

A STUDY OF A GROUP OF GLASSWARE PRESERVED IN THE COPTIC MUSEUM (AN ARTISTIC ARCHAEOLOGICAL STUDY)

¹Heba ELSayed Ahmed ELamir , ²Mamatova Z.Sh.

¹Inspector of archaeology in Ministry of Antiquities in Egypt, master from university Sohag,
Egypt ,MA Silk Road International University

²MA Silk Road International University

<https://doi.org/10.5281/zenodo.11403439>

Abstract. *The study analyzes a group of glassware preserved in the Coptic Museum, providing an artistic and archaeological look at these pieces. The study includes a detailed description of some vessels such as a plate, an ostrich egg-shaped ball, and a cup. The research will talk about Glass is defined in Arabic dictionaries as “a hard, easily breakable, transparent core,” and the origin of the word “glass” goes back to glassmakers and since ancient times, humans have discovered glass and used it to make tools and description of some of the glassware preserved in the Coptic Museum was presented, such as the plate, the ostrich egg-shaped ball, and the cup. We chose this topic A study of a group of glassware preserved in the Coptic Museum To clarify its many aspects that have been neglected by many studies, as we find that there are multiple studies that have referred to the subject in a brief manner, and some have completely ignored talking about it, and at the same time an attempt to fill one of the gaps related to the study of Coptic art. This study will also shed light on two pieces of glass that have not been studied before.*

Keywords: *the Glass, history, industry, techniques, symbols, civilization, Coptic Museum.*

Definition of Glass: -

Before mentioning the raw materials of glass and the methods of its manufacture, the term glass must first be defined. In the Arabic dictionaries and dictionaries, we find that glass was generally defined without addressing the depth of its chemical or physical nature [1]. In the brief dictionary, we find a definition of it, which is " glass: a solid core that is easy to break and transparent." In the intermediate dictionary, "glass is a solid core that is easy to break, transparent, made of sand and frying. "This word "glass " is derived from the glass maker or its vendors [2], as well as the word “glass”, the piece of glass, the bottle and the jellyfish

Glass is also mentioned twice in the Holy Quran, one of which is: once directly and the other indirectly. It is mentioned directly in Surat Al-Nur in the Almighty's saying: - [Allah is the light of the heavens and the earth. فِيهَا مِصْبَاحٌ الْمِصْبَاحُ فِي زُجَاجَةٍ اللَّهُ نُورُ السَّمَاوَاتِ وَالْأَرْضِ مِثْلُ نُورِهِ كَمِشْكَاةٍ فِيهَا نُورٌ كَأَنَّهَا كَوْكَبٌ دُرِّيٌّ الرُّجُاجَةُ كَأَنَّهَا كَوْكَبٌ دُرِّيٌّ] [His light is like a lamp in which the lamp is lit in the glass as if it were a dwarf planet. It was mentioned indirectly in Surat Al-Naml when he told us that Suleiman the Prophet had a shrine of bottles, and we find that the Arabs called the glassware bottles and they used to call its maker bottles, and it is clear that they took this from what was mentioned in the Holy Quran in “قَوْلُهُ تَعَالَى: وَيُطَافُ عَلَيْهِمْ بِآيَاتِهِ مِنْ فَضَّةٍ وَأَكْوَابٍ كَانَتْ فَوَارِيرًا” the Almighty's saying: And they are given silver pots and cups that were bottles.

The origin of the word glass is derived from the Latin term *glassum*, by which he meant the glossy transparent material, and another word that was used to denote the glass material is *vitreous*, and its origin is derived from a Latin word, a term that is intended for all materials included in glass.

The Corning Museum of Glass also stated a definition of glass from a chemical standpoint: “It is a homogeneous material with an irregular structure similar to the random structure of liquids.

