

# HELLENISTIC AND BYZANTINE WEIGHTS IN THE TROY MUSEUM TROYA MÜZESİ'NDEKİ HELLENİSTİK VE BİZANS AĞIRLIKLARI

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## **Abstract**

This article examines 19 (+2) lead and bronze commercial and coin weights dating to the Hellenistic and Byzantine periods, housed in the collection of the Troy Museum in Çanakkale. Among the commercial weights attributed to the poleis are of Abydus (no. 1), Alexandria (no. 2), Assos (nos. 3-5), Lampsacus (no. 6) and Lysimachia (nos. 7-10). Additionally, there is an unattributed tetarton (no. 11) without any ethnic or symbol but a unit mark. In the collection, alongside commercial weights, there are one tritateron (no. 12), three staters (nos. 13-15), and one dekadrakhmon (no. 16), all dating back to the Hellenistic period. Furthermore, three coin weights from the early Byzantine period are included in the catalog: one 1-uncia (no. 17), one 1-nomisma (no. 18), and one semissis (no. 19). At the end of the article, two Lysimachian weights, not present in the museum collection but in the unpublished *Sammlung Calvert* kept in the museum, have also been included (nos. 20-21).

**Keywords:** *Lysimachia, Alexandria Troas, Assos, Abydus, Akakios*

## **Özet**

Bu makalede Çanakkale'deki Troya Müzesi koleksiyonunda kayıtlı Hellenistik ve Bizans dönemlerine tarihlenen 19 (+2) adet kurşun ve bronz ticari ve sikke ağırlıkları ele alınmaktadır. Ticari ağırlıkların ait olduğu kent devletleri şunlardır: Abydos (no. 1), Aleksandreia (no. 2), Assos (no. 3-5), Lampsakos (6) ve Lysimakheia (no. 7-10). Üzerinde herhangi bir ethnicon veya sembol bulunmayan ama birim işareti yer alan bir adet tetarton'un (no. 11) hangi kentin üretimi olduğu belli değildir. Koleksiyonda, ticari ağırlıkların yanı sıra bir adet tritateron (no. 12), üç adet stater (no. 13-15) ve bir adet de dekadrakhmon (no. 16) bulunmaktadır. Bu ağırlıkların tamamı Hellenistik Dönem'e tarihlenmektedir. Bunların yanı sıra, katalogta, Erken Bizans Dönemi'ne tarihlenen üç adet sikke ağırlığı yer almaktadır. Bunlar, bir adet 1-uncia (no. 17), bir adet 1-nomisma (no. 18) ve bir adet de semissis (no. 19) birimlerinde ağırlıklardır. Makalenin sonuna, müze koleksiyonunda olmayan ama yayımlanmamış *Sammlung Calvert*'te yer alan iki Lysimakheia ağırlığı da eklenmiştir (no. 20-21).

**Anahtar Kelimeler:** *Lysimakheia, Aleksandreia, Assos, Abydos, Akakios*

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## INTRODUCTION

The weights discussed in this article provide valuable data in terms of provenance and/or attribution, as they are located in the Troy Museum collection, serving as a museum for the Troad<sup>1</sup>. The region hosts about 25 poleis that minted coins while having political or urban status (or both). However, some lost their independence, declined, and ceased coin minting before the Hellenistic Period. Nevertheless, commercial activities persisted in many of these cities. Indeed, commercial and coin weights used in markets entered museum collections through excavations, purchases, or confiscations. Some of them bear the city-states' coats of arms (parasema) or ethnics, facilitating identification and attribution.

Not only in terms of the museum collection but also when considered more broadly, poleis in the Troad bearing parasema or symbols on their weights include: Abydos (eagle), Alexandria (horse or kithara), Assos (griffin), Dardanos (cock), Gargara (bull), Gentinos (bee), Ilion (Athena's head, pig's head, helmet), Skepsis (pine tree) and Tenedos which is an island off Troas (double axe)<sup>2</sup>. In the museum collection, weights from three of these cities (Abydos, Alexandria, and Assos) are present, along with a weight from Lampsacus in Mysia and

Lysimachia in Thracian Chersonesus. Although these civic weights are generally dated to the Hellenistic period, some belong to the end of the Hellenistic period. Byzantine weights, on the other hand, are limited to only three and are dated to the 6th-7th centuries AD.

