HELLENISTIC LEAD WEIGHTS

Steluța Marin*

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Cuvinte cheie: pond, greutate de plumb, mina, Chersones, Callatis, Dionysopolis, etalon ponderal, perioada elenistică.

Abstract: In this study, the author discusses certain lead objects, already published, which sparked interest right from the first lecture. For these, we will try to propose a more specific assignation, as their issuing workshop was identified quite doubtfully. C. Iconomu and C. Chiriac published lead pieces from different eras, dating from the Greek to the late Roman period, from the former collection of Ionel Matei (today at the Brăila Museum). Among the published ones, two lead weights were identified as belonging to the northern Black Sea city of Chersonesos. Also in the literature, a lead weight is mentioned, which unfortunately remained unpublished. A study published by R. Ocheşeanu and S. Torbatov, presents a weight bearing the HPA legend, which was rightly attributed to Dionysopolis. In the context of this discussion, R. Ocheşeanu and S. Torbatov mention the piece we will describe here.

Rezumat: Autoarea discută pe marginea unor piese de plumb deja publicate, care i-au stârnit interesul încă de la prima lectură a studiului. Pentru acestea, va încerca să propună o atribuire mai precisă, deoarece atelierul lor emitent a fost identificat destul de nesigur. C. Iconomu și C. Chiriac au publicat mai multe piese de plumb din diferite epoci, de la cea greacă mergând până la cea romană târzie, din fosta colecție a lui Ionel Matei (azi în Muzeul Brăilei). Dintre cele publicate, două plumburi au fost identificate ca aparținând cetății din nordul Mării Negre, Chersones. Tot în literatura de specialitate este amintit un pond de plumb care, din nefericire a rămas inedit. Într-un studiu realizat de R. Ocheșeanu și S. Torbatov, aceștia publică un pond de plumb ce poartă legenda HPA, pe care îl atribuie pe bună dreptate cetății Dionysopolis. În contextul acestei discuții, R. Ocheșeanu și S. Torbatov amintesc de piesa pe care o vom descrie aici.

In this study, we will try to discuss certain lead objects, already published, which sparked our interest right from the first lecture. For these, edited in detail or summarily mentioned, we will try to propose a more specific assignation, as their issuing workshop was identified quite doubtfully.

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^{*} Bucharest Municipality Museum.

Lead Weights from Chersonesos

C. Iconomu and C. Chiriac have published lead pieces from different eras, from the Greek to the late Roman period, from the former collection of Ionel Matei, which is currently preserved at the Brăila Museum¹. The origin of such weights is not known, as most of them have been purchased from other collectors, who did not always specify this information. Therefore, the authors tended to assign them to mints already identified as issuing such pieces in Dobrudja: Istros, Tomis and Callatis, without excluding the possibility that they were manufactured by other workshops, from Scythia Minor². Among the published ones, we shall only discuss two lead weights, which awoke our attention right from the beginning of the study and which shall be subsequently described.

1/4 mine

1. Pb 116,33 g, diameter 45 mm, variable width 6 – 16 mm; round shape; former col. of Ionel Matei of Bucharest, today col. of the Brăila Museum, inv. 15204, Pl. I/1.

Obv. [X - E] - P. A bull head facing.

Rv. TE - T - AP - [TH]. A modius with three wheat ears, placed on a boat³. Iconomu, Chiriac 2008, p. 106, no. 2, fig. 2/1.

1 mine

2. Pb 472 g; 63 × 96 mm; border width 18 mm; rectangular shape, with flat handle and tall edge, similar to a frame; former col. of Ionel Matei of Bucharest, today col. of the Brăila Museum, inv. 15203, Pl. II/6.

Obv. A caduceus to the left / MNA / a club to the right. On the handle, a bull head facing.

Rv. Non imprinted, with traces, without a specific shape.

Iconomu, Chiriac 2008, p. 105-106, no. 1, fig. 1.