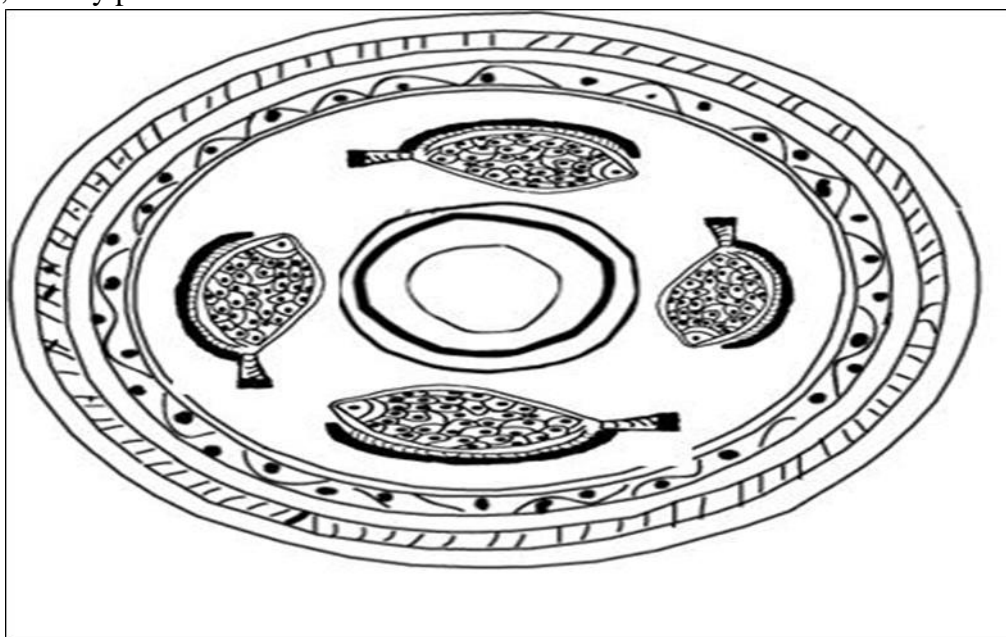
It is an amorphous material. To produce this material, it requires heating the raw materials involved in its manufacture to a degree sufficient to transform it into molten when it is suddenly cooled.” It makes an amorphous solid.

It can be said that although the glass manufacturing techniques and materials used to improve the properties of glass to obtain attractive colors have varied over the ages, the basic material for it is always silica, the basis of its manufacture in all eras, with different types and the type of glass produced and its properties.

-The emergence of the glass industry

The discovery of glass by man was an important event that undoubtedly affected the development of civilization through historical times. In fact, it is difficult to determine the beginning of the history of the discovery of glass, as there were many opinions and conflicting stories about this and How people found glass and the original homeland of this industry, However, no matter how different the opinions were, there is no doubt that the human heritage was not born suddenly, but there were always preludes to that heritage. Glass has been known since the beginning of the history that man left as archaeological records that infer his life. Man knew it for the first time in his natural image that nature's hand made for him in its volcanic lava, and as a result of the ease of sharp edges, this allowed the production and manufacture of knives, arrowheads and other cutting tools from natural glass. Before knowing the art of glassmaking, the first man knew many types of glassmaking.

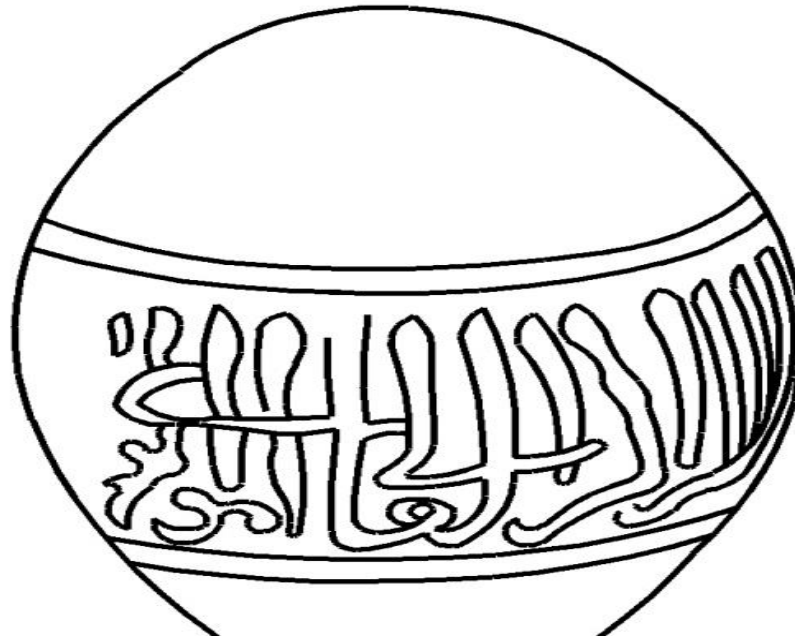
We will now move on to studying some of the glass vessels preserved in the Coptic Museum, a study published for the first time.



