



A Group of Bronze Lamps from Demre Museum

Demre Müzesi'nden Bir Grup Bronz Kandil

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Citation Ü. Demirer, "A Group of Bronze Lamps from Demre Museum". *Phaselis* X (2024) 129-142. <http://dx.doi.org/10.5281/zenodo.14576561>

Received Date: 22.10.2024 | Acceptance Date: 30.10.2024
Online Publication Date: 30.12.2024

Editing Phaselis Research Project
www.phaselis.org



A Group of Bronze Lamps from Demre Museum

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Abstract: This study examines 12 copper alloy oil lamps in Demre Museum, which were identified as bronze due to the lack of chemical analysis. Three of the oil lamps (Cat. No. 1, Cat. No. 4 and Cat. No. 5) were found in mixed contexts during scientific archaeological excavations, while the other nine oil lamps entered the museum's inventory through purchase or forced acquisition. Since there is no link between the lamps, the order of examination is based on the chronology provided by similar examples, which help to date the lamps. The oil lamps, which date from the IInd century BC to the Seljuk Period, were analyzed by considering the characteristic form features of the periods to which they belong; Cat. No. 6, Cat. No. 7, Cat. No. 8, Cat. No. 9 and Cat. No. 10 have been classified as "biconical-bodied lamps with crosses" due to their body structure and the crosses on the handle, in a group whose similar lamps were widely found between the Vth-VIIth centuries AD. In some cases, the other oil lamps analyzed are considered to be local designs that may have been inspired by terracotta contemporaries or predecessors.

Keywords: Demre Museum, Bronze Lamps, Ancient Lighting Tools, Lychnology

Öz: Bu çalışmada, Demre Müzesi'nde bulunan, kimyasal analizleri yapılmadığı için bronz olarak tanımlanan 12 adet bakır alaşım yağ kandili incelenmiştir. Kandillerden üçü (Kat. No. 1, Kat. No. 4 ve Kat. No. 5) bilimsel arkeolojik kazılardaki karışık kontekstlerde bulunmuş, diğer dokuz kandil satın alma veya zor alım yoluyla müze envanterine girmiştir. Kandiller arasında bir bağ bulunmadığından, inceleme sırası kandillerin tarihlenmelerinde yardımcı olan benzer örneklerin sağladığı kronolojiye göre belirlenmiştir. MÖ II. yüzyıldan Selçuklu Dönemi'ne dek geniş bir zaman dilimi içinde tarihlenen kandiller, ait oldukları dönemlerin karakteristik form özellikleri gözetilerek incelenmiş; Kat. No. 6, Kat. No. 7, Kat. No. 8, Kat. No. 9 ve Kat. No. 10 gövde yapıları ve kulp üzerinde bulunan haçlar sayesinde, "bikonik gövdeli haçlı kandiller" olarak, MS V-VII. yüzyıllar arasında benzerleri yaygın olarak bulunan bir grupta sınıflanmışlardır. İncelenen diğer kandiller, bazı durumlarda pişmiş toprak çağdaş veya öncül örneklerden esinlenmiş olabilecek yerel tasarımlar olarak değerlendirilmiştir.

Anahtar Kelimeler: Demre Müzesi, Bronz Kandiller, Antikçağ Aydınlatma Araçları, Liknoloji

Introduction

Oil lamps, which were widely used by the ancient people in their daily lives to illuminate the darkness or for symbolic purposes¹, were also among the liturgical objects of religious ceremonies or offerings

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I would like to thank to Nilüfer SEZGİN, director of Demre Museum, who gave permission for scientific research and publication of the works; Archaeologist Numan Emin ÜNVER, who provided all kinds of facilities during my studies; Sharing the artifacts found during the excavation, Rhodiapolis excavation director Prof. Dr. İsa KIZGUT and Arykanda Excavation director Prof. Dr. Macit TEKİNALP and to architect Esra ŞİMŞİR for contributing to the drawings of the lamps.

¹ Acara & Olcay 1998, 249.

to sacred places². In addition to being used in interior spaces such as houses, temples, mines, odeion, baths, basilicas and exterior spaces such as streets, boats, theaters; they were also left in graves as votive objects that illuminate the afterlife, as they symbolize the eternal light³ that is seen as the source of life⁴. In addition to their functionality, lamps made of very different materials were also status symbols; while the poor used lamps made of stones, shells and rough ceramics they could obtain, the rich preferred more elaborate, expensive and ornate ceramic or metal ones⁵.

