"ALEXANDRU IOAN CUZA" UNIVERSITY OF IAȘI
FACULTY OF HISTORY
INTERDISCIPLINARY CENTRE FOR ARCHAEOHISTORICAL STUDIES

STUDIA ANTIQUA ET ARCHAEOLOGICA

29/2, 2023

EDITURA UNIVERSITĂȚII „ALEXANDRU IOAN CUZA”

IAȘI - 2023

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ISSN 1224-2284

ISSN-L 1224-2284

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Studia Antiqua et Archaeologica 29(2):189-206
DOI: 10.47743/saa-2023-29-2-1

Symbol or Utilitarian? Perspectives on the Function of Two Unusual Artefacts from the Chalcolithic Settlement Isaiia-*Balta Popii*

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Abstract. The article brings to the attention of both specialists and the general public two clay artifacts, quasi-conical, provided with holes and perforations, discovered in the Precucuteni II-III settlement at Isaiia-Balta Popii, Iasi County. Although objects with similar characteristics are rather rare, the authors have managed to find a few nearly exact analogies. This is all the more surprising as the analogies come from various Neolithic and Eneolithic cultural contexts in Central and Southeastern Europe, giving this object an archetypal character. Establishing its functionality, however, proved to be much more challenging, leading many archaeologists who discovered or approached similar artifacts to easily place them in the somewhat ambiguous sphere of symbolism and cult. Although this interpretation cannot be categorically ruled out, there are arguments supporting a surprising utilitarian functionality, albeit situated, in a sense, within the realm of prehistoric spirituality.

Rezumat. Articolul aduce în atenția atât a specialiștilor, cât și a publicului larg, două artefacte de lut, cvasi-conice, prevăzute cu orificii și perforații, descoperite în așezarea Precucuteni II-III de la Isaiia-*Balta Popii*, jud. Iași. Deși obiectele cu caracteristici asemănătoare sunt mai degrabă rare, autorii au reușit să găsească câteva analogii aproape exacte. Acest fapt este cu atât mai surprinzător cu cât analogiile provin din diverse medii culturale neolitice și eneolitice din centrul și sud-estul Europei, ceea ce conferă acestui obiect un caracter arhetipal. Mult mai dificilă a fost, însă, stabilirea funcționalității sale, ceea ce a determinat, din partea majorității arheologilor care le-au descoperit sau abordat, o facilă amplasare în sfera destul de echivocă a simbolului și a cultului. Deși această interpretare nu poate fi înlăturată categoric, există argumente care pledează pentru o surprinzătoare funcționalitate utilitară, dar situată, într-un sens, tot în zona spiritualității preistorice.

Keywords: *Precucuteni Culture, Isaiia-Balta Popii settlement, quasi-conical clay artefacts, functionality.*

Introduction

The Isaiia-Balta Popii archaeological site is located in the east-southeast sector of Răducăneni commune in Iași county (eastern Romania). From a geographical point of view, the site is located at the contact between the Central Moldavian Plateau (Culmea Crasnei unit; subunit: Dealurile Comarna – Răducăneni) and the Prut Corridor (common meadow Cozia – Jijia

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– Prut). As a result of the repeated overflows of the Jijia, at the junction between the right slope and the alluvial plain, a stage of fluvial erosion was formed, in some sectors still active, with a relative amplitude of about 3-5 m. Here the pluri-stratified settlement from Balta Popii is located, bounded in the NW–SE direction by two lateral torrents, tributaries of the Cozia stream (Figure 1)[3].

Figure 1. Aerial image of the Isaiia-*Balta Popii* site, view from North-East (Photo by Andrei Asăndulesei).

The longer habitation with the most vestiges belongs to the Precucuteni culture of the early Eneolithic; three habitation sequences were identified, from the evolved stage of phase II to the beginning of phase III. The settlement of the Precucuteni culture occupied an area of almost 4000 m^2; relatively large groups of stones, deposited (on the Eneolithic ground surface) in piles (two fully researched so far) can be interpreted as "milestones" meant to mark the limit of the inhabited area[4]. So far, 11 dwellings and over 60 pits belonging to this culture were investigated[5]; some of these have been radiocarbon dated[6]. Within these features, over twenty years of excavation, thousands of artefacts made of clay, stone or bone were discovered. Most of them fit into the known typologies of the Precucuteni Culture; however, the small

[3] URSULESCU *et alii* 2020.

[4] BOLOHAN *et alii* 2016, 40; TENCARIU *et alii* 2019, 83.

[5] URSULESCU, MERLAN, TENCARIU 2001, 110-113; URSULESCU, MERLAN, TENCARIU 2002, 160-163; URSULESCU *et alii* 2003, 158-160; URSULESCU *et alii* 2004, 149-151; URSULESCU *et alii* 2005, 188-191; URSULESCU, TENCARIU 2006; URSULESCU *et alii* 2006, 187-190; URSULESCU *et alii* 2008, 161-162; URSULESCU *et alii* 2009, 124-125; URSULESCU *et alii* 2010, 79-81; URSULESCU *et alii* 2011, 58-59; BOLOHAN *et alii* 2016, 39-40 ; TENCARIU *et alii* 2017.

[6] TENCARIU *et alii* 2022.

Chalcolithic community from Isaiia reserved us a significant amount of 'surprises', either in the form of ritual features, or of special arrangements within dwellings or of objects with a nearly incomprehensible functionality. This paper focuses on two findings of the latter category, more precisely two quasi-conical objects of fired clay showing certain characteristics that raised problems of interpretation.

The artefacts

The first artifact was discovered in 2018, in pit no. 78, which partially intersected house 14[7]. The complex, quite large in size (2.10 x 3.80 x 0.60 m) was interpreted as a domestic pit, due to the very large number of bones from various animals, Unio shells, fragments of turtle shell, flint artifacts, artifacts from hard animal materials and burnt clay. Stratigraphically, the pit belongs to the upper habitation layer, from the beginning of the Precucuteni III phase; the complex has been radiocarbon dated within 4531-4369 BC range (2σ range)[8]. The artifact is almost intact (L = 98 mm; Dmax = 45 mm - Figure 2), except for a chip on the bottom part and a partial detachment of the slip on the dorsal side[9]. It was crafted from a fairly fine ceramic paste, with finely crushed shards in the composition. After the initial modelling, the object was covered with a slip approximately 0.5 mm thick, but the surface was only superficially smoothed. The piece was likely initially fired in a reducing atmosphere, having a dark-grey colour; later, it underwent a brief secondary firing in the presence of oxygen, causing the slip to change its colour to yellowish-red, with grey spots. What sets it apart as unusual are the interventions made on the still soft clay, through carving and perforation. Thus, the piece has two longitudinal holes that penetrate deep into the interior, without communicating with each other. The one on the upper part (E) is quasi-conical, with a rounded bottom (depth = 55 mm, D = 37 mm), probably created by carving. Inside the hole, we note a groove with a width of 5 mm, present only on the wall of the dorsal part, approximately 10 mm below the edge of the piece. The hole on the lower part (F) is cylindrical (depth = 38 mm, D = 9 mm), with very straight and smooth walls, resulting from the insertion and probably the rotation of a thin and hard support (wood or bone). On the upper part of the object, four perforations were made (quasi-circular, with diameters between 4 and 7 mm): three are arranged in a triangle on the ventral side (A, B, C), and one on the dorsal side (D), perfectly aligned with C on the opposite side.

