159, pl.56.
 - 21 A brass cylindrical container inlaid with silver and gold, h. 26cm., diam. 17cm.
 - 22 'Izzi, *Collque international sur l'histoire du Caire*, 237, pl. 2, 4, but she didn't mention the text of the radiating inscription.
 - 23 A brass qum-qum, h. 22cm. and diam. 8cm. It is preserved in the Museum of Islamic Art in Cairo.
 - 24 'Izzi, *Collque international sur l'histoire du Caire*, 238, pl. 6.
 - 25 A mosque lamp preserved in the Museum of Islamic Art, h.36 cm., diam. 37cm.
 - 26 Wiet, *Objets en cuivre*, 110-111, n. 4082, pl. X.
 - 27 A brass tray inlaid with silver and gold and its diameter is 96 cm.
 - 28 Ward, *Islamic Metalwork*, 9, pl.1.
 - 29 Brass rose water sprinkler inlaid with gold and silver, h. 22.5 cm., diam.9 cm. It's preserved in the Museum of Islamic art in Cairo.
 - 30 *Islamic Arts in Egypt*, 88, n. 79; *The Arts of Islam, Hayward Gallery* (1976) 194, n. 225; Atil, *Renaissance of Islam: Art of the Mamluks* (1981), 98, n. 31; O'kane, *The Treasures*, 121, pl.108.
 - 31 It's preserved in the Museum of Islamic Art in Cairo and made of brass inlaid with gold and silver. It's height is 8cm., w. 9cm., l. 31cm.
 - 32 *Islamic Art in Egypt*, 89, n. 80; *The Arts of Islam*, 194, n. 224; Wiet, *Objets en cuivre*, 123-125, pl. III, IV. But Wiet mentioned the text of the radiating inscription as: عز لمولانا السلطان المالك الملك العالم العامل الغازي المجاهد المرابط. But the reading proved to be al-'adil not al-Ghazi, See also: عبد الرؤوف علي يوسف، متحف الفن الإسلامي، هيئة الآثار المصرية (القاهرة، ١٩٨٣)، ٤٠.
 - 33 Diameter of the tray 78.8 cm.
 - 34 Grube, *The World of Islam*, 110, pl. 65; T. Stanley, *Palace and Mosque: Islamic Art from the Middle East* (1983), 93, pl.105; James Allan, 'Sha'ban, Barquq, and the Decline of the Mamluk Metalworking Industry', *Muqarnas* 2 (1984), 85, pl. 1.
 - 35 Allan, *Sha'ban, Barquq*, note n. 1, 92.
 - 36 Cast quaternary alloy inlaid with silver. h. 9.8 cm. and rim diam 17.3 cm.
 - 37 Allen, *Metalwork of the Islamic World: The Aron Collection* (London, 1986), 86, n. 9.
 - 38 Quaternary alloy inlaid with silver, h. 29.8cm., diam. of tray 12.9 cm.
 - 39 Allen, *The Aron collection*, 90, n. 11.
 - 40 Brass tray inlaid with silver and gold, diam. 28.9 cm, h. 3.2 cm.

- 41 Atil *et al.*, *Metalwork*, 167-168, n. 22.
- 42 A brass cylindrical box inlaid with silver and preserved in the Kuwait National Museum. h. 11.6 cm., diam. 10.6cm.
- 43 Atil, *Islamic Art and Patronage: Treasures from Kuwait* (New York, 1990), 206, n.67.
- 44 A brass tray stand inlaid with silver, gold and a black compound, h.22.6 cm., diam. 24.4 cm.
- 45 The band of inscription on the lower conical part bears the text: المرابطى المتأخرى الذخري الهمامي / الكفيلى المبرى القومى الناصرى: Allen, *The Nuhad Es-Said Collection*, 96.
- 46 Allen, *The Nuhad Es-Said Collection*, 96, n.9.
- 47 Atil, *Art of the Mamluks*, 97. The text of inscription was not mentioned.
- 48 A brass tray was originally in the Collection of Yousif Kamal and its diameter is 45 cm. Wiet, *Objets en cuivre*, 161, n.446, pl. LXXIII. But he didn't mention the text of the radiating inscription.
Wiet suggested the year 736 A.H. as a date for this tray but the comparison between it and the tray of Sha'ban, which reveals clear influence on the second, suggests that it was not made earlier than 746 A.H.
- 49 Cylindrical brass box inlaid with silver and gold and preserved in Louvre, h. 17.6cm, diam. 15 cm.
Aydemir held the post of dawadar under al-Malik al-Nasir Hassan and became the governor of Aleppo in 773A.H./ 1371 AD: Rice, *Studies IV*, 490.
- 50 Rice, *Studies IV*, 492.
- 51 Rice, *Studies IV*, 490, 498, pl. III-a.
- 52 A bronze mirror inlaid with gold and silver. It was first preserved in Victoria and Albert Museum and now in Topkapi Museum and its diameter is 78.8 cm.
- 53 He is Alaa' al-Din Altanbugha (d. 1342 AD), viceroy of Syria and cup-bearer to Sultan al-Nasir Muhammad. Hillenbrand, *Art and Architecture*, pl. 119.
- 54 Grube, *The World of Islam*, 110, n. 66; J.M. Rogers, *Topkapi: the Treasury* (London, 1987), 205, pl. 109; Hillenbrand, *Art and Architecture*, pl. 119.
- 55 The height of the bulb is 46 cm. and its diameter is 59.
- 56 Wiet, *Objets en cuivre*, 140-141, n. 8535, pl. XLII.
- 57 A brass basin with a height of 21 cm. and diam. 45cm. The basin is attributed to Khuand of sultan Qaytbay who must be Fatema bnt Khas Bek the only wife of the sultan.
