The evolution of the mosque lamp Miškāh in Islamic Arts. A new prospective in light of a rare lamp from the Fatimid period preserved in the Museum of Islamic Art (Inventory No.3901)

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The evolution of the mosque lamp Miškāh in Islamic Arts. A new prospective in light of a rare lamp from the Fatimid period preserved in the Museum of Islamic Art (Inventory No. 3901)
تطور المشكاه في الفن الإسلامي. منظور جديد من خلال مشكاه نادرة من العصر الفاطمي محفوظة في متحف الفن الإسلامي بالقاهرة (رقم سجل 3901)

المستخلص: يتناول هذا البحث بالدراسة والتحليل تطور المشكاه في الفن الإسلامي من خلال دراسة مشكاه فاطمية نادرة محفوظة في متحف الفن الإسلامي (رقم سجل 3901) تنشر لأول مرة. تهدف الدراسة إلى تحليل الشكل العام للمشكاه وطرازها الفريد، حيث تتم المشكاهات في العصر الفاطمي بفوهة المخروطية المتسعة من أعلى وبدنها المنخف المتنافق عليه يتصق به ايدي صغيرة بطريقة الإضافة وقاعدتها القصيرة وهذا الطراز يشبه طراز المشكاهات في العصر المملوكي علاوة على أهمية هذه المشكاه النادرة من الناحية الأثرية والتاريخية. أما بالنسبة للمنهج المتبوع في الدراسة، فقد اتبع الباحث المنهج الوصفي من حيث وصف المشكاه وصفًا دقيقًا، وأيضاً المنهج التحليلي للشكل العام للمشكاه وطرازها الفني من خلال اتباع أساليب المقارنة ودراسة الفنية للشكل والطراز دراسة علمية دقيقة. وقد أفضت الدراسة إلى أن طراز المشكاهات في العصر الفاطمي استمرت في الظهور حتى العصر المملوكي بسماه الإبراهيمي والدركي كما أن حجم المشكاه الصغير وطرازها الفريد أفضي إلى القول بأنها لم تستخد لغرض الأذاعة فقط بل استخدمت في أعراض أخرى دينية أو روحانية. كما أفضت الدراسة أيضاً إلى بعض التوصيات الهامة من حيث مدى الاستفادة من المشكاهات واعراض إهمالتها في المجال السياحي والأثرى.
Abstract: By examining a special example of a Miškah conserved at the Museum of Islamic Art in Cairo (Inventory No. 3901) and published for the first time, this paper seeks to explain the evolution of the mosque lamp Miškah. In addition to the historical and archaeological significance of this unpublished glass lamp, this study aims to analyze its layout of creative styles. In the Fatimid period, the lamps have been made in a simple form with a flared neck starts above the body. The globular body is provided with very tiny handles and short base shown in the mamluk lamps. The study’s methodology will be addressed through descriptive, and analytical research. This will be made clear by discussion, investigation, comparison and analysis that may be found through close examination of the study's objects, elements, and structure. The study concluded that the mamluk and late mamluk glass lamps retained the Fatimid lamp style, particularly in the shape of the neck, body, and base. Additionally, the lamp's unusually small size supports the notion that it had spiritual and religious connotations, in addition to being utilized as a source of illumination. Regarding its significance in tourism and archaeology, the report outlines key recommendations.

Keywords: Miškah – Fatimid glass – Fatimid Art-Fatimid Architecture.
Introduction

Studying the style and forms of the glass lamps is very important from the artistic point of view. The word miškāh refers to an illuminating device called “Glass Lamp” or “Mosque Lamp” and the word firstly mentioned in the Holy Quran in al-Nur chapter\(^1\). In the Holy Quran, the word Miškah is interpreted as the lighter, or lamp qandīl, however, ibn Kaṭīr has notified according to Ibn ῾Abbās, the word is interpreted as the place in which the thread is put inside. He mentioned the term “Recess” or Kawwah in the wall as it is refers to the miškah\(^2\). The term “Recess” or Kawwah on the one hand, has been noticed from the archaeological point of view\(^3\) notably agreed with Ibn Kaṭīr of clarifying the same term. On the other hand Miškah became a word that is referring to a “Lamp” in terms of lighting and illuminating mosques\(^4\).

\(^{1}\) Al-Qurṭubī


\(^{4}\) Numerous books and authors in Islamic art used this term to refer to the lamps that were made of metal or glass.

\[\text{Allah is the Light of the heavens and the earth. The Parable of His Light is as if there were a Niche within it a Lamp: the Lamp enclosed in Glass: the glass as it were a brilliant star: Lit from a blessed Tree, an Olive, neither of the east nor of the west, whose oil is well-nigh luminous, though fire scarce touched it: Light upon Light! Allah doth guide whom He will to His Light: Allah doth set forth Parables for men: and Allah doth know all things. Quran, XIV/35.}\]
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also has notified that the word Miškah means a recess kawaah in a wall and refers also to the lighting lamp qandīl in which the threads was put.⁵

For many years ago, when the Muslims were greatly talented in many aspects of the glass making; a famous and a notable industry that was inherited from the Greeks and the Roman predecessors⁶. This industry spread in both Alexandria and al-Fustat and also worldwide in many Muslim regions as Mesopotamia, Nisaphure, Iraq, Samarra, Tunisia and Morocco⁷. There are items produced of blown glass in Egypt and Syria, two countries where the Muslim era was in power. Products resembling mountain crystal, such as figured and colorful lamps, figured wineglasses and goblets, and containers to hold odors, were created and put into production during the Fatimid dynasty⁸. Early types of glass artistic objects have paved the way to illuminate the

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development of the glassworks in Islamic Ages. In the first three centuries from Hijra glass fragments are coated by only monochrome color as brown or green colors imitating that of the early Roman and Byzantine prototypes. There was also a lack of a complete glass lamp or a miškah or even a complete vessel could be found. Early lamps have been discovered in al-Fustat in Isṭabl Antar where a large variety of Glass lamps have been discovered in different forms and shapes especially their bases and the body with a slight attached handle and a bifurcated neck. The glass lamps became one of the focal themes in Islamic arts after the Fatimids era especially in the Ayyubids and mamuluk periods as a lighting tool used in mosques and secular constructions, nevertheless, the glass was the major material for the mosque lamps as well as the bronze and copper.

