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AN EVALUATION OF THE FORM AND DECORATION OF MOSUL SPRINKLER

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ABSTRACT

To identify Islamic civilization, the cognoscenti have usually focused on architecture and terracotta, so metalworking has not been considered as much as it deserves. Due to the lack of the researches, there are still some unclear aspects regarding this valuable art, i.e. metalworking and also there is an obvious lack of research regarding Islamic metalworking art. Since metal works are undeniable documents to identify political, social, religious, cultural, and art situations of each period, metal productions and schools, especially Mosul metalworking school is a main factor to recognize Islamic art and culture. Among famous productions of Mosul, sprinklers produced by the most important decoration technique, i.e. inlay (jewel work) and in various forms, decoration and narrative subjects can be mentioned. The present study investigates the form and content of some sprinklers made by Mosul's metalworkers in terms of technique, kinds of decorations and the issues engraved on them using inlay.

Keywords: Metal Working Art, Mosul, Inlay Techniques, Sprinkler (Ewer), Decorated With Human, Animal, and Birds

INTRODUCTION

Mosul is one of the major cities of Iraq which have played an important role in evolving metalwork art in Abbasid era. In this regards, Mosul metalwork school which was formed during Abbasid reign and reached its climax along with Seljuk's era up to the end of

Mongol and Ilkhani era could changed into one of the most active and advanced metal schools and the biggest cities of producing metal works in Islamic world using techniques of neighbor countries` production and decoration –Iran of Sassanid era and

metalwork school in Seljuk's era- as well as creativity in metal works and transferring their experiences through immigration of artists to Qahere and Dameshgh; and creating valuable and unique metal works in those cities. The works in metal school of Mosul were mostly produced using casting and hammering the metal sheets with engraving method to create decorations on objects known as Trsy technique. Most of the decorations used on the objects include decorations of human, animal, and birds, plant decorations, geometric, inscription, and manuscript decorations. Mosul metal works decorating the museums of today include different kinds of sprinklers, candlestick, Kist, pot, and basin. The present study attempts to analyze the form and kinds of decorative objects in several instances of Mosul metalwork school's sprinklers.

Mosul city was occupied by the Seljuks in 489 Hegira/1096 AD and different arts were emerged. The most outstanding period of the Seljuks in Mosul city pertains to the reign of Atabak Zangy (516-600 Hegira). In the reign of Zangy family, especially Badr-al-Din Lulu, industries and arts (especially metalwork) was highly considered. This effort was manifested in artisans' skills in different metalwork arts and its decorations. Although metal works produced in Mosul school have not been

emerged in well-known museums of the world up to the seventh century (Hegira), this art-industry had been available there from long time ago undoubtedly since it was evolved in seventh century. But "the prosperity period of metal works of Mosul city was during Badr-al-Din Lulu era (594-640 Hegira/1218-1262 AD)" (Rice, 2005, p. 110). There are several works among Mosul metal works made by the order of Badr-al-Din Lulu such as Kist, candlestick and two trays characterized by the name of Badr-al-Din Lulu in different museums. "Mosul was placed in the neighboring of historically important cities like Assyria, Nineveh and Alhazar in which metalwork was the main art. It is confirmed by Archaeologists's explores. On the other hand, Mosul city was governed by the Sassanid before Iran's failure against Arabsin 16 Hegira/637 AD" (Tabari, 1963, p. 36). Due to the reputation of the Sassanid in metalwork, historians and Arabian tourists have confirmed the reputation of Mosul city in metal work art. For example, Ibn-e-Saeid, a Morrocan tourist, in his journey to Al-Arab islands and Iraq states that "there are plenty of industries and arts in Mosul city, specially the dishes made of copper brought for the kings" (Barrett, 1945. P. 14; Rice, 1949, p. 334). Accordingly, it can be induced that metalwork arts of Mosul was so excellent that the kings

were interested in their copper products. Obviously, the kings have spent great amounts of money to gain valuable and precious decorative things. Another implication is that metal works were so abundant that caused it to be the most important center of metal works, especially copper works production and export. Mosul was famous for its precious golden works like chandeliers. Ibn-e-Asir regarding the events of 1258 Hegira/565 AD stated that “Badr-al-Din Lulu sent a golden chandelier with the price of 1000 Dinars to Mashhad per year” (Ibn-e-Asir, 1932 Hegira, p. 21). Considering metalwork and metalwork arts` prosperity in Mosul, especially at the time of Badr-al-Din Lu, it seems that these golden chandeliers were made in Mosul. In thirteenth century, Mosul at the north of Iraq was the biggest center of Islamic inlay so that all the copper and silver inlays were attributed to Mosul.