Below, the identification, description, and dating of the scale weights in the museum collection, particularly for those from the Hellenistic period, are presented in order of city first by alphabetically, then from the highest unit to the lowest (see Table). Following that, there are weights for which identification and dating are possible but cannot be attributed to any specific city. These are followed by the identification, description, and dating of three Byzantine coin weights. Some of the weights in the museum collection had been published before (Tekin, 2014); here, in this article, the weights that have not been published yet are discussed.

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<sup>1</sup> I would like to extend my gratitude to Museum Director Rıdvan Gölçük for granting permission for the study and publication of the weights, to Kemal Çibuk for helping me during my research, and to Fecri Polat for the editing process.

<sup>2</sup> For weights of the cities in Asia Minor and their civic badges (parasema), see Tekin, 2016: 9-10 (Table 1).

| CITY       | PARASEMON    | METAL & MASS | SIZE        | UNIT               | FIGURE NO |
|------------|--------------|--------------|-------------|--------------------|-----------|
| Abydos     | Eagle        | Pb 211.1 g   | 44x44x8 mm  | Hemimnaion.        | 1         |
| Alexandria | Horse        | Pb 56.7 g    | 32x31x4 mm  | Ogdoon             | 2         |
| Assos      | Griffin      | Pb 761.2 g   | 65x66x20 mm | Dimnaion?          | 3         |
| Assos      | Griffin      | Pb 288.1 g   | 50x49x13 mm | Hemimnaion or Mna. | 4         |
| Assos      | Griffin      | Pb 65.7 g    | 32x35x6 mm  | Ogdoon?            | 5         |
| Lampsacus  | Winged horse | Pb 1415 g    | 81x79x26 mm | Trimnaion          | 6         |
| Lysimachia | Lion         | Pb 489.8 g   | 96x92x14 mm | Mna                | 7         |
| Lysimachia | Lion         | Pb 248.9 g   | 45x44x13 mm | Hemimnaion         | 8         |
| Lysimachia | Lion         | Pb 143.4 g   | 61x56x6 mm  | Tetarton           | 9         |
| Lysimachia | Lion         | Pb 130.3 g   | 38x45x7 mm  | Tetarton           | 10        |

**Table:** Cities with their parasema and units represented in the collection of Troy Museum

### 1) Abydos. Hemimnaion. Inv. no. 955 (Figure 1)

Abydos (Aydos-Nara Burnu) is located on a promontory projecting into the Hellespontos. It was founded as a colony by the Milesians towards the end of the 7<sup>th</sup> century BC. As its name is mentioned in the *Iliad*, it is clearly one of the oldest settlements in the region. Its name appears in the Athenian tribute lists paying four talents. The well-known story of Hero and Leandros took place in the region of Abydos and Sestos. As understood from its coins and weights, the city's parasemon was the eagle; extant weights of Abydos are of lead and usually rectangular or square in shape (Tekin, 2016: 87-88).

The lead weight here is in a square form with slightly rounded corners, weighing 211.1 g and measuring 44x44x8 mm<sup>3</sup>. It was donated to the museum in 1936. On the top, there is a depiction of a standing eagle facing left, and on the top right corner, there is the inscription ABY

(δημων); all in relief. The eagle is a frequently depicted emblem on the coins of Abydos and serves as the civic badge (parasemon) of the city. The bottom is plain, but there is a minor break in the bottom left corner. Although it does not bear any unit mark on it, it seems that its unit is hemimnaion, and its mass corresponds to a 422.2 g mna (211.1 g x 2) in Attic standard. It may be dated to the 4th-early 3rd century BC.

### 2) Alexandria. Ogdoon. Inv. no. 15638 (Figure 2)

Alexandria (present-day Dalyan village) is strategically located at a point where the Sea of Marmara connects the Aegean Sea to the Black Sea. Before Alexandria, there was a pre-existing settlement called Sigia in this area. In the late fourth century BC, Antigonos I Monophthalmus, one of Alexander the Great's successors, established a new city named Antigoneia here through synoecism, uniting the populations of neighboring cities symbolically under his name. The city also

<sup>3</sup> This weight is also described with a photo in unpublished *Katalog der Sammlung Calvert*, "Tavolia", no. 25.

became a member of the Ilion League, founded by Antigonos. In 301 BC, Ly-simachus, another successor of Alexander the Great, changed the city's name to Alexandria in honor of Alexander's memory, following his victory over the Seleucid Kingdom (Cook, 1973: 198-204; Cohen, 1995: 145-48; Ricl, 1997; Meadows, 2004: 47-49).