Research problem

The lack of the early examples of mosque lamps between 4\(^{th}\) -6\(^{th}\) AH/10\(^{th}\) -12\(^{th}\) AD discovered in Egypt and such areas like al-Fuṣtat and Iṣ tabl ’ Antar that could introduce a complete analysis of the style of lamps in this period. Some artefacts in the stores of the Musum of Islamic Art in Cairo is in a bad state and under restoration and it was difficult to photograph them that’s why I was compelled to use the old photos from the books and references, i.e. (Pls., V,VI).

**Literature Review**

No separate study has been found to study the glass lamps in the early four centuries from the Hijrah. There are no records from the second and the third centuries from Hijrah illustrate a glass lamp or even studies or excavations found in both Syria and Iraq give such evidences around a glass lamp *miškah*. Prof. Dr Maysah Dāwwūd gives a complete account on the glass lamps through the Mamluk era in her Master Degree dissertation presented to the Faculty of Archaeology, Cairo University “*al-Miškāwāt al-Zigāgiyah fī-l-῾Aṣr al-mamlūkī*”. She noted a green coated glass lamp made by fee blowing preserved in the Museum of Islamic Arts (Inv.No 13437), giving 5\(^{th}\) AH/11\(^{th}\) AD as a probable dating for this lamp\(^{13}\). Danièle Foy presented an illustrated study of some slightly coated glass lamps from the excavations of Iṣ ῆ abl ’ Antar at al-Fustat. The study revealed some broken fragments of lamps coated with monochrome colors. It refers also to a complete red

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coated glass lamp with a rounded foot ring, and kick base, a globular body with flattering rim. Around the body with a zigzag lines and the six loops handles were broken\textsuperscript{14}. Prof. Dr Ahmad 'Abd al-Rāziq illustrated the same Miṣkah in his book “\textit{al-Funūn al-Islāmiyah ḫata nahāyat al-ʾaṣr al-Faṭīmī}” mentioning that it is made of globular body, flattering neck and rounded small foot ring\textsuperscript{15}.

**Methodology**

The research focuses on a study of a rare Miṣakah from the Fatimid period which reflects a unique design of the lamps and displays a technical and artistic creation in the arts of the glass lamps in the early Moslem ages especially during the 4\textsuperscript{th} -5\textsuperscript{th} AH/10\textsuperscript{th}-11\textsuperscript{th} AD centuries. Therefore, the researcher tried to close a gap by shedding light on the development of the lamps in this era and determining whether there were any influences or impacts that extended to the mamluk prototypes. There is a gap in the history of Islamic arts to understand the arts of the mosque lamps in the Fatimid era. That is through a study of a rare glass lamp preserved in the Museum of Islamic Arts in Cairo (Inventory N°.3901). Both descriptive and analytic methods have been used to study this rare mosque lamp that gives a probable date to the 4 or 5\textsuperscript{th} AH/10-11\textsuperscript{th} AD. This estimated date is basically according to a comparative study with similar glass lamps from the same centuries in many parts.

\textsuperscript{14} Foy., \textit{Lamps de verre fatimides}, 181-191, Fig.5 N°.1

\textsuperscript{15} 'Abd al-Rāziq.A, \textit{al-Funūn al-Islāmiyah ḫata nahāyat al-ʾaṣr al-Faṭīmī}, (Dār al-Ḥarīrī, Cairo, 2\textsuperscript{nd} ed.2006), 217, Pl.166
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of the Muslim world. In order to demonstrate that the mamluk glass lamps were unmistakably inspired by the early 4th and 5th century Hijra prototypes, the researcher attempted to demonstrate how mosque lamps developed up until the mamluk period in this paper, particularly in the forms of the globular body, the low flatteringly base, and the bifurcated neck.

The Descriptive Study

Mosque Lamp (Pls.I/a, 1/b)
Purchased from Šayḫ Farrğ Ismā’īl in 5/4/1912AD
Place of Preservation: Museum of Islamic Arts- Cairo
Inventory N°: 3901
Material: Glass
Date: Estimated 4th -5th AH/10th -11th AD
Publication: Unpublished
Status: Good – half of the upper bifurcated neck has been partly broken
Measurements: Height: 6cm
   Neck Diameter: 4.5cm
   Body Diameter: 6 cm
   Base Diameter: 2.5 cm
   Thickness: 2mm
Technique: Free blow for the body, the neck and has been stuck to the body.
Description: Small Glass lamp Miškāh or Qandīl used for lighting the mosques or secular constructions. Starting from the upper bifurcated neck which has a conical shape. Obviously there are remains of green coloring on the upper
part of the neck extended downwards till the upper part of the globular body. The lamp has a globular body with flaring rim. Six prunts having six loop handled are attached to the body. It declared that metal chains are attached to the handles to pass tangent to the upper part of the flattering neck then hanging on the ceiling. There are some remnants of green or brown colors on this spherical body, indicating that this lamp may have been covered with a monochromatic colored covering. The lower part of the lamp is fixed by a rounded foot rim like a small base attached to the lower part of the lamp. Inside the base, a vertical tube for holding the wick or threads is shown.

The Analytic Study

In order to prove that this small sized lamp dates to 4th - 5th AH/ 10th -11th AD centuries, it is possible to analyze the form and shape of the lamp giving a comparative approach to this lamp with the other prototypes discovered in Egypt’s Fustat, Syria, or Nishapure. The shape of this lantern is definitely distinctive due to its relatively small scale, which is uncommon to see in an early medieval glass lamps. As for the technique Glass production methods have evolved over time and can be categorized into three categories: modelling, drawing, and blowing. Nasir Ḥusrū, the

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Persian traveler have narrated many situations and occasions concerning the glass industry and admiring a vast market on the northern part from the mosque of Amr ibn al-’Aṣ called “The Lamps Market” *ṣūq al-qanādīl*, "The vendors and merchants, including grocers and apothecaries, were dispersed in glass products, putting their wares in glass vessels to sell them in the markets," he continued.”17. The Analytic methodology for the lamp will be followed starting from the neck, body with the handles, and the base.


According to the researcher’s analysis, the necks of glass lamps from the 4th-5th AH/10th-11th AD could be classified into two main forms; first: The bifurcated neck made obtuse angle, the second is the short necked lamp. The glass lamp (the topic of study) has a conical bifurcated shaped neck turns wider upwards (Pl.I/a-b) (Figs.1/a-c). This form of the necks occurred in some prototypes from the 5th AH/11th AD century on a paper from a manuscript preserved in Al Ṣabāḥ Ḥāl ṣ Collection of Islamic Art in Kuwait18 (Pl.II) (Fig.2).