[7] TENCARIU *et alii* 2019, 82.

[8] TENCARIU *et alii* 2022.

[9] For the constituent parts and characteristics of pieces of this type, we have chosen the following conventional names: upper part - the half along the length with the larger diameter, which includes the four transverse perforations and the conical longitudinal hole, wider and deeper; lower part - the half with the smaller diameter and a cylindrical longitudinal hole, narrower and less deep; ventral part - the transverse half on which the three perforations triangularly disposed are made; dorsal part - the transverse half with a single hole; A-C - the three perforations arranged in a triangle on the ventral side; D - the perforation on the dorsal side; E - the hole of the upper part; F - the hole of the lower part.

Figure 2. Isaiia-*Balta Popii* – the first artefact (photo and drawing by the authors).

The second artifact was discovered in 2003, in dwelling No. 8, attributed to the second Chalcolithic habitation sequence at Isaiia (Precucuteni II – III). The artifact is fragmentary (L = 112 mm; D = 54 mm - Figure 3), lacking a larger portion from the upper part and a smaller one from the ventral lower part, lost over time. It is made from a coarser paste compared to the first one, using clay with larger granulation (superficially kneaded), with added finely crushed shards. The surface was not covered with slip, only superficially smoothed. The non-uniform colour (various shades, from light yellow to dark brown) indicates firing in a mixed

atmosphere; it shows signs of secondary firing – probably the burning of the dwelling– which likely caused the detachment of some fragments. The holes and perforations are made in the same manner as for the first piece, with a difference in dimensions: the upper quasi-conical hole (E) is 64 mm deep and has a maximum diameter of 40 mm; the lower cylindrical hole is 42 mm deep and has the same 9 mm diameter. Unfortunately, the piece is broken at the locations of perforations A and C, from which only halves are preserved (diameters of 5 and 8 mm); B is missing, and the dorsal perforation (D) is narrower on the outside (3 mm) and wider on the inside (5 mm).

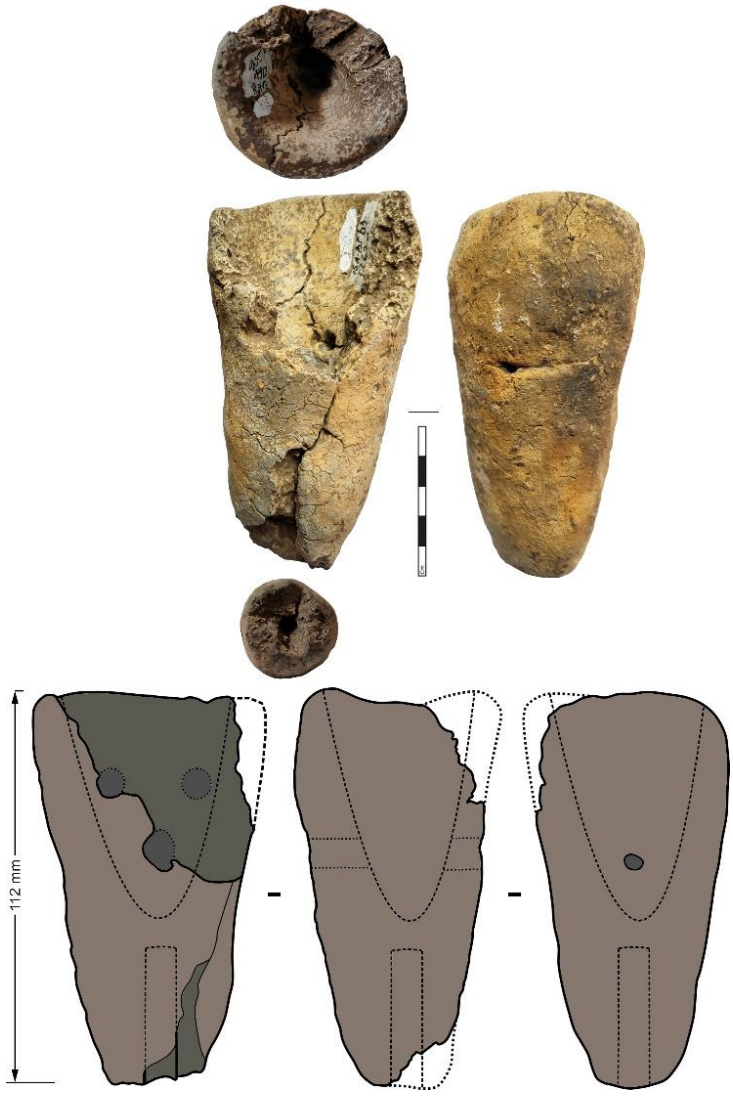

Figure 3. Isaiia-*Balta Popii* – the second artefact (photo and drawing by the authors).

The analogies

Among the material remains of Neolithic and Chalcolithic cultures, there is a significant number of conical clay objects with longitudinal holes, perforated or not, of various sizes. We were surprised, however, to identify in the literature certain pieces with characteristics (referring to the four perforations) that bring them almost to similarity with the artifacts from Isaiia. Therefore, we will only refer here to quasi-exact analogies, with other types to be mentioned in discussions regarding possible interpretations. The surprise was even greater when observing the very broad chronological and spatial range of the spread of this type of artifact, so we will attempt to present them in a quasi-chronological order.

A complete piece (as per the drawing - Figure 4/2) and several fragments of artifacts (Figure 4/3) very similar to those from Isaiia were discovered in the early 1990s in the **Starčevo-Criș** culture settlement (early Neolithic, approximately 5950-5400 BC) at **Gellénháza**[10], west of Lake Balaton (Hungary). The intact object is also quasi-conical in shape, with the same characteristics (holes and perforations) and similar dimensions (length of 95 mm; maximum diameter of the upper conical hole, 33 mm; diameter of the lower cylindrical hole, 11 mm). Furthermore, the piece exhibits a kind of groove/ledge inside the upper hole, bringing it even closer to the first object from Isaiia.