In lamps, which are one of the most intensively studied⁶ groups among archaeological artifacts, studies on terracotta samples, which are found more frequently, have been more extensive⁷. The scarcity of scientific studies on metal oil lamps is due to their rarity compared to terracotta oil lamps; Metal oil lamps, which were mostly cast in copper alloy, were produced with a technique called "melting wax"⁸, in which the mold could not be reused after casting, and only one oil lamp was obtained from each model designed⁹. For these reasons, it is very difficult to find identical metal lamps; unless they are found in the context, stylistic evaluation or dating can be based on terracotta similarities produced in the same period¹⁰.

Bronze Lamps in Demre Museum¹¹

Fig. 1. Cat. No. 1

Ant. Mus. Inv.: 2009/116 - Rhodiapolis Excavation, East Cavea, Analemma 3, Trench 1.

Demre Mus. Inv.: 2022-673

Dimensions: L: 13,7 cm; H: 5,5 cm; W: 5,5 cm.

Description: Made by casting technique; the flattened spherical

body on a high conical base formed by two mouldings, the lower convex and the narrower upper concave, has a large ring-shaped oil hole at the top. The pin and cap are missing and incomplete on the joint positioned adjacent to the ring. On either side of the body are appliquéd two dolphin figures facing the nose of the oil lamp, with curved bodies and tails separated from the body. A leaf emerges from the ring surrounding the oil hole, extends towards the nose, rises in a curve and returns to the body. Two branches extending from beneath this leaf, on the upper two sides of the thin and long snout separated from the body, extend to the flat-sided, circular wick hole, and again make a turn and open outwards. On the back of the body, two branches with a small leaf and two tendril curls, emerging separately from the shoulder, join and knot together to join the large vine



Fig. 1.

² Bailey 1975, 9; Coşkun 2007, 11; Kan-Şahin 2008, 38-41; Köroğlu & Hetto 2021, 411; Özdemir & Özdemir 2023, 314-315; Özçelik 2023, 91.

³ Acara & Olcay 1998, 250.

⁴ Aydın-Tavukçu & Gülünay 2018, 2732; Akyüz 2019, 26-27.

⁵ Kan-Şahin 2008, 37; Sahar 2023, 23.

⁶ Chrzanovski 2002, 13.

⁷ Kan-Şahin 2008, 5.

⁸ Atasoy 2005a, 193-194; Metin 2017, 11-12.

⁹ Demirel-Gökalp 2002, 174.

¹⁰ Atasoy 2005a, 194; Rosenthal&Sivan 1978, 156; Sussman 2006, 45.

¹¹ The 12 copper alloy oil lamps have been the subject of this study with the approval of the General Directorate of Cultural Heritage and Museums dated 03.09.2024 and numbered E-76252222-155.01.5622035 and the permission of Demre Museum Directorate dated 16.09.2024 and numbered E-70793822-155.01.5671035.

leaf on the semicircular handle rising from the back of the body. The central section of the five-part leaf is broken and missing. Dark green-brown patina, heavily corroded.

Although it was recovered from the excavations at the Theater of Rhodiapolis among finds dating to the IIIrd century AD¹² in a mixed context including coins dating to the Hellenistic and Roman periods, it is one of the characteristic spherical-bodied, long-nosed oil lamps of the IInd century BC¹³. This is an example of how artifacts made of durable materials could have been used for centuries while retaining their function.

This type of oil lamps with a circular form and a nose extending from a round body may have been inspired by the terracotta oil lamps produced in Ephesos¹⁴. Comparisons with similar examples show that the metal oil lamps produced in the Hellenistic Period¹⁵, with the advantage of the strength of the metal casting material, can be designed with thinner and more delicate noses¹⁶ that are separated from the body compared to terracotta examples¹⁷.

Curved branches, leaves, tendrils, shoots and projections and auricles formed by human or animal figures on the body, handle or nose are common elements of Hellenistic Period¹⁸ metal oil lamp decorations; In one example where the body is designed in the form of a head, it is seen that human ears are plastically carved on both sides¹⁹. Curved volutes²⁰ formed by branches coming from the body to the nose, palmettes and vine leaves, again starting from the body and extending to the handle, where they merge with knots or folds and rise on the handle, are also quite common on both terracotta and metal oil lamps²¹.

All these ornaments and curves add richness to the decorations with the light-shadow and contrast they create. Although some scholars suggest that the bases under the candle bodies were raised in the Byzantine Period²², high and conical bases with concave interior parts, expanding downwards in the form of moldings, are also common in the Hellenistic Period²³.

