

**ÖLÜMÜN CAMDAN YANSIMASI:
ROMA İMPARATORLUK DÖNEMİ CAM URRÜNLER ÜZERİNE BİR
DEĞERLENDİRME**

**The Reflection of Mortality in Glass:
An Evaluation of Glass Urns from the Roman Imperial Period**

Doç. Dr. Ömür Dünya ÇAKMAKLI

Karabük Üniversitesi

E-posta: odcaktmakli@gmail.com

Orcid ID: 0000-0003-3660-9347

Abstract

The urns possess considerable significance in ancient Roman funerary practices and, more broadly, in Roman culture. They function not only as containers for preserving the ashes of the deceased but also as essential symbols in the commemoration of the dead. It is noteworthy, however, that glass, one of the most prevalent materials utilized during the Roman Imperial period, is rarely identified in urn production, whereas terracotta urns are ubiquitous. This scarcity complicates efforts to ascertain the demographic distinctions associated with these vessels, including factors such as gender, age, and social status, as well as variations in the geographical distribution of finds. Furthermore, most glass urns documented in contemporary literature originate from museum and private collections, where their provenance and chronological context remain ambiguous. Additionally, anthropological and archaeometric studies have not been conducted on these artifacts, leaving their origins largely indeterminate. This study aims to evaluate the role of these urns within the context of funerary practices by examining existing literature on Roman Imperial glass urns and addressing the aforementioned questions.

Keywords: Glass, Roman Imperial Period, Cinerary Urn, Necropolis, Cremation.

Öz

Antik Roma cenaze uygulamalarında ve daha da geniş anlamıyla Roma kültüründe önemli yeri olan urneler ölünün küllerinin saklandığı kaplar olmanın yanı sıra ölüyü anmada önemli bir semboldür. Ancak özellikle pişmiş toprak malzemeden sıklıkla karşımıza çıkan urnelerin, Roma İmparatorluk döneminin en yaygın kullanım gören malzemelerinden olan cam söz konusu olduğundaki nadirliği dikkate değerdir. Bu nadirlik, bu tip kapların kimler için kullanıldığı, kullanımda cinsiyet, yaş, sosyal statü gibi ayrımlar olup olmadığı, buluntuların coğrafi dağılımında bir farklılık gözlenip gözlemlenmediği gibi saptamaların yapılmasını zorlaştırmaktadır. Dahası modern literatüre geçmiş cam urnelerin pek çoğu kökeni ve dönemi saptanamayan, antropolojik ve arkeometrik incelemeleri yapılmamış müze ve özel koleksiyon buluntularıdır ve dolayısıyla buluntu kaynakları çoğunlukla bilinmemektedir. Bu

çalışma, mevcut literatürde karşımıza çıkan Roma İmparatorluk dönemi cam urnelerini odak noktaya alarak, bu urnelerin cenaze uygulamaları bağlamındaki konumunu, yukarıda bahsi geçen soruların cevapları kapsamında değerlendirmeyi amaçlamaktadır.

Anahtar kelimeler: Cam, Roma İmparatorluk Dönemi, Mezar Urnesi, Nekropol, Kremasyon.

Introduction:

The Romans, recognized as one of the most significant, glorious, and enduring powers of antiquity, profoundly shaped various aspects of their culture through the influence and integration of preceding cultures, as well as those they encountered and assimilated into their own. Funeral practices are unequivocally one of the principal cultural elements through which this interaction can be observed. They held intricate beliefs regarding death and the afterlife. They posited that death was not a terminus, but rather a transitional phase, marking an important juncture in the continuum of existence. They sought to honor the deceased with respect and to provide a farewell that was commensurate with their social status. Nevertheless, understanding how Roman society, as well as other pagan societies, approached death presents a significant challenge.

Each stage of funeral rituals, which constitute a significant aspect of social life, warrants careful examination. Consequently, while the frequency of these rituals fluctuates based on temporal factors and the status, gender, and age of the deceased, it is particularly beneficial to analyze the predominant forms of burial in Roman society, namely cremation and inhumation, in order to gain a deeper understanding of the culture. Beginning around 400 BC, cremation emerged as the predominant funerary practice, continuing in this capacity through the 1st century AD. In the 2nd century AD, the practice of inhumation became prevalent; however, cremation continued to be employed. During this period, the Romans utilized a variety of containers to preserve the cremated remains of the deceased. These containers, which included urns, chests, and altars, were crafted in diverse shapes and materials (Perna,2012: 787).