Going further, we identified another quasi-exact analogy in the early Neolithic tell from **Ovčarovo-Gorata** (north-east Bulgaria), a settlement occupied in the interval approximately 5700-5400 BC[11]. This artefact, from the excavations of the Bulgarian archaeologist Ilka Angelova's between 1974-1979, bears a striking resemblance to our specimens from Isaiia, except perhaps for the lower hole, which, from the photograph, appears wider and not necessarily cylindrical (Figure 4/4). The dimensions (length 99 mm, maximum diameter 51 mm, diameter of perforations between 4 and 6 mm), paste and surface treatment, as well as the number and placement of the perforations make it as an almost perfect analogy.

Other analogies can be found in the settlement of the **LBK** culture (early Neolithic) at **Brunn am Gebirge**, Wolfholz, south of Vienna (Austria)[12]. In 1992, several fragmented artifacts with approximately the same characteristics were discovered here as well. The more complete piece (Figure 4/1) has a rather cylindrical shape, being somewhat longer (140 mm) than our pieces and other analogies. Otherwise, it has the same two non-communicating longitudinal holes (hole F has a conical, not cylindrical shape) and four perforations (three on one side, one on the opposite side). The other three fragmented pieces seem to have the same characteristics. The dwelling 23, from which the more complete artifact originates, is dated in the interval 5460 – 5360 BC[13].

[10] SIMON 1996, 68.

[11] KRAUß 2014, 280-294.

[12] POMBERGER 2009; POMBERGER, KOTOVA & STADLER 2018; POMBERGER, KOTOVA & STADLER 2019.

[13] KOTOVA 2019, 255.

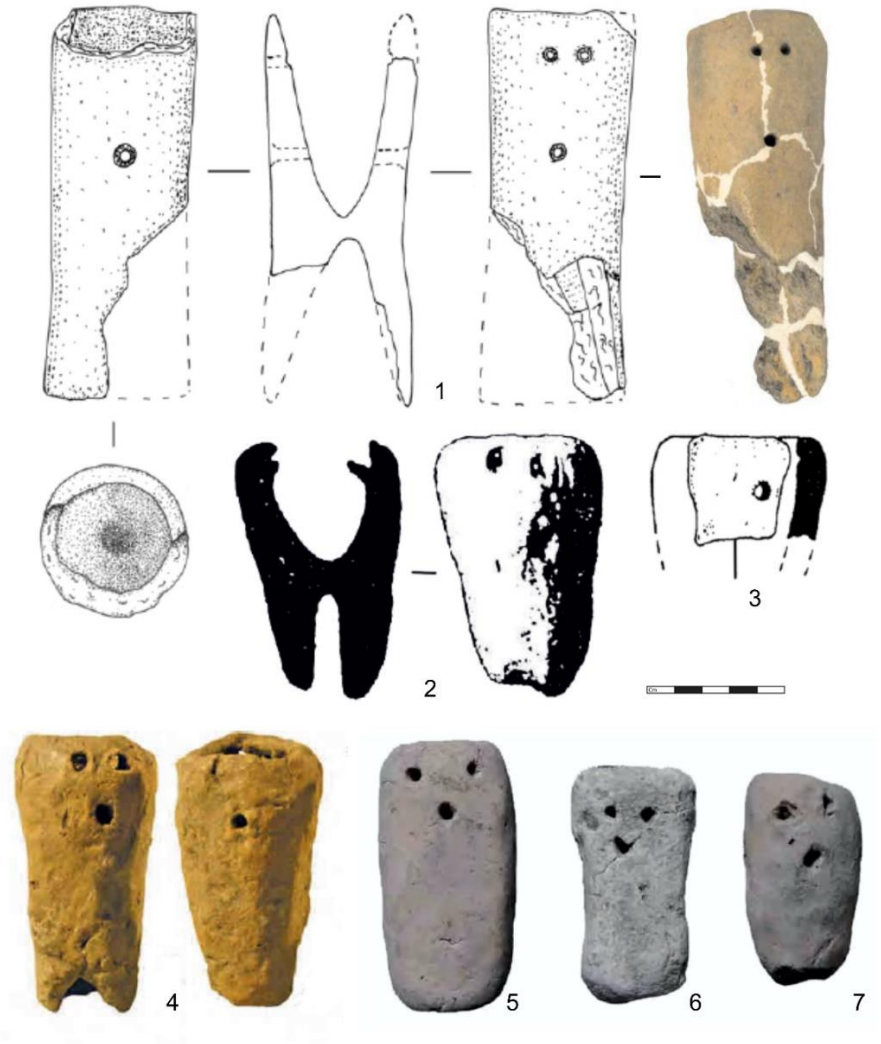

Figure 4. Analogies: 1 - Brunn am Gebirge; 2-3 - Gellénháza; 4 - Ovčarovo-Gorata; 5-7 - Hotnica (1 - POMBERGER, KOTOVA & STADLER 2019; 2-3 - SIMON 1996; 4-7 - KRAUß 2014).

No less than three such pieces are also found in the **Chalcolithic** tell at **Hotnica** (Northern Bulgaria, investigated by Nikola Angelov between 1956-1959 and by S. Chohadzhiev starting in 2000). The settlement has a long history of habitation (almost the entire 5th millennium BC), with Boian-Polyanitsa-Karanovo VI and Kodzhedermen-Gumelnitsa-Karanovo VI cultures being stratigraphically attested. Therefore, although we do not know the stratigraphic position of the specific artifacts, we are broadly situated on a chronological level

closer to the Isaiia settlement. All three pieces (Figure 4/5-7), apparently[14], exhibit similar characteristics to those from Isaiia: lengths of 97, 87, and 78 mm; cylindrical or quasi-conical shape; three perforations arranged in a triangle on the upper part.

Getting closer, geographically and chronologically, to the Precucuteni settlement from Isaiia, we encounter a series of objects from the Cucuteni culture, phase A (Middle Chalcolithic).