The techniques used in decorating Mosul`s works: inlay as the major technique

In the process of producing and decorating metal works in Mosul, it can be dared to say that creating engraving technique on metals was the most part of the process. In Mosul`s works, various techniques were used to engrave different decorations and designs and among them, Trsy work had been the most

prominent technique. Inlay was used so elaborately and it was used by Syrian and Egyptian artists who were mostly immigrants. Inlay“ is a method to decorate the metals in which desired design is engraved on the object and the place of the design is deepened and filled with gold, copper or silver; then it is hammered and heated by the fire flame to make it flat and finally, it is polished by an onyx or jade” (Al-Abidi, 1970, p. 195; Hamze Lulu, 1387, p. 47). Generally, “inlay is the creating a kind of paradox in the colors and creating penumbra as skillful as possible by artists and metalworkers” (Baiani, 2003, p. 64). During the periods of metalwork prosperity, Mosul`s artists could widely use various subjects of decoration through metalworking. Inlay technique “increased the value of brass plates and goods of Mosul just like Khorasan; also, many subjects of Iranian metal work was transferred into Mosul`s metal work`s decorative scope, the scenes related to hunting (Bahram Gur and Azadein tablet 1 and symbolic role of Bahram in tablet 2 in which he keeps an ax in one hand and a severed head on another hand), astrology, coronation, fight, and daily life scenes and ...” (Ward, 1993, p. 80) shown differently in final sketches. Although Mosul`s metalworkers followed Eastern inlay technique, most of plates` form and

decorative motifs were designed from a set of national works. A sample of creativity and innovation can be found in the form, inlay and decorating sprinkler of Shoja-Ibn-e-Mane Mosuli (**Tablet 3**), one of the most well-known metal works made in the workshop of Shoja-Ibn-e-Mane in Mosul. Other techniques (lattice work, niello, tapestry, spinning, etc.) were rarely used in Mosul's metal works.

Various types of decorations and their subjects in Mosul's metal works: human-oriented role and decorations focus

By studying and categorizing available decorations in Mosul's metal works, it can be concluded that there are four types of decorations in Mosul's works including: designs of animals, human and birds; designs of plants; geometric designs; written designs and inscriptions. The form and pattern of decoration in Mosul's works can be described as follow:

The surface of the desired plate is divided into some horizontal or circular strips with different widths. Some sketches are embedded between the layers of the strips which are mostly circular and different motifs are designed within these strips and motifs.

written designs and inscriptions was used to engrave the name of the work's manufacturer or the name of the person ordered, the time

and place of creation with some titles and benedictory phrases for the manufacturer on the object. In Mosul's works, metalworkers used two kinds of written language including Kufic and Naskh or a combination of both. It was due to the tendency to variety making metal works more beautiful and indicating the skill and creativity of the artist. Kufic texts were used to write the benedictory phrases and Naskh texts were used to write the name, time and place of the work creation; and it was usually written on the lower part of the sprinklers, candlesticks or other objects' neck. The artists did not use the simple form of the written words only, but they used their creativity to create interesting and attractive shapes from the words; e.g. they draw a human head from the end of the written words (tablet 5). The content of the work was mostly about pray and health, luck, wealth, long life, happiness, intercession, forgiveness, and mercy. The pray lyric simply indicated "blessing, joy and happiness for the owner". Sometimes, the words were written in passive form and poem by Kufic language in inscriptions. Advices were also of the other contents of the metal works. Most of the works produced in this period were in accordance the museum resources such as sprinkler, candlestick, vase, bowl, glass. Etc.

Geometric decorations can be called as the second type of Islamic art designs. “The geometric decorations are based on putting small designs or units together depicted using simple tools. The units can be duplicated and cover a wide surface by fully connecting together” (Wiet, 1932, p. 64). The main feature of the geometric decorations is the designs` and motifs` diversity. There is a decorative system on geometric background that the Latin word of (T) is its basis and sometimes it is appeared in the form of octagonal decorative element. The other geometric designs are the shapes that are similar to (Y) and (Z) are twisted together reversely (Tablets 1 and 2).

METHODOLOGY

The present study is an analytical-descriptive research using field and library methods to gather required data.

RESULTS AND DISCUSSION

The sprinkler of Ahmad Zaki-Al-Naghash Mosuli (Tablets 8 and 9)

Based on the historical evidence, the oldest metal work has been made by Ahmad Zaki-Al-Naghash Mosuli in Mosul (Alabidi, 1970, 47). Generally, this kind of sprinkler made in Mosul has a spherical and circular form; its handle has been fixed from the upper part and decorated with circular balls. But it is moving from the lower part, comes out from the body`s shoulder, goes towards upside, and

turns back towards inside. The neck of sprinkler is a pipe narrowing from its joint point to the body and the sprinkler` pipe come out as a channel from the body`s shoulder directly. In this regards, Christian Rice believes that that “some parts were added into the sprinkler later, i.e. the sprinkler`s cap and upper ring of the neck as well as a piece attached to the pipe near to the body (Rice, 1949, p. 297).