In the context of cremation, urns serve as a significant component of the burial process. They functioned both as containers for the ashes of the deceased and as symbols of remembrance. The production materials, techniques, and decorative elements of these vessels provide distinctive insights into the social status and identity of the deceased, as well as the broader societal context. At this juncture, it remains a topic of scholarly debate why glass urns, which serve as the primary focus of our study, were infrequently encountered during the Roman Imperial period—our main temporal framework—despite glass being one of the most prevalent materials utilized in vessel production during this era¹, particularly in contrast to the widespread use of terracotta urns.

¹ According to the results of archaeological excavations in the cities of Pompeii and Herculaneum, which were buried under volcanic ash by the eruption of Mount Vesuvius in 79

The rarity of these vessels necessitates an examination of their intended purpose, including potential distinctions related to gender, age, and social status, as well as an analysis of the geographical distribution of the findings. However, the majority of glass urns documented in contemporary literature are sourced from museums and private collections², with indeterminate origins and periods, and have not undergone rigorous anthropological or archaeometric analyses. Therefore, in assessing the intended use of the glass urns according to the aforementioned criteria, it is crucial that the artifacts, which do not present issues of provenance or dating, are evaluated collectively and with meticulous attention to detail.

Typological Characteristics and Usage Periods of Glass Urns

After its discovery in the 1st century BC, likely in the Middle East, the ability to shape glass using the blowing technique, coupled with the establishment of a rapid, cost-effective, and adaptable production method, led to the inevitable proliferation of glass artifacts. These artifacts quickly and extensively permeated various domains, including tableware, storage containers, portable vessels, lighting fixtures, cosmetic containers, laboratory equipment, and medical apparatus, ultimately surpassing many other materials in terms of widespread utilization. It is noteworthy that glass, which competes with terracotta in the realm of grave goods, ritual objects and daily wares, and even surpasses its terracotta counterparts in certain forms³, is so infrequently recovered in the context of cremation vessels.

The most illuminating sources regarding our subject are instances in which glass vessels, typically discovered in a broken, fragmented, and often incomplete state within the archaeological excavations of domestic or public areas, are found in their complete condition in necropolis excavations. Based on these findings, it appears that some of the glass urns were produced specifically for cremation, while others were repurposed for cremation after serving their primary function for a period of time. However, none of the types of glass vessels utilized as cremation containers constitute a novel form. Nevertheless, they can occasionally be distinguished from conventional glassware by specific decorative features and color attributes.

AD, glass vessels used as tableware were found to be two to three times more prevalent than thin-walled pottery vessels (Stern 1999,469).

² Numerous glass urns with provenance issues exist in museums and collections, rendering it impractical to provide an exhaustive list herein. Nonetheless, a selection of specific examples that have been documented in the literature is presented for the benefit of interested scholars: Toledo Museum of Art (Stern 1999, 448, fig.9; Klein and Lloyd, 2000,32); Glasmuseums Hentrich (Klein 1999, 5, Abb.9).

³ For instance, the unguentarium form, recognized for its relative ease of production and suitability for mass manufacturing in both terracotta and glass, was predominantly produced in glass rather than terracotta during the period from the 2nd to the 6th centuries AD (Robinson 1959, 15).

The substantial storage and transport vessels of the Roman world are recognized to have been repurposed as cremation urns⁴. These vessels were characterized by their wide necks and encompassed cylindrical (Figure 3), globular, square (Figure 4), or hexagonal body forms (Figure 5). They are specifically designed with lids to preserve the cremation ashes contained within. The shapes of both the lids and the vessels themselves exhibit variation. Nonetheless, the majority of the non-excavated examples are located in collections that lack accompanying lids.

There exist urns that lack handles, in addition to those that are equipped with handles. The most prevalent category of handle-less globular glass urns is the large jar form, as identified by Ising form 67, which represents an urn in its secondary use. This form is notably dominant among all urn types due to its significant functionality as a cremation vessel, attributable to its morphological characteristics⁵. Z. Buljević, referencing the globular glass urns uncovered in the Lora Cemetery at Split (Croatia), posits that these vessels, which first appeared during the Tiberian/Claudian era (1st cen. AD.) and were widely utilized in the western provinces of the Empire, progressively fell out of favor in funerary contexts during the 3rd century, a decline that coincided with the waning of the cremation cult (Buljević 2012: 197-198).



Figure 1. Roman Fresco, "Still Life with Glass Bowl of Fruit and Vases", 50-79 AD, House of Julia Felix (Pompeii), Museo Archeologico Nazionale di Napoli.