From the **Cucuteni A3** settlement at **Truşeşti-*Ţuguieta*** (Botoşani county), we know two very good analogies for our objects. Regarding the first one (Figure 5/2), mentioned and illustrated in the settlement's monograph[15] and in the comprehensive work dedicated to Cucuteni anthropomorphic figurines[16], we know the following details: it comes from a dwelling, is crafted from coarse paste, and has a length of 135 mm. About the second piece (Figure 5/3), we have fewer details, finding it only in two catalogues[17], with photos and catalogue sheets. From these, we learn that the piece is made of coarse paste and has a length of 130 mm. We note that the upper edge is turned inward, and its outer surface is smoother than the other piece.

Another analogy comes from the **Scânteia-*Dealul Bodeşti/La Nuci*** settlement (also **Cucuteni A3**), involving a fragmented piece originating from a pit[18]. From the published photograph and drawing, both holes and two perforations are evident. The piece is crafted from coarse paste, negligently smoothed, and has a length of 102 mm (Figure 5/1).

Another similar piece was discovered in 1960 at **Târgu Bereşti-*Bîzanu***, also in a settlement of the **Cucuteni A** phase. According to the published drawing and the description by the discoverer[19], the object is crafted from coarse paste, has all the holes and perforations found in the other pieces, and a length of 125 mm (Figure 5/4).

From the settlement at **Ariuşd-*Tyiszk-Hegy*** (belonging to the Transylvanian aspect of the **Cucuteni-Trypillia** civilization, at the same chronological level as phase A in Moldova), there is a quasi-exact analogy for the pieces discussed by us. It is a quasi-conical, complete piece (Figure 5/5), crafted from coarse paste, with a length of 114 mm, having both holes (E-F) and all four perforations (A-D)[20].

[14] We only had access to a frontal photograph, with a scale, from the Ovčarovo monograph (KRAUß 2014).

[15] PETRESCU-DÎMBOVIŢA 1999, 539.

[16] MONAH 2012, 217.

[17] MANTU, DUMITROAIA, TSARAVOPOULOS 1997, 210; LAZAROVICI, LAZAROVICI, ŢURCANU 2009, 183.

[18] LAZAROVICI 2022, 60, 331.

[19] DRAGOMIR 1967, 45, 53.

[20] SZTANCSUJ 2015, 53, 582. The photographs of the piece in this article, previously unpublished, were taken and provided by Dr. Sandor Stancsuj (Székely Nemzeti Múzeum, Sfântu Gheorghe), to whom we express our gratitude through this acknowledgment.

Figure 5. Analogies: 1 - Scânteia-*Dealul Bodești*; 2-3 – Trușești-*Țuguieta*; 4 – Târgu Berești-*Bîzanu*; 5 – Ariușd-*Tyiszk-Hegy* (1 – LAZAROVICI 2022; 2-3 – MANTU, DUMITROAIA, TSARAVOPOULOS 1997; PETRESCU-DÎMBOVIȚA, FLORESCU, FLORESCU 1999; 4 - DRAGOMIR 1967; 5 – Photos by Sandor Sztancsuj).

Leaving the Cucuteni culture and heading south, but without surpassing the chronological horizon of the Middle Chalcolithic, we encounter several good analogies in both the Stoicani-Aldeni cultural aspect and the Gumelnița culture.

In the settlement at **Mălăiești de Jos**, Prahova County (**Stoicani-Aldeni** aspect), in the dwelling No. 6 such an object was discovered, very similar to our pieces. The artifact is also crafted from coarse paste and has a length of 108 mm, with holes at the upper and lower parts, as well as four perforations arranged identically to the cases mentioned above[21] (Figure 6/1). According to radiocarbon dating, the dwelling where the artifact was discovered operated immediately after 4250 cal BC[22].

In the Gumelnița culture, we are aware of two analogies as well. The first one comes from the settlement at **Drăgănești-Olt-*Corboaica***[23] (**Gumelnița B1**). Although its dimensions are not mentioned (we estimate the length to be around 90-100 mm) and it is more cylindrical, with slightly rounded walls, still it is very similar to the pieces from Isaiia. Especially noteworthy is a groove made inside the upper hole, exactly like in the case of piece No. 1 from Isaiia (Figure 6/3).

Last but not least, from the tell settlement at **Teiu**, Argeș County (**Gumelnița B1**), we mention another artifact of the type discussed above. The object comes from a dwelling, has a quasi-cylindrical shape, it is also crafted from coarse paste, and has a length of 118 mm. Like the others, it has two holes and three perforations on one side[24] (visible in the photograph and in the drawing, with a fourth likely to exist on the opposite side - Figure 6/2).

Discussion and conclusion

From the above, one can notice that we are dealing with an artifact with a special character, determined by its distinctive morphological features. The type has a rather low frequency (under 20 quasi-whole pieces identified), but somewhat paradoxically, it has a very broad incidence in space and time; we are talking about pieces identified from eastern Austria to north-eastern Romania, and from the early Neolithic (Starčevo-Criș, the first half of the 6th millennium BC) to the Middle Chalcolithic (Cucuteni and Gumelnița cultures, the second half of the 5th millennium BC).

[21] FRÂNCULEASA *et alii* 2012, 12.

[22] FRÂNCULEASA 2016, 68.

[23] NICA, SCHUSTER, ZORZOLIU 1997, 17, 34; PĂTROI, BÂSCEANU 2019, pl. 2/3.