The neck of the sprinkler

The neck is a hollow pipe narrowing in the connection point to the shoulder of sprinkler and consisting of an area of ten blade-like parts. In the lower part of the neck, there is a ring dividing the neck into two upper and lower sections. The upper section consists of three strips whose designs have been paled so that it is hard to distinguish the designs and motifs on the surface. In the lower section, there is a strip that some things have been written on it in Naskh script (Tablet 10). This inscription included the name of manufacturer, the date and place of sprinkler`s production. The content of the inscription is “made by Ahmad Zaki Naghash Mosuli in the 620 hegira, greetings to my lord”. Gaston Wite (1932) have read the text in such a way that it seems the word of my lord is not consistent with other words, so it should be read as his lord. Also, two other

names (Hossein Ibn-e-Qasem and Osta-Al-Mohtaseb) are seen on the neck of the sprinkler which it seems to be added later. Alghalghashandi believes that “the word of Osta is the abbreviation of Ousta (master) which was a well-known title in Abassids era and attributed to the emasculated servants who were called Tavashi” (Alghalghashandi, 1913, 489).

The body of the sprinkler (strip 7 as the main decorative and Trsyworked strip)

Generally, the body of the sprinklers including connected horizontal stripes, Toranjes or sketches has been investigated in the present study. The Toranjes include the motifs of human, animal and birds. Each Toranj narrates a story including different scenes of human life, from courtier life to the poor people`s life, the scenes of music, hunting, fighting, travel, sport, farming, etc. **Tablet 9** shows a graphic design of the sprinkler with nine horizontal stripes on its body. Unfortunately, the decorations of the first strip to the fourth strip have been cleaned. The fifth strip including the sprinkler`s shoulder has been almost cleaned so that a great part of its silver workings have been disappeared and there is nothing but some shadows indicating throne, song and music. The fifth strip has been cut with the sprinkler`s handle and pipe. The sixth strip

which is placed in the lower section has been decorated with two rows of pearls from top to the bottom. Between the rows of pears, there is an inscription written in Kufic script. This inscription is ended to human designs from the upper side. “many people believe that Mosul`s metal workers have been influenced by Iranians in this scope since this kind of writing was emerged in an Iranian historical metal works (Harari, 1939, p. 308). The seventh strip is the widest strip on the body which has been surrounded by pearls from the top to the bottom having three dividable sketches with different volumes. Five out of seven are big and one sketch is medium placed in front of them. While each upper and lower row of the mentioned strips includes ten pear-like sketches which are smaller than the prior sketches. The background of the sketches of the seventh strip has consisted of plant designs and elegant arabesque motifs and inlay has been used with rare and unique subjects.

Sketches or Toranjes of strip 7

Strip 7 consists of two rows of eight big-and-small sketches or Toranjes whose motif have been paled mostly. Here, 8 big and main sketches which still have clear designs are investigated.

Sketch or Toranj 1 (**Tablet 11**) is a set of big sketches or Toranjes. In the middle of the

Toranj, there is a tree on which three birds are sat. In the left side, a hunter on the horse has targeted a bird while in the right side of the three, a farmer is plowing the land and the farmer's food are hung on the tree branches.

Sketch or Toranj 2 (**Tablet 12**) depicts two persons on the camel communicating with each other. Rice believes that "one of them has a wineglass or bouquet in his hand" (Rice, 1949, p. 295) while Alabidi believes that "there is nothing in their hands" (Alabidi, 1970, p. 48). In this sketch, three birds in the top and a rabbit in the low have been engraved.

Sketch or Toranj 3 (**Tablet 13**) shows the image of a woman sitting on a throne with a mirror in her hand and there are two peacocks over her head. In her left side, two attendants have stood, one with a box of cosmetics and the other are bringing something to her which is unclear. The bottom of the image has also been decorated with small motifs of animals.

Sketch or Toranj 4 (**Tablet 14**) depicts a scene of music. Two persons sitting in a background decorated with plants, one of them are playing a harp and the other is fifying. There are also some birds around the Toranj and the players.

In the sketch or Toranj 5 (**Tablet 15**), it seems that the depicted image is a woman lying on a bed; putting her right hand under her head and

her left hand on her chest; and a person with unclear face sits alongside the woman's feet and massaging her. But Rice believes that "that person has a bowl in the hand alongside the woman's feet" (Ibid, p. 296). Also a woman has stood behind her having a bowl in her hand. In this image, there are some motifs of tree and birds.

Sketch or Toranj 6 (**Tablet 16**) depicts a farmer plowing the land having a plow in his left hand and two cows pulling the plow. The background of the Toranj is the motif of a tree that two birds have sat face to face on its branches. Such scene has been manifested in Islamic metal works for the first time.

Sketch or Toranj 7 (**Tablet 17**) shows two hunters symmetrically sitting cross-legged face to face in tow sides of a tree and shooting two birds on the tree.

Sketch or Toranj 8 (**Tablet 18**) is the image of a shepherd sitting in front of a tree and fifying. A flock including three sheep pasturing freely and the shepherd's dog has sat on the ground. A bird on the tree and a bird on the shepherd's shoulder can also be seen.