The pieces have been assigned by the authors, based on the stylistic resemblances with the weights issued by the Callatis workshop for this city, but the presence of certain details deters us from agreeing with such an identification. The aspect we remarked from the beginning is the representation of the bull head on the obverse of the first piece. This does not appear on the other weights issued by the Greek cities on the West coast of the Black Sea, fact which determined us to question whether the piece belongs to another workshop, different from Callatis. Another clue would be the legend identified by us as being XEP. The authors only identified the letter P on the inscription, which they even considered to be a possible striking mistake. On the handle of the second weight, a bull head facing has also been identified, together with the main attributes represented on the front side: a caduceus and a club. The imprinting of the

¹ Iconomu, Chiriac 2008, p. 105-106.

² Iconomu, Chiriac 2008, p. 105.

³ The authors identified the attribute under the *modius* as a boat, due to the resemblance of such piece with another piece issued by Callatis, edited in Moisil 1957, p. 269, nr. 13, pl. III, 3.

bull head facing, as well as the integration of the known legend of Chersonesos, pledged in favour of assigning such pieces to the workshop in the northern Black Sea city. Chersonesos, located near Sevastopol, an ancient colony of Heraclea Pontica, has Artemis Tauropolos as its representative goddess, whose attribute and symbol is the bull. Several pieces are known from here - lead *tessera*, displaying the head of Hermes with petasos to the right on the obverse, and a bull head facing on the reverse (Pl. I/4,5)⁴. They are presented on online antiquity markets being rightfully assigned to this workshop. In the archaeological excavation at Pantikapaeum from 1949, a similar weight of 220.56 g was discovered, having the same bull head imprinted (Pl. I/2). The piece with the sizes of 56×53 mm and a width of 8 mm, is not in a very good preservation state⁵. Some studies assume that two lines of the legend on the reverse have been identified: AFOPANO / MOYNTOC, however the certitude of some of the imprinted letters is not clear.

Among those presented by us, the first weight was assigned by the authors to Callatis due to the resemblance of the representations with a piece executed here. On the reverse, a basket with three wheat ears is imprinted, placed on a boat, but it still represents an unexplained curiosity (Pl. I/3). The piece of 211 g bears on the reverse the letters **TE**, which signify a fourth of mine. This means it is reported to a mine of 840 g. O. Iliescu identified this standard as being the Babylonian heavy mine for the gold, reasoning that such a mine was also used in Istros during the 5th Century BC⁶. Still, in regards to Callatis, the date of its foundation is still unclear, which, according to historical sources, may be situated rather at the beginning of the 4th century BC, during the reign of Amyntas III (390–373 BC.)⁷. This is why the comparison is not significant for our piece, especially because it is much lighter. It belongs to a system which was in place later, as we shall demonstrate.

The second weight has the value of a mine, of 472 g, while the first weight has the value of 116.63 g, representing a fourth of a mine (reported to a 465.32 g mine). This fact means that they are included in the same weight system which was in place in the Greek cities on the North-West coast of the Black Sea. Although this affirmation in the current study may appear quite exaggerated, evidence of this weight system were observed in Istros, as well as in Callatis. The weights of the other Greek cities also appear to confirm such weight evolution in the autonomous period, meaning an obvious gradual decrease until 250–200 BC, when the Attic standard (436 g) was generally adopted.

In terms of weight, the Chersonesos leads belong to a previous period. The second piece is extremely interesting, having the caduceus (Hermes' attribute) and the club (Herakles' attribute) imprinted on the reverse. It is also relevant that the bull head is further imprinted in a secondary position, on the handle, as an element marking only the affiliation of the piece. Such leads, with the caduceus and the club, have been issued

⁶ Iliescu 1967, p. 688 (210.05 g).

⁴ Vcoins – Dmitry Markov. Ancient Coins, 21.09.2016, no. 20301: AE 2.80 g; 15 mm (pl. I/4) and no. 20302: AE 3.68 g; 16 mm (pl. I/5); dated at the end of the 3rd century BC.