[24] NEAGU, MĂNDESCU 2011, 91

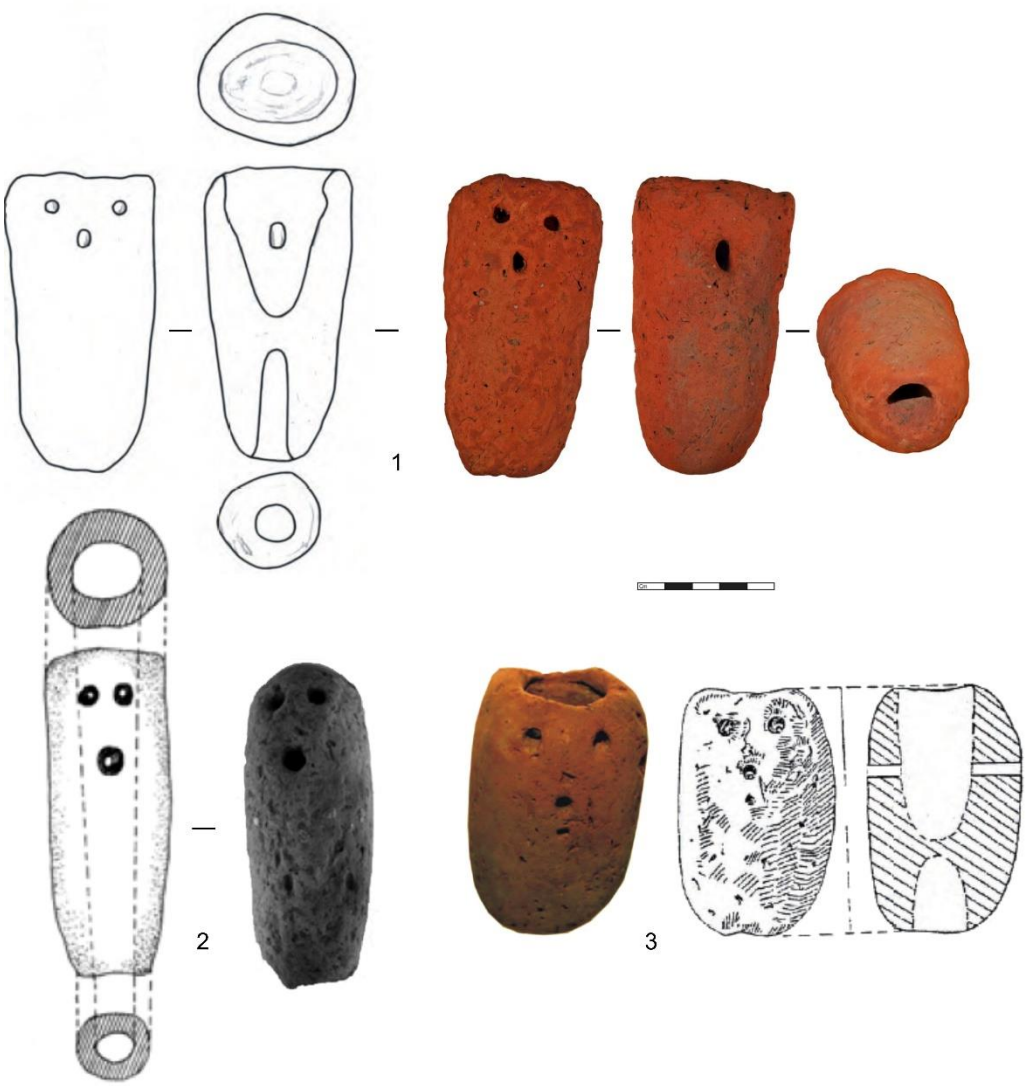

Figure 6. Analogies: 1 – Mălăiești de Jos; 2 – Teiu; 3 - Drăgănești-Olt-*Corboaica* (1 – FRÎNCULEASA *et alii* 2012; 2 – NEAGU, MĂNDESCU 2011; 3 – PĂTROI, BÂSCEANU 2019).

If a wide distribution of few specimens is intriguing, deciphering the functionality of the artifact is by no means an easy undertaking. Its morphometric characteristics do not indicate a clear practical utility, automatically prompting the temptation to place it in the realm of cult and symbols. But is it really so? Depending on various factors and the interpretations put forth by different archaeologists, we will attempt to decide which direction the balance tips.

In terms of the **discovery context** - where it is known/published - we note that they were found either within dwellings or in household waste pits nearby. However, no case of ritual deposition is documented. This could indicate that it was indeed an object with practical functionality, kept at hand, used, and probably discarded when it became defective.

Observing the quality of the **ceramic paste** and the **forming** and **finishing** of the pieces, we note that the majority are made from coarse clay, hastily shaped, and with surfaces generally treated superficially. Even though there are a few examples of objects made from finer raw materials and which are more carefully smoothed, even slip-coated (such as the one from Isaiia, a specimen from Trușești, probably Hotnica), the first impression is that of utilitarian objects, whose lack of finesse in execution does not hinder their function.

Regarding the **dimensions**, although each piece is unique, their sizes do not vary much. Taking into account their degree of fragmentation, the lengths range from 78 mm (Hotnica, fig. 4/7, fragmented) to 140 mm (Brunn, fig. 4/1), with an average of 100-110 mm. This suggests objects that are easily and frequently manipulable.

Things become more complicated when we consider the interpretation of the artifact **shapes**, combined with the longitudinal **holes** and transverse **perforations**. Their elongated shape, generally quasi-conical (less commonly quasi-cylindrical), has led to an easy association (especially in the Romanian archaeological literature) and their inclusion in the category of *phalli* - symbols of masculinity. Furthermore, the presence of the three perforations arranged in a triangle at the upper part is associated with a schematically rendered human face (eyes and mouth).

For example, M. Petrescu-Dîmbovița, in classifying "*phallic*-shaped objects", describes one of the artifacts from Trușești, as mentioned by us earlier: "The third variant, narrower at the lower end and wider at the upper end, is no longer perforated entirely, but only at the ends... the upper part of a piece being provided with two oval holes (eyes) and a rectangular one (mouth) beneath them; indication of the eyes and mouth contributes to the anthropomorphising of that particular piece"[25].

Referring to the object from Scânteia, Cornelia-Magda Lazarovici integrates it into the category of *phallic* type artifacts, with additional anthropomorphic features: "Some artifacts of this type, with holes that suggest a human face, can undoubtedly be considered anthropomorphized artifacts, and we have in mind the ones from Trușești..." [26].

[25] PETRESCU-DÎMBOVIȚA *et alii* 1999, 539.

[26] LAZAROVICI 2022, 60.

In the same manner, the other artifacts from the Cucuteni culture are interpreted: Ariușd - *phallus*[27]; Târgu Berești - "...*phallus*, of fired clay, with impressions of chaff, provided with three transverse holes for suspension..." [28].

Also categorized as *phalli* by the discoverers are the artifacts from Mălăiești de Jos (Stoicani-Aldeni) [29], Teiu (Gumelnița) - "the *phallus* from Teiu is anthropomorphic and recalls the identical artifact discovered in the Cucuteni A3 settlement from Truşeşti-*Ţuguieta*"[30]; Drăgănești-Olt (Gumelnița) [31].

Recently, in a synthetic study on artifacts interpreted as *phalli*, a few pieces similar to those from Isaiia are brought into discussion. Although the authors acknowledge that "not everything that is conical/cylindrical and longitudinally perforated is a *phallus* or was used in the context of a sacred ceremony with a *phallic* role" [32] nonetheless, "...holes were made in the body of the piece through perforation, and their arrangement suggests a human figure, which is why these artifacts have been classified as anthropomorphized *phalli*[33]".

Dan Monah, in his well-known work on Cucutenian anthropomorphic figurines, discussing the same category of objects (referring to the pieces from Trușești and Malnaș[34]), does not favour their interpretation as phalli. However, he maintains the idea of anthropomorphising[35].