There are also some tiny sketches in the seventh strip which are very pale and unclear. But some of these sketches have been protected from destruction. For instance, among the sketches of the upper row, a hunter can be seen riding a horse and another hunter

on the foot targeting an animal. In another sketch depicts a winged human putting on a hat; and among the sketches of the lower rows, there are some people beating a drum and two persons re dancing in the other motif. On the other motif, there are some people fifing and there is a tree that is eternal tree, as Alabidi says, and he believes that it has been taken from Iranian motifs (Alabidi, 1970, 53). In another motif, two people have been depicted; one is fifing and the other playing Daf.

In the strip 8, various kinds of decorations mostly include the motifs of animals running from right to the left in a background of plant designs. But the bottom the sprinkler has been decorated with strip 9 with the design of an inscription that its one part is in Kufic and another part is in Naskh script. Most of people believe that the bottom part of this sprinkler is twine with no originality since the inscription engraved on it include the common titles used in Egyptian kings that they governed after the date of this sprinkler's production" (Alabidi, 1970, 54). Regarding the decorations of the handle of the sprinkler, it should be said that most of the decorations have been disappeared gradually but in the lower part, there is an inscription in Nakhsh script including the metal worker's signature, "Ahmad Zaki Almosuli", (Rice, p. 268). Most

of the pipe's designs have been disappeared and hardly can be investigated.

The sprinkler of Yunus-Ibne-e-Musuli (Tablet 19)

This work has been produced in accordance to the inscription engraved on its neck by Yunus-Ibne-e-Musuli in 1247 AD/644 Hegira. **Table 3** describes the characteristics of this sprinkler.

The neck of the sprinkler

The upside of the sprinkler's neck consists of a strip with four pearl-like sketches or Toranjes which have been inlaid on a background including plant decorations and arabesque engraving. The subjects of these sketches are mostly music (singing and playing). The sketches are surrounded from up and down with two inscriptions in Naskh script. Following it, a ring has been engraved. In the downside of the ring, there is an inscription in Naskh script including the name of the manufacturer and the date of the sprinkler's production: "made by Yunus-Ibn-e-Yusuf-Al-Naghash-Al-Mosuli in 644 Hegira". This part of the sprinkler's neck is the place of writing the manufacturer's name followed by butterfly collars.

The shoulder of the sprinkler

The shoulder has been decorated by a strip including 8 pear-like sketches connected by small circles. The sketches are full of four-

leaf bushes which have been inlaid on a dense background of geometric decorations, especially integrated T-like motifs with two bent heads (**Tablet 6**). The subject of the sketches include some scenes of music and singing, horse riding and fencing; some scenes depicting two persons in which one of them has a container and the other has a stick (**Tablet 20**). In addition to these scenes, another narrative pictures can be seen in Mosul's works which have been duplicated frequently; some scenes depicting a person sat on a throne and another person is kissing his hand and a guardian has stood behind them (**Tablet 25**).

The body of the sprinkler

The body of the sprinkler has been decorated with a wide strip encompassing around the body and including six sketches or Toranjes on a background of the narrow branches of plants as different arabesque subjects. Table 4 presents the characteristics of these sketches.

Sketch or Toranj 1 (**Tablet 21**) depicts the image of a hunter on the horse hunting with a bow and arrow.

Sketch or Toranj 2 (**Tablet 22**) shows the image of a hunter on the horse with a spear in his hand and it cannot be distinguish that if he is fighting or hunting due to the unclearness of the image.

Sketch or Toranj 3 (**Tablet 23**) depicts the image of a prince sitting on a throne and is protected by two lions at the bottom of his throne. There are two servants in his two sides "having a bat in hand. Such subject can be seen in some metal and ceramic works in Seljuk's and Sassanids' era" (**Alabidi, 1970, p. 86**).

Sketch or Toranj 4 (**Tablet 24**) is a scene of two persons sitting face to face and fiving and there is a tree between them which can be the eternal tree as it was manifested in Sassanids works.

Sketch or Toranj 5 (**Tablet 25**) includes the reiterative subjects depicting a person who is kissing the king's hand while a guardian protect the king.

Sketch or Toranj 6 (**Tablet 26**) shows the image of two persons, one of them has sat on the ground and the other ones has a long spear in his hand and there are two horsemen between them. In the upside of the sketch, there are some birds accompanying the king.

It is considerable that the background of these sketches is decorated based on delicate branches and snail-like of plants. There are two strips up and down of the mentioned strip decorated by inscriptions and plants delicately. But the bottom of the sprinkler has a strip with a Kufic inscription cutting with some small circles of human images. The

handle and pipe of the sprinkler has been decorated with plant branches. Also, human and animal motifs used on the sprinkler are very weak with very low area dedicated to them.

The sprinkler of Qasem Ibn-e-Ali Mosuli (Tablet 27)

The sprinkler of Qasem Ibn-e-Ali Mosuli has been made by Qasem Ibn-e-ali, the student of Ibrahim Ibn-e-Mavalia Mosuli in 629 Hegira. Table 5 presents the characteristics of the mentioned sprinkler.