The surviving weights from Alexandria are primarily made of lead, with a smaller portion made of bronze. The predominant form is square across various units, ranging from large to small, with a few featuring suspension holes. The horse, a common motif on most Alexandrian weights, is generally depicted facing right, although in several instances, it faces left. The horse serves as a parase-mon of Alexandria (Tekin, 2023).

The lead weight introduced here is in a square form with beveled edges and rounded corners, weighing 56.7 g and measuring 32x31x4 mm. It was confiscated in 2009. There is a hole in the upper left corner. The back side is flat and plain. On the top, there is a raised depiction of a grazing horse facing left, with the first three letters of the ethnic name ΑΛΕ(ξανδρέων) just above the horse. There is a large corn grain between the horse's legs, and its size suggests the possibility of representing the first letter O of ogdoon. Regardless, we can suggest

that its weight may indicate ogdoon (56.7 x 8 = 453.6 g mna value).

On Hellenistic and colonial period coins of Alexandria, there is a depiction of a horse facing left or right, grazing with its head lowered<sup>4</sup>. In fact, the depiction of a horse on the coins of Alexandria is not accidental. The horse imagery on the city's coins likely indicates the importance of horse breeding in the city and its surroundings. Horse breeding in and around Mount Ida and the royal herds of horses in the region are mentioned in literary sources (Ellis-Evans, 2019: 109-153). The significance of horses in the Troas region is also known from ancient sources or mythological stories. According to Homer (*Iliad*, XX.219-230), King Erichthonius, who ruled Troas, raised thousands of horses in his pastures. In another myth (*Iliad*, V.265-66), Zeus abducted King Tros's son Ganymede and took him to Mount Olympus to serve him drinks, leaving the king with an immortal pair of horses in return. Troas takes its name from King Tros, Erichthonius's son and Ganymede's father. Similar to the coins, the balance weights of Alexandria also feature a depiction of a grazing horse along with the abbreviated ethnic name of the city, ΑΛΕ, and various variations (Tekin, 2016: 93-97; Killen, 2017: 215-217; Pondera, "Alexandria Troas"). The grazing horse depiction seems to be the civic emblem (parase-mon) of

<sup>4</sup> Bellinger, 1961: A28-A46; A53-A72; A104-A124; A171; A201-A202; A224-A225; A236; A243; A251; A261; A283; A300; A315; A322; A324; A326; A339-A341; A349-A351; A355-

A356; A363-A367; A377-A379; A396; A398; A405-A406; A421-A422; A436-A438; A451-A453-A454; A462-A463; A486-A489.

Alexandria, serving as a distinctive element in identifying the weights of Alexandria. The depiction of the grazing horse is thought to have been copied from Neandria, another city in Troas (Weiss, 2008: 721). The weight may be dated to the 3rd-2nd century BC.

### 3) Assos. Dimnaion? Inv. no. 8163 (Figure 3)

Assos, located to the south of Troas, was founded by Aeolians (probably Methymnaeans) from the island of Lesbos and was one of the poleis that paid tribute to the Delian League (Mitchell, 2004; Arslan, 2024). The depiction of a griffin, commonly seen on its coins, is also present in its weights. Therefore, it can be confidently stated that the griffin serves as the city's parasemon. The griffin is sometimes depicted facing left and other times facing right on both coins and weights<sup>5</sup>. However, it does not exhibit craftsmanship of the same quality (elaborately) as seen in the coins of the city; it is more stylized.

The lead weight in the collection is square in form, with slightly rounded corners, weighing 761.2 g, and measuring 65x66x20 mm. It was found during the archaeological excavation at Assos from C. IX. Grave 1 in 1995. On the top, a relief of a griffin sitting to the right is