⁵ Blavatski 1955, p. 204.

⁷ EAIVR I, p. 239, *sub voce* Callatis (Gh. Poenaru Bordea).

especially at Callatis, where we have a first series of pieces: 472 g⁸ mine, as well as other ¼ mine leads (de 118 g⁹ of 107.92 g¹⁰), bearing these attributes: a caduceus, an altar, a club. The association of such attributes is not occasional, it may suggest a possible entry of the city in an alliance, certified by the presence of the altar. The burning altar makes us think of a possible commercial arrangement between certain Greek cities on the North-West Coast of the Black Sea, a uniformization of the representations on lead weights, perhaps as a result of an economical standardisation and not necessarily a political one. In 1926, Leon Ruzicka mentions, referring to his weight having such attributes (Pl. II/7), that they could be the proof of the existence of that Κοινόν Ποντος or Κοινόν των Έλληνων, meaning a Pontic community, that is the Greek community¹¹.

The presence of the two attributes, a caduceus and a club both on the pieces from Callatis and on the Tauric Chersonesos, reveals a connection between the two cities. This connection too, is clearly highlighted during the revolution of Callatis against Lysimachus in 313 BC, by ousting the Macedonian garrison from the city. The initiative determined similar reactions in other cities, at Istros and Odessos. After the quick defeat of these cities, Lysimachus besieged Callatis, perhaps until in 311 BC, when peace was concluded between the Diadochi, who were trying to dominate the West-Pontic area. Subsequently, in 310/309 BC, the city was once again besieged, and one thousand people from Callatis took refuge in the Bosporan Kingdom. According to the sources, king Eumelos had offered them the city of Psoa, whose territory was divided among them in order to sustain themselves 12. In these circumstances, it is possible that Callatis and Chersonesos have concluded this economical accord, sealed by the issue of weights with joint representations¹³. From this perspective, the image adopted on the first weight from Chersonesos, the basket with the three wheat ears, placed in a boat, is not coincidental, as such an image was taken from an older lead from Callatis (Pl. I/1, 3). The fact that these weights with joint representations from Chersonesos and Callatis were issued in the second phase of the revolt against Lysimachus, in the years 310/309 BC, is supported by other elements as well. Such weights have not been observed yet at Istros, this being an ally of Callatis at the beginning of the conflict, when it too was defeated by Lysimachus. Odessos also supported the initiative of the Megarian city since the first moments, but was soon defeated by the Macedonian troops. A lead issued here, a 1/3 mine, is interesting as it displays a caduceus and a wheat-ear instead of club (Pl. III/10). Although not having enough technical data, we could say that it is included in the same joint attributes series, but it was issued later¹⁴.

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⁸ Ocheşeanu 1975, p. 153-154.

⁹ Ruzicka 1926, p. 457, no. 8, pl. 106, 9; Moisil 1957, no. 29, pl. V, 8. This piece is illustrated here, in Pl. II/7. ¹⁰ Ocheşeanu 1997, p. 190-191.

¹¹ Ruzicka 1926, p. 458.

¹² DID I, p. 217-218; EAIVR I, p. 240, sub voce Callatis; p. 296, sub voce 2-3, Chersonesos (Tauric).

¹³ Müller 2010, p. 66, shows that Chersonesos was part of a monetary alliance with Theodosia and Phanagoria against the Pantikapaeum city between 390-380 BC. This fact is demonstrated from a numismatic point of view.

¹⁴ We have only a photo of the piece on the internet, with no technical or source data.

At Callatis, the above mentioned pieces are followed by weights still bearing the caduceus and the club, but without the altar. One of 122.10 g, with the image of Hermes with petasos on the obverse, was assigned to the workshop of Dionysopolis, however, the letters engraved on the reverse, ΔA , show that it is about the Callatis mint (Pl. III/8)¹⁵. While another piece of 118.77 g, assigned by us to the same issuer, has, apart from the respective symbols, two countermarks with an oblique quadripartite square (Pl. III/9)¹⁶. Such leads appear to follow the caduceus, altar and club series, as the Odessos one. They are slightly later, being manufactured during 300/281-225 BC, right at the beginning of the interval¹⁷.

