

SOME UNPUBLISHED LANTERNS IN THE ISLAMIC ART MUSEUM IN CAIRO "ANALYTICAL, HISTORICAL AND ARTISTIC STUDY"

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Abstract

This paper aims to study some unpublished lanterns, preserved in the Islamic Art Museum in Cairo through analytical, historical and artistic study. In general, the lanterns are oil lamps and usually with a large round bulbous body, reaching to a narrower center, where above it is the flaming top section. These lanterns can be placed on a surface, however they were commonly suspended by chains and in these chains there were some loops on the outer surface of the body of lanterns that were used to light mosques or any other architectural buildings during Islamic times and in order to light large areas in groups of lanterns, hanging from a metal frame that had the form of a circle, these circular frames continued to be used in many mosques till nowadays. In researching for the collections and antiques, preserved in the Islamic Art Museum in Cairo, it is observed, that there are some unpublished lanterns, have not been discussed and have not been concentrated and strongly investigated by researchers. This study seeks to discuss these unpublished lanterns that include a significant layout of artistic styles, this is besides the historical and archaeological value of these lanterns. The methodology of this study will be addressed through descriptive, historical, artistic and analytical study; this will be revealed through discussion, investigation, analysis that can be detected through detailed interrogation of the objects, elements and structure of the content of this study.

Keywords: lanterns, lamps, lighting, glass industry, Islamic art, sultans, amirs.

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1. Introduction

The lantern was one of the most important sources of lighting during Islamic ages, when it contained a cylinder or piece of wax or tallow with a central wick that was a strip of a porous material, up which liquid fuel was drawn by a capillary tube to produce flame in a lantern, or so-called candle, lamp, and lighter, which was the source of lighting in outdoors or inside the buildings. The lanterns also refer to torches or any general outdoor and indoor light sources [1, 2]. The lanterns are lamps with a clear closet, protecting the flame and usually have handles, through which they can be carried or hung. During Islamic ages, the lanterns were used as lamps for Mosques, which made of enameled glass, often they were with gilding. It should be noted, that Cairo in Egypt and the cities of Aleppo and Damascus in Syria were the most important manufacturing centers for Islamic lanterns, especially during the 13th and 14th centuries A.H [3]. In general, the lanterns are oil lamps and usually with a large round bulbous body, reaching to a narrower center, where above it is the flaming top section. These lanterns can be placed on a surface, however they were commonly suspended by chains and in these chains there were some loops on the outer surface of the body of lanterns that were used to light mosques or any other architectural buildings during Islamic times and in order to light large areas in groups of lanterns, hanging from a metal frame that had the form of a circle, these circular frames continued to be used in many mosques till nowadays [4–6].

The aim of this research is to discuss some unpublished lanterns, preserved in the Islamic Art Museum in Cairo and this will be through analytical, historical and artistic study. In the Islamic Art Museum in Cairo there are many numbers of preserved lanterns, of which these unpublished lanterns that will be discussed in this study which will also highlight and reveal these unpublished lanterns, preserved in the Islamic Art Museum in Cairo, including a significant layout of artistic styles, technical methods, as well as historical and archaeological value of these lanterns. The objectives of this study will be revealed through discussion, investigation, analysis that can be detected through detailed interrogation of the objects, elements and structure of the content of this

study, particularly as a basis for explaining the content and significance through the discussion and interpretation. The methodology of this study will be addressed through descriptive and analytical study and this will be revealed through discussion, investigation, analysis that can be detected through detailed interrogation of objects, elements and structure of the content of this study and all of these will be evident through the methodology, structure and content of this study.

2. The Methodology and structure of this study

2. 1. What is Lantern?

Lantern is a stemware that includes a lamp. Rulers and Amirs ordered its manufacture to be placed in mosques, this stemware was known as lantern [7]; the purpose of manufacturing lanterns was lighting mosques [8, 9]. Concerning the term, lantern was adapted from the Quranic verse "Allah is the Light of the heavens and the earth. The example of his light is like a niche within which is a lamp, the lamp is within glass the glass is as if a pearly [white] star lit from [the oil of] a blessed olive tree... [10]. Furthermore, we believe that a small glass container for water and oil with a floating wick was inserted inside the lamp, and the lamp itself was suspended by chains from the ceiling [11]. Lanterns became from the elements of the Arts, which created high spirituality. As well as helped to uncover and clarify the ambiguity which had many names and terms of Sultans and Amirs [12]. The most numerous are the mosque lamps with a flaring neck, bulbous body, glass loops for suspension and a foot ring [13]. Thus, it can be said, that the lantern is a masterpiece, it contains a lamp, placed inside a bulb. It looks like a vase of a puffy body that ends at the bottom with a base, has a vast funnel neck, inside the lantern there is placed a small vase with oil and a thread [14]. Usually each lantern has salient handles, which were varied in number, may be three or more. The metal chains were attached to handles to be gathered on the oval ball. Perhaps the aim of these chains was to preserve the balance of the lantern from swing [15]. Lanterns were lightening by the Maghrib prayer (sunset) every night. It is worthy to mention, that the Museum of Islamic art in Cairo has the largest collection of enamelled glass lanterns in the world [16]. The Mamluk era is considered to be one of bright times, which produced Islamic lanterns [17], when Egypt passed on two phases of the Mamluk reign, which can be clarified as the first phase, known as the Bahri Mamluk era (from 1250 to 1382 A.D. 648–874 A.H) [18, 19]. The second phase is known as the Burgi Mamluk era (from 1382 to 1517 A.C. 874–923 A.H) [20, 21]. The Mamluks interested deeply in building mosques and schools, which needed to manufacture a massive number of lanterns. Therefore, the artists did their best, using numerous artistic styles in decorating lanterns that even become extremely beautiful and magnificent antiques [22–25].