depicted; there are faint [M]Δ letters below. There is a high probability that the distorted letter on the right is a delta, and if so, Δ, the first letter of the words δις / δύο (double or two), indicating the unit as dimnaion (2-mna), is likely. The letters should have been engraved in the form of ΔM, but a mistake may have been made, and they were written in the reverse form of MΔ<sup>6</sup>. Assos used the Chios standard (c. 3.80 g) in silver coins during the 4th-3rd centuries BC as many poleis in the western Asia Minor<sup>7</sup>. The mna value of this weight is 380.6 g, and it may have been produced in the Chian standard of 100 or 105<sup>8</sup>. In this case, it can be dated to the 3rd-2nd centuries BC. However, considering Assos also had survived weights in the Attic standard, and the unit mark under the griffin is faint, it could be a heavier mna in the Attic standard, dating to the end of the 1st century BC. Then, the deformed letter Δ may be the upper part of an irregular Σ, one of the two Σ's in the ethnic ΑΣΣ(ίων). Unfortunately, the surviving weights of Assos do not always exhibit precision in terms of units; they are somewhat problematic. The bottom is flat and plain.

<sup>5</sup> See for the rare weights of Assos, Pondera, 17258,17048 and 13280.

<sup>6</sup> For a similar example see ex-Nomos-Obolos 27, 434 (=Pondera 17048), now it was included into the Eskinazi Collection.

<sup>7</sup> For the widespread use of the Chios standard by cities in western Anatolia in the 4th century BC see Meadows 2011.

<sup>8</sup> However, we still cannot be certain about the theoretical weight and drachm-content of the mentioned weight.

**4) Assos. Hemimnaion or Mna. Inv. no. 13839 (Figure 4)**

The lead weight is square in form, with beveled edges and rounded corners; it weighs 288.1 g and measures 50x49x13 mm. It was found during the archaeological excavations at Assos from chapel complex at Western Gate in 2016. On the top, there is a relief of a right-facing seated griffin; the letters in the field are illegible. In the upper left corner, there is ΔΗ(μύσιον), which stands for state guarantee. There is an uncertainty area between the letters ΔΗ above and the back of the griffin; it is unclear whether there are a few more letters after ΔΗ or if it relates to something about the griffin's wing. Below the griffin it reads ΑΣΣΙ(ων). The top point of the initial Α, the upper horizontal line of the following Σ, and the both upper and diagonal lines of the second Σ can be seen; the last Ι is indistinct. The bottom is flat and plain. With a weight of 288.1 g, it is quite low for a mna, so it must be a hemimnaion (mna value of 576.2 g in Attic standard). But as we stated above for the previous example, it may also be a mna according to Chian standard. There is a possibility that the Assian weights conform to the Chian standard. It can be dated to the 2nd-1st centuries BC.

**5) Assos. Ogdoon? Inv. no. 11533 (Figure 5)**

The lead weight is square in form, with slightly beveled edges; it weighs 65.7 g and measures 32x35x6 mm. It was found in the excavation at Assos from the 13th trench at western necropolis in 2009. On

the top, there is a relief of a right-facing seated griffin; the inscription is either absent or too faint to read; in the lower left corner, there is a punched Ο(γδοον?). If the Ο refers to ogdoon (1/8 mna), then the mna value would be 525.6 g (65.7 g x 8). It can be dated to the 3rd-2nd centuries BC.

**6) Lampsacus. Trimnaion (3-mna). (Figure 6)**

Lampsacus (modern Lapseki), situated on the Asian side at the entrance of the Hellespont, leading to the Sea of Marmara, was originally established by settlers from Phocaea (today Foça) and Miletus. The recognized weights of Lampsacus are of lead and exhibit either square or triangular forms. They feature the representation of the city's parasemon – a protome of winged horse with a bird's tail in relief. During the Classical period, Lampsacene coins portrayed a horse protome with two wings, one positioned above and the other below. However, in the Hellenistic period, the lower wing undergoes a transformation, taking on a fan-like shape situated at the rear of the creature. Some scholars have suggested that this creature might be a Hippalectryon rather than a Pegasus or a winged horse. It can be asserted that the depiction on the Lampsacene weights, at least during the late Hellenistic period, represents a protome of winged horse with a bird's tail, not a Pegasus or a Hippalectryon.

The weight in the museum collection is square in form and of lead. It weighs

1415 g and measures 81x79x26 mm. It was confiscated in 2014 but it was not registered to the inventory yet. It was previously published in Tekin, 2016: Table, 30, no. 1, fig 148. On the top it features a left-facing protome of a winged horse with bird's tail. On the top left and right corners are the letters Λ and Α, the first two initials of ethnic Λαμψακηνῶν. But the top right letter (Α) is faint. On the bottom, it reads ΤΡΙ(μναῖον) which stands for 3-mna in unit. This is a unique and largest unit for the Lampasakene weights to date.