- 58 Wiet, *Objet en cuivre*, 115-116, n.4120, pl. XLIV.
- 59 A bronze lamp preserved in the Museum of Islamic Art in Cairo, its height is 142cm and its diameter is 85cm. The diameter of the tray is 108cm.
- 60 Wiet, *Objets en cuivre*, 28, n. 239, pl. XXI.
- 61 Wiet, *Objets en cuivre*, 15-18, n. 139, pl. I, II and see fig.1-A,B in the present study.
- 62 Ward, *Islamic Metalwork*, pl.14.
- 63 See fig. 2-A.
- 64 Allen, *The Aron Collection*, 86
- 65 See fig. 6-B.
- 66 See fig. 5-A.
- 67 See fig. 4-A.
- 68 See fig. 4-B.
- 69 See fig. 2-B.
- 70 See fig. 3-B.
- 71 Wiet, *Objets en cuivre*, pl. X.
- 72 See fig. 7-B.
- 73 Wiet, *Objets en cuivre*, pl. XLII.
- 74 Wiet, *Objets en cuivre*, pl. LXXIV.
- 75 'Izzi, *Collque international sur l'histoire du Caire*, 238, fig. 6.
- 76 See fig. 7-A.
- 77 See fig. 4-A.
- 78 Wiet, *Objets en cuivre*, pl. XLIV.
- 79 Qaytbay had three epigraphic emblems that were used on his objects and buildings, and the three of them contain his name, title and prayer with variations in the way they were written. For more details about these emblems see:
أحمد عبد الرازق، الرنوك الإسلامية (القاهرة، 2001)، 198-199.
- 80 See fig. 8
- 81 In the case of the radiating inscription on the bottom of a bowl of an amir, see page 102.
- 82 In the case of the radiating inscription on the Incense burner of al-Nasir Muhammad and the tray of amir Altanbugha.
- 83 See texts in page 98-99.
- 84 See fig. 2-B and fig.11.
- 85 See fig. 4-A.
- 86 See fig. 13
- 87 See fig. 1-B and the same practice could be seen on the incense burner in fig. 11.
- 88 See fig. 4-A
- 89 Eva Baer, *Islamic Calligraphy* (Cairo, 2006), 337.
- 90 See fig. 1, 2-B, figs. 10 and 11.
- 91 See page 105.

- 92 The candlestick of an officer of al-Malik al-Nasir; See fig. 7-B
- 93 The tray stand of an officer of al-Malik al-Nasir but the centre of the radiating inscription bears the title 'al-Malik al-Salih' who must be the ruling sultan when the stand was made; See fig. 7-A.
- 94 See fig. 2-B, 3-B, 4-B.
- 95 See fig. 9 for the hexagonal table, fig. 2-A for the candlestick of Museo Artistico Industriale at Rome and another candlestick in: Ward, *Islamic Metalwork*, fig. 14.
- 96 See fig. 6-A.
- 97 Farid Shafi'i, *Simple Calyx Ornament in Islamic Art* (1957), 15.
- 98 زكي محمد حسن، الصين وفنون الإسلام (1941)، 16-14؛ نادية حسن علي أبو شال، المبخرة في مصر الإسلامية—دراسة حضارية وأثرية، (رسالة ماجستير، كلية الآثار، جامعة القاهرة، 1984) 74؛ محمد عبد الودود عبد العظيم، دراسة مقارنة للكتابات والزخارف على النقود والتحف المعدنية في العصر المملوكي البحري، (رسالة ماجستير، كلية الآثار، جامعة القاهرة، 247-245 (2004)
- 99 Atil, *Art of the Mamluks*, 51.
- 100 See fig. 4-A and 6-A.
- 101 See fig. 1-A and 4-B.
- 102 حسين عليوه، كراسي العشاء المعدنية في عصر المماليك (رسالة ماجستير، كلية الآداب، جامعة القاهرة، 1970)، 275؛ محمد عبد الودود، الكتابات والزخارف، 295-294
- There are countless examples of metal objects dating back to the reign of Qalawun family with the flying duck motif. See: M.S. Dimand, *A Handbook of Muhammadan Art* (1958), 149; *L'Islam dans les collections nation-*
- ales* (1977), 80, pl.96; Prisse d'Avennes, *Islamic Art in Cairo* (1999), 168,170-171.
- 103 أحمد عبد الرازق، الرنوك، 92-89؛ محمد عبد الودود، الكتابات والزخارف، 253-251
- 104 For more details about the Signs of the Zodiac and their associated planets see: Baer, *Metalwork in Medieval Islamic Art*, 245-274; S. Carboni, *Following the Stars: Images of the Zodiac in Islamic Art* (1997), 3-8.
- 105 Allen, *Nuhad Es-Said Collection*, 15-16.
- 106 Baer, *Islamic Ornament*, 127.
- 107 Atil, *Metalwork in Medieval Islamic Art*, 169.
- 108 Allen, *Nuhad Es-Said Collection*, 88.
- 109 Allen, *Nuhad Es-Said Collection*, 24.
- 110 Allen, *Nuhad Es-Said Collection*, 24.
- 111 Allen, *Nuhad Es-Said Collection*, 25.
- 112 Carboni, *The Zodiac and their associated planets*, 20.
- 113 Nurban Atasoy *et al.*, *The Art of Islam* (1990), 128; Carboni, *The Zodiac and their associated planets*, 8, 12, 14, 40
- 114 Baer, 'Fish-pond' ornament on Persian and Mamluk Metal Vessels', *BSOAS* 31, 1968, pl. VI, VII, VIII, IX, XI.
- 115 Such as al-Nasir Ahmad, al-Kamil Sha'ban and al-Man-sur Muhammad.
- 116 That explains the lack of the name of the patron in most of the objects made for amirs.