Dionysopolis Weights

In the literature, a lead weight, unfortunately still unpublished, is mentioned. In a study by R. Ocheşeanu and S. Torbatov, they publish a lead weight bearing the HPA legend, which they rightfully assign to Dionysopolis (Pl. IV/11)¹⁸. Such a piece has been also edited by C. Moisil in a study representative to this day on the metrology of the pontic cities ¹⁹. He erroneously considers that the weight imprinted with the HPA legend is an issue of the Callatis workshop. In the context of such a discussion, R. Ocheşeanu and S. Torbatov mention the piece which we will describe here.

With the occasion of development-led archaeological excavations performed in 1990 in a site dating from the Hellenistic era, located 5 km west from the village of Krapets, Shabla district (Bulgaria), some elements have been revealed, which belong to a cultural layer dating from the $3^{rd} - 2^{nd}$ centuries BC²⁰. On this occasion, two lead weights have been purchased from a collector, as well as 30 ancient coins which were also discovered there. The coins are issued by the Macedonian kings (Philip II – 2 pieces and Alexander the Great – 2 pieces), Scythian kings (Charaspes – 2 pieces and Tanusa - 1 piece), but the biggest part, over 20 silver and brass coins, belong to the Callatis workshop²¹. It is significant that the structure of these coins generally confirms the dating of the lot from the Hellenistic era. The authors study one of the weights, the one representing Dionysus on the obverse and with the HPA inscription on the reverse. They identify it, by comparing it with the piece published by C. Moisil, as belonging to the Dionysopolis workshop. This is an eighth of a mine (62.79 g), while the piece from C. Moisil is a fourth of a mine of 120 g, both imprinted with the same representation. They are reported to a weight standard of 502.32 and 480 g respectively, the weight difference may owe to the 1/4 mine's preservation state, as its superior edge seems cut. They are included in a weight system which seem to have been generally adopted by the Greek cities on the North-West coast of the Black Sea, as it results from the metrological

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¹⁵ Sutzu 1914, p. 4-5 and 7, no. 5; Ruzicka 1917, p. 75, no. 5; Moisil 1957, p. 276, pl. V, 9.

¹⁶ Gorny & Mosch 2003, no. 2426; Gorny & Mosch 2009, no. 335.

¹⁷ Gramaticu 2016 (1); Gramaticu 2016 (2).

¹⁸ Torbatov, Ocheşeanu 2002, p. 9-10.

¹⁹ Moisil 1957, p. 283, no. 45, pl. VII, 1.

²⁰ Torbatov, Ocheşeanu 2002, p. 9.

²¹ Torbatov, Ocheseanu 2002, p. 9.

evolution at Istros²² and Callatis²³, between 313–300 BC, when a standard between 514 – 447 g is registered (Callatis). At Istros, we determined a quite wide time interval, between 330–300 BC, while at the end of the period we have a similar weight norm $(480 \text{ g})^{24}$.

The second lead from this lot is only briefly mentioned in the description of the discovery, being entitled by the authors as a "weight from Callatis, dating from the transition period"²⁵.

½ mine

Pb 113 g; diameter between 38×40.5 mm; width comprised between 9-11 mm; round shape, with a prominent, bold edge²⁶, Pl. IV/12.

Obv. **TE** in the centre.

Rv. Traces of legends or images are distinguished, but they are not legible. Also, it is possible that the traces are due to the lead manufacture process.

Regional History Museum of Dobrich, no. inv. I 3749. Torbatov, Ocheşeanu 2001, p. 9.