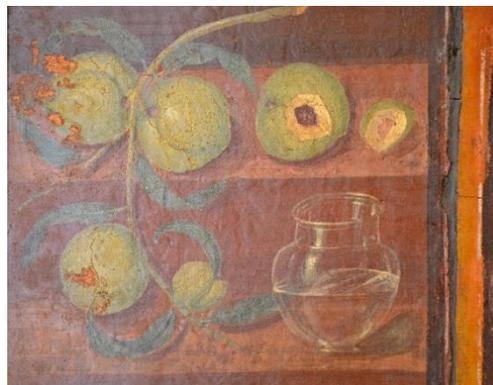


Figure 2. Roman Fresco, "Still Life with Fruit and Pitcher", 62-69 AD, House of the Deer (Herculaneum), Museo Archeologico Nazionale di Napoli.

These globular jars, characterized by their distinctive folded tubular collars, have been discovered in numerous contexts dating from the late 1st to the early 2nd century AD in Britain, central and northern France, and the Netherlands (Fleming 1997, 27). Similar types of jars are observable in the wall paintings of Pompeii (Figure 1) and Herculaneum (Figure 2) dating to the 1st century AD. Originally very plain and undecorated, this wide-mouthed, free-blown large jar form is well-documented;

⁴ Large storage vessels from Roman Britain, dating to the 1st and 2nd centuries AD, occasionally contain ashes, suggesting that they may have been repurposed for cremation (Price and Cottam 1998 :8).

⁵ For examples, see. Lora Cemetery, Split (Buljević 2012, 198, fig.1), Colchester, Essex (Allen 1998, 37, fig.26).

however, there are also examples of these vessels featuring ribs, such as the "zarte Rippenschale" (delicate ribbed bowl). These specimens constitute a more refined category and are infrequently observed. This group, which may have been intended for a more elite class, also appears in the form of cremation urns⁶.

I. Lazar, who conducted research on the glass artifacts found in Budva (Montenegro), a Hellenistic and Roman necropolis, also observed the presence of glass urns within the necropolis, which contained glass objects in nearly every grave. These urns are classified as storage vessels, as identified by Isings 63 and 67, and include cylindrical bottles with wider, open mouths, as well as square and cylindrical jars (Lazar, 2021: 256). In the study conducted by I. Lazar in the Budva Necropolis, it is observed that large transport glass vessels may serve as glass urns in individual burials. Consequently, for the purpose of containing ashes and grave goods in individual interments, not only globular glass urns, with or without handles, are utilized, but also larger cylindrical bottles with wide necks and square or cylindrical jars are frequently employed as urns (Figure 8). This practice reflects similar trends observed in family grave plots. (Lazar, 2021: 256). Another glass urn, dated to the 1st century AD, was uncovered during excavations at the necropolis of Ravenna in northeastern Italy (Montevecchi and Leoni 1999, 23). This artifact exemplifies the cremation practices associated with this particular type of glass vessel.

As previously indicated, the examined examples of cremation urns with wide cylindrical bodies demonstrate significant typological diversity in terms of their handles. For example, jar forms characterized by "M"-shaped handles and a bulbous or globular body represent one of the most prevalent glass forms observed in the context of urns. C. Isings asserts that this type represented the most common form of handled jar from its inception in the mid-1st century A.D. through the 2nd century (Isings, 1957: 81-82, Form 63). D. Foy references Isings Form 63 regarding the two glass urns featuring "M"-shaped handles, one originating from Cimiez (Nice, France) and the other housed in the Cimiez Museum. She underscores, however, that this category of Mediterranean vessel may diverge from the typological characteristics outlined by Isings for the northern centers (Foy 2014, 39-40, Fig.4). C. Lightfoot indicates that, similar to the two large "M"-handled glass urns in the collection of the National Museum of Scotland—one originating from Libarna and the other from Puteoli—the glass urn of the same design housed in the Hunterian Museum is likely to have originated in Italy (Lightfoot 2007, 107-108, cat.247, 249).

These handles may be designed as either single or double configurations. Most examples of bottles serving an urn function are characterized by the presence of double handles; however, instances of single-handled variants also exist. Glass 'prismatic bottles,' which were widely utilized as storage and transportation vessels in the Roman world and also played a role in cremation practices, have been documented in both single-handled and double-handled forms. Based on our analysis, it appears that the

⁶ For information regarding a glass urn from Tait Street see. Hobson 2015, 15, fig.1.9. and three cremation jars featuring ribs, including one with a lid, in the collections of German museums, see. Klein 1999, 5, Abb.10.

majority of prismatic urn examples found in the literature are characterized by a single handle.