Within the archaeological literature, the issue of the functionality of elongated objects, perforated entirely longitudinally, has been raised in the past. The hypothesis was put forth that these may not represent *phalli*, as originally considered for all pieces, but rather nozzles for bellows used in copper metallurgy[36]. Of course, this cannot be the case for the discussed pieces, as they are not perforated entirely longitudinally and have transverse perforations, therefore cannot facilitate the pressure and direction of air circulation.

A vaguely similar piece, cylindrical, with two non-communicating longitudinal holes (166 mm in length), discovered in Văleni (Neamț County), was initially interpreted as a torch or a support for attaching a torch to the wall[37]. Later, the same author proposed another theory:

[27] SZTANCSUJ 2015, 576.
[28] DRAGOMIR 1967, 45.
[29] FRÎNCULEASA *et alii* 2012, 12-13.
[30] NEAGU, MĂNDESCU 2011, 81.
[31] NICA, SCHUSTER, ZORZOLIU 1997, 17.
[32] PĂTROI, BÂSCEANU 2019, 9.
[33] PĂTROI, BÂSCEANU 2019, 14.
[34] Unpublished piece, information from Attila László.
[35] MONAH 2012, 217.
[36] BRUDIU 2001.
[37] CUCOȘ 1981, p. 43

the piece could have been used, probably, in a system for rotating vessels during shaping, possibly placed on an axis inserted into the ground, with a circular rotating wooden mass above it with another axis inserted into the top of the piece[38]. Neither hypothesis is applicable to our pieces. In the case of the pivoting device for pottery, the smaller dimensions and the narrow lower hole would allow for a very thin axis, which would not be able to support such weight. Regarding the torch, the perforations at the top would not be useful for holding a liquid fuel in the upper hole.

Analysing the pieces from Isaiia, the authors of this article considered, based on some ethnographic analogies, the hypothesis that they might be a kind of *cache-sexe*; however, this idea was quickly abandoned due to their small dimensions and other characteristics that did not support this interpretation.

While interpretations in Romanian archaeological literature almost unanimously converge towards the symbolic realm (phallus as a masculine principle), we find differing opinions in foreign literature.

The more intact or fragmented pieces from Gellénháza are referred to as "pear-shaped clay weights" with perforations for suspension[39].

Based on rather vague analogies, such as tables-altars with four legs and anthropomorphic protomas in the centre, R. Krauss interprets the artifacts from Ovčarovo-Gorata and Hotnica as anthropomorphized objects, components of complex artifacts[40].

Finally, a very reasonable interpretation[41] is offered by Austrian archaeologists who investigated and published the LBK site at Brunn am Gebirge in Austria. They propose the hypothesis that the pieces could actually be musical instruments, specifically a type of flute or ocarina, composed of two parts. The artifacts discussed here would represent the lower part – an upper resonator corpus with finger holes and a lower part in which a wooden stick was inserted as a handle. The upper part, when separated, was a mouthpiece with a blowhole, which could be fixed onto the resonator[42]. As far as we know, no clay object with such an appearance has been found, so it can be argued that it might have been made of other materials that did not withstand the test of time (such as wood or resin). One of the mentioned authors, Beate

[38] CUCOȘ 1999, 73.

[39] SIMON 1996, 68.

[40] KRAUß 2014, 162.

[41] Special thanks to Dr Senica Țurcanu, who directed us to the publication, thus enabling a more appropriate presentation of the Isaiia pieces by identifying analogies and hypotheses unknown in the literature from Romania.

[42] POMBERGER, KOTOVA & STADLER 2018, 462.

Maria Pomberger, even conducted some experimental reconstructions of the instruments (Figure 7), producing, recording, and analysing sounds[43].

Figure 7. Experimental reconstructions of the flute from Brunn am Gebirge (1 - POMBERGER, KOTOVA & STADLER 2018; 2 – POMBERGER 2009).

In **conclusion**, considering all existing analogies and hypotheses, we can assert with a fair degree of certainty that the pieces in question are not *phalli*. In comparison to other representations, they do not adhere to the anatomical structure of a phallus, and all other characteristics are not justified in the case of an abstract representation. We also disagree with the supposed anthropomorphising of the pieces based on the arrangement of the three holes in a triangle. Of course, at first glance, there is a sensation of a human face, but this is due to facial pareidolia – the human brain's tendency to recognize faces even in the most abstract forms. Furthermore, this approach to representing the human face is rather contemporary and is not found at all in the "canons" of the epochs in question.

On the other hand, we fully agree with the functionality of the pieces as musical instruments, a kind of ancient ocarinas, although we do not yet have a clear image of the complete object[44]. This interpretation explains, in a way, both the rarity of the pieces and their archetypal nature, given the very broad spatial and chronological distribution range.

Therefore, the artifacts from Isaiia and their counterparts very likely have a practical functionality (producing musical sounds), a functionality that places them in the fascinating and ever-surprising realm of the prehistoric spiritual universe.

[43] POMBERGER, KOTOVA & STADLER 2019.

[44] Even though experiments have been conducted based on the pieces from Brunn am Gebirge, we intend to test our own hypotheses regarding the making and use of these artifacts in the near future.

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Studia Antiqua et Archaeologica 29(2):207-219
DOI: 10.47743/saa-2023-29-2-2

Clay Objects from the Chalcholithic Settlement of Cucuteni -*Dâmbul Morii (Iasi County, Romania)*

Radu-Ștefan BALAUR[1]

Abstract. *The archaeological research carried out at Dâmbul Morii settlement led to the discovery of 15 dwellings. In their inventory, 30 pieces identified were made of clay. All artifacts that were not plastic representations were included in this category. In this study, we want to make a presentation of these artifacts, and the context of the discovery, to give us a picture of their functionality. Unfortunately, this task is hampered by the low number and fragmented state of the pieces. The artefacts discovered at Dambul Morii can be classified in the category of household items (clay weights, spindle whorls, clay balls, clay tokens), as well as ornament items (beads, clay disc, en violon idol, amulets, etc.). Some of them can also be used in some ritual activities, such as amulets, or clay balls, or for other purposes.*