The neck of the sprinkler

The neck of the sprinkler consists of plant decorations and an inscription which have been separated with a ring. The upper part of the ring includes a strip with a background decorated with arabesque motifs and plant designs on which a grid with a surface of interrelated lattice holes is placed. The framework of the lattice work design consists of plant branches ended in half-leaf palms. Written decorations of this work is in the lower part of the ring. In the neck of the sprinkler and in a background decorated with plant designs, there is an inscription in Naskh script surrounded by two lines of pear decorations (Tablets 28 and 29). Regarding the text of the inscription, Ibn-e-Asir believes that “it was assumed that this sprinkler has been made for someone has a very intimate

relation with the king and it is likely that the king is Qias-Al-Din Mohammad Ibn-e-Malek Mazaher, Qazi Ibn-e-salah-Al-Din, the governor of Aleppo governed in 613-633 Hegira and if it is true, the sprinkler`s owner would be one of the relatives of Aziz king” (Ibn-e-Asir, 1290, p. 129). Considering the name of the prince on the sprinkler, it is more likely that the sprinkler has been made by his order and exported since “Mosul exported such containers” (Alabidi, 1970, p. 37). In the lower part of the linear strip, there are ten butterfly-like pearls on which an inscription in Naskh script has been engraved; the inscription is discontinuous and its words are scattered among the pear-like blade and the name and time of the production has been written on the sprinkler (Tablet 31). The text of the inscription indicates “made by Qasem Ibn-e-ali, the student of Ibrahim Ibn-e-Mavalia Mosuli in 629 Hegira”.

The body, pipe, and handle of the sprinkler

The body of the sprinkler is spherical and its surface has been decorated with delicate plant motifs and sketches writings that one instance of it can be seen on the sprinkler`s neck. In fact, engravings and inlaying on the sprinkler`s body are reiterative designs on its neck. The handle of the sprinkler has been decorated with spherical grains. The form of

the sprinkler's pipe is upright with twisted decorations just like the designs of the handle.

The sprinkler of Ibrahim Ibn-e-Mavalia (Tablet.32 The sprinkler of Ibrahim Ibn-e-Mavalia is spherical with a circular bottom and a short neck. The most obvious difference of this sprinkler with the early mentioned ones is its pipe's bending which is almost

vertical and has a dragon-like span and an open-mouth dog-like handle. Alabidi believes that "it seems that the pipe and handle of the sprinkler of Ibrahim Ibn-e-Mavalia have been made after the ewer since they have nothing to do with the style of the sprinkler" (Alabidi, 1970, p. 88). Table 6 indicates the characteristics of this sprinkler.

Table 1: Characteristics of Ahmad Zaki-Al-Naghash Mosuli's sprinkler

The name of work	Production date	The kind of work	Production technique	Decoration technique	The height of work	Keeping place
Ahmad Zaki-Al-Naghash Mosuli	1223 Ah/620 Hegira	Brass alloys	Casting and hammer work	inlay with silver	36/5 cm	Cleveland museum

Table 2: Summary of 8 Toranj

Strip 7	Type of decoration	Subject of decoration
Sketch or Toranj 1 (tablet 11)	Human, animal, bird, and plant motifs	Farming and sport
Sketch or Toranj 2 (tablet 12)	Human, animal, plant, and bird motifs	Conversation and visit
Sketch or Toranj 3 (tablet 13)	Human, animal, bird, and plant motifs	Courtier life (making up)
Sketch or Toranj 4 (tablet 14)	Human, bird, and plant motifs	Music (musicianship)
Sketch or Toranj 5 (tablet 15)	Human, bird, and plant motifs	Courtier life (massaging)
Sketch or Toranj 6 (tablet 16)	Human, animal, bird, and plant motifs	Plowing
Sketch or Toranj 7 (tablet 17)	Human, bird, and plant motifs	Hunting
Sketch or Toranj 8 (tablet 18)	Human, animal, bird, and plant motifs	Shepherding

Table 3: Characteristics of Yunus-Ibne-e-Musuli's sprinkler

The name of work	Production date	The kind of work	Production technique	Decoration technique	The height of work	Keeping place
Yunus-Ibne-e-Musuli's sprinkler	1247 AD/644 Hegira	Copper	Casting and hammer work	inlay with silver	40 cm 18 cm	Baltimore museum in America

Table 4: Characteristics of the sketches on the body of Yusuf-Al-Naghash-Al-Mosuli's body