Evidence indicates that prismatic glass vessels were in use at least until the first quarter of the 5th century AD, with their existence documented from AD 79 onwards based on finds at Pompeii and Herculaneum (Scatozza-Höricht, 1991 76-85). Archaeological evidence has documented that prismatic glass vessels, which can be characterized as square (Figure 4), rectangular, hexagonal (Figure 5), octagonal, or even decagonal in shape, functioned as urns in secondary use during the period when cremation burial was prevalent, similar to many storage vessels. Despite the narrow neck of these vessels rendering them less practical for cremation purposes, there are documented instances that illustrate the utilization of this vessel type for such practices.



Figure 3. Cylindrical Vase containing the cremated bones of the deceased. 1st cen. AD, Caerleon (Wales).



Figure 4. Prismatical Vase containing the cremated bones of the deceased, 1st/2nd cen. AD, King's Mead (Cirencester).



Figure 5. Hexagonal glass cinerary urn containing the cremated bones of the deceased, AD 250-350. Girton's Grounds (Cambridge)

Examples of the utilization of prismatic vessels with urn functions can be provided: At the site of Vannes- Darioritum (Morbihan) in western Gaul, France, a significant necropolis has been identified, encompassing both cremation and inhumation burials. A substantial number of glass urns, dating from the 1st to the 3rd centuries AD, have been discovered at this location, indicating their use within this funerary context. All of the vase types are predominantly characteristic of the 1st and 2nd centuries AD. Within the typological table presented in the study, it is evident that single-handled prismatic glass vessels utilized as urns, handleless examples of prismatic vessels, and cylindrical or ovoidale glass urns, have been documented (Figure 6) (<https://journals.openedition.org/rao/9364>). A. Tolga Tek, who has conducted research on Arykanda glass, notes that prismatic glass urns have been documented in western centers such as Meuilley and Nida-Heddernheim, indicating that this type of urns is more prevalent in these western regions⁷. Moreover, A. Tolga Tek posits that a prismatic vessel from Arykanda may have served as an urn, based on the other earthenware urns discovered in conjunction with it. He further asserts that this vessel, along with an urn from Germanicapolis (Çankırı), represents the only known prismatic glass urns in Anatolia (Tek 2001, 82). Cylindrical glass bottles, akin to prismatic glass vessels, are similarly recognized for their function as urns. G. D. Weinberg and E. M. Stern further report that the one handled cylindrical bottles were frequently employed as urns for cremation in the western regions of the empire (Weinberg and Stern 2009, 115).



Figure 6. Chronological Typology of Glass Urns from the Roman Cemetery of Vannes Darioritum (Morbihan)



Figure 7. (a) Urn in niche 8. (b) Lead case containing the urn. (c) Reddish liquid contained in the urn, Carmona (Spain)

⁷ The instances can be expanded upon. Two prismatic bottles from Colchester, Essex—one square and one hexagonal—were utilized as cremation urns and were discovered alongside the ashes and bones of the deceased. These artifacts are preserved in the Castle collection (Allen 1998, fig.23-24).

In addition to the conventional glass urn forms previously mentioned, there is also evidence for the use of the classical “aryballos,” a spherical or round-shaped vessel traditionally utilized for storing oil or perfume, as an urn (Figure 9). An aryballos devoid of ashes, dated to the second half of the 1st century AD, was uncovered during the excavations at the Zabda Tomb in Palmyra. This artifact has been interpreted as a cremation urn, drawing parallels to an identical glass aryballos discovered in the tomb of 'Aqraban, also situated in Palmyra, which contained cremation ashes and bones (Gawlikowska 2015, 781).

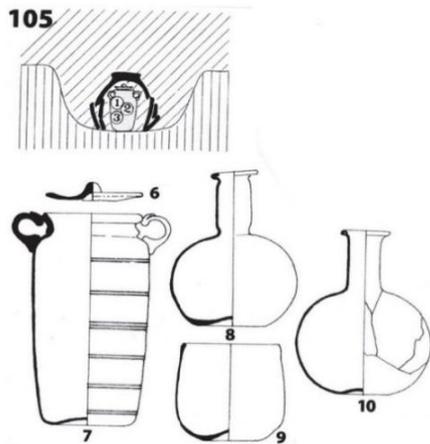


Figure 8. Grave 105 of a dolium type with high cylindrical glass urn (Budva Cemetery)