Painting	: 1
Masterpiece	: Plate
Place of Preservation	: Coptic museum
Masterpiece Source	: by exchange
Registration No	: 42408
Date	: 6-7AD
Scales	: Height 12cm , Width47,5cm
Industry Style	: The method of casting in mold
References	: unpublished

The description from the outside is a flattened, circular rim followed by a semi-oval body and a wide, flat base.

The description from the inside is a round dish with an edge extending outward and slightly flattened, in the middle of which are two black circular bands with horizontal slanting lines between them. Next is a body that is not high and round, decorated with two wider bands. Of the first ones, in black, enclosed between them is a wavy stripe running horizontally, with black dots between the top and bottom of the stripe (Similar to water waves). Next is the base, which begins with a black circular stripe, followed by four fishes moving clockwise in black around a circle in the middle, surrounded by two wide stripes enclosing parallel lines. The bowl is made of light yellow glass.



Painting	: 2
Masterpiece	: A ball shaped like an ostrich egg
Place of Preservation	: Coptic museum
Masterpiece Source	: Marmina Monastery at Bifam Alkhalij
Registration No	: 3241
Date	: 8 AH/14 AD
Scales	: Height 15cm, diameter 10cm
Industry Style	: Blowing into the mold
References	: Guide to the Coptic Museum, the churches of ancient Egypt and the Roman fort

the description : A ball of glass camouflaged with enamel, in the shape of an ostrich egg. It was originally used to hang it above lanterns to prevent mice from reaching it to steal the oil in it. Because of its smooth surface, the mouse cannot slide on it to reach the lanterns below, as well as to maintain balance when the wind caresses it. It has a spherical shape and consists of two wide red lines with inscriptions in Arabic between them, and two Rankin in the shape of a biqaja with a text in the middle in the blue enamel that reads, “The great and exalted residence of Mawlawi al-Malki al-Salihi al-Maliki al-Makhdoumi al-Sayfi Sarghatmish.” المقر “It is said that this ball bore the name of the donor of this masterpiece. This oval-shaped ball was the link between the large stone niche and the long, thin chain, from which the niche was hung from the ceiling.



Painting	: 3
Masterpiece	: cup
Place of Preservation	: Coptic museum
Masterpiece Source	: Deir Abu Fana
Registration No	:3444
Date	: 5-6AD
Scales	: Height 13.5 cm, depth 15 cm
Industry Style	: blow, Drilling method
References	: Published in Actes du Symposium des Fouilles Coptes Le Caire

7-9 November, 1996 / sous les auspices du Conseil Superior des Antiquities

The description: A shallow hemispherical cup has a polished edge and The base has been lost, as traces of the separation between the body and the base appear on it .It has two handles, one above the other. The first is larger in size than the other, which takes a round shape, while the next handle takes the shape of a triangle, they are of the same type of glass. Facing them on the other side of the same cup are the remains of two handles that were lost. On the top of the body we find an ornament of two circular lines that wrap around the body , then followed by another round decoration, Following this circular line is a drawing of a large cross, with a drawing of palm fronds emerging at the intersection of each of its sides, and inside each of the ribs of the cross is Intersecting lozenge decoration forming a grid shape , On either side of the cross, drew two circles of approximately equal size, inside each of which is a half image of two people who appear to be standing facing the cross each wearing Roman clothes painted with unclear black lines. We see the person in the right circle of the cross with a large head, a short beard, curly hair ending at the bottom of the neck, a wide almond eye, a straight nose, and a mouth of two lines, and perhaps the person in this circle represents the Apostle Paul. As for the person in the left circle of the cross, he appears to be plump, where we see the head directly attached to the body, he has a small beard, and this person may represent the Apostle Peter.