Fig. 2. Cat. No. 2

Ant. Mus. Inv.: A.1.50.93/06.12.1993
Purchase.

Demre Mus. Inv.: 2022-305

Dimensions: L. 10,2 cm; W. 3,6 cm; H. 5,3 cm.

Description: The spherical body of the cast oil lamp on a low base elongates conically to form a nose and terminates in a circular wick



Fig. 2.

¹² Kızgut *et al.* 2010, 87-88.

¹³ Bailey 1975, 136, Pl. 46, Q272-273.

¹⁴ Kan-Şahin 2008, 25, Res. 10; Metin & Polat-Becks 2015, 311. Fig. 1 K2; Özdilek 2023, 96, Fig. 14.1-14.2.

¹⁵ For an example from the IInd century BC, see: Metin 2017, 34, 45, K1.

¹⁶ Atasoy 2005a, 196, 212, Res. 2-3; Lafli & Buora 2014, 440, Pl. 2, No. 4; Rosenthal & Sivan 1978, 156, No. 643-644.

¹⁷ Radt 1986, 48, Abb.20-22.

¹⁸ Loeschke 1919, 472, Abb. 44, 1-3; Simion 2003, 40, Nr. 6; Bruyako 2014, 190, Рис. 3, 191 Рис. 4-6; Sahar 2023, 20; Demirer 2024, 230, Fig. 5, Kat. no. 2.

¹⁹ Sussman 2006, 40, Fig. 1, 42.

²⁰ Kan-Şahin 2008, 9; Sahar 2023, 19.

²¹ Sussman 2006, 42; Franken 2023, 33, Abb. 7a-7b.

²² Köroğlu & Hetto 2021, 409.

²³ Atasoy 2005b, 1-3, No. 1-5; Bailey 1996, Pl. 5, No. Q3550-3552; Walters 1914, 14, No. 83; Franken 2023, 31-33.

hole. Adjacent crescent-shaped projections on both upper sides of the nose connect the wick and oil holes. On the body there is a circular oil hole surrounded by a ring. The cap covering the oil hole and the joint to which it is attached are missing and incomplete. The ring-shaped handle adjacent to the back of the body has an ivy leaf design terminating in a droplet. Green patina, light corrosion.

A very close similar example in the collection of the British Museum, except for the missing leaf on the handle, is dated to the 1st century BC²⁴. On the 1st century AD example found in Karacaören, Adana, and included in the inventory of the Istanbul Archaeological Museum, the crescent projections on the nose are in the form of tendrils terminating in volutes, and the leaf on the handle is more elaborately designed with linear ornamentation²⁵. The example in the J. P. Getty collection, on the other hand, is of Anatolian origin and has been dated to the 1st century BC - 1st century AD²⁶. A very similar example in form is in the Konya Archaeological Museum and dates to the same period²⁷.

Fig. 3. Cat. No. 3

Ant. Mus. Inv.: A.47.12.72/Purchase.

Demre Mus. Inv.: 2022-117

Dimensions: L. 7,8 cm; W. 4,2 cm; H. 4,7 cm.

Description: Spherical body with bracelet base. On the body there are vertical relief divisions descending from the shoulder to the base in the form of a flat circle. The nose has a small wick hole in a concave bowl at the tip, and there are projections on both sides, one end with a wick hole and the other joining the body. The handle on the back is broken and missing. Dark green patina, lightly corroded.



Fig. 2.

The ivy leaf on the handle of a similar example in the Archaeological Museum of Istanbul²⁸ and the crescent-shaped handle terminating in a horse's head of a similar example from the settlement of Oplontis near Pompeii, which was buried under the ashes of the Vesuvius eruption in 79 AD, may give an idea about the missing part of the artifact²⁹.

Although the vertical reliefs on the body are the same on the Istanbul and Herculaneum³⁰ examples, the volutes on either side of the nose are simplified and stylized in Cat. No. 2, the Pompeii example³¹ dated to the Iulian-Claudian period, and the similar example acquired by Sir W. Hamilton, the Ambassador of Naples, and acquired by the British Museum³², are simplified and stylized. This type with a low base and circular body, described as a "volute lamp³³" because of the outward

²⁴ Bailey 1996, 8, Pl. 4, Q3545.

²⁵ Atasoy 2005b, 6, No. 10.