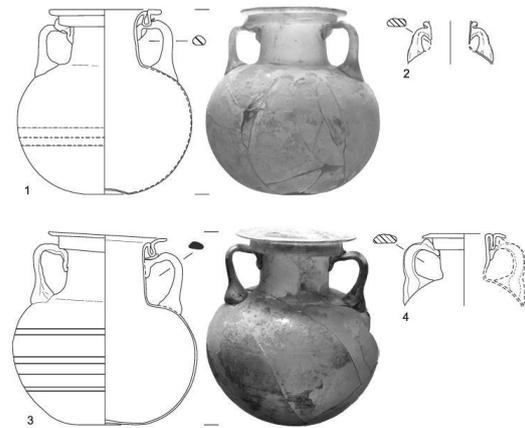


Figure 9. Big aryballos from the Zabda Tomb (2nd half of the 1st cen. AD.) and Aryballos from the Aqraban Tomb (Palmyra)

Some of the recovered glass urns were housed within more durable containers or cases, likely intended to protect the glass. These containers may have been constructed from various materials. Carmona, located in Western Andalusia, was governed by Roman Empire during the 1st and 2nd centuries AD. It contains the largest and best-preserved necropolis on the Iberian Peninsula. Notably, two glass urns were uncovered in a Roman mausoleum during an excavation conducted in 2019. The glass urns situated within two distinct niches are enclosed in lead cases (Cosano. et.al.2024, 2-3). A glass cinerary urn, shaped like a large jar without a handle, originating from Mersea Island (Essex), was interred within a lead box featuring a wooden lid inside a tomb located beneath a barrow (Figure 11) (Allen 1998, 38, fig.27). Consider the example of Budva; typically, these glass urns are either covered or placed beneath a half amphora or another large lower portion of a ceramic vessel for protection. (Lazar,2021: 256). The Ravenna glass urn is also housed within an amphora (Montevecchi and Leoni 1999, 23). An another instance from Colchester (Essex), a glass cinerary urn was discovered interred within a cist constructed of tiles (Figure 10) (Allen 1998, 37, fig.26).



Figure 10. Glass cinerary urn buried in a cist of tiles from Colchester (Essex).



Figure 11. Glass cinerary urn buried in a lead box with a wooden lid inside a tomb under a barrow. Mersea Island (Essex).

Utilization of Glass Urns in Relation to Gender, Age Demographics, and Socioeconomic Status

The demographic characteristics of the age and gender groups represented by the glass urns can serve as a significant factor in elucidating the cultural context surrounding the practice of utilizing glass urns. The issue, however, is that there have been very few anthropological analyses of the glass urns containing cremated remains. Therefore, the existing analyses lack the numerical density necessary to determine whether these urns were predominantly associated with children or adults.

Anthropological analyses were conducted on three of the six glass urns containing cremated remains from the collection of the National Museum of Denmark. The findings of these analyses indicated that the glass urns, originating from various regions of Italy and dated between 100 AD and 200 AD, contained the remains of an adolescent male aged 16.5 years, an adult male over 50 years of age, and an adult female over 40 years of age (Becker 1997, 51-62). The cremation contents of the Carmo urns were subjected to analysis, revealing that they originated from an adult male and an adult female (Cosano. et.al.2024, 2-3).

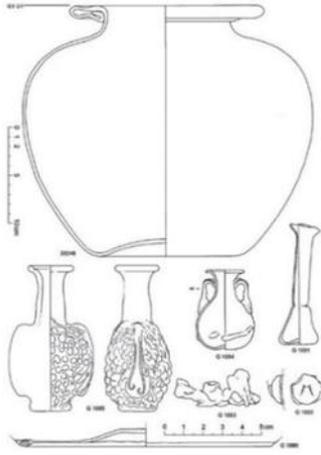
In Montblanc, Eyren, and Marans, located in the southern region of Gallia, cremation burials of children aged between 3 and 10 years have been discovered in glass urns dating to the 2nd century AD. These burials are documented to have been accompanied by coins and a variety of grave goods (Suárez and Blázquez-Cerrato 2019, 94). Although it has not been established that the purple-colored glass vessel discovered in the Northern Necropolis of Aizanoi (Kütahya) serves an urn function, it is considered to be an urn based on its morphological characteristics. This vessel was found within a rudimentary earthen grave identified as Grave 17, which contained a

cremation burial⁸. Anthropological studies revealed that this grave belonged to a child (Çakmaklı 2025, 11-12, fig.7.1). The Arykanda prismatic glass vessel was discovered in conjunction with earthenware urns that contained the cremated remains of children. Consequently, it has been posited that these artifacts may have served a similar purpose (Tek 2001, 82). In the necropolis of "Les Torts" (France), the cremation remains of a child aged 3 to 6 years were documented within glass urns dating to the late 3rd to early 4th century (Suárez and Blázquez-Cerrato 2019, 94).