2. 2. Development of the Glass industry until the Mamluks Age in Egypt

Historically, some Pharaonic glassware proved that the ancient Egyptians were the first to invent the glass industry. Besides the innovation of glass industry ovens (glass factories) that were found in Thebes and dated back to the time of King Amenhotep III of the 18th Dynasty in Tel Amarna, some glass industry ovens were found dated to the reign of King Akhenaten of the 18th Dynasty [26]. Syria was distinctive in the glass industry during the Byzantine era, and it also flourished in Iran during the Sasanian period. It should be noted, that it is difficult to determine the decorative topics, painted on glass precisely, because of using a soluble substance, as well as the difficulty of re-manufacturing, besides being easily breakable [27]. Numerous examples of such devices appear in Syrian and Egyptian glass mosque lamps; these gilded and enameled lamps assumed a standard vase shape in the fourteenth century [28]. Islamic monuments researchers derived their knowledge of the glass industry, known during the early Islamic era, from the excavations, found in some Islamic archaeological sites in Egypt. The glass industry reached its peak under the rule of the Fatimids in Egypt. The main centers of this industry were in Fustat - Fayoum - Alexandria, and these centers were the same ones for the industry in the Roman era [29]. The Mamluk times are deemed the brightest in glass. The Mamluk lanterns industry style is considered to be an extension of the method, used during the Ayyubid period, as well as excellent lantern decoration was in both reigns. In the Mamluk era lanterns were characterized by using colors like dark blue, purple and bright white [30]. Mamluk times are deemed to be the brightest in glass industry and decorative

arts, Egypt and Syria continued in producing the finest glass works until the 9th Century A.H/ 15th Century A.D [31]. Muslims used the same old technique in producing their industry of glass antiques, which is started in smelting sand (silica oxide) after mixing it with a certain percentage of limestone (calcium carbonate) plus a certain percentage of (Sodium carbonate). Thus, it can be said, that the glass is a treated material in the form of a paste to be finally a solid structure of a frangible substance. Then, the main features of the glass material are clear, could be seen in the rubbery appearance when heated, and transparency when it is cold [32–34]. Islamic glassware often lacked information, referred plainly to its history and place of manufacture. That's why scientists of Islamic art adopted the form of the vessel, method and elements of its decoration, the used colors, and the script on the antique to be able to determine the pace and history of the item roughly. It should be noted, that the most important production centers of lanterns were Fustat – Fayoum – Alexandria during the Mamluk period in Egypt [35], all these centers were near desert areas, because the glass industry used sand up to 68 %, as well as silica, sodium and potassium. There are varied types of sand like the white sand, yellow sand or Egyptian sand, red sand and blue sand [26].