Figure 1, dish (6-7 AD), Coptic museum, record number 42408.



Figure 1(b), a detailed part of the previous piece



Figure 2, a ball in the shape of an ostrich egg (14 AD), place of preservation, the Coptic Museum, register number 3241, published in the book Guide to the Coptic Museum, the Churches of Ancient Egypt, and the Roman Fort.



Figure 3, Cup (5-6 AD), storage location Coptic Museum, from Actes du Symposium des Fouilles Coptes Le Caire 7-9 November, 1996 / sous les auspices du Conseil Superior des Antiquités



Figure3(B), cup (5-6 AD), preserved in the Coptic Museum



figure 3c, detail of the previous fragment

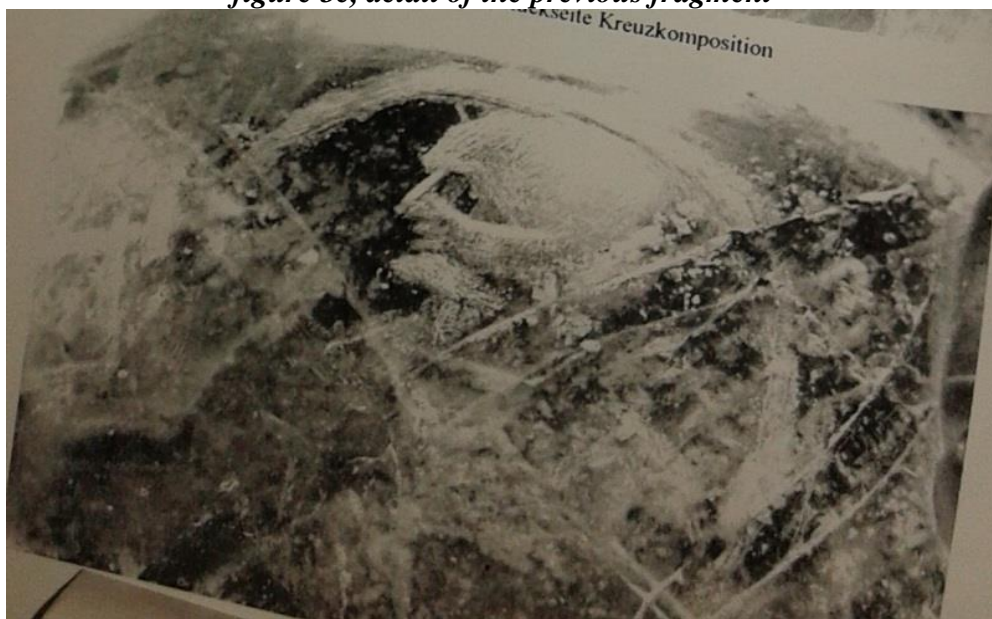


Figure 3 (D) a detailed part of the previous piece

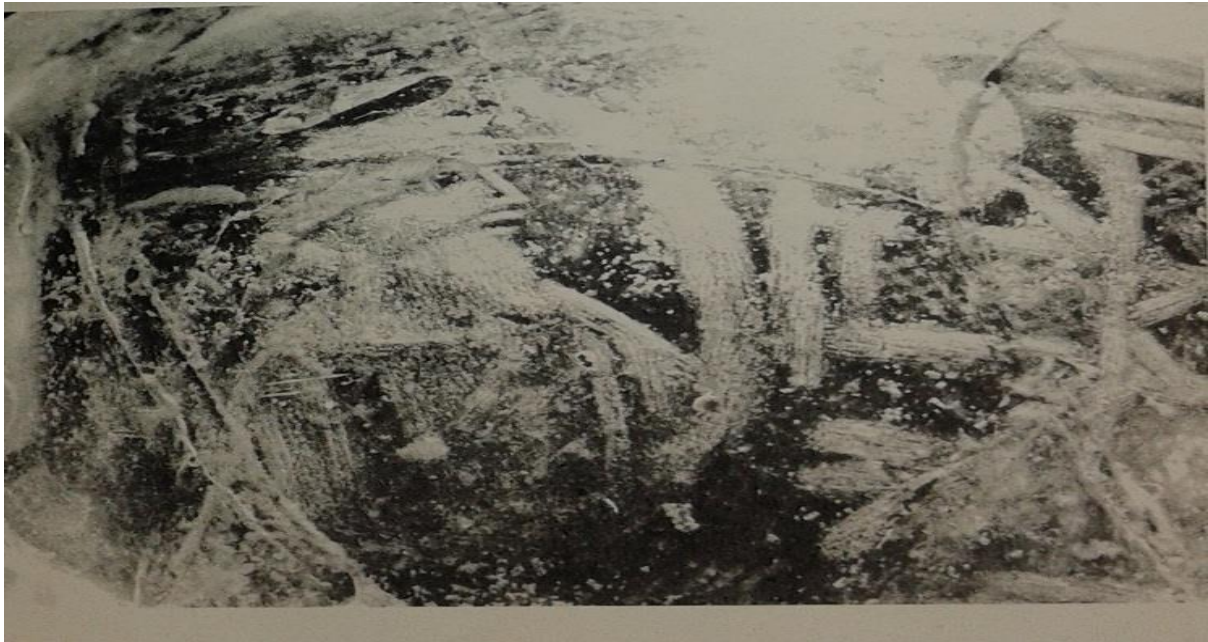


Figure 3 (E) a detailed part of the previous piece

REFERENCES

1. -Alfred Butler, *The Ancient Coptic Churches in Egypt*, translated by Ibrahim Salama Ibrahim, General Book Authority, Part Two, 1993.
2. -Alfred Lucas: *Materials and industries among the ancient Egyptians*, Madbouly Library in Cairo, first edition, 1991 AD.
3. -Ammar Muhammad al-Nahar, *The Slandered Era, The Era of the Bahri Mamluks*, Dar Al-Nahda, 2007.
4. -Anastasios ch. Antonaras : *Glass lamps of The Roman and Early Christian Periods: Evidence From The Thessaloniki Area*, Acts of 2nd International Congress On Ancient and Middle Age Lighting Devices, Zalău / Cluj-Napoca 2008.
5. -Aziz S. Atiya ; *The Coptic Encyclopedia* , volum1, New York , 1991 .
6. -Freestone ,I,C and Leslie,K,A: *Strontium Isotopes in The Investigation of Early Glass Production* ,University Of Oxford, 2003.