²⁶ Bussière & Lindros-Wohl 2017, 449, 456, No. 618.

²⁷ Özdemir & Özdemir 2023, 321, Fig. 4, Kat. No. 8.

²⁸ Atasoy 2005b, 11, No. 20 (1st century AD)

²⁹ De Carolis 1987, 81-83, 2a-b.

³⁰ Valenza 1977, 159, Tav. LXXIII.9.

³¹ Pompeii 1999, 183, No. 214.

³² Bailey 1996, Pl. 29, Q3626.

³³ For contemporary similar terracotta lamps see: Loeschcke 1919, 224, Abb. 4. 1-2; Radt 1986, 40, Abb. 1; Zych 2019,

curves on the sides of the nose, was widely produced and used from the Early Imperial Period onwards³⁴.

Fig. 4. Cat. No. 4

Ant. Mus. Inv.: 2017/414-ARY17M76/2017 Arykanda Excavation.

Demre Mus. Inv.: 2022-90

Dimensions: L. 8,2 cm; W. 3,7 cm; H. 5,8 cm.

Description: The piece is cast with a flat base and circular body. The funny body, which opens from the base and widens upwards, has rounded shoulders. At the tip of the nose, which narrows and extends from the body, there is a circular wick hole.

Two folds coming from either side of the nose make two small projections at the mouth of the wick hole. There are small concentric circles on the shoulder, and on the back, on the body, the hinge and the annular handle are attached. An ivy leaf with a droplet tip rises above the handle. The protruding lid, attached to the hinge with iron rivets, covers the annular raised oil hole. Dark green patina, lightly corroded.

In the similar example in the Istanbul Archaeological Museum, dated to the 1st century AD, the projection on the lid, which is turned backwards, appears to be a vegetal curve³⁵. The similar example in the Burdur Museum dates to the same period³⁶. Lamp was found during the 2017 excavation season, in a 3.88 x 11.00 meter rectangular building with two rooms to the north of the Arykanda Slope Bath³⁷. The site was excavated between 2012 and 2017, and it was found that the area was continuously inhabited from the IVth century BC onwards, as evidenced by numerous ceramic, metal and coin finds; the latest of the 76 coins found in the same context as the lamp was dated to the Probus period (276-282 AD)³⁸.



Fig. 4.

478; Capellini & Corti 2020, 182, 195, 64.122; Dimakis 2021, 179, K. 124.

³⁴ Richter 1915, 381, Nr. 1340; Valenza 1977, 159, Tav. LXXIII.9; Spagnolis & Carolis 1983, 28, II.12; 29, II.13; 36, III.6; Bailey 1996, 28-29, Pl.29, Q3623-Q 3629; Menzel 1964, 45, Taf. 29, Nr. 81; Radt 1986, 54, Abb. 37; Khamis 2013, 11, Fig. 25; Vaiani, 2015, 19.8, 20.9; Eber 2023, 295, Abb. 37.8.

³⁵ Atasoy 2005b, 8, No. 15.

³⁶ Metin & Polat-Becks 2015, Fig. 2, K8.

³⁷ Tekinalp *et al.* 2018, 16, Fig. 2.

³⁸ Tekinalp & Sancaktar 2024, 115.

Fig. 5. Cat. No. 5

Ant. Mus. Inv.: 2009/11- Rhodiapolis Excavation, East Cavea, Trench 1.

Demre Mus. Inv.: 2022-675

Dimensions: L. 9,2 cm; W. 5,5 cm; H. 5,2 cm.

Description: The oil lamp is cast with a biconical body and flat base. The short nose flares out from the body and rises slightly, with a large circular wick hole on the front. There are six circular decorations on the shoulder. The oil hole is surrounded by a raised ring. The handle, which has been crushed and lost its circular form, is missing the pin on the joint that connects it to the upper part of the body at the back, and the mask-embossed oil cap with which it was attached is separate from the body. Dark green patina and heavy corrosion.



Fig. 5.

A. Metin dates the similar example in the Fethiye Museum to the IIIrd-IVth centuries AD³⁹, while an example in the Burdur Museum is dated to the Vth century AD⁴⁰, more broadly defined as "Late Antiquity". As can be seen in these comparisons, there are uncertainties in the efforts to determine provenance and age in collections other than excavation contexts, where the method of acquisition is either by purchase or uncertain, and researchers have to follow the dates given by previous researchers backwards until the first similar specimen is recovered from a context.

Fig. 6 Cat. No. 6

Ant. Mus. Inv.: 2008/241- Purchase.