2. 3. Techniques of Manufacturing and Decorating Glass

There were varied techniques of producing glass throughout ages, which can be divided into three types; modeling, drawing and blowing [36]. The modeling technique was one of the most important methods, used in forming most of the Mamluk lanterns, which was not a popular industry, but restricted only on the sultans, emirs and senior statesmen, where glass was manufactured under the supervision of the state, as well as modeling technique, resulted in regular, beautiful and solid forms. There were numerous lantern modules, which were the original modules, engraved directly, and hewn modules [35]. Glassmakers in Islamic lands inherited a variety of techniques to decorated glass objects [37], so there were numerous methods, used in decorating glass, that were known and can be summarized as applied spiral glass lines, honey Comb [38], stamped decoration, pinching iron decorations, applied and pierced glass lines, applied decorations by comb, engraved decorations by hand or wheel, incised decorations [16], enamelled glass [17], and metallic luster [39]. The modeling technique was the most important method, used precisely in producing lanterns widely during the Mamluk region. Lanterns were of a great importance aesthetically besides functionally, they were decorated with enamel and gild to hang in mosques and palaces [40, 41]. The decoration style of using different glass colored threads on the glass surfaces was the beginning of using enameled lanterns [42]. The method of gilding and enameling was undergoing with multiple technical steps, craftsmen put the gilt decorations on the item by a quill when drawing the outlines, then shaping the subject of the graphic in red, then using different colors of the enamelled coatings. The enamel coating was semi-transparent, consisted of molten lead then colored with green mineral oxides, driven from of copper oxides, the red color was of the iron oxide, the yellow was of the antimony acid and white was of the tin oxide. The blue enamel color played an important role in the glass ornament, which was made of lapis lazuli powder with a transparent glass [29, 43]. Colors are of the important elements in decorative design as it has a significant psychological impact on item viewers. Yellow color is expressive, adding warmth, and a color of energy, besides being an attractive and positive color. Orange is a warm color, which symbolizes optimism and is associated with healing factors. Red color is hot, refers to energy and movement, it symbolizes strength and will. Blue color is cool, refers to calm, patience and helps you to relax, while white color suggests serenity, purity and chastity [44]. All of these colors like red, blue, yellow, white, light green and pink, found on the outside surface of the lantern, are characterized with accuracy, beautiful decorations and harmony of colors, in addition to the quality of manufacture and high-technique of production [45]. The richness of colors on the Islamic works reflects the contrast between light and darkness. The artist didn't use more than five colors on one piece to clarify the variance of grades between colors. The Muslim artist tried to decrease colored spaces on glass works, especially lanterns, as well for recurrence, we see how contrasted colors were converged in harmony after being placed in geometric patterns or units, distributed in large areas with other colors. The Muslim artist tried to avoid free spaces on his works, which invited him to repeat his figures, whether they were written in floral or geometric or decorative motifs [46]. The Geometrical designs are basically very simple:

they may be constructed with only a compass and a rule and the knowledge of certain procedures, which produce triangles, squares, hexagons, stars [47]. There is no nation in the history that the Handwriting of life plays so important role as Arab and Islamic nation [48, 49].

2. 4. Arabic calligraphy is science and art

The calligrapher adopted geometry, trigonometry and circles at the implementation process, as the Arabic calligraphy was not just writing that caused the purpose and function, but it was an expression of the spirit and the sense [48]. To the Islamic glass works, especially lanterns, include two types of script, which can be divided into religious writings and memorial and historical writings. These scripts seem to be static while they have the effect of a moving word, through the message it implies to the viewer's sense while it is stable in place, this is the concept of symbolic technique, innovated by the Muslim artist on his antiques [50]. On lanterns appeared ranks, had been known during times of the Atabegs and Ayyubids, but spread in the Mamluk era, and became officially the traditional norm, maintained by an owner on his antique because of its symbolic importance to memorialize him [51]. It should be mentioned, that rank is a Persian word that means the color. This term was mentioned by historians as the emir's emblem, when the Sultan granted him the title of emir. Rank was a sign of appointing and granting the position of emir to someone by the Sultan, also the ranks of the Sultan were a circle with a bevel, contained his name and titles [40], which was a slogan of the sultan's hegemony on the state. Ranks appeared frequently on the Islamic buildings and antiques [52]. Ranks could be divided into Top of Form the simple rank that contained a sign that referred to the emir's position, it was known sometimes with "the functional rank", such as the beaker's rank referred to the beverage bearer, and the rank of inkwell and pen referred to position of *Dawadar* "the writer". The compound rank contained more than one mark, initially it was referring to the jobs, held by emirs, then its function developed during the 9th Century A.H to refer to a group, not to one person. It was used to refer to a group of Mamluks and the military troops of the Sultans. The documentary rank, used by sultans to register their names and titles, usually associated with some religious phrases such as "Sultan Hassan's rank", codified with Thuluth calligraphy which documented as; "Glory to our Sultan, Nasser state and religion, Hassan, boosted his victory"[53]. The decorations on lanterns, we will discuss, are varied, can be listed as floral motifs, geometric motifs, inscriptional motifs, and rank motif. It is noted, that finest glass lanterns, most accurate in technique and decoration, date back to the 7th and 8th centuries A.H. There is also noted the weakness in this industry, started with the early of the 9th century A.H.