The design of the flattering neck could be also observed in a red coated lamp from the discoveries of *L’stitut francais d’archéologie orientale* of Ḥabl ‘Antar at al-Fusṭāṭ 19 (Pl.III) (Fig.3), while the neck is slightly turning obtuse upwards. This is a prototype of a lamp mainly resembled the lamp in the Museum of Islamic Art (The topic of study

![Figure.2](image)

*A drawing of a lamp in a paper from a manuscript preserved in Al-Ṣabāḥ collection of Islamic Art –Kuwait (Inv.N°. LNS 48 MS) (Pl.II)*

Done by the researcher

In the same era, another example could be seen depicted on the luster painted pottery. Some examples could be seen preserved in the museum of Islamic Arts in Cairo dating to

19Foy, Lamps de verre fatimides, 188 , Fig.5 N°.1, Pl.III.22 ; A, ' Abd al-Rāziq, *al-Funūn*, 217.
the 5th AH/11th AD century. In other words, the same forms of the bifurcated neck occurred in the glass lamps from Nisahpure preserved in

![Figure 3](image)

A drawing of a lamps from the excavation of al-Fustat

- Iṣṭabl Antar

After. Foy, Lamps de verre fatimides

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20 M. Dāwwūd, *Miškawāt*, II, Pl.25
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the Metropolitan Museum of New York. The Museum preserves a fragment of a green coated lamp- with applied decoration dated to 4th -6th AH/10th -12th AD centuries (Pl.IV) discovered at Nishapur/Iran21 ; a magnificent artwork resembling the glass lamp (The topic of Study) (Pl.I/a) especially in the neck, the globular body, and the short base with the foot ring. Other prototypes of lamps with bifurcated neck could be seen in three lusterware glass fragments preserved in the museum of Islamic art (Inv.No. 6956/1 -6956/2- 6956/3) (Pl.V). They have a chain attached to the looped handles to be hanged in a wall. The globular body seem to have been decorated with a central decorative band. They have a conical bifurcated base resembles the neck. The lamps have been decorated with a golden lusterware on a white background22.

In the late 6th AH/12th AD century, with the beginning of the Ayyubid era, that witnesses the disappearance of the real glass lamps, however a glass lamp has been conserved in La County Museum of Art LACMA in Wilshire Boulevard in Los Angelos gives a probably date to the Eastern Mediterranean 6-7th AH/12th -13th AD. It is free blown glass lamp with flared neck, globular body and bifurcated base (Pl.VI/a). This is probably the oldest and a rare lamp discovered dates most probably to the Ayyubid era in the east. It has a flared neck moves slightly narrower to downwards towards the top of the body. It could be

21 It is a colorless lamp with yellowish green ting and applied decoration (measures 12.2.cm H-Diameter at the rim 11.8cm) discovered in 1939 (Accession Number: 48.101.59). See: Kröger, Nisahpure, 182, Pl.235.
22 M.Dāwwūd, al-Miškāwāt, II, Pl.25.
considered as the beginning of the mamluk style of the glass lamps. This lamp bears some traces of green or brown coatings and the features resembles those of the Fatimid prototypes as seen in the row of lamps depicted in a paper from al-Ṣabāh collection of Islamic Art (Fig.2) (Pl.II). Some examples of the lamps with conical bifurcated necks carved in black on the tombstone related to the Šayḥ Abū-l-Ḥusayn 'Alī ibn 'Issa dated to 637AH/1239AD preserving in the Museum of Islamic Art in Cairo (Inv.No.2365) (Pl.VI/b) (Fig.4). It’s shown hanged from the handles by chains and has globular body and short footage.

(Figure.4) A carving scene of a lamp on a tombstone from the Ayyubid period preserving in the Museum of Islamic Art (Inv.No.2365) (Pl.VI) Done by the researcher

In the mamluk art, the majority of glass mosque lamps have been also applied with a conical flared neck, and mainly has polychrome enameled enhancements. The early types of the mamluk lamps have been stuck with a conical enameled glass neck especially in Mamluk Egypt as seen in a glass lamp preserved in the Metropolitan Museum of Art with the name of Emir Ahmad al-Mihmandar (Pl.VII). Ahmad al-Mihmandar (d.784/1332) contributed this lamp, perhaps one of several, to the madrasa that he built in Cairo in 725-726/1324–1325, according to its inscription.24. The lamp is the surviving example that best illustrates the change from the undecorated lamps to the opulent enameled Mamluk examples25.

The short neck

Between the 4th – 6th AH/10th -12th AD, the lamps were involved with a short neck that could be seen in a free blown miškah of greenish glass preserved in the Museum of Islamic Arts in Cairo (Inv.N°13437)26. The short neck could be seen also in an engraved form of a Miškah hangs from the apex of the arch in a stucco window grill in the western

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25 For more details on this lamp see also Wypyski M. Metropolitan Museum Studies in Art, Science, and Technology. vol. 1. (New York, 2010).,111, Fig.3.
26 M.Dāwwūd, al-Miškāwāt, II, Pl.23
façade of al-Aqmar mosque (519AH/1125AD)\textsuperscript{27} (Pl.VIII) (Fig.5); a finest prototype of its kinds made Professor Creswell saying: ”The earliest example I have ever seen of this motif.”\textsuperscript{28}. The neck is slightly disappeared, and mainly supported by chains could be seen on the upper part. This type of short neck can be also observed carved in the tombstones from the Ayyubid era in a gravestone dates to 589AH/1139AH related to the daughter of the sultan Abi al-Saddād ibn Yaḥiya ibn Abī al-Saddād al-Muwafaq. This gravestone preserved in the Museum of Islamic Art in Cairo (Inv.No.51)\textsuperscript{29} (Pl.IX) (Fig.6)


\textsuperscript{29} For more details on this gravestone see M. Dāwwūd, \textit{al-Miškāwāt}, II, Pl.28; Wiet.G, \textit{stèles funéraires}, VI, 209.
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In the mamluk models, it is very rare to see lamps with short necks, Dr. Maysa Dawūd provided a thorough description of the Mamluk era lamps, pointing out a particular type of lamp that typically took the shape of a wide bowl with a little lantern in the center for depositing the lighting oil. Mosques and palaces were the primary settings for these lamps.30.