Rezumat. *Cercetările arheologice de la Dâmbul Morii au dus la identificarea a cel puțin 15 locuințe. In inventarul acestora au fost identificate și 30 de piese realizate din lut. În această categoria erau incluse toate artefactele care nu erau reprezentări plastice. In studiul de față dorim să facem o prezentate a acestor artefacte, și contextul descoperirii pentru a ne face o imagine asupra funcționalității lor. Din nefericire această sarcina este îngreunată de numărul scăzut și starea fragmentară a pieselor. Piesele descoperite la Dâmbul Morii pot fi încadrate în categoria obiectelor casnice (greutăți, fusaiole, bile, jetoane), precum și a obiectelor de podoabă (mărgele, disc de lut, idol en violon, amulete). Unele dintre ele pot fi utilizate și în unele activități rituale, asemenea amuletelor, eventual și a bilelor de lut, sau in alte scopuri.*

Keywords: *Dâmbul Morii, clay objects, clay weights, spindle whorls, clay tokens*

Introduction

The Cucutenian communities used other objects besides weapons, ceramics, plastic, and cult objects in their practical and spiritual activities. These pieces represent clear evidence of the practice of domestic and community activities at the level of the settlement. Some researchers include in this category practically all materials that were not plastic representations[2]. Among the objects considered in this study, we list spindle whorls, clay weights, clay balls, and so-called clay tokens, as well as a series of objects that could be considered adornments.

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[2] BOGHIAN 2004, 161; MELNICIUC 2011, 133; BEM 2007, 179.

The settlement at *Dambul Morii*[3] was first mentioned by H. Schmidt, under the name „Talsiedlung - the settlement in the Valley". The German scholar also conducted a small control survey in the western part of the settlement[4] without making significant discoveries or leaving a plan of excavation. The research carried out in the 1961-1962 campaigns have identified the ditch, but it appears to be limited to a 5-6x2 m area[5]. The settlement from *Dâmbul Morii* is located northeast of Romania (Fig. 1/A), Iasi County (Fig. 1/B), on the territory of Cucuteni commune, Băiceni village (Fig. 1/C), on a promontory positioned between the Recea stream to the west and the Morii stream to the east, with steeper slopes to the southeast and smoother on the other sides [6].

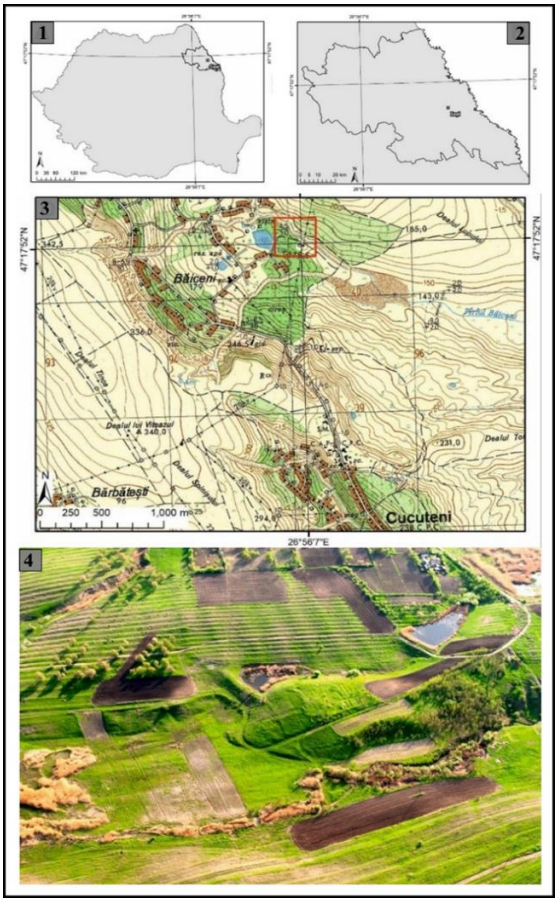

Figure. 1. Site location of Cucuteni – *Dâmbul Morii*. Iași County (1-2), and on the topographic map, Scale 1.25000(3); Oblique aerial photography from the ENE(4) (after Asăndulesei 2020, Fig. 1,7).

[3] In some studies, the settlement is also known as Cucuteni-Băiceni - *Dâmbul Morii* or Băiceni - *Dâmbul Morii*.

[4] SCHMIDT 1932, p. 13.

[5] DINU 2006, 31; 2009, 106.

[6] DINU 2006, 31; 2009, 106; ASĂNDULESEI et alii. 2020, 320; BALAUR 2020, 170.

During the eight excavation campaigns (1961-1964, 1965, 1977-1978 and 1989), under the leadership of Marin Dinu, 10 Cucuteni A-B dwellings and the defensive system of the settlement were identified and investigated[7]. After a careful consultation of excavation plans and site notebooks the number of partially or fully investigated dwellings increased to 15[8] (Fig. 2).

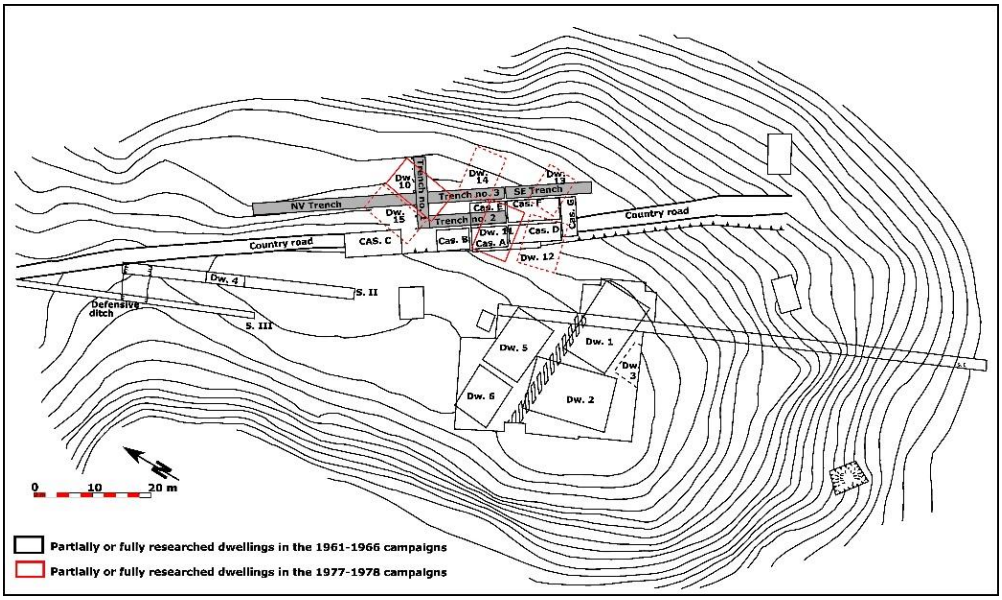

Figure. 2. Cucuteni – *Dâmbul Morii* . Excavation plan (adapted after Dinu 2006, 43, with additions).