3. The Descriptive Study Bottom of Form Bottom of Form

3. 1. The First Lantern

3.1.1. Item No.: 36-37-38-39/337

3.1.2. Place of Preservation: The Museum of Islamic Art, Cairo – Egypt

3.1.3. Dimensions: 35:40 cm Height, diameter about 50 cm

3.1.4. The item dates back to: 7th Cen. A.H/13th Cen. A.D.

3.1.5. Type of the Item: Lantern of transparent Glass

3.1.6. Description: Fig. 1–4



Fig. 1. The First Lantern (By the researcher)



Fig. 2. The First Lantern (By the researcher)



Fig. 3. The First Lantern (By the researcher)



Fig. 4. The First Lantern (By the researcher)

This Lantern took the form of a vase, contained of a base and a pear-shaped body with its vast funnel. It is mainly made of transparent glass; the base is not high, simple and free of decorations. The body is decorated with scripts of Mamluk Thuluth calligraphy. It should be noted, that this calligraphy was empty of dotting or any marks of punctuation. The inscriptions show the Sultan's name and his tiles and a pray for him as follows: "Glory to our Sultan, the king El-Nasser, Protector of the state and religion, Hassan Mohamed, boosted his victory". It is worth mentioning, that the inscriptions are carried out in a way of discharge area on a floor of blue enamel, the letters are outlined with red and confine floral patterns of leaves and branches among them. Top of Form

The lantern's body contains six handles, surrounded by almond forms and motifs. Arises the body, a wide funnel, decorated with two bands of ornamentations; the lower band appears narrow and outlined with red colored strips. Top of Form

This narrow band includes small medallions, enamelled with blue and decorated with floral leaflets with similar and smaller medallions, each medallion is decorated with motifs of different colors, namely "green – red – blue, the upper band is inscribed with the Thuluth Mamluk script. Bottom of Form

These inscriptions show the verse 35 of Quranic EL-Nour Sura. The remaining part of the verse on this item at the moment is "The example of His light is Like a niche In...", and

mediates this Quranic verse by two medallions, decorated with blue enamel and outlined with thin strips of reddish color. These medallions have a rectangle with inscriptions, written on it without dots “Glory to our Sultan”. It is noticeable, that medallions of the funnel look identical in decoration and writings. Top of FormIt is clear, that this lantern was manufactured specifically for the Madrasa of Sultan Hassan bin Al-Nasir Muhammad bin Qalawoon. It is a lantern of the Mamluk style; this is confirmed by the form and method of the decorations on the lantern. The Mamluk era in Egypt is marked by using blue enamel which is made of lapis lazuli powder with transparent glass [54], in addition to identifying the letters, script or texts and motifs with thin reddish stripes.

3. 2. The Second Lantern

3.2.1. Item No.: 1-2-3-4-5/337

3.2.2. Place of Preservation: The Museum of Islamic Art, Cairo – Egypt

3.2.3. Dimensions: 60 cm Height, diameter about 45 cm

3.2.4. The item dates back to: 7–8th Cen. A.H/13–14th Cen. A.D.

3.2.5. Type of the Item: Lantern of transparent Glass

3.2.6. Description: Fig. 5, 6



Fig. 5. The Second Lantern (By the researcher)



Fig. 6. The Second Lantern (By the researcher)

This Lantern took the form of a vase, contained of a base and a sphere-shaped body with its vast funnel. The base height is almost 15 cm, decorated with floral and geometric motifs, it is clear, that in the patterning process the artist used a quill, this is due to the irregular, successive and horizontal bars that confine decorations. The lower bar, decorating the base, is ornamented with small successive medallions, an arrow with a reddish color is drawn within each medallion, this bar decorations rises with a trefoil leaf, colored in white and red, surrounded with a medallion of blue enamel and surrounding other medallions in reddish color, above this there is a third bar on the lantern base, which is decorated with a set of contiguous medallions, inside each there is a small star, colored in red. The body is spherical in shape; its decorations could be divided into three sections;

the lower section of the body is decorated with five medallions, each mediated with a rectangle, surrounded from top and bottom with forms of semi-circles, in which the phrase “Glory to our Sultan” is written, while the title “King” is written in the lower form and in the upper form the title “El-Zahir” is written using the reddish Mamluk Thuluth calligraphy. This medallion is surrounded with another wider one with a blue enameled floral branch as decoration. Another one wider is found decorated with smaller successive medallions in red, drawn with a quill. It is noted, that the confined spaces between medallions are decorated with floral motifs with multi-petalled rose, colored in blue, red and white, surrounded by a floral bar on the blue enameled ground. The middle section includes a thin bar that has a group of small, successive medallions, in which a small star is drawn. The upper section of the lantern’s body has five handles, surrounded by fine lines, colored in red; these lines form the almond shape, drawn to the bottom. These handles confine writings in Thuluth Mamluk calligraphy “Glory to our Sultan (the pure king) al-Malik Tahir” among them. The letters are painted in blue enamel with colored stripes in red, as well as decorating the confined space with floral motifs of flowers and branches in red, white, and light green colors. The lantern’s body is topped with a wide funnel, decorated with big medallions, one of these medallions is decorated with interlacing geometric blue enamel, beside it, another one is decorated with colorful floral motifs in blue and red. It is worth mentioning, that this lantern is similar in decorations to the Mamluk era lanterns.