### 7) Lysimachia. Mna. Inv. no. 16351 (Figure 7)

Lysimachia (today Bolayır) was a city founded by Lysimachus in 309 B.C. on the Gallipoli peninsula (Thracian Chersonese) where the neck of the peninsula joins Thracian land (Brodersen 1986; Sayer 2007). Lysimachus settled people from neighboring cities, especially from Kardia (today Bakla Burnu) in his new capital city and named it Lysimachia after himself. It is hard to determine the number of surviving examples of Lysimachian weights. The examples known to me are about 100 pieces, but there may be twofold this number in collections. Most of the surviving examples are of lead; only a few examples are of bronze. Lysimachian weights are basically square in shape, but a few examples are triangular in shape. Almost all examples have rounded corners but a few have sharp edges. Some examples have hanging holes on corners. All examples bear a

lion depiction on the obverse whereas the reverse is blank.

The weight introduced here is of lead with bronze plating and has a triangular shape; it weighs 489.8 g and measures 96x92x14 mm. It was confiscated in 2009. On the top, in relief, a lion breaking a spear with its mouth is depicted, leaning to the left and forward; however, due to wear, the spear is not visible. Above the lion, the first two letters of the city's ethnicon, ΛΥ(σιμαχέων), are present. This type of lion depiction is also known from the coins of Cardia. It is known that Lysimachia, formed by people from Cardia among other cities, adopted this lion image. Therefore, we can say that the lion breaking a spear motif was copied from Cardian coins. However, this depiction also appears on coins of some southern Italian cities such as Mateola, Venusia (both in the Apulia region), and Capua (Campania), as well as on coins of Amyntas III (393-370 BC), Perdiccas III (365-359 BC), and Cassandrus (350-297 BC). It is worth noting that, in Lysimachia weights, lions are generally and primarily depicted facing right; however, in triangular weights and depictions of lions breaking spears, they are more often portrayed facing left. Although there is no unit mark on the weight, it is evident from its weight that it represents a mina (mna). The bottom is flat and plain. It can be dated to the 3rd-2nd centuries BC.

**8) Lysimachia. Hemimnaion. Inv. no. 16353 (Figure 8)**

The weight is made of lead, has a square shape, weighs 248.9 g, and measures 45x44x13 mm. It was confiscated in 2009. On the top, there is a relief of a right-facing lion protome. The lion's face is depicted frontally with a distinct mane, while the body is in profile. The abbreviation of the ethnic distributed to the four corners of the weight is Λ-Y-Σ-I(μαχέων). Just below the body of the lion, the unit mark H(μμναῖον) is present. The 248.9 g weight corresponds to a value of 497.8 g of mna. This weight is a typical value for Lysimachian hemimnaions because the average weight of the surviving Lysimachian hemimnaions is between 245-250 g, indicating a mna weight of 490-500 g for the Early Hellenistic period Lysimachian weights. There is a minor breakage at the bottom of the left edge due to striking, and the bottom is flat and plain. Lysimachian hemimnaions with a lion protome and unit mark have survived in considerable numbers to the present day. It can be dated to the 3rd-2nd centuries BC.

**9) Lysimachia. Tetarton. Inv. no. 16352 (Figure 9)**

The weight is made of lead, triangular in form, weighing 143.4 g, and measuring 61x56x6 mm. It was confiscated in 2009. On the top, in relief, is depicted a lion leaning left and forward, breaking a spear with its mouth and holding it with its claws; due to its faintness, the spear is not visible. Above the lion, it reads the first letter of the ethnic, ΛY(σιμαχέων).

Similar to the no. 7 in design, it is understood to be a tetarton from its weight, even though there is no unit mark, indicating a mna value of 573.6 g. Comments regarding the composition of the weight in no. 7 will not be repeated here, as they are applicable to this weight as well. The surface of the weight is heavily worn, and the bottom is flat and plain. It can be dated to the 3rd-2nd centuries BC.