**The globular body**

The glass lamp (The topic of study) has mainly a bulged globular body bearing traces of paints (Pls.I/a,b) (Figs.7). This lamp has an unusual design with a small body that is 6 cm in diameter which is unique to be found in the mosque.

(Figure.5) a drawing for a Miškāh   (Figure.6) a drawing of a Miškah on the western wall of al-Aqmar mosque (Pl.VIII) on a gravestone in the Museum of Islamic art (Inv.no 51). Pl.IX

Done by the researcher

30 For details see M.Dāwwūd, *al-Miškāwāt*, I.,301, 302.
lamps. The remaining examples of the glass lamps that were discovered at al-Fustat and Iṣṭablʾ Antar have globular body with traces of handles\(^{31}\) (Pl.III) (Fig.3). The styles of the globular bodies of the lamps could be seen in a lamp from the 5\(^{th}\) AH/11\(^{th}\) AD century on a paper from a manuscript preserved in Al Ṣabāḥ collection of Islamic Art in Kuwait\(^{32}\) (Pl.II) (Fig.2). The same form of the bodies can also be observed in the lamp carved in one of the windows of the western façade of al-Aqmar mosque\(^{33}\) (Fig.5). It is obvious that those prototypes are small in shape and scale, especially in the height and the diameter of the neck and the body. The traces that found in the excavations of al-Fustat demonstrated conical bodies and

\[^{31}\text{Foy, Lamps de verre fatimides, pp.,187,188 , Fig.5 N°.1, Pl.III.22}\]
\[^{32}\text{Trésors fatimides, Pl.96.}\]
\[^{33}\text{Creswell , M.A. E, I, p. 243; A. Fikrī, Masājid al-Qāhirah, I, 93,94, Pl.45.}\]
they are 4 to 5cm in diameter\(^{34}\). Al-Fustat also produces globular lamps resembling the glass lamp (the topic of study) (Fig.7) with small handles and applied wavy strips running on the trims of the base, body and the neck\(^{35}\).

(Figure.8). Sectors from a glass lamp among the excavations of Istabl Antar After. Foy, Lamps de verre fatimides, Fig.5/2-7

The early Mesopotamian models of lamps are exhibiting the same form of globular body of the lamp (topic of study); however, the early prototypes from Nishapure dating to 4\(^{th}\)-5\(^{th}\) AH/10\(^{th}\)-11\(^{th}\) AD\(^{36}\) centuries (Pl.IV) confirm the similarities of the body, neck and the

\(^{34}\) Foy, Lamps de verre fatimides, pp.185, 186, Fig.4/1-6.

\(^{35}\) Foy, Lamps de verre fatimides, p.187,188, 189, Fig.5/1-4.

\(^{36}\) Kröger, Nishapure, 182, Pl.235.
prunts with the handles. The same anatomical features have been observed between the Egyptian and the Mesopotamian models. The lamp (topic of study) has six handles mainly applied to the body, pointing out to the way of controlling the lamp by hanging using metal chains to be fixed on the beams of the arches in the mosques or on the ceiling. The small cut-pieces of handles that were recovered at al-Fustat (Fig.8), resemble those of the previous model (the topic of study) (Fig.1/a) declaring irregular semi-circles with thick bodies stuck on the central line of the body, and the spaces are equal between each handle. The diameter of the bodies are somehow equal approximately to 5cm.

The style of the globular body with a flaring rim also continued in the Ayyubid models (Figs.4,6) and continued in all the models of lamps from the mamluk period that the body is filled with enameled decoration, and the handles are attached to the body for hanging with chains\(^{37}\).

**The foot ring (the base)**

In the glass lamps (topic of study), the base is mainly circular. It is short and forms a complete ring attached to the globular body from the lower edge (Fig.1/c). By observation, the lamps from the 4th-5th AH/10th -11th AD have two types of foot rings; the short base, and flaring bifurcated base. The lamp (topic of study) is from the first type of short circular foot ring that is 2.5cm in diameter. It seems that the Fustat’s finding was occupying numerous collection of remains of lamps with short bases almost 2 to 3cm in diameter. This small foot ring could be observed in the majority of the glass art objects in the Fatimid era. The lamp in the stucco windows, inside a mihrab image in the western façade of al-Aqmar mosque (Fig.5) has also a small foot ring like a circular base hanged by chains to the top of the mihrab. The Mesopotamian models in Iran or Nishapure findings have made with small foot rings (Pl.IV) shown in the same design of the glass lamp of the Museum of Islamic Art (the topic of study) forming a

38 Foy, Lamps de verre fatimides, 188,189, Fig.6
39 A.Fikri, Masāğīd, 1, Pl.45; Abouseif, D.B, “The Façade of the Aqmar Mosque in the Context of Fatimid Ceremonial”, Muqarnas, Vol. 9, (1992, Brill), 33, Fig.5; Salah El Din. R.M, Dr. Hashim. O.A Hussein.Ash, “Reviving the architectural heritage values of Al-Aqmar Mosque as an architectural inherited and a source of inspiration for contemporary interior design” (Journal of Design Science and Applied Arts, Helwan University, January 2020, Volume 1, Issue 1), 137, Table.2, Fig.2.
circular base. The models of the 4th AH/10th AD century carries the same design of the small circular foot ring in the lower part of the body. Another model in Iran which is a yellowish colored lamp preserved in David Collection of Copenhagen having a flaring neck with a short circular foot ring\(^41\) (Pl.X). The second type is the flaring base attached to the lower edge of the globular body. This form of bases can be seen in the row of the lamps depicted in a paper from a manuscript preserved in Al Šabāḥ collection of Islamic Art in Kuwait\(^42\). (Pl.III), resembles the lamp preserved in La County Museum which dates back to the 6th -7th AH/12th -13th AD (Pl.VI/a) most probably Ayyubid era.