The piece represents a fourth of a mine according to the inscription on the front, τετάρτη, reported to a 452 g mine. This weight standard seems to be situated in analogy with the other Greek cities (Istros, Callatis) in the interval comprised between $300/281\pm255$ BC. ²⁷ However, because of to the place of its discovery, we consider that this lead was also issued by the Dionysopolis workshop and not by the one in Callatis. The simplicity of the execution and the representation of the image on obverse are different from those of the Callatis weights from the same period. On the other hand, the weight value of 452 g is included at the end of the abovementioned interval, preceding the moment when the Greek cities adopted the Attic standard (436 g). Unfortunately, the composition of the Callatis coins within the purchased lot is not known, otherwise it could have provided a stricter dating. But as it appears from the summary description of the lot, the oldest pieces are dated between the 4th century BC and the second half of the 3th century BC.

The shape of the weight and the sobriety of the imprinting on the obverse also suggest a slightly reduced economic status of Dionysopolis during the mid-3rd century BC, an inferior position in regard to the neighbouring cities. At the same time, for instance, Callatis was preparing to occupy the Tomis emporium, entering in conflict with the Byzantium authorities. If we were to compare our piece with the ones issued at Istros, we can notice that they are characterized by different shapes and representations

²⁵ Torbatov, Ocheşeanu 2002, p. 9.

²² Gramaticu 2015, p. 32.

²³ Gramaticu 2016 (1); Gramaticu 2016 (2).

²⁴ Gramaticu 2015, p. 32.

²⁶ With a greater appreciation, I thank to my colleagues from the Regional History Museum of Dobrich (Bulgaria), to Veselin Parushev and Dessislava Hristova, for providing us the photo and the technical data of such weight.

²⁷ Gramaticu 2015, p. 32, for Istros; Gramaticu 2016 (1), (2), for Callatis.

during the same period²⁸. At Callatis, a larger variety of imprinted images can be noticed, as they are directly influenced by the events in that period of time (years $300 / 281 \pm 255 \text{ BC.})^{29}$.

We must present here another weight presented on the online antiquity market, similar to the one described by us, in terms of the simplicity of its execution.

Pb 105.02 g; 36×36 mm; square shape, an obvious width of the edge, without being measured, P1. IV, 13.

Obv. TE in the centre.

Rv. not imprinted.

The data and photos of the piece have been taken from the site vcoins.com, without other details: Auction house or offer date.

Unfortunately, we have no data regarding to the place of discovery of the lead weight. It is similar to the one described by us, discovered in the Shabla region, because of the sobriety of the representation and the execution. For this reason, we wonder whether it also belongs to the Dionysopolis workshop, although there is no data regarding the place of its discovery. It has a weight of 105.02 g, and represents a fourth of a mine, according to the description $\tau\epsilon\tau\acute{\alpha}\rho\tau\eta$. It is reported to a 420.08 g mine. Except for small scratches on the flan, both on the obverse, and on the reverse, the weight is presented in a good conservation state. It is included in the Attic weight system (436 g), which has been adopted by the West Pontic Greek cities after the mid-3rd century BC: \pm 255 - 100 30 / the early 1st century AD. 31

The similarities between the two pieces in regard to the manner of manufacture, sobriety of representation and execution, determined us to wonder whether it also belongs to the Dionysopolis workshop. It was made in a later phase, after the adoption of the Attic standard. If we look at the other two Greek cities, we can notice a standardisation of the representations, which become monotonous, however richer than those of the described lead weights³². Nevertheless, we limit on asserting that the piece was manufactured by a modest, marginalised market, with a reduced impact on Greek economical life. However, we do not exclude the possibility that such a piece could have been manufactured by Dionysopolis, due to the resemblances with the first weight discovered near the Greek city.

²⁹ Gramaticu 2016 (1), (2).

²⁸ Gramaticu 2015, p. 45-46.

³⁰ Gramaticu 2016 (1), (2).

³¹ Gramaticu 2015, p. 32.

³² Gamaticu 2015, p. 47, for Istros; Gramaticu 2016 (1), (2), for Callatis.

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