3. 3. The Third Lantern

3.3.1. Item No.: 30-3-32/336, 331/13887

3.3.2. Place of Preservation: The Museum of Islamic Art, Cairo – Egypt

3.3.3. Dimensions: 20 cm Height, diameter about 25 cm

3.3.4. The item dates back to: 7–8th Cen. A.H/ 13–14th Cen. A.D.

3.3.5. Type of the item: Lantern of transparent Glass

3.3.6. Description: Fig. 7, 8



Fig. 7. The Third Lantern (By the researcher)



Fig. 8. The Third Lantern (By the researcher)

This Lantern is made of transparent glass, but incomplete and the residual part is part of the body and the vast funnel. The body includes a set of handles, each surrounded with a specific almond form, outlined with a reddish line as well as body decorative motifs with Thuluth Mamluk calligraphy, and note, that the writings appeared by outlining letters with reddish thin strips. The remaining part can be read as follows; (Maulana (our) Sultan... the ... Abu Said God). By searching the writings and texts of lanterns, the text can be completed as follows; “Maulana Sultan Malik al-Zahir Abu Said, May God supports him”. “Our sultan, the king El Zaher, Abo Said, may God supports him”. These writings appeared on a floor of blue enamel and decorative floral motifs, outlined with thin strips of red color. It is clear from the writings and the lavishly decorative elements that this lantern dates back to Sultan al-Zahir Abu Said, Sultan Barqouq the first of Burgi Mamluks in Egypt. A bar of floral motives connects the body and the funnel, represented in contiguous colorful rosettes of blue enamel; these rosettes confine small colored flowers in red, yellow, and white. Concerning the lantern funnel, it is decorated with overlapping branches and floral leaves in harmony and made with the incised colored method in red, blue, and gold. The edge of the funnel is decorated with a bar of inscription, mentioning verse 35 of El-Nour Sura, written in Thuluth Mamluk calligraphy “God is the Light of the heavens and the earth. The example of His Light is like a niche wherein a lamp is; the lamp is in a crystal, and the crystal is shining as if a pearl-like radiant star.” Writings seemed incised on blue enamel, as well as outlining the letters with gilding.

3. 4. The Fourth Lantern

3.4.1. Item No.: 1-2-3-4-5/3202

3.4.2. Place of Preservation: The Museum of Islamic Art, Cairo – Egypt

3.4.3. Dimensions: 20 cm Height, diameter about 40 cm

3.4.4. The item dates back to: 7th Cen. A.H/ 13th Cen. A.D.

3.4.5. Type of the item: Lantern of transparent Glass

3.4.6. Description: Fig. 9–11



Fig. 9. The Fourth Lantern (By the researcher)



Fig. 10. The Fourth Lantern (By the researcher)



Fig. 11. The Fourth Lantern (By the researcher)

This Lantern took the form of a vase which had a low base and a spherical, bloated-shaped body with a funnel, but it is almost missed. The base is free of decoration, but the spherical, bloated body is decorated, and we will divide it into two parts; the lower section includes three decorated medallions with the cup rank which is colored in white color on the reddish background. This rank is a simple functional one of a beverage bearer [29]. It should be noted, that the beverage bearer rank was longer more spread on the antiques, dated back to the Mamluk era, due to the large number of bearers in Mamluk tiles [53]. Following the previous medallion, the other ones are more spacious and decorated with floral motifs on a ground of blue enamel, each one is outlined with thin strips, colored in yellow. The area, enclosed between each medallion and the others, is decorated with floral motifs of tripartite leaf as well as interlaced branches and leaves with a beautiful, attractive form. These floral motifs are colored in blue, light green, red, white, pink and yellow. The body is decorated with inscriptions on a floor of blue enamel, written in Thuluth Mamluk calligraphy; the outer frame of the letters is outlined with thin red lines [41]. Despite the letters were colorless, we can read these inscriptions as follows: (from the works of the poor slave to God ... EL-Nasri, King Sultan ... rh). According to the records of the Museum of Islamic Art in Cairo, which reported this lantern, it included the following: (the poor Ali bin ...). It can be said, that the Islamic Art Museum includes a lot of sultan El Nasir Muhammad bin Qalawoon's lanterns, the artist signed his name on some of them, which is read as follows: »Work of the poor slave Ali bin Mohammad Amki, May Allah forgives him16[«]. Thus, we conclude that the artist Ali bin Mohammed Amki was one of the most famous makers of lanterns in the era of Sultan El Nasir Muhammad bin Qalawoon. As well as the aspects of similarity in the patterning process between lanterns, decorations of the Mamluk era, especially the period of Sultan El Nasir Muhammad bin Qalawoon, and the lanterns, subject of the study. From the above mentioned we can conclude that this lantern dates to the Burgi Mamluk era in Egypt.