**Interior components (thread bearer –oil space)**

The glass lamps are supposed to be enlightened by using a special sort of organic oil. Nāṣir Ḥusrū mentioned that the people in Egypt used to squeeze the Radish and Turnip to extract the oil called it “The hot oil” to fill the mosque lamps. He also notified that “the sesame oil was very rare, whereas the Olive oil is cheaper and merely available”\(^43\). Nāṣir Ḥusrū also narrated that the governor of Levant was seeking for the “hot oil” of radish and turnip because of its lack in Syria. He asserted that he had obtained the caliph's approval to import this type of oil, but the caliph retorted,
"You must not alter anything pertaining to the house of Allah." (The mosque)44

The lamp (the topic of study) looks very impressive from inside; an elongated cylindrical thread bearer can be seen from the middle of the inner spot (Figs.9/a,b) used for putting the linen thread inside and dipped in oil in the rest of the bottom and filled till the middle. According to observation, the lamps found at Iṣṭabl’ Antar shared the same design for the cylindrical thread container that was fastened in the middle of the lamp’s base.45 (Fig.10)

44 Nāṣir Ḫusrū, Safar Nāmah, 125.
45 Foy, Lamps de verre fatimides, Pl.5/1
This device is also shown in most of the Mesopotamian prototypes of lamps especially in Iraq at Sammara. Remarkable finds has declared some fragments showing the early design of glass lamps in the 4th AH/10th AH century.
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The works recovered lamps with interior designs as cylindrical bearers. With the exception of the aforementioned examples carved on gravestones (Figs. 5, 7), there hasn't been a lamp in existence since the end of the 6th AH/12th AD, making it difficult to determine the design of the interior mosque lamps at this time. Given that the Ayyubids followed the same traditions as the Fatimids, it is most likely that they are developing the same manufacturing and decorative techniques such as, free blowing, blowing in cast, or combing. The interior bottom of the glass lamp (the topic of study) has some splashes that possibly are oil remnants (Pl.I/a,b), nevertheless, when dating the lamp preserved in La County Museum of Los Angelos (Pl.VI/a) to the Ayyubid period, its interior component is not clear.

**Suspension handles**

The handles of the glass lamp (Pl.1/a,b) (Figs.1/a-c) are taking the form of an irregular prunt like a curved knob (Fig.11). This irregular shape could be noticed in most of the glass lamps between the 4th -6th AH.10-12th AD such as

46 As believed by Avinoam Shalem, a candle was held inside the hollowed cylindrical glass tube that was attached to their inner base. See Shalem.A ,"Fountains of Light", Muqarnas, XII, 5, Fig.5. Without a doubt, Nāṣir ʿIr Ḥusrū described the types of oil that were utilized in this age, which provides a convincing interpretation that the oil is the substance used in the lamps (Nāṣir ʿIr Ḥusrū, Safar Nāmah, 120,125). I believe that most probably the candles were used in the recent times.

47 A. ʿAbd al-Rāziq, al-Funūn, Ayyubi wa mamlūkī, 243; Ward, Lamps, 57
the lamp discovered at Isṭ abl῾ Antar (Fig.8). The majority of lamps always have six handles or knobs connected to the globular body. Typically, the handles were created so that the lamp could be suspended from the ceiling, the top of the shrine, or the niche using chains. The handles were made of a molten glass wires and fixed on the body of the lamp. Each handle has an equal and approximately 2 or 3 cm spacing between them. Due to the fact that the handles were handcrafted using specialized metal tools to shape the molten glass into translucent glass wires before being attached to the body, it is extremely difficult to make identical handles. This method is applied in all the lamps, especially those from the early 4th -6th AH, 10th-12th AD centuries. This form of the handles are also seen in the Mesopotamian models of lamps. 48 (Pls.IV,X,XI).

48 Kröger, Nisahpure, 182, Pl.235.
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This type of hanging position also seen in a free blown-applied lamp from near east preserved in Museum Für Islamische Kunst-Berlin dated to 4th-6th AH/10th -12th AD49 (Pl.XI). The suspension handles took irregular shapes as they might be used only for a purpose of hanging on the walls or on the shrines rather than being a decorative device. The suspension handles developed asymmetrical designs because they might not have been intended for ornamental purposes but rather for hanging on walls or on shrines.

**Technique**

Many glass artefacts that are unquestionably adaptations of the zoomorphic flasks popular in the eastern Mediterranean regions of the late Roman Empire have been discovered in early period sites in Egypt, Greater Syria, and

49 Carboni, Whitehouse, Glass, 77, Pl.7
Iraq. Both of these examples feature birds with bodies that are free-blown into the shape of dolphins, opaque red wings, claws, and heads, and a ring for suspension⁵⁰. Therefore, it is important to remember that the early Islamic lamps, notably those from the Fatimid period, are free blown⁵¹. This method was used in early Islamic artefacts as well as Roman and Byzantine period works of art⁵². The procedure was carried out using a special long blowpipe, and the top of the tube was fixed with a piece of molten glass. The body of the lamp is formed by the craftsman blowing into the blowpipe in a circular motion. The obtuse shape of the neck was created by pushing the upper portion over the spherical body in a way makes the neck conical to the orifice. One of the craftsman's assistants fixes the body to the round foot ring to create the base.⁵³ Furnaces used in the production of ancient glass have to be at least 1.150°C. That in turn required a significant amount of fuel, even for small furnaces, and fuel is frequently the most expensive component in the production of glass⁵⁴. The handles were created by shaping glass wires into amorphous, semi-rounded knob shapes, which were then adhered to the lamp's body with equal spacing between each handle. Unfortunately the remnants of the glass lamps discovered at al-Fustat, Iran, Nisahpure, or Syria left no evidence of the

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⁵¹ A.’ Abd al-Rāziq, al-Funūn, 217.
⁵⁴ Carboni, Whitehouse, Glass, 26.
of the occurrence of the names or signatures of the glass craftsmen in the 4th-6th AH/10th-12th AD.

Function and purpose

It is undeniable that the glass lamp conserved in the Museum of Islamic Art in Cairo (Inv. No. 3901), like any other glass lamp, was created with lighting as its primary function. The glass lamp's anatomical feature (Pl. I) (Figs. 1/a, b) is both unusual and impressive. Its diameter and height are both 6 cm, which is smaller than one might anticipate. Because of its little size, it is extremely difficult to employ in a large space like a mosque or a large court inside a palace. It might have been placed inside a niche or a mihrab in the mosque, or it might have been used in a small room. There are arguments in favour of this hypothesis because early examples of mosque lamps depicted and carved on artefacts are described as having a large form, a conical, obtuse neck, and a wide orifice, similar to prototypes shown on a piece of paper from a manuscript preserved in the Al-Ṣabāḥ collection of Islamic Art in Kuwait (Pl.II).