Sketch or Toranj	Type of decoration	Subject of decoration
Sketch or Toranj 1 (tablet 21)	Human, animal, bird, and plant	Hunting

	motifs	
Sketch or Toranj 2 (tablet 22)	Human, animal, plant, and bird motifs	Hunting or fighting
Sketch or Toranj 3 (tablet 23)	Human, animal, and plant motifs	Courtier life (a prince on throne)
Sketch or Toranj 4 (tablet 24)	Human and plant motifs	Music (musicianship)
Sketch or Toranj 5 (tablet 25)	Human and plant motifs	Bowing for the king
Sketch or Toranj 6 (tablet 26)	Human, animal, bird, and plant motifs	Accompanying and protecting the king

Table 5: Characteristics of the sprinkler of Qasem Ibn-e-Ali Mosuli

The name of work	Production date	The kind of work	Production technique	Decoration technique	The height of work	Keeping place
Qasem Ibn-e-Ali Mosuli's sprinkler	1232 AD/629 Hegira	Brass	Casting and hammer work	inlay with silver	40 cm 21/5 cm	California museum

Table 6: The characteristics of the sprinkler of Ibrahim Ibn-e-Mavalia

The name of work	Production date	The kind of work	Production technique	Decoration technique	The height of work	Keeping place
Ibrahim Ibn-e-Mavalia's sprinkler	1230 AD/627 Hegira	Brass	Casting and hammer work	inlay with silver and copper	30/8 cm 22/5 cm	Louvre museum in Paris

The neck of the sprinkler

The upper side of the neck is decorated by plant motifs, especially twisted branches and palm leaves. In the lower part, there is another engraved strip including an inscription in Naskh script on a background of plants designs. The text of the inscription indicates "more health, power and wealth". In the bottom of the inscription, there is a ring embossing a part of the neck; its one part is ended in a pear-worked area including delicate arabesque plant motifs.

The body of the sprinkler

This part of the sprinkler which is its most important part in terms of engraved decorations consists of a number of horizontal stripes, half of them are narrow and half of

them are wide. Among the stripes, there are some stripes twisted in other stripes. Two lines made of inlaid red copper encompass these twisted stripes. These stripes have been decorated with human and animal motifs. Further, there are geometric designs and inscriptions inside of the stripes. In the first strip located in the upper part of the body, there is an inscription in Kufic script (**Tablet 33**) on a background of plants and snail-like designs and conventionally has the content indicating "glory, victory, eternal life, patient, grace, wisdom are appropriate attributes from Ibrahim Ibn-e-Mavalia". Here, the feature of being Mosul has been attributed to the manufacturer. The second strip is wider than the former and includes some images of

human and animals embedded in a row. In the image, there is a person sat on a throne with a wineglass in the hand. Sixteen people can be seen in his two sides. The pipe and handle of the sprinkler cut these people symmetrically. The engraved designs of these people show different poses and postures; the subjects used in these designs include playing with animals (such as dog and panther), carrying weapons such as sword and spear, horse riding, rural scenes (carrying load with donkey), and courtier scenes (a person sat with two attendants in two sides). In such subjects, faces and some feet have been inlaid with red copper while other parts of the body have been silver stamped. Some of the persons in the images have covered their heads with covering and some heads are bare. The background of these strips has been decorated with big plant motifs. After this strip, there is another strip decorated with an inscription in Naskh script on a background designed by plants motifs. The content of the inscription is “permanent glory, happiness, long life, victory, power, health, wealth, and grace for the sprinkler’s owner”. In the bottom of the inscription, there is another strip which is the widest strip of the sprinkler’s body. The mentioned strip is divided into ten sanctuary-like sketches or Toranjes. Each sketch depicts sitting and standing moods of two persons.

Two sketches have similar subjects. For example, in four sketches, two people have stood alongside communicating with each other; and in two other sketches, there is a tree between two people. Hunting, playing music (fifing) and bird are of other subjects used in the sketches. There is nothing but some plant motifs on the backgrounds of the strip.

In the other strip placed in the bottom of the mentioned strip, there is a coupled background decorated with twisted plants, actual birds, legendary human-like birds motifs modeled from Iranian art. One unique subject of the strip is “the manifestation of polo so that some horsemen can be seen on the horses with the bats in the hand in different poses and gestures which narrates the artists’ skill in depicting the narration. Unfortunately, there is no image of the described scene. Using red copper in inlay as well as using nested funnel-like shapes of trees and their roots can be introduced as the obvious feature of Ibrahim Ibn-e-Mavalia’s sprinkler. This style reminds Arabic school of painting “(Dimand, 1958, p. 23). “The images of imaginary full-human birds manifested on the sprinklers” can also be mentioned (Alabidi, 1970, p. 94). Further, “a kind of short clothing which are loose in tow sides and signifying the features of Mosul’s

school” is manifested in the motifs used in the sprinklers (Wiet, 1932, p. 64).