Although quantitative data regarding preferences for glass and terracotta urns in cremation is limited, several published findings enable us to delineate a general outline of the socioeconomic status of individuals who favored glass urns. In this context, it is essential to prioritize the examination of grave goods. Most of the glass urns documented in the literature, along with their associated finds, contain artifacts that are prevalent across various burial practices and cannot be distinctly attributed to a specific social stratum⁹. However, a limited number of these urns present a significant area for further evaluation. In the Roman necropolis of La Robine in Narbonne (France), a gold ring was discovered beneath the cremation remains of the deceased, which were contained within a glass urn (<https://www.inrap.fr/les-resultats-de-l-exceptionnelle-fouille-de-la-necropole-du-haut-empire-de-la-17968>) Another example is a glass urn from the collection of the National Museum of Denmark, which is proposed to be an artifact from Southern Italy. Minuscule fragments of woven gold textiles were discovered alongside the cremation remains of the deceased within a glass urn, which dates from the mid-1st century BC to the mid-2nd century AD (Brøns 2022, 130-131). In Montblanc (France), pottery and glass artifacts, footwear nails, and a gold ring were recovered from the glass cremation urn of a child aged 4 to 7 years ((Suárez and Blázquez-Cerrato 2019, 111, no.33). In grave 1 at Lora Cemetery in Split, a globular glass urn contained several significant artifacts, including amber rings, bone pins, a mirror, and seven distinct glass items (Figure 12). Notably, one of these items is a grape bunch-shaped balsamarium, which, along with the other luxurious grave goods, warrants further scholarly interest (Buljević 2012, 197-198, fig.1).

⁸ The glass vessel was discovered within the grave and was fragmented into 51 pieces. The remains of the individual associated with the cremation burial were documented alongside these fragments. Following restoration efforts, the vessel's form is sufficiently reconstructed to be comprehensible; however, certain fragments remain absent (Çakmaklı 2025, 11-12).

⁹ Glass vessels utilized as burial gifts are prevalent in the Budva necropolis. The unguentarium contained within a cylindrical glass urn, as well as the glass beaker, are characteristic of the Early Roman Imperial period (Lazar 2021, 255-268.); Although the glass urns in the collection of the National Museum of Denmark were discovered alongside opulent burial gifts, they are representative of the ceramic and glass vessels characteristic of the period, and are emblematic of burial gifts more broadly, with the exception of the aforementioned gold ornament (Becker 1997).



Figür 12. Grave 1, Urn 1 from Lora Cemetery (Split)



Figür 13. Glass cinerary urn containing the cremated bones and the ashes of the deceased, Narbonne (France)



Figür 14. Wine-coloured glass cinerary urn with opaque white theatrical mask. Said to be from Santelpido (Campania)

In the utilization of glass urns, it is occasionally observed that they extend beyond conventional color palettes, allowing for the incorporation of rare hues. These rare colors must, of course, serve a distinct social stratum. The aforementioned Aizanoi example serves as a pertinent illustration of this phenomenon. The purple hue of the Aizanoi vessel not only falls outside the typical color scheme of urns but is also atypical within the Aizanoi glass repertoire. This rarity enables us to conclude that the Aizanoi vase is not of local or regional origin, but rather an imported artifact. A similar urn in purple, characterized by a more sophisticated design and featuring two plastic mask decorations appliquéd to its ovoid body, positioned beneath each handle, is part of the collection at the British Museum (Figure 14) (Tait 2004, 68, fig.83-84.). S. Perna, a scholar specializing in Roman cinerary urns constructed from colored stone, observes that the importation of colored marbles to Rome, which began in the 1st century BC, resulted in a notable increase in the prevalence of funerary urns made from Egyptian alabaster, purple porphyry, and occasionally granite within Roman burial practices (Perna 2012, 787). In this context, the Aizanoi and British Museum vessels may be regarded as an imitation of precious stones crafted in glass urns.

Geographical Distribution of Glass Urns

The distribution of glass urns utilized in cremation is primarily concentrated in the western regions of the Empire, as demonstrated by the majority of examples presented thus far in this study. Within these regions, the centers located in Italy are particularly prominent. However, At this juncture, it is important to note that the forms utilized as urns are essentially repurposed items; in their original function, the primary production centers concurrently serve as the primary distribution centers. It is unsurprising that the regions in which they were utilized as urns predominantly correspond to the areas where those vessel forms were produced.