55 For more details see H. Yūsuf, Moyens d’Eclairage, I, 65-87.
In mosques like al-Aqmar and al-Ṣaliḥ Talāʾiʿ, they are depicted as a row of lamps between arcades. Given that the mosque lamp from the mosque of al-Aqmar (Pl. VIII) was depicted inside a window frame in the shape of a niche or a mihrab, I assume that the lamp's diminutive size suggested that it was utilized inside one of these structures. The most convincing explanation for its diminutive size, then, is that it may be utilized inside the mihrab and connected to chains that are fixed to the top of the mihrab's cupola. (Fig. 12)

Figure 12. Estimated location of the lamp preserved in the Museum of Islamic Art (Inv. N° 3901) done by the researcher

56 Trésors fatimides, Pl. 96.
Its diminutive size calls for it to be hung from chains inside a niche or a mihrab in one of the Fatimid mosques that once stood on the outskirts of al-Fusṭāṭ. However, this mosque was destroyed in the great fire of al-Fusṭāṭ, which was started by the cunning Fatimid Vizier Šāwar, who threw more than 20,000 pots of naphta and 10,000 flames, according to al-Maqrīzī. He also reported that the catastrophe persisted until it reached the city's smaller neighborhoods in zuqqāq al-qanādīl and ḥaṭṭ al-nahbaḥālīn; nonetheless, the inhabitants sought to destroy the building's remnants and sell their ruins.57

Evolutionary aspects

The anatomy of the neck, body, and base of the mosque lamp (M.I.A. Inv. n°. 3901) clearly demonstrates evolution. For the neck, it is evident that the long conical flared neck appeared in prototypes from the Ayyubid dynasty towards the end of the 6th AH/12th AD century (Fig.4). The early mamluk examples also shown with this type of flattered neck as seen in a lamp preserved in the Metropolitan Museum belongs to `Alā’ al-Din Aidakīn al-Bunduqdār and was discovered in his tomb58 (Pl.XII). The lamp's globular body, which also served as a prototype, was present in the majority of glass lamps from the Ayyubid era

(Fig. 4) or the Mamluk era, as shown in the lamp attributed to sultan al-Ašraf Ḥâlîl ibn Qalāwūn 693AH/129AD59. The lamp ((M.I.A Inv.n°.3901) had a short type of base, which could also be seen in the lamps from the mamluk era in all the lamps attributed to sultan Ḥasan preserved in the Museum of Islamic Art -Cairo60. The short foot ring also continued its presence in the late mamluk models as seen in the lamps of al-Ẓāhir Barqūq61. There are four types of morphologies in the mamluk lamps that have been observed and considering as a continuation of the Fatimid models, according to a prior analysis of the lamp (M.I.A Inv.n°.3901) and its equivalents from the 4th – 6th AH/10th – 12th AD centuries.

1- Lamps with a bifurcated neck, globular bodies, and short bases (Fig. 13), which are included in the majority of mamluk glass lamps like the ones used by sultan Ḥasan and al-Ẓāhir Barqūq, as well as others. The lamp’s anatomies appear to resemble those of the Fatimid varieties.

59 Wiet, Lamps en verre, No.264, Pl.IV; H. Yūsuf, Moyens d’Eclairage, II, Pl.XXXIV.
61 Wiet, Lamps en verre, Pls.LXIII- LXVIII, LXXIV-LXXIX, LXXXI-LXXXV.
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2- A different kind of lamp acts as a continuation of the Fatimid models and has a neck that is only a little bit shorter. This is the lamp's design that most closely resembles it (M.I.A. Inv. no. 3901; Figs. 1/a, 1/b) (The topic of study). The globular body, the somewhat wider-from-the-center bifurcated neck, and the rounded foot ring can also be seen in the Fatimid prototypes discovered during the al-Fustat excavations at Ish tabl Antar (Fig.3). In the mamluk arts, this design is shown in a lamp of enameled glass belongs to Amir Sayf al-Dīn Salar (Pl.XIII) (Fig.14). The lamp from the Museum of Islamic Arts (M.I.A. Inv. n°. 3901) (Fig. 7) has a neck that is

62Wiet, Lamps en verre, Pl.VII; Ward, Mosque lamps, p.60, Fig.2

(Figure.14). A morphology of the lamp of Salar that resembles the Fatimid models. Done by the researcher
somewhat wider toward the globular body with a short foot ring.

3-The third type of the lamps that serves as a continuation of the Fatimid prototypes which have a globular circular body while the neck and the base are slightly equal in size took a flared form moving slightly narrower to the body (Fig.15). This type of lamps was shown on a sheet of paper from a text preserved in Kuwait's Al-Ṣabāḥ collection (Fig.2), showing a row of glass lamps from a Fatimid mosque. The distinctive lamp, which is housed in the La County Museum of Art in Los Angeles, is supposed to be a continuation of the Fatimid prototypes since it has a flared neck, a slightly flared base, and a rounded globular body (Pl.VI/a). (Fig.15) This form of lamps continued in the mamluk models and could be seen in an enameled footed lamp made of yellowish greyish colorless glass, with a globular body and flared neck, and formed in the shape of vertical ribs. It comes back to the mid of the 7th AH/ 13th AD about 648AH/1250AD preserved in Victoria and Albert Museum (Pl.XIV). The body of the lamp is dramatically flared above and rounded below. Added to this were a high foot, three suspension loops, and a tubular wick-holder at the base of the reservoir. The main morphological

63 Trésors fatimides, Pl.96.
64 It is 21.2cm in height and 13cm wide. For details see Carboni, and Whitehouse, Glass of the Sultans, 226, Pl.113; A' Abd al-Rāziq, al-Funūn, Ayyūbi wa mamlūkī, 266, Pl.217. Visit also
variation is that the handles are applied in the middle of the body and the globular body is slightly bulged here, giving it an oval shape. As a result, unlike the Fatimid model of the Al-Ṣabāh collection (Fig.2), the body is not shaped like a complete circle. (Fig.15)

(Figure.15). The morphology of the third type of the mamluk mosque lamps showing a similarity with the Fatimid models. Done by the researcher

4- The fourth category of lamps might be regarded as a wholly mamluk design that bears no resemblance to Fatimid prototypes. Anatomically speaking, this kind has a neck that is slightly flared and prolonged before becoming smaller toward the body. The size of the base is almost half

https://collections.vam.ac.uk/item/O818/lamp-unknown/ (Accessed in 5/2/2023)
that of the neck (Fig. 16). Numerous Mamluk lamps bearing the names or titles of their patrons exhibit this design, for instance, the lamps that belongs to the emirs of al-Nāṣir Muḥammad ibn Qalāwūn such as the unique enameled glass lamp bears the name of emir ẞarqatmiš al-Nāṣir irī preserved in the Museum of Islamic Art65. The same design could be seen in a lamp made for the emir al-Malik al-Jukandār preserved in the Museum of Islamic Art (Inv.No.312)66, an enameled glass lamp for emir Qawsūn al-Sāqī al-Nāṣirī preserved in the Metropolitan Museum of Arts in New York (Inv.No 17.190.991)67. The thing that distinguish this type of lamps from the Fatimid examples is the style of the foot ring is short and flared downwards.