CONCLUSION

Investigating the metal works produced in Mosul, especially the sprinklers made in Mosul including the sprinkler of Ahmad Zaki-Al-Naghash, Yunus-Ibn-e-Yusuf, Qasem-Ibn-e-Ali, and Ebrahim-Ibn-e-Mavalia-Mosuli in terms of making method, types of techniques, types of decorations and the subjects used as the decoration on the objects` body, the following results can be stated:

- Metal works made by Mosul`s metalworking school in general and the sprinklers investigated in the present study were produced by casting, molding (using green sand instead of clay) and hammer working on cold sheets. Most of the metals and alloys used to produce Mosul`s sprinklers include copper, brass alloys, silver, burns, and sometimes gold. Inlay with copper, especially with red copper, silver stamping and silver stamping were use to make Mosul`s sprinklers. Also, other techniques such as lattice work, niello, tapestry, spinning were used in addition to inlay with silver and gold.
- Different types of decorations and subjects used in the surface of the

sprinklers (body, neck, handle, stand, etc.) were analyzed in the present study. Various decorations used in the metal works of Mosul, especially in the four mentioned sprinklers include the designs of human (king, prince, horseman, hunter, singer, dancer, musician, attendant, servant, farmer, shepherd), animals (horse, lion, monkey, sheep, donkey, camel) and birds (duck, pigeon, falcon), plants (tree {life tree}, arabesque designs and twisted branches, palm designs and rose flowers), geometric designs (T-like, Y-like and Z-like designs, inscription decorations and pictographs written in Naskh mostly and in Kufic rarely). Various types of benedictory phrases, calling for increasing income, health and long life, luck, and happiness, and so forth were the subjects used in the form of written text.

- The subjects and scenes used in the form of decoration on the surface of the four sprinklers include the issues related couturier and courtly life such as the scene in which the king seats cross-legged laying on the throne with a wineglass in his hand and two servants stand in two sides of him or

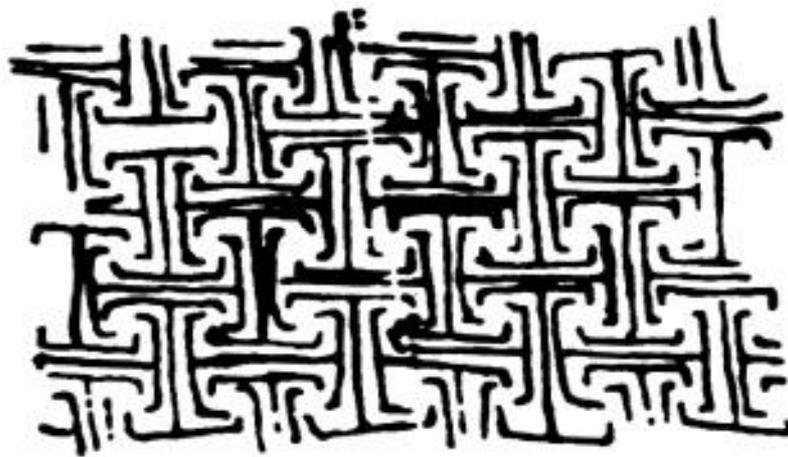
are serving him. Such scene has been duplicated in the designs of Mosul's metal works frequently. In some scenes, queen seats and are making up herself and a maid is bringing her a box of jewelry. Another scene depicts a lord on horse or camel and an attendant takes the horsehalter in his hand and an armed guardian protects them. A hunter who is hunting on the horse, or on seat by a bow and arrow ; and in some scenes, two hunters seated in front of each other and shooting to flying birds are of the other designs used on the objects' surface. Pitched battle, singing, dancing, playing music by fife, def and harp by two musicians in front of each other, sport, polo, wrestle, various plays by dogs and tigers, shepherding, farming (plowing), travel, resting under a tree can be referred as the other subjects used as the designs on the metal works' surface.

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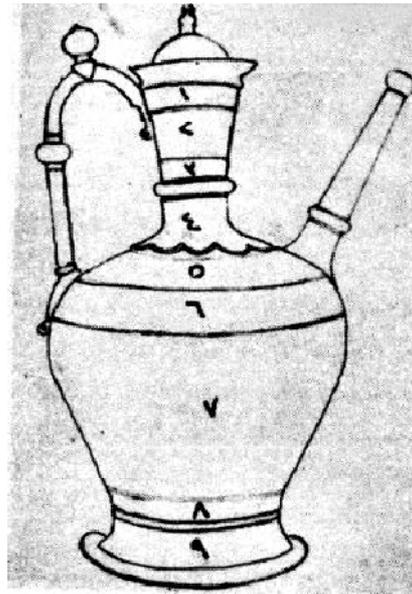
Tablet 1: The design of Bhrum Gour and Azade on the inlaid body of Shoja Ibn-e-Mane Mosuli`s sprinkler (Ward, 1993, p. 82)

Tablet 2: The symbolic design of Bahram with an ax in one hand and a severed head in another hand (Es-said, a982, p. 34)

Tablet 3: Shoja Ibn-e-Mane Mosuli`s sprinkler (Britain museum website, London)

Tablet 4: The scene of a person sat on the throne with a wineglass in the hand and two attendants in two sides

Tablet 6 and tablet 7: T-like, Y-like and Z-like designs on the body of the metal works of Mosul (Alabidi, 1970, pp. 39-40)



Tablet 8 and tablet 9: Ahmad Zaki-Al-Naghash Mosuli and its graphic design by Salah Hosein Alabidi in 1979 (Alabidi, 1970, p. 45)

Tablet 10: the inscription in Naskh script including the signature of its manufactures, Ahmad Zaki-Al-Naghash Mosuli in 620 (Alabidi, 1970, p. 46)

Toranjes of strip 7 of the sprinkler`s body, tablets or Toranjes 11, 12, 13, and 14 from right to left, respectively.