4. Conclusion and Analysis of the Study

The lantern was one of the most important sources of lighting during Islamic ages, when it contained a cylinder or piece of wax or tallow with a central wick that was a strip of a porous material up which liquid fuel was drawn by a capillary tube to produce flame in a lantern, or a so-called candle, lamp, and lighter, which was the source of lighting in outdoors or inside the buildings. The lanterns also refer to torches or any general outdoor and indoor light sources. The lanterns are lamps with a clear closet, protecting the flame and usually have handles, through which they can be carried or hung. During Islamic ages, the lanterns were used as lamps for Mosques, which made of enameled glass, often they were with gilding. Cairo in Egypt and the cities of Aleppo and Damascus in Syria were the most important manufacturing centers for Islamic lanterns, especially during the 13th and 14th centuries A.H. In general, the lanterns are oil lamps and usually with a large round bulbous body, reaching to a narrower center, where above it is the flaming top section. These lanterns can be placed on a surface, however they were commonly suspended by chains and in these chains there were some loops on the outer surface of the body of lanterns that were used to light mosques or any other architectural buildings during Islamic times and in order to light large

areas in groups of lanterns, hanging from a metal frame that had the form of a circle. These circular frames continue to be used in many mosques nowadays. In the Islamic Art Museum in Cairo there are many numbers of preserved lanterns, of which these unpublished lanterns that will be discussed in this study that will focus on some unpublished lanterns; it will also highlight and reveal these unpublished lanterns, preserved in the Islamic Art Museum in Cairo, which include a significant layout of artistic styles, this is besides the historical and archaeological value of these lanterns. A lantern is a stemware that includes a lamp. Rulers and Amirs ordered its manufacture to be placed in mosques, this stemware was known as a lantern; the purpose of manufacturing lanterns was lighting mosques. Concerning the term lantern, it was adapted from the Quranic verse “Allah is the Light of the heavens and the earth. The example of his light is like a niche within which is a lamp, the lamp is within glass, the glass is as if a pearly [white] star lit from [the oil of] a blessed olive tree.... Furthermore, we believe that a small glass container for water and oil with a floating wick was inserted inside the lamp, and the lamp itself was suspended by chains from the ceiling. Lanterns became from the elements of the Arts, which created high spirituality. As well as helped to uncover and clarify the ambiguity, which had many names and terms of Sultans and Amirs. The most numerous are the mosque lamps with flaring neck, bulbous body, glass loops for suspension and foot ring. Thus, we can say that lantern is a masterpiece that contains a lamp, placed inside a bulb. It looks like a vase of a puffy body and ends at the bottom with a base, has a vast funnel neck, a small vase with oil and a thread is placed inside the lantern. Usually each lantern had salient handles, which varied in number, may be three or more. Metal chains were attached to handles to be gathered on the oval ball. Perhaps the aim of these chains was to preserve the balance of the lantern from swing. Lanterns were lightening by Maghrib prayer (sunset) every night. It is worthy to mention, that the Museum of Islamic art in Cairo has the largest collection of enamelled glass lanterns in the world. The Mamluk era is considered to be one of bright times, which produced Islamic lanterns, when Egypt passed on two phases of the Mamluk reign, which can be clarified as the first phase, known as the Bahri Mamluk era (from 1250 to 1382 A.D. 648–874 A.H); the second phase is known as the Burgi Mamluk era (from 1382 to 1517 A.D/ 874–923 A.H). The Mamluks interested deeply in building mosques and schools, which needed to manufacture a massive number of lanterns. Therefore, the artists did their best, using numerous artistic styles in decorating lanterns that even became extremely beautiful and magnificent antiques. The first lantern is preserved in the Museum of Islamic Art, Cairo – Egypt with No. 36-37-38-39/337, which dates back to the 7th Cen. A.H/13th Cen. A.D. It took the form of a vase, contained of a base and a pear-shaped body with its vast funnel. It is made mainly of transparent glass, the base is not high, simple and free of decorations. The body is decorated with scripts of Mamluk Thuluth calligraphy. The second lantern is preserved in Museum of Islamic Art, Cairo – Egypt with No.1-2-3-4-5/337, which dates back to the 7–8th Cen. A.H /13–14th Cen. A.D. This Lantern took the form of a vase, contained of a base and a spherical shaped body with its vast funnel. The base height is almost 15 cm, decorated with floral and geometric motifs, it is clear that in the patterning process the artist used a quill, this is due to the irregular, successive and horizontal bars confine decorations. The lower bar, decorating the base, is ornamented with small successive medallions, an arrow with a reddish color is drawn within each medallion, this bar decorations rises with a trefoil leaf, colored in white and red, surrounded with a medallion of blue enamel and surrounding other medallions in reddish color, above this there is a third bar on the lantern base, which is decorated with a set of contiguous medallions, inside each there is a small star colored in red. The body is spherical in shape; its decorations could be divided into three sections; the lower section of the body is decorated with five medallions, each mediated with a rectangle, surrounded from top and bottom with forms of semi-circles, in which the phrase “Glory to our Sultan”, while in the lower form written the title “King” is written and in the upper form the title “El-Zahir” using the reddish Mamluk Thuluth calligraphy is written. The third lantern is preserved in Museum of Islamic Art, Cairo – Egypt with No. 30-3-32/336, 331/13887, which dates back to the 7–8th Cen. A.H/ 13–14th Cen. A.D. This Lantern is made of transparent glass but incomplete and the residual part is part of the body and the vast funnel. The body includes a set of handles, each surrounded with a specific almond form, outlined with a reddish line as well as body decorative motifs with Thuluth Mamluk calligraphy, and note that the writings appeared