Certain forms were produced in various regions of the empire while others were not. Conversely, even within centers that generated identical forms, variations in the formality of these forms may have existed. For instance, a collection of large lidded jars utilized as cinerary urns for the interment of ashes was extensively manufactured across Italy, Illyria, North Africa, and central and western Europe. With few exceptions, each region cultivated its own distinctive stylistic variations of these urns (Klein and Lloyd, 2000,32). This is similarly applicable to bulbous jars featuring "M"-shaped handles. Numerous examples of this type of jug have been excavated from tombs located in Italy, Gaul, Britain and North Africa (Tait 2004,81). Centers where the utilization of certain basic glass vessel forms in everyday life is already prevalent are also locations where these specific vessel forms are similarly widespread as urns¹⁰.

The example of Narbonne is noteworthy in this context. The city has been documented not only as a production center for prismatic glass vessels (Cottam 2019, 43) but also as a site where globular-bodied, wide, open-mouthed, handled vases were produced during the same period as the prismatic vessels and utilized as urns, similar to them (Figure 13).

Sporadic instances can be observed in the eastern provinces. Palmyra in Syria (Gawlikowska 2015, 781), Tripoli in Libya (Tait 2004, 81), Alexandria in Egypt¹¹, Germanicapolis / Gangra (Çankırı)¹² (Lightfoot 2003, 342; Tek 2001,82), and potentially Aizanoi (Çakmaklı 2025, 11-12) and Arykanda (Tek 2001, 82) in Anatolia as well as Athens (Weinberg and Stern 2009, 78, no. 120) and Corinth (Wiseman 1969, p. 87, pl. 32.1), in Greece, are acknowledged as eastern centers in contemporary archaeological literature due to their significant discoveries of glass urns.

Concluding Remarks

As demonstrated by the aforementioned examples, the preponderance of glass urn usage is evident in the western centers of the Empire. In contrast, the instances recorded in the eastern centers are significantly fewer than those in the west. During a period when cremation was one of the predominant methods of burial, the introduction of the blowing technique in the glass industry facilitated the widespread availability of glass throughout the empire, particularly for domestic applications. In the eastern provinces, the practice of burial utilizing urns also incorporates the custom of placing glass grave goods within the grave. This cultural distinction highlights a notable east-west variation in the utilization of glass urns, which warrants further

¹⁰ In her study, C. Isings highlights the western centers of the Empire, including Pompeii, Este, Planig, Vaison, Rasteau, Cologne, and Nijmegen, in relation to the distribution of vessels with "M"-shaped handles, specifically through the identification of subtypes of these vessels (Isings 1957, 81-83). Contextual findings from archaeological excavations indicate that the use of glass urns was already widespread in these western centers.

¹¹ The provenance of this vessel, currently housed in the Metropolitan Museum, is primarily open to interpretation (Lightfoot 2003, 342).

¹² C. Lightfoot asserts that the urn from Garga is classified as one of the "M"-shaped urns featuring handles, suggesting that this particular type of urn likely has its origins in Italy (Lightfoot 2007, 107).

examination. However, the principal factor contributing to this disparity is likely the variation in burial practices influenced by differing belief systems. In the eastern regions of the empire, burial without cremation was more prevalent, whereas cremation was favored in the west. During the 2nd and 3rd centuries AD, the burial tradition began to disseminate from east to west, leading the Romans to construct large tombs and monuments, influenced by Hellenic culture. By the 3rd century AD, inhumation had become an accepted universal practice (Koyuncu 2019, 233-253).

Conversely, the fluctuations in the use of glass urns, including their emergence, intensification, and decline, are not unexpected. With the advent of the free-blowing technique, numerous jars, bottles, and jug forms that were commonly used in daily life have been identified, exhibiting characteristics that can be adapted for cremation burials, thereby serving as examples of glass urns. When assessing the utilization of these forms as urns, it is essential to investigate the periods of their primary application. In this context, we encounter a timeframe commencing in the 1st century BC and extending until the 3rd century AD, with sporadic examples dated to the 4th century AD¹³. The majority of the artifacts have been dated to the 1st and 2nd centuries AD. This chronology aligns with the period during which cremation practices were prevalent. The proliferation of Christianity likely led to a significant decrease in the practice of cremation burials, irrespective of the materials involved. This phenomenon was exacerbated by the transference of the eastern tradition of inhumation-oriented burial to the western context, which, as previously noted, intensified and became predominant in the 2nd and 3rd century AD. Additionally, the economic crisis that began to emerge in Italy at the end of the 2nd century should be considered a significant factor, as Italy is regarded as the primary center for the production of glass urns. Since that period, there has been a significant decline in luxury vessels (Stern 1999, 470). Based on the available data, if we posit that glass urns were primarily marketed to the socio-economically upper class, it becomes plausible to understand why this demographic, whose prevalence is already a subject of scholarly debate, gradually withdrew from the market.