Demre Mus. Inv.: 2022-663

Dimensions: L. 6,7 cm; H. 3,8 cm; W. 2,7 cm.

Description: The cast oil lamp has a circular biconical body rising on a low ring-shaped base. There is a circular wick hole at the tip of the nose, which extends from the body and widens towards the tip. The discus/oil hole is surrounded by a slightly raised annular bracelet. The joint at the back of the shoulder has a clam-shaped oil hole cover connected by an iron pin. The two arms of the Greek cross⁴¹ on the pommel, which protrudes from the back of the body and connects to the annular joint on the shoulder, are broken and missing. Dark green patina, lightly corroded.



Fig. 6.

From the Vth century AD onwards, the sphericity of the body on the discoid base of metal oil lamps decreased and turned into a biconical form, while the nose became slightly elongated and crosses began to appear on the handles⁴². The oyster was also one of the most preferred motifs for

³⁹ Metin 2017, 41, K15.

⁴⁰ Metin & Polat-Becks 2015, 284, Fig. 6, K27-K28.

⁴¹ Taş & Özcan 2015, 255.

⁴² Although the cross has been a motif used for thousands of years in different cultures, its transformation into the most

the oil reservoir cover. Cat. No. 6, with its low base, proportioned body, which is a good example of the transition from spherical to biconical form, oyster-shaped lid and slightly elongated nose, is an example that fully reflects the characteristics of the group to which it belongs.

Fig. 7. Cat. No. 7

Ant. Mus. Inv.: A.1.25.90- Purchase.

Demre Mus. Inv.: 2022-280

Dimensions: L. 7,5 cm; W. 6,5 cm; H. 4,5 cm.

Description: The circular body of the cast oil lamp extends and merges into a wide-sided, broad-sided nose with a splayed circular wick hole. On a low circular base, a rod rises from a ring-shaped handle adjacent to the body from behind, supporting a Greek cross rising from the hinge at the back of the body. The lid covering the circular oil hole on the body is missing and incomplete. Light green patina, light corrosion.



Fig. 7.

Similar in form to Cat. No. 6, its distinctive feature is the intact preservation of the cross on the handle. As mentioned above, the distinctive features of this type, which was common from the Vth century onwards, were usually the small differences in the lids and crosses⁴³.

Fig. 8. Cat. No. 8

Ant. Mus. Inv.: A.1.18.95- Purchase.

Demre Mus. Inv.: 2022-322

Dimensions: L. 10,6 cm; H. 5,4 cm; W. 5,2 cm.

Description: The biconical body of the oil lamp, made by the casting technique, has a flat base without a pedestal and joins the nose with a slight curve. There is a circular wick hole in the nose. The flattened body forms an oval shoulder. The bar rising from the ring-shaped stem adjacent to the body at the rear joint supports the Greek cross rising from the back of the body. On the joint in front of the cross, there is a circular cap with a truncated edge, connected by an iron pin, covering the circular oil hole. Slightly corroded, light green patina, two small chips on the front shoulder.



Fig. 8.

The distinctive features of the artifact, which can be classified in the same group as Cat. No. 6 and Cat. No. 6 and Cat. No. 7 are the absence of a thin discoid base under the body⁴⁴ and the fact that the sphericity seen in the early metal oil lamps is further reduced by the flattened structure of the body. In addition, the grooves in the arm tips of the cross on the handle are more deeply incised.

important symbol of Christianity began after the IVth century AD; see: Taş & Özcan 2015, 249.

⁴³ Bailey 1996, 71, Pl. 81, Q3802.

⁴⁴ For a similar example, see: Topoleanu 2012, 225, No. 134.

Fig. 9. Cat. No. 9

Ant. Mus. Inv.: A.2.11.86- Purchase.

Demre Mus. Inv.: 2022-242

Dimensions: L. 7 cm; W. 2,8 cm; H. 4,7 cm.

Description: The circular biconical oil lamp with a flattened body was made by casting technique. There is a circular wick hole with a flat rim in the nose, which first tapers and then widens as it extends from the body. There is a circular, flat oil hole on the body. The joint carrying the missing oil hole cover on the upper back of the shoulder and the annular handle are joined together. The rod rising from the handle supports the Greek cross rising from the joint.



Fig. 9.

This oil lamp, can be classified in the same group of Cat. No. 6, Cat. No. 6, Cat. No. 7 and Cat. No. 8. The distinctive feature is that the nose is slightly thinner and longer⁴⁵.