**10) Lysimachia. Tetarton. Inv. no. 1417 (Figure 10)**

The weight is made of lead with bronze plating, in a square form, with edges slightly rounded. It weighs 130.3 g and measures 38x45x7 mm. It was donated in 1936. On the top, a relief of a left-facing lion protome is depicted; its face is in three-quarter view, and the first two letters of the ethnic are present in the upper left and right corners Λ[Y](σιμαχέων), but the Y is faint. On Lysimachian weights, lions are primarily depicted facing right, with only triangular weights showing them facing left; in this example, the lion is also facing left. There is no unit mark, but it is understood to be a tetarton from its weight, indicating a mna value of 521.2 g. The bottom is flat and plain. It can be dated to the 3rd-2nd centuries BC.

**11) Uncertain. Tetarton. Inv. no. 13096 (Figure 11)**

This lead weight is square in form, with slightly rounded corners, weighing 147.7 g, and measuring 40x40x8 mm. It was found in the archaeological excavation at Assos from the well-trench at



Agora/Temple in 2015. The top is engraved with T(ἔταρτον); the bottom is plain and blank. Its weight corresponds to a 590.8 g mna (147.7 g x 4). It may be dated to the Hellenistic period.

**12) Uncertain. Tristateron. Inv. no. 15438 (Figure 12)**

This lead weight is square in form; it weighs 63,1 g and measures 33x35x5 mm. It was found in the archaeological excavation at Troy in Agora area, H/10 in 2019. The top is engraved with TP(ιστάτηρον) in ligature and it refers to 3-stater in unit (21 g x3). The bottom is blank and plain. It may be dated to the Hellenistic period.

**13) Uncertain. Stater. Inv. no. 15400 (Figure 13)**

The weight is made of lead and square in shape, with raised edges at the top and bottom, and slightly rounded corners. It weighs 21.8 g and measures 22x22x5 mm. It was found in the excavation at Asosos from the chapel complex at Western Gate in 2019. On the top, there is an incised Σ that possibly stands for "στατήρ" while the bottom is flat and blank. The prominent sigma on the obverse likely signifies the initial letter of "stater," suggesting that the unit of weight is a stater. Considering that it might be an Attic stater, its weight does not conform to the standard stater weight. However, it is known that the stater initially weighed as much as an Attic tetradrachm and later increased, leading to the emergence of staters weighing in the 20s or even 30s of grams. The surviving Cyzicus staters

range from 15.15 g to 30.52 g (Tekin, 2016: nos. 91-118). Cyzicene weights with unit marks also include staters weighing 20-22 grams (Tekin, 2016: Table 29, no. 98-111). Since there is no ethnic or other depictions on the weight, attributing it to a specific city is challenging, but it could be associated with one of the cities in the Troad region. The excessive darkening on the surface suggests that it might have been preserved in a burnt environment. It can be dated to the 3rd-1st centuries BC.

**14) Uncertain. Stater. Inv. no. 15762 (Figure 14)**

This lead weight is square in form, weighing 19.8 g, and measuring 19x19x5 mm. It was confiscated in 2005. The top features a relief Σ, possibly representing "στατήρ" Similar to the previous weight, it is in the stater unit, and the comments made there apply to this weight as well. Once again, as there is no ethnic or other depiction on the weight, attributing it to a specific city is challenging, but it could be associated with one of the cities in the Troad region. It can be dated to the 3rd-1st centuries BC.

**15) Uncertain. Stater? Inv. no. 15791 (Figure 15)**

This lead weight is square in form, weighing 29.3 g, and measuring 27x28x3 mm. It was confiscated in 2002. Since it lacks a unit mark, it is challenging to determine its unit precisely, but it could be suggested to be a stater. On the top, there is a central punched dot, and the reverse

is plain and flat. It may be dated to the Hellenistic period.

**16) Dekadrahmon or Distateron. Inv. no. 15792 (Figure 16)**

The weight is made of lead and square in form, weighing 40.7 g, and measuring 22x20x8 mm. It was confiscated in 2002. The top is engraved with “Δ” which may stand for dekadrachm (Δεκάδραχμον) or distateron (διστάτηρον). It may be dated to the Hellenistic period.

**17) Early Byzantine. 1-uncia. Inv. no. 13098 (Figure 17)**

This bronze weight is square in form with a plain profile; it weighs 26 g and measures 23x23x5 mm. It was found in the archaeological excavation at Assos from the chapel complex at Western Gate in 2015. The top is engraved with the denominational mark Γο Α, initially inlaid with silver, but the inlay is missing. All of this is enclosed within a square frame of punched dots. The bottom is plain and blank. 4th-6th centuries AD.