7. -George Ferguson, *Christian Symbols and Their Meaning*, Institute of Coptic Studies, 1964.
8. -Hams Eabd Alhafiz, *Manifestations of physicochemical damage in archaeological glass and its relationship to chemical composition*, Master's thesis, Faculty of Archaeology, Cairo University, Department of Restoration, 2005.
9. -Heba ELSayied Ahmed ELamir , *The Egyptian glass antiques with purposes and the Christian decorations in the Islamic reign*, Master Thesis, Sohag University,2019.
10. -Hugh Tait, *5000 years of glass*, British Museum Press, 2012.
11. -Otto Friedrich , *Two Thousand Years of Coptic Christianity* , American University in Cairo Press, 2002.
12. -Paul Ava Yekimov, *The Art of the Icon and the Theology of Beauty*, translated by Father Bishoy Antwi.
- Salwa Gad Al-Karim Dhawa: *A study of the tools used in ancient glass manufacturing technology*, Journal of the Faculty of Archeology, Cairo University, Issue 10, 2005 AD.
13. -Selastian bock; *the egg of the pala montefeltro by piero della Francesca and its symbolic meaning* , Heidelberg, 2002.

14. -Tadros Yacoub Malti, Studies in Church Tradition and Iconography, The Church is the House of God, Nabe' Al-Fikr Library, Alexandria, Fourth edition, 1995.
15. -The Brief Dictionary, General Authority for Princely Printing Affairs, 2001.
16. -The Intermediate Dictionary, Chapter Al-Hamza, Part One, Al-Shorouk International Library, 2004.
17. -Wadih Youhanna, Guide to the Coptic Museum and the Churches of Ancient Egypt and the Roman Fort, Egyptian National Press in Cairo, 1931.