by outlining letters with reddish thin strips. The fourth lantern is preserved in Museum of Islamic Art, Cairo – Egypt with No. 1-2-3-4-5/3202, which dates back to the 7th Cen. A.H/ 13th Cen. A.D. This Lantern took the form of a vase. It has a low base and a spherical, bloated-shaped body with a funnel but it is almost missed. The base is free of decoration, but the spherical, bloated body is decorated, and it will be divided into two parts; the lower section includes three decorated medallions with the cup rank, colored in white color on the reddish background. This rank is a simple functional one of a beverage bearer. The body is decorated with inscriptions on a floor of blue enamel, written in Thuluth Mamluk calligraphy; the outer frame of the letters is outlined with thin red lines. According to the records of the Museum of Islamic Art in Cairo, which reported this lantern, it included the following: (the poor Ali bin ...). It can be said, that the Islamic Art Museum includes a lot of sultan El Nasir Muhammad bin Qalawoon's lanterns, the artist signed his name on some of them, which is read as follows: "Work of the poor slave Ali bin Mohammad Amki, May Allah forgives him". Thus, we conclude that the artist Ali bin Mohammed Amki was one of the most famous makers of lanterns in the era of Sultan El Nasir Muhammad bin Qalawoon. As well as the aspects of similarity in the patterning process between lanterns, decorations of the Mamluk era, especially the period of Sultan El Nasir Muhammad bin Qalawoon, and the lanterns, subject of the study. From the above mentioned it can be concluded, that this lantern dates to the Burgi Mamluk era in Egypt.

References

- [1] Bock, G. H., (Ed.) (2003). Light for Everyone. Old-House Journal, 31 (5), 65–66.
- [2] Simpson, J.; Weiner, E., Murray, J. (Eds.) (2005). Lantern. Oxford English Dictionary. Oxford: Oxford University Press.
- [3] Jones, D., Michell, G., (Eds.) (1976). The Arts of Islam. London: Arts Council of Great Britain Press.
- [4] Carboni, S., Whitehouse, D. (2001). Glass of the Sultans. New York: Metropolitan Museum of Art Press, 342.
- [5] Lamm, C. J. (1930). Mittelalterliche Gläser und Steinschnitt Arbeiten Aus Dem Nahen Osten. Berlin: Verlag Press, 544.
- [6] Bilkadi, Z. (1995). The Oil Weapons. Saudi Aramco World, 46 (1), 20–27.
- [7] Allam, N. (1989). Arts of the Middle East in the Islamic Ages. Cairo: Dar El-Maaref Press.
- [8] Arts of the Islamic World (2002). Smithsonian Institution Press.
- [9] EL-Rfaie, A. (2002). Philosophical and aesthetic assets of Islamic art. Cairo: Helwan University.
- [10] The Quran. EL-Noursoura. Verse 35.
- [11] Bloom, J., Blair, S. (1997). Islamic Art. New York: Phaidon Press, 448.
- [12] Hillenbrand, R. (1999). Islamic Art and Architecture. London: Thames and Hudson, 288.
- [13] Brend, B. (1991). Islamic Art. London: Published by the British Museum Press, 240.
- [14] Abouseif, D. B. (1995). Mamluk and Post-Mamluk Metal Lamps. Le Caire: IFAO, 110.
- [15] Mohamed, S. (1986). Islamic Arts. Cairo: the General Egyptian Book Organization.
- [16] Rizk, A. (2006). Arabic, Islamic Arts in Egypt. Cairo: Madbouli Library, 241.
- [17] Kristi, A. (1984). Heritage of Islam in the sub-arts, photography and architecture. Cairo: Dar El-ktab El-Arabi.
- [18] Abd El-Daim, A. (2004). Egypt during Mamluks and Ottomans. Cairo: Dar Nahdet EL-Shark.
- [19] El Qwusi, A. (1997). Islamic history of Egypt from the Arab conquest until the Ottomans. Cairo: House of Arab culture.
- [20] Ashour, S. (1976). The Mamluk region in Egypt and Syria. Cairo: Dar EL-Nahda El-Arbia.
- [21] EL-Anasri, N. (1993). Brief in history of Egypt "political and administrative systems". Cairo: Dar EL-Shrouk.
- [22] Khedr, M. (2003). History of the accurate Islamic Arts. Abu Dhabi: Dar EL-Swidi for publishing and distribution.
- [23] Moer, W. (1995). History of Mamluks in Egypt, translation of Sleem Hassan. Cairo: Madbloli Laboratory.
- [24] EL-Termanini, A. (1997). Events of Islamic history arranged in years. Vol.4/1. Damascus: Dar Talas.
- [25] Craig, B. (Ed.) (2002). Mamluk Studies Review. Vol. VI. Chicago: Published by the Middle East Documentation Center/ MEDOC, University of Chicago Press, 1–237.
- [26] Lokas, A. (1991). Materials and industries in ancient Egypt. Cairo: Madbloli Laboratory.
- [27] Khalili, N. D. (2008). Islamic Art and Culture "Time Line and History". Cairo: American University in Cairo Press, 186.
- [28] Yeomans, R., (2006). The Art and Architecture of Islamic Cairo. Garnet Publishing Limited, 274.
- [29] Dymand, N. (1982). Islamic Arts. Cairo: Dar EL-Maaref.
- [30] Nouiser, H. (1996). Islamic monuments. Cairo: Nahdet EL-Shark Press.
- [31] Abd El-Hameed, S. (1986). Architecture and the arts in the Islamic state. Alexandria: Dar El-Maaref.
- [32] Herbert, R. Arts and industry "basis of industrial design". Cairo: El-kotob.