**18) Early Byzantine. 1-nomisma. Inv. no. 13097 (Figure 18)**

This bronze weight is discoid in form with a plain profile; it has a raised rim and a centring point on the top. It weighs 4.3 g and measures 13x3 mm. It was found in the archaeological excavation at Assos from the chapel complex at Western Gate in 2015. Punched on the top with the denominational mark N with a

punched o below and a large thin lathe circle. 6th-7th centuries AD<sup>9</sup>.

**19) Early Byzantine. Semissis (1/2 Nomisma) Inv. no. 16434 (Figure 19)**

The first glass weights likely emerged during the reign of Emperor Justinian I. These weights typically featured either the name of a high-ranking state official (such as an eparch) in monogram form or the bust of this state official (or emperor) surrounded by their name and titles. The production of glass weights was generally overseen by the city prefect (eparchos) of Constantinople. However, officials like the praetorian prefect, as seen in the Oriens prefecture, also played a significant role in the production of glass weights. Byzantine glass weights served for the denominations of nomisma, semissis (1/2), and tremissis (1/3) during the 5th to 7th centuries AD. The glass weight presented here exhibits a translucent dark blue/darkgreen color and takes a disc shape, weighing 1.9 g with dimensions of 19x3 mm. It was found in the excavations at Assos from the chapel complex at Western Gate in 2021. It displays minimal wear on the edges. The current weight slightly deviates from its theoretical weight which should be ca. 2.25 g originally. However, the weight of glass weights never perfectly matches; it may be slightly above or below. This is because the crucial aspect is to measure whether it is close to the theoretical weight. The top features a stamp portraying a bust of reigning emperor between

<sup>9</sup> For similar example see *CPAI* 3/2, 607.

two crosses, while the bottom is plain and blank. Beneath the bust is a box monogram composed of the letters A+K+I+O+Y, spelling the name Akakios in the genitive singular, AKAKIOY (Ακακίου, of Akakios). This weight is dated to the 6th century AD. Notably, during the 6th century AD, there was a certain city prefect (eparchos) in Constantinople. This glass weight of Akakios is one of the rare examples bearing his monogram. Similar examples bearing the Akakios monogram can be found in the following collections and/or publications: British Museum<sup>10</sup>, one found in Capidava, now in Museum of National History in Bucharest (Oprîș, 2023), Hermitage Museum (Guruleva 2018, 118, photo 8), from Luni-Liguria excavation (Perassi 2000; 2006, fig. 2c), one from a sale catalogue (Leu Numismatik 5, 592), and some others from various collections (Pondera 4449, 6100, 5338, 6101). Additionally, though it is not certain whether it belongs to the same individual, a signet ring displaying Akakios's monogram is housed at The Walters Art Museum in Baltimore, USA (Hostetler, 2021). The photo in the plate (fig. 19) was taken not from the top but from a slight angle to ensure clarity.

### **Lysimachian Weights in the *Katalog der Sammlung Calvert* but Not in the Museum's Collection**

As an English consular official in the eastern Mediterranean region, Frank Calvert held a profound fascination for Troy and its surroundings, conducting amateur archaeological research in the late 19th century. Calvert curated a significant personal collection through archaeological findings gathered from the region. His collection and notes regarding the findings were translated into German by H. Thierisch and compiled in a notebook titled "Sammlung Calvert"; however, this notebook was never published. A copy of this two-volume notebook, of which we are unaware of any duplicates, is housed in the Troy Museum (*Sammlung Calvert*, 1902). Below, two Lysimachian weights featured in the Calvert notebook but not present in the museum collection are introduced.

#### **20) 1-mna or 2-mna (Figure 20)**

It is a lead weight, square in form, with slightly rounded corners. Its weight is not indicated. It measures 70x70x10 mm<sup>11</sup>. On the top is a running lion to right; the abbreviation of the ethnic distributed to the four corners of the weight is Λ-Y-Σ-I(μαχέων). Just below the body of the lion is a Δ. It refers to Δημόσιον (state guarantee) or Δίμνου (2-mna). It dates to the 3rd-2nd centuries BC.