Unfortunately, it was not possible to infer usage intensity based on age (adult or child) or gender in the examples involving the use of glass urns. This limitation is primarily attributed to insufficient anthropological data. The existing examples are too diverse to permit generalization. Consequently, although we cannot identify a predominant gender or age, the identification of glass urns associated with children facilitates some evaluative insights. It is important to note that in many ancient societies, the cremation of children was not commonly practiced, particularly if the child had died during childbirth or had not yet developed teeth;¹⁴ consequently, cremation was not a

¹³ The glass urn from the necropolis of Les Torts in France, along with its contents, is dated to the late 3rd to early 4th century. This artifact may serve as an example of late-period artifacts (Suárez and Blázquez-Cerrato 2019, 94).

¹⁴ It is well-documented that in ancient times, due to the scarcity of medical resources, the majority of infants either died at birth or within weeks of delivery (Özer 2019, 375). In ancient Rome, childbirth represented a perilous occurrence for both mother and child, characterized by elevated rates of infant and maternal mortality. Traditional Roman medicine predominantly

prevalent practice in these contexts (Özer 2019, 375-393). It may also be posited that the societies associated with these graves held a distinct perspective on child mortality in instances where cremation burial was practiced, irrespective of whether the graves were marked with terracotta or glass. The three cremated child burials discovered in the Northern Necropolis of Aizanoi (Özer 2019, 377) are significant for illuminating the sensitivity of Aizanoi society towards child mortality. Among these cremations, one burial is particularly noteworthy for our discussion, especially given the prevailing understanding that it was interred in a glass urn notable for its purple hue, a color traditionally associated with high status. As previously noted, a glass child's urn from Montblanc (France) is particularly significant due to the gold ring among its accompanying artifacts (Suárez and Blázquez-Cerrato 2019, 111, no.33), suggesting the high social status of the deceased child. Based on the examples presented in the study, it may be inferred that the practice of using glass urns for children is indicative of a higher socioeconomic status, suggesting that the child in question did not originate from the lower social strata.

The colors generally correspond with the predominant hues associated with the primary function of vessels whose secondary function is that of urns. Regardless of whether the vessels are cylindrical, ovoidal, or prismatic in shape, shades of blue and green predominantly prevail. There are very few exceptions to this generalization, such as cobalt blue or purple. These exceptions are specifically related to individuals belonging to a distinctly high socio-economic strata and do not provide appropriate examples for contextualizing the use of glass urns in relation to social status¹⁵.

In summary, glass urns, which are found in conjunction with cremation practices, although not ubiquitous, are regarded as a secondary application of certain prevalent forms from the period. The predominant forms include wide-open jars, both with and without handles, with "M" shaped handles being particularly common among the handled examples.

relied on folklore and religious practices; however, the emergence of Hippocratic medicine facilitated substantial advancements in the care of women during pregnancy and parturition (Todman 2007,82).

¹⁵ A lidded glass vase in the collection of the Metropolitan Museum of Art was first discovered near Taranto in 1910. Upon its acquisition, the vase was dated to the Roman period and described as a glass urn. The vase and lid constitute a cohesive ensemble, crafted from translucent purple glass adorned with applied purple opaque marvered glass featuring white trails. Given these characteristics, if it could be accurately dated to the relevant period, it might be regarded as the most expensive and luxurious urn from the Roman era among all glass urns. However, contemporary studies, along with archaeological and archaeometric investigations, have established that it was produced in the 19th century, likely by Venetian artisans. Nevertheless, it remains indeterminate whether the urn serves as an imitation of an ancient artifact, is a product inspired by an ancient model, or has been intentionally aged to simulate the appearance of an ancient object (Lightfoot, Pilosi and Wypyski 2010, 240-243).

While it is challenging to ascertain a precise age or gender distribution regarding the utilization of these vessels, the available instances suggest that glass urns were employed by individuals across all age groups and genders. Nevertheless, it is reasonable to assert that the individuals utilizing these urns were likely part of the upper socio-economic stratum, as indicated by the majority of examples from archaeological excavations.

Glass urns are particularly prevalent in the western centers of the Empire, especially in Italy. Although Italy serves as the primary production center, it is highly probable that additional production centers existed within the western regions. In this context, directing archaeological research toward glass production and identifying the principal manufacturing centers for glass urns—specifically those utilized for cremation—through archaeometric analyses will enhance our understanding of the origins of glass urns. Conversely, the use of glass urns in the eastern centers remains relatively rare. This numerical scarcity in the eastern centers is likely attributable to variations in the burial traditions of the region. However, this disparity, which correlates with the differing find centers, warrants further investigation.

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