- [33] Shackelford, J. F., Doremus, R. H. (Eds.) (2008). Ceramics and glass materials “structure, properties and processing”. doi: <http://doi.org/10.1007/978-0-387-73362-3>
- [34] Dawood, M. (1971). Glass lanterns in the Mamluk era. Cairo: Cairo University.
- [35] Marzouk, M., (1987). Islamic decorative arts in the Ottoman era. Cairo: General Egyptian book organization.
- [36] Blair, S. (1998). Islamic Inscriptions. Edinburgh: Edinburgh University Press, 224.
- [37] EL-Shal, M. et. al. (2005). Plastic arts in Islamic civilization. Cairo: General Egyptian book organization.
- [38] Tait, H. (1995). Five Thousand Years of Glass. London: British Museum Press, 256.
- [39] Amin, M., Ibrahim, L. (1990). Architectural terms in the Mamluk documents. Cairo: AUC Press.
- [40] Atil, E. (1981). Renaissance of Islam: art of the Mamluks. Washington: Smithsonian Institution Press, 256.
- [41] Abd Allah, R. (1999). Decorated and enameled glass antiques in gold. Cairo: Cairo University.
- [42] Al-Bahnasi, A. (1979). Beauty of the Arabic art. Algeria: Alem EL-MaarefaPress.
- [43] Wazit, H. et. al. (2008). Functional and aesthetic dimension of colors in the contemporary interior design. Damascus University of Engineering Sciences Journal, 24 (2), 7–10.
- [44] Carboni, S. (2001). Glass from Islamic lands. New York: Thames – Hudson.
- [45] Hassan, Z. (1955). Atlas of decorative arts and Islamic pictures. Beirut: DarEL-Raaed EL-Arabi.
- [46] Wilson, E. (1988). Islamic Designs. London: British Museum Press, 128.
- [47] El-Fangary, A. (1998). Islam and the Arts. Cairo: House of the Secretary for printing and publishing.
- [48] Al Sayegh, S. (1998). Islamic art “contemplative reading in its philosophy and aesthetic characteristics”. Beirut: Dar EL-Maarefa Press.
- [49] Qalqashandi, Abi EL-Abbas Ahmed (1914). Subh al-Asha. Cairo: Al-Ameiria Press, 3.
- [50] El Basha, H. (1970). Cairo “History – Arts – Monuments”. Cairo: Al-Ahram Commercial publishing.
- [51] Dahman, M. (1990). Glossary of historical terms in the Mamluk era. Damascus: Dar al-Fikr.
- [52] Abd EL-Razik, A. (2001). Islamic Ranks. Cairo: Ain Shams University.
- [53] Hassan, Z. (1981). Islamic arts. Cairo: Dar El-Fekr EL-Arabi.

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