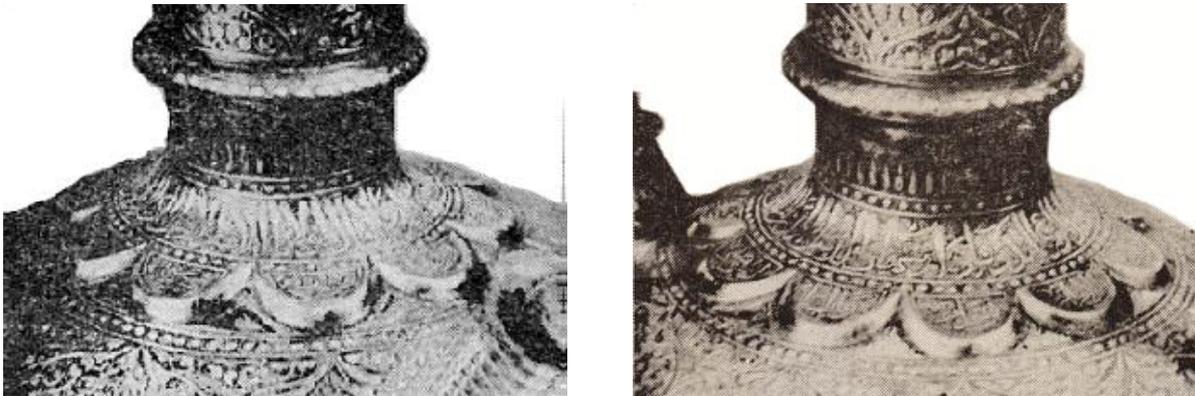
Toranjes of strip 7 of the sprinkler`s body, tablets or Toranjes 15, 16, 17, and 18 from right to left, respectively.

Tablet 19: Ynus Ibn-e-Yusuf Mosuli`s sprinkler (Dimand, 1958, p. 24)

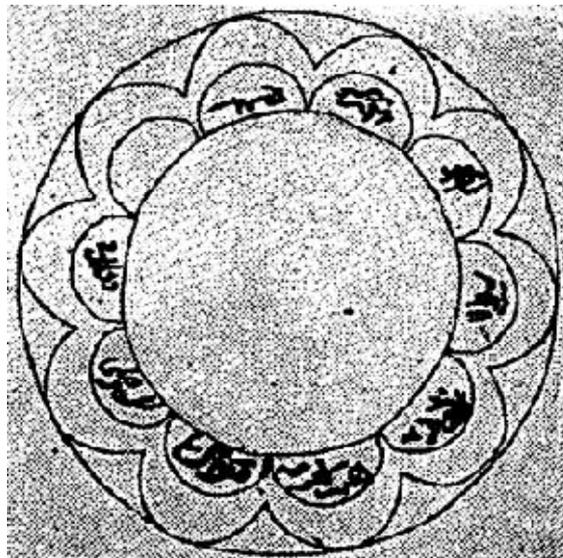




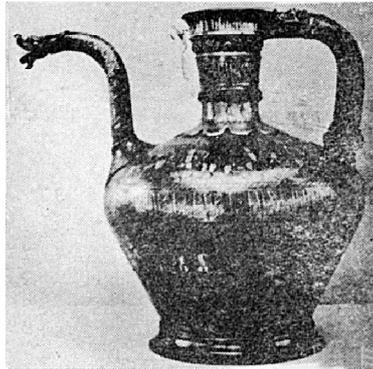
Tablet 26 and tablet 27: available Toranjes on the body of the sprinkler of Yunus
Tablet 27: Qasem Ibn-e-Ali Mosuli's sprinkler (Alabidi, 1970, p. 61)



Tablet 28 and tablet 29: tiny pearls taken from Sassanids Iranian pattern
Tablet 30: the inscription on Qasem Ibn-e-Ali Mosuli's sprinkler



Tablet 31: the inscription on the neck of Qasem Ibn-e-Ali's sprinkler including the manufacturer's signature



Tablet 32: Ibrahim Ibn-e-Mavalia Mosuli`s sprinkler (Alabidi, 1970, p. 88)



Tablet 34 and tablet 35: a part of designs engraved on the body of Ibrahim Ibn-e-Mavalia Mosuli`s sprinkler



Tablet 33: the inscription on the body of Ibrahim Ibn-e-Mavalia Mosuli`s sprinkler