<sup>10</sup> [https://www.britishmuseum.org/collection/object/H\\_1997-0218-3\(4.11g\)](https://www.britishmuseum.org/collection/object/H_1997-0218-3(4.11g)) and [https://www.britishmuseum.org/collection/object/H\\_1884-0509-15\(4.03g\)](https://www.britishmuseum.org/collection/object/H_1884-0509-15(4.03g))

<sup>11</sup> *Katalog der Sammlung Calvert*, "Tavolia", no. 24 (misattributed to Abydos). For similar examples see Tekin, 2018: nos. 3-5.

**21) 1-mna (Figure 21)**

It is a lead weight, square in form; its weight is not indicated. It measures 60x60x13 mm<sup>12</sup>. On the top is a running lion to right, facing three-quarter; the abbreviation of the ethnic distributed to the four corners of the weight is Λ-Y-Σ-I(μᾶχέων). Just below the body of the lion is the unit mark M(νᾶ). So, although its mass is unknown, it seems to be a 1-mna in unit based on the unit mark. It dates to the 3rd-2nd centuries BC.

**Evaluation**

The majority of the balance weights in the Troy Museum collection, which constitute the subject of this article, are dated to the Hellenistic period; a few are dated to the Byzantine period. The presence of weights from Abydus, Alexandria, Assos, Lampsacus, and Lysimachia in the collection is a natural and expected occurrence, given that these cities are located in the northwest of Asia Minor. An earlier article, which also included weights from the museum collection, featured two Lysimachian weights (Tekin, 2014: 2014, figs. 4-5) and one

Lampsacene weight (Tekin, 2014: 2014, fig. 3). The significance of the Assos weights in this article (nos. 3-5) lies in their discovery during the excavations at Assos<sup>13</sup>. Similarly, the Lampsacus weight (no. 6) that joined the Troy Museum collection by confiscating in 2014 at Lapseki is important due to being the largest unit known to date. It is not surprising to find four weights representing Lysimachia in the collection because, on one hand, Lysimachian weights are the most numerous weights to have survived after Cyzicus, and on the other hand, Lysimachia is located only 67 kms (one-hour drive away) north of Çanakkale, where the museum is situated. Another noteworthy weight in the collection is a Byzantine glass weight found during the Assos excavations. The presence of the monogram on this weight, indicating a certain city prefect Akakios of Constantinople, and its rarity among known examples, enhances the significance of this weight.

<sup>12</sup> *Katalog der Sammlung Calvert*, "Tavolia", no. 409. For similar examples see Tekin, 2018: nos. 7, 12-13, 16, 18.

<sup>13</sup> For the weights found during the excavations see Arslan 2024: 324, figs. 417-418 (here nos. 3-5, 17-18).

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Figure 1: Abydus - Hemimnaion  
211.1 g, 44x44x8 mm



Figure 2: Alexandria – Ogdoon  
56.7 g, 32x31x4 mm



Figure 3: Assos – Dimnaion?  
761.2 g, 65x66x20 mm



Figure 4: Assos - Hemimnaion  
288.1 g, 50x49x13 mm



Figure 5: Assos – Ogdoon?  
65.7 g, 32x35x6 mm



Figure 6: Lampsacus - Trimnaion  
1415 g, 81x79x26 mm



Figure 7: Lysimachia - Mna  
489.8 g, 96x92x14 mm



Figure 8: Lysimachia – Hemimnaion  
248.9 g, 45x44x13 mm



Figure 9: Lysimachia – Tetarton  
143.4 g, 61x56x6 mm



Figure 10: Lysimachia- Tetarton  
130.3 g, 38x45x7 mm



Figure 11: Tetarton  
147.7 g, 40x40x8 mm



Figure 12: Tristateron  
63.1 g, 33x35x5 mm



Figure 13: Stater  
21.8 g, 22x22x5 mm



Figure 14: Stater  
19.8 g, 19x19x5 mm



Figure 15: Stater?  
29.3 g, 27x28x3 mm



Figure 16: Dekadrakhmon  
or Distateron  
40.7 g, 22x20x8 mm



Figure 17: 1-Uncia  
26 g, 23x23x5 mm



Figure 18: Nomisma  
4.3 g, 13x3 mm



Figure 19: Semmissis  
1.9 g, 19x3 mm



Figure 20: Lysimachia- Dimnaion  
70x70x10 mm  
(Photo taken from the notebook)

Figure 21: Lysimachia- Mna  
60x60x13 mm  
(Photo taken from the  
notebook)