65 Artin. Y, “Lampe en verre émaillé portant armoirie appartenantà S.E. Boghos Pacha Nubar” , Bulletin de l’Institut égyptien, BIE, (L’Egypt, Volume 1-5, 1907) 159-162, Fig.1
66 H. Yūsuf, Moyens d’Eclairage, II, Pl.XXXVII
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Discussion

The study addressed a glass lamp preserved in the Museum of Islamic Art in Cairo (Inv. № 3901). The registries of the Museum gives no date on the exact date of this piece of art. The documents of the Museum noted that it was purchased from Šayḫ Farrḡ Ismāʿ īl in 5/4/1912AD. This paid attention to us that it was found in somewhere in Egypt. According to the examination and analytic study of the lamp and its morphological aspects it was found at al-Fustat especially in Iṣ tabl Antar or any other place in it. This interpretation based on the style of the lamp and a comparative study with its similarities from the Fatimid

(Figure.16). Morphology of the third type of the mamluk glass lamps. After. H. Yūsuf, Moyens d’Eclairage.
models. According to this survey it is mostly dated to the Fatimid period in 4\textsuperscript{th} -6\textsuperscript{th} AH/10\textsuperscript{th} -12\textsuperscript{th} AD. According to the descriptive and analytic study of this unique piece of art, its neck is partly broken which means that it was buried in a narrow area somewhere at al-Fuṣṭāṭ may be Iṣṭabl῾ Antar or any other place around the area. The previous survey also declared that this lamp was once coated with a single colored coating which interprets the idea of a monochromic types of lamps which appear through this era in Egypt or in the near eastern countries like Iran or Iraq. It is worth to note that this lamp is too small in height and diameter which is very unique to be found in a glass lamp from Egypt; only this character could be observed in its similarities in Mesopotamia. The intricate design of the lamp proves that it is a style of lamps that continued to be appeared in both the Ayyubid and the mamluk art so far, however, the mamluk artisan began to create a new technical creation like enameling and blowing in molds. The morphological aspects and the anatomy of the mamluk models bears some changes and evolutionary features in the shape and forms, size, (Fig.16) also in the manufacturing processes like blowing in molds, enameling and applying techniques. The size of the lamps began to be bigger than any other lamps from the early 4\textsuperscript{th} -6\textsuperscript{th} AH/10\textsuperscript{th} -12\textsuperscript{th} AD centuries.

A rare Fatimid mosque lamp. Religious, spiritual or symbolic conception
Due to the circumstances of the latter days of the Fatimid state and the firing of al-Fusṭāṭ, as previously noted, it is uncommon to locate several specimens and styles of the Fatimid lamps or any other complete prototypes from this period. It is hard to assert that this type of lamps may have a doctrinal implication related to the Shiite thoughts and believes concerning the Imāmah (leading prayer) for the caliph, however the scholars such as Doris Abu Seif briefly asserts that the window grills of the Aqmar mosque reflects ceremonial occasions while the arched grilled window may have represented the place where the caliphs represented in his ceremonial occasions. One of the windows has a decorative, religious scheme based on a lamp that might be a symbol for the caliph whom Fatimid sources often compare with the conception of a light as the young caliph al-Amir was described as a lamp or a lantern guiding the believers to the right way.68 She based her theory on the writings of Ibn al-Muyassar who blessed the imamate of the Fatimid caliphs as they are the light which guides the believers to the truth and the right path.69 Caroline Williams emphasizes the idea of the doctrinal factor that proves the idea of the light in the Shiite concept when she addressed the writing of the Rāšidu al-Dīn ibn Šahrašūb, the famous Shi’ī writer (d.588/1192) who provides in his book The virtues of the

family of Abī Tālib\textsuperscript{70} that among the litany epithets of al-Imām al-Ḥusayn “The lamp of those who trust in God”, “The lamp of the lofty family ties”, “The shining full moon”. He also stated that some epithets for the same Imam was narrated by his mouth when he said “My Father is the sun- My mother is the moon- and I’m the star, my grandfather was the lamp of guidance”\textsuperscript{71}.

In 2016, a study on the Shiite connotation of Islamic architecture was presented to the faculty of tourism and hotel at Fayyyum University. It focused on the significance of the lamp carved on one of the windows of the al-Aqmar mosque and its mention in the Holy Quran’s al-Nūr chapter (Quran, XIV/35) as well as the opinions of scholars and writers regarding the symbolism of the Miškāh in the Shiite conception as it symbolizes the Fatimid caliph, however, it's most likely that the lamp stands for "Ali Ibn Abi Talib," who was known to Shia as "The lamp of believers" and "the lamp of Ahlu-l-bait."\textsuperscript{72}. Another essay on the restoration of the architectural heritage value of the al-Aqmar mosque was published in the journal of digital sciences and applied sciences.


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arts in the year 2020 AD. The researcher analyses the lamp motif carved on the stucco window of the western façade and claims that it is related to the concept of light, one of the four intellectual constants that influenced the philosophic outlook of the Muslim builder. These openings refer to the connection to the infinite universe through sight, as well as the connection of the building to the universe and the orientation of its components, and the connection of light to the sky and the earth had its causal relation to the rise of these openings above the human level. Overall, the lamp was utilized as a lighting source throughout the Fatimid period but also serves to illustrate some spiritual and theological ideas connected to Shiite doctrine, which is how the craftsmen were able to reproduce this device on their structures and artefacts.