Fig. 10. Cat. No. 10

Ant. Mus. Inv.: 2016/2- Confiscation.

Demre Mus. Inv.: 2022-89

Dimensions: L. 10,3 cm; W. 3,5 cm; H. 4,6 cm.

Description: Made by casting technique, the piece has a flattened circular body. There is a small circular oil hole in the center of the discus, which collapses inward forming a sharp shoulder. The long nose extending from the body on a high conical base rises slightly in front. The snout has a large straight-edged, concave, circular wick hole. The Greek cross extending from the back of the shoulder with a ring-shaped handle under the cross. Dark green patina, without corrosion.

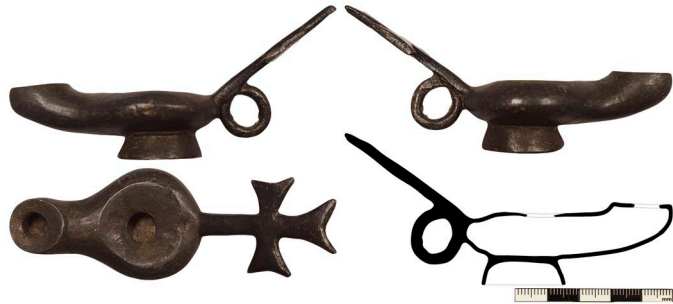


Fig. 10.

Fig. 11. Cat. No. 11

Ant. Mus. Inv.: A.30.2.95- Purchase.

Demre Mus. Inv.: 2022-318

Dimensions: L. 12,3cm; H. 2,7 cm; W. 7,4 cm.

Description: It is made of two separate plates as body and lid by forging technique. The edges of the lid are bent down and fixed to the body. The flattened circular shaped body on a low base extends towards the nose and joins the nose with a pod shaped concave wick hole. Around the discus embossed as a circular ring on the body



Fig. 11.

⁴⁵ For similars see: Köroğlu & Hetto 2021, 420, Kat. No. 17, Resim 20; Metin & Polat-Becks 2015, 285, Fig. 8, K33.

are incised triangular-zigzag decorations. There is a small oil hole in the concave section in the center of the elevation. Dark green patina, lightly corroded, with some decay and cracks.

Fig. 12. Cat. No. 12

Ant. Mus. Inv.: 2007/36-Confiscation.

Demre Mus. Inv.: 2022-646

Dimensions: L. 14,1 cm; W. 7 cm; H. 8,4 cm.

Description: Made by casting technique, it has a flattened circular body with a flattened abdomen. The abdomen has a pin-shaped projection on each side. It rises on three conical legs, the front one shorter and the rear one longer. The dotted, circular decorations on the shoulder are incised. The thin and long hexagonal nose, extending from the body where it is joined by a bracelet, has a pointed, drop-shaped wick hole. On the long conical neck rising from the body, which is also connected by a bracelet, there is a circular oil hole/mouth with a flaring lip. The semicircular handle with a drop-shaped leaf rising from the back of the shoulder joins the joint behind the spout. The cover carried by the joint is missing and incomplete. There is a repair on the shoulder made with a long rectangular piece during the period of use. Lightly corroded with a dark green/brownish patina.



Fig. 12.

Similar in form to the oval-bodied, long and upturned-nosed oil lamps in the Kayseri Museum of Seljuk Civilization⁴⁶, it also resembles the Seljuk Period oil lamps produced in Nishabur, Iran⁴⁷ in terms of the three legs, long nose and spherical body.

Similar in form to the oval-bodied, long and upturned-nosed oil lamps in the Kayseri Museum of Seljuk Civilization⁴⁶, it also resembles the Seljuk Period oil lamps produced in Nishabur, Iran⁴⁷ in terms of the three legs, long nose and spherical body.

Conclusion

The 12 copper alloy oil lamps analyzed in this study were found within the borders of Antalya province and acquired by different ways. The earliest example, Cat. No. 1, is one of the rarest Hellenistic Period oil lamps and although it was found in a mixed context, it can be dated to the IInd century BC due to its similarities in design with its contemporaries and its molding technique.

Cat. No. 2, with the exception of the Dura-Europos type dated to the IInd century AD⁴⁸, which is similar in body structure and voluted projections on the nasal margin with minor differences, suggest that this type was widespread between the Ist century BC and the Ist century AD⁴⁹.