Conclusion

The purpose of the current study on this unique art work is to determine the evolution of the glass lamp in Islamic Art and objectively understanding a new perspective in light of a unique glass lamp preserved in the Museum of Islamic Art in Cairo (Inv.N°.3901). This essay set out to give both descriptive an analytic study of this art object with a comparative overview to the other similarities from the same era. The empirical finds of this study provide a new understanding of the evolution of the mosque lamps

from the Fatimid era till the end of the mamluk era. The current essay illuminated various findings:

- The study has identified unpublished tiny lamp kept in the Museum of Islamic Art (Inv.No.3901) has been made clear by the study. According to the previous survey, it possibly dates to the Fatimid era based on the lamp's style and comparisons to other artefacts from the same time period, such as the lamp found at Iṣṭabl 'Antar in al-Fustat (Pl. III) and others found outside of Egypt in Mesopotamia, such as (Pl.IV). The previous survey suggests that it was extremely uncommon to discover this little-sized lamp, reflecting the idea of placing it inside a small room or a mihrab (Fig. 12), but it is not possible to be hung in a wall of a house or a mosque.

- The findings of this survey have significant implications for the understanding of how this sort of little sized uncommon lamp has not only a religious conception for the Shiite symbolism as seen on the façade of al-Aqmar mosque, but also it gives both spiritual and decorative conception especially when it is small sized rather than enlightening the area.

- The study of this unique glass lamp reflects a clear evolution and technical creation of the mosque lamps in the early 4th -6th AH/10th -12th AD centuries and its impact on both the Ayyubid and mamluk prototypes of lamps. On one hand, the style of the conical bifurcated neck has not been
only appeared in the mamluk period, however, it is seen in the Fatimid examples (Pl.I/a,b) (Pl.III). The style of the globular body with the small six handles can be seen in the majority of the mamluk examples. The short foot ring also occurred in the early Fatimid examples and not only be found in the mamluk lamps.

- The study came to the conclusion that the styles and shapes of lamps used throughout the Ayyubid and Mamluk periods are a continuation of those used during the Fatimid period. The Fatimid style could be observed in the early Ayyubid and mamluk lamps as seen in the lamp of La County Museum of Art (Pl.VI/a), enameled glass lamps belongs to Aidakīn al-Bunduqdār (Pl.XII), and an enameled glass lamp for Amir Salar (Pl.XIII).

**Recommendations**

- Maximizing the role of the Miškah in Islamic Arts especially in the arts of the early Fatimid period of Egypt. In the Museum of Islamic Art, a special exhibition could be established for exhibiting the remaining prototypes of the Miškāwāt exploring the role and the evolution of this lighting device in the Fatimid period.
- I propose the establishment of a museum in the heart of Cairo for exhibiting the lamps and showcasing their creative development from the Fatimid period until the present in order to study the significance of the Miškah as a crucial source of lights in mosques or homes.
Promoting awareness of the importance of this lighting device in the tourism and archeology majors especially in the schools and faculties. Also exploring the importance of Islamic arts and its evolutionary aspects throughout the Muslim ages.

- By emulating the designs of vintage lamps from the 4th – 6th AH/10th – 12th AD centuries and highlighting the significance of the Miškah in contemporary architecture such as mosques and houses. It is worth to note that the Bohra community created the mihškāt, as it is known to them, a glass lantern during the renovation of the Bohrah had used the ancient styles of the Fatimid mosque lamps with very short curved neck and globular body; the style that is shown on the western façade of al-Aqmar mosque (Fig.5) and applied it in the mosque of al-Hakim bi Amr Allah. The Bohra community created the mihškāt, as it is known to them, a glass lantern during the renovation of al-Anwar mosque (al-Hakim bi Amr Allah mosque) based on a Fatimid stone carving on the façade of al-Aqmar that features a representation of a light. The mosque lamps miškāwāt were installed at various Fatimid sites repaired by the community during the al-Anwar mosque (al-Hakim) renovation (Pl.XV). Additionally, they were given to other Fatimid-era structures including al-Azhar as well as the Prophet's family shrines in Cairo and other Middle Eastern cities. To explore its importance from the artistic and touristic criteria, this custom must be followed in all

modern places of worship that imitate the antique mosque lamps when it comes to mosque design, whether it is Fatimid, Ayyubid, Mamluk, or Ottoman.

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The plates

Pl. I/a: Glass lamp *miškah* preserved in the museum of Islamic Art (Inv. N°. 3901). Photographed by the researcher.

Pl. 1/b: Details from the previous lamp (inner core).

Pl.III: Lamp from the excavations of Ḥabd al-Fusṭāṭ. After: Foy, Lamps de verre fatimides
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Pl.VI/a: A Glass lamp from the eastern Mediterranean dates to 6th-7th AH/12th - 13th AD preserved in LA County Museum of Art – Los Angelos.  
https://collections.lacma.org/node/187786
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Pl.VI/b: Tombstone from the Ayyubid period preserved in the Museum of Islamic Arts in Cairo (Inv.No.2365). After. M.Dāwūd, al-Miškāwāt, Pl.28
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Pl. IX: Tombstone from the Ayyubid era dates to 589AH/1139AH. After

Pl. X: Lamp from 4th AH/10th AD Iran? Preserved in David collection - Copenhagen. After, Shalem.A, Fountains of Light, Fig.7
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Pl.XI: Hanging lamp from the near east 4th-6th AH/10th - 12th AD century preserved in Museum Für Islamische Kunst-Berlin. After, Carboni, Whitehouse, Glass, Pl.7

https://www.metmuseum.org/art/collection/search/447000?ft=MOSQUE+LAMP&offset=0&rp=40&pos=6

Pl.XIII: Enameled glass lamp related to Emir Sayf al-Din Salār. After (M.I.A. Inv.No.82)

The evolution of the mosque lamp Miškā in Islamic Arts. A new prospective in light of a rare lamp from the Fatimid period preserved in the Museum of Islamic Art (Inventory No.3901)

Pl.XV: The lamp carved on the western façade of the mosque of al-Aqmar (Left)- The lamp that added by the Bohara inspired by the Fatimid style as al-Aqmar’s model.(center). A recent model added in the Azhar and al-Hakim mosque inspired by the Fatimid prototypes. (Right) . After. Madraswala.A.N, The Ḥyāʾ of al-Jāmiʿ al-Anwar, Fig.7-12.