An example of circular-bodied lamps with volutes, Cat. No. 3, with its distinctive features such as the stylized volutes on the sides of the nose and the embossed vertical divisions on the flattened spherical body, can be considered to belong to the group of “volute lamps” produced from the Early Imperial Period onwards, like its terracotta contemporaries. As mentioned above, in the production of oil lamps, local workshops copied popular forms from terracotta examples due to their cheapness and accessibility; they used the periodic features of form and decoration in their own designs with minor additions, reductions or simplifications. This must have led to a constant diversity in the metal counterparts produced with a single mold compared to the easily moldable terracottas. The similar examples found in “time stood still” cities such as Pompeii and Herculaneum facilitate the dating of

⁴⁶ Eroğlu-Bilgin & Köseoğlu 2022, 123, 131, Kat. No. 11-12;

⁴⁷ Allan 2012, 45-47.

⁴⁸ Menzel 1954, 106-107, Abb. 89.1.

⁴⁹ Metin 2017, 34-35, K3 (Ist century BC); Starac 2022, 143-144, Fig. 3 (Ist-IInd century AD); Özdemir & Özdemir 2023, 321, Fig. 4, Kat. No. 8 (Ist century BC).

this type between the Ist century BC and the Ist century AD.

With its steepening shoulder and pedestal-less base, Cat. No. 4 has a form common in the Late Roman-Early Christian period. In this type, the crosses have not yet appeared on the handle, and the traces of its predecessor, the voluted oil lamps, remain only on the edges of the wick hole. Although some similar examples with an ivy leaf with a dropped tip on the handle have been dated to the Vth-VIth centuries AD, the Arykanda context dates the piece to the IInd-IIIrd centuries AD, since the data from the Arykanda context were discontinued in the late IIIrd century AD.

Cat. No. 5 was found in the same trench with Cat. No. 2, which has all the form characteristics found in Hellenistic Period oil lamps, and was dated by the excavation team to the IIIrd century AD based on contextual data⁵⁰. Since the dating of similar specimens by the researchers dates back to Late Antiquity⁵¹, when the artifact is compared with the similar specimens in the Konya Archaeological Museum⁵² and the British Museum dated to the Ist century AD⁵³, it can be concluded that this form, with its flattened discoid body and short nose with a large wick hole, is contemporary with and inspired by the teapot-shaped terracotta oil lamps in the Ereğli Museum⁵⁴ and the Afyonkarahisar Museum⁵⁵, which are also dated to the Ist century AD and later.

With its oyster-shaped oil cap and large cross on the ring handle, Cat. No. 6; Cat. No. 7 with the same features except for the lost and missing lid; Cat. No. 7 with the same features except for the lost and missing lid; Cat. No. 8 and Cat. No. 9 with their pedestal-less bases and slight differences in the cross arms belong to the “biconical-bodied lamps with crosses” group. This design, which was mass-produced between the Vth and VIIth centuries AD in Athens, Pergamon, Smyrna, Egypt, Bulgaria, Romania, Ukraine, Syria, Palestine, and other centers such as Athens, Pergamon, Egypt, Bulgaria, Romania, Ukraine, Syria, and Palestine, with minor modifications such as candelabrum base, suspension systems, and different cover patterns, became one of the most common bronze oil lamp forms found in archaeological excavations⁵⁶ and in personal or museum collections⁵⁷ in Italy, Germany, England⁵⁸, Greece⁵⁹, North Africa⁶⁰, Constantinople⁶¹, Greece, North Africa, and Anatolia.

With a cross on the handle, Cat. No. 10, with its flattened body, the level of the wick hole being considerably deeper and higher than the level of the concave discus, the long nose and the conical base, has a form differentiated from the biconical-bodied cross lamps. No similar lamps with such a flattened body or a conical base widening towards the bottom have been found in the literature searches. However, both the contours and the cross on the handle allow us to suggest an earliest date of the Vth century AD.

Cat. No. 11, whose material and technical analogues were not found in the literature search is an example of the simple models designed by local workshops with their own skills in the production

⁵⁰ Kızgut *et al.* 2010, 87-88.

⁵¹ Metin & Polat-Becks 2015, 284, Fig. 6, K27-K28.

⁵² Özdemir & Özdemir 2023, 322, Fig. 5, Kat. No. 10-11.

⁵³ Bailey 1996, 47 Pl. 58, Q 3703.

⁵⁴ Coşkun 2007, 60, Res. 3-4, 61, Res. 5-6.

⁵⁵ Aydın-Tavukçu & Gülünay 2018, Çiz. 1-4, Kat. No. 1-4.

⁵⁶ Demirel-Gökalp 2002a, 69, Pl. 30, Fig. 3; 2002b, 191, Çiz. 1.c; Zoroğlu & Tekocak 2013, 239, Res. 8.; Lafli & Buora 2014, 438, Plate 2.2; Özdemir & Özdemir 2023, 327, Fig. 8, Kat. No. 27.

⁵⁷ Angelkou & Cheimonopoulou 2019, 77, Fig. 7; Golan *et al.* 2017, 134.3.

⁵⁸ Bailey 1996, 70, Pl. 81; 72, Q3800-Q3801; Pl. 82, Q3808, (VIth-VIIth century AD).

⁵⁹ Papanikola-Bakirtzi 2002, 292, Nr. 310; Xanthopoulou 2010, 6, Fig. 8, LA 3.025.

⁶⁰ Béjaoui 2005, 117, Fig. 2.

⁶¹ Atasoy 2005b, 48, No. 88; 50, No. 91; Köroğlu & Hetto 2021, 418, Kat. No. 11, Resim 14; 419, Kat. No. 14, fig. 17.

of oil lamps with its features such as the discus with a small oil hole rising in relief and slightly conical, the wick hole in the form of a pod, and the fact that it was forged from two plates⁶². A similar example made of iron found during the excavations at Kibyra was dated to the VIth-VIIth centuries AD by H. Metin and to the Vth-VIIth centuries AD by Ü. Demirer based on a comparison of other data in the context⁶³.

Cat. No. 12 is the most different in form and period among the group of artifacts analyzed. Although it has been mentioned above that there are similar forms in the Kayseri Museum of Seljuk Civilization, there is a similar one in the online sale catalogues with features such as the incised decoration on the shoulder and the tripod base, which was undoubtedly produced in the same workshop⁶⁵ (Fig. 13). For artifacts that enter museums through purchase or confiscation, the accuracy of their provenance is also uncertain, as the seller's or smuggler's statements may be inaccurate. In addition, it is not uncommon for imitations of archaeological artifacts to be traditionally produced and sold in a quality indistinguishable from the originals⁶⁶. Therefore, the identification of Cat. No. 12 should be treated with caution until further similar examples are obtained.



Fig. 13. Similar Lamp with Cat. No. 12⁶⁴.

Scientific studies on metal lamps produced, exported or imported in Anatolia are quite scarce. Scientific research and publications, apart from individual excavation finds and theses⁶⁷ including lamps, are limited to lamps in the Istanbul Archaeological Museums⁶⁸ and examples in a private collection in Istanbul, some of which were purchased from abroad⁶⁹, and the published works are mostly from the Vth century AD onwards⁷⁰. Some groups of artifacts in museum inventories cannot be the subject of scientific studies for many years due to reasons such as the busy schedules of specialists working in museums due to their routine duties, and the concentration of academics with whom they are in scientific cooperation on their own excavations and research. For the aforementioned reasons, the dating of oil lamps becomes difficult as it is difficult to find similar examples unless they are found in context during excavations, and the identification of metal oil lamp production workshops becomes difficult due to their transformable materials and flexible

⁶² Similar in form: Bailey 1996,70, Pl. 81 / Q3799 (VIth-VIIth C. AD); De Ridder 1915, 147, Pl. 109, Nr. 3111.

⁶³ Demirer 2013, 42, 202, C1; Metin 2012, 243, 867, K813.

⁶⁴ <https://www.invaluable.com/auction-lot/persian-oil-lamp-iran-13th-century-in-bronze-153-c-7db4d59abb> (Open Licensed 01.12.2024)

⁶⁵ <https://www.invaluable.com/auction-lot/persian-oil-lamp-iran-13th-century-in-bronze-153-c-7db4d59abb> (Open Licensed 01.12.2024)

⁶⁶ During the civil war in Syria, a significant portion of the artifacts sold abroad by terrorist organizations and looters were found to be fake: <https://www.independent.co.uk/news/world/middle-east/syria-isis-civil-war-antiquities-fakes-palmyra-a7228336.html>.

⁶⁷ Acara 1990; Demirel & Gökalp 2001.

⁶⁸ Atasoy 2005b.

⁶⁹ Atasoy 2005a.

⁷⁰ Lafli & Buora 2014, 433.

design possibilities, increasing the importance of the artifacts brought to science in every study on oil lamps.

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