The clay objects that were discovered at *Dambul Morii* settlement will be the topic of our discussion. In the eight excavation campaigns, in different contexts, 30 pieces of clay artefact were identified, representing different types of tools such as clay weights, spindle whorls, balls or clay projectiles, a clay disc, and a miniature clay axe, etc. Also, two pieces there were discovered that we failed to fit into the categories mentioned above. These objects were made from a clay paste of poor quality, or a carefully purified paste, having a composition of fine sand. These were subjected to low-quality firings, as in the case of clay weights, which allowed the absorption of moisture, thus becoming brittle, or a firing in an oxidizing environment[9].

[7] DINU 2009, 106-107; ASĂNDULESEI A., et alii 2020, 324.

[8] BALAUR 2023, 71.

[9] BOGHIAN 2004, 101; MELNICIUC 2011 133.

Household objects

Clay weights

The first category of tools under discussion concerns the clay weights. These pieces were usually made from a coarser paste mixed with sand, chaff, or fine chamotte, burned brick or light brown. They are found in various forms. The first is the truncated one with a right base, narrower or rounded, or a more robust pyramidal body. In both cases they were perforated at the upper part. The second shape encountered is the round one, with a 7-10 cm in diameter, perforated centrally and slightly flattened. In some cases, these pieces have two incisions on either side of the body, from the hole to the nearest edge, most likely the result of their use, hanging from the fibers. Their weight was sufficient to determine the printing of these fibers in the clay, probably not very burnt[10]. As for the size of these pieces, they were divided into two categories: large pieces (those of the pyramid, ovoid, circular, and flattened form), and medium and small-sized pieces, with predominantly bitronconic or circular shapes[11].

The functionality of these pieces was diverse. In some cases, they served to stretch the warp yarns, when weaving at vertical loom, thinner or thicker canvases, or knitting mats, in the case of medium and small pieces. Also, according to the researchers, in the case of circular clay weights, for fishing nets[12].

Unfortunately, the number of clay weights in the A-B phase settlements is very small, either due to a lack of research or due to the perishability of the material used (clay), which, after an insufficient burn, has degraded[13]. Near the settlement of *Dâmbul Morii* similar clay weights, truncated or pyramidal, were discovered at Cucuteni – *Cetățuia* in Cucuteni A-B and B levels[14] and Buznea – *Silişte*[15] or circular in Cucuteni – *Cetățuia*[16], Giurgeşti[17] and Buznea[18].

At *Dâmbul Morii*, too, few such pieces were discovered. All the pieces in question were discovered in dwelling no 5. Here we have two circular, flattened weights, a whole one (Fig. 3/1) and a fragmentary one (fig. 3/2), both with a diameter of about 12 cm, a trapezoidal weight, with a ellipsoidal base, kept on a height of about 10.6 cm (Fig. 3/3), and fragments from other circular weights (Fig. 3/4).

[10] BOGHIAN 2004, 101; MELNICIUC, 2011 135; BEM 2007, 179.

[11] BEM 2007,179, fig. 44/7, 392/1-14, 393/1-6; MELNICIUC, 2011 135.

[12] BOGHIAN 2004, 101.

[13] MELNICIUC 2011 135.

[14] BOGHIAN 2004, 101; SCHMIDT 1932, 67, fig. 36/4.

[15] BOGHIAN 2004, 101, fig. 59/6, 9-10; 61/48-49.

[16] BOGHIAN 2004, 101, fig. 59/2; 60/3-4, 8; SCHMIDT 1932, 67.

[17] BOGHIAN 2004, 101, fig. 59/1.

[18] BOGHIAN 2004, 101, 60/3-4, 8.

Figure 3. Clay weights from dwelling no 5 from *Dâmbul Morii.*

Spindle whorls

The spindle whorls attest to the practice of the craft of processing of fibers of animal or vegetable nature within the prehistoric communities. As a rule, they were made of a carefully cleaned paste, having fine sand in its composition. The combustion was carried out in an oxidizing environment, thus gaining gray colors, brick to red or brown-brick, or burned in a reducing environment, getting lighter or darker gray colors[19]. There is also the opinion that these pieces were made of broken ceramic fragments, which were then sanded until a circle

[19] BOGHIAN 2004, 101; MELNICIUC, 2011 133; PETRESCU-DÎMBOVIȚA, VĂLEANU 2004, 147.

was made, later perforated with a flint tip[20]. They are found in various forms, conical or bitronconic, symmetrical or asymmetrical, elongated or flattened, perforated straight or slightly concave, as well as plan-discoidal, flattened resembling perforated discs. Some of them had a decor that included incised motifs, potholes, notches, and other features[21]. Among the different types of spindles whorles discovered, we mention those from Hăbăşeşti[22], Cucuteni – *Cetătăuia*[23], Giurgeşti[24], Ruginoasa[25], Buznea[26], clear evidence that these communities spun animal and vegetable fibers, obtaining threads for weaving and knitting[27].

Also, in this case their number is low, and unfortunately the pieces discovered very fragmentary. The six pieces discovered at *Dambul Morii* were part of the category of bitronconic (Fig. 4/2, 6) and circular (fig. 4/1, 4, 5) spindles whorles, with widths ranging from 2.5 to 4.2 cm, respectively, and heights between 2.2 and 3.8 cm. Regarding the context of the discovery, two pieces each come from dwelling no 2 (Fig. 4/1, 3), investigated in the 1963 campaign, and dwelling no 11 (Fig. 4/2, 5), investigated in the 1978 campaign, one artefact in dwelling no 13 (Fig. 4/6), identified in the 1977 campaign, and another artifact discovered under the platform of a dwelling, without specifying exactly which one, researched in the 1978 campaign.

[20] BEM 2007, 179, fig. 393/9-11, 13-14.

[21] BOGHIAN 2004, 101; MELNICIUC, 2011 133.

[22] DUMITRESCU 1954, 267, fig. 27/1-15; 28/1-14; BOGHIAN 2004, fig. 61/1-29.

[23] PETRESCU-DÎMBOVIȚA, VĂLEANU 2004, 147-148, fig. 68/1-14.; SCHMIDT 1932, 67, fig. 16; BOGHIAN 2004, fig. 61/34-36, 41-43.

[24] BOGHIAN 2004, fig. 61/30-33; 37-40; 44-47.

[25] LAZAROVICI, LAZAROVICI, 2012, fig. VIII/29.7.

[26] BOGHIAN 2004, 101, fig. 59/11; 60/5-7.

[27] BOGHIAN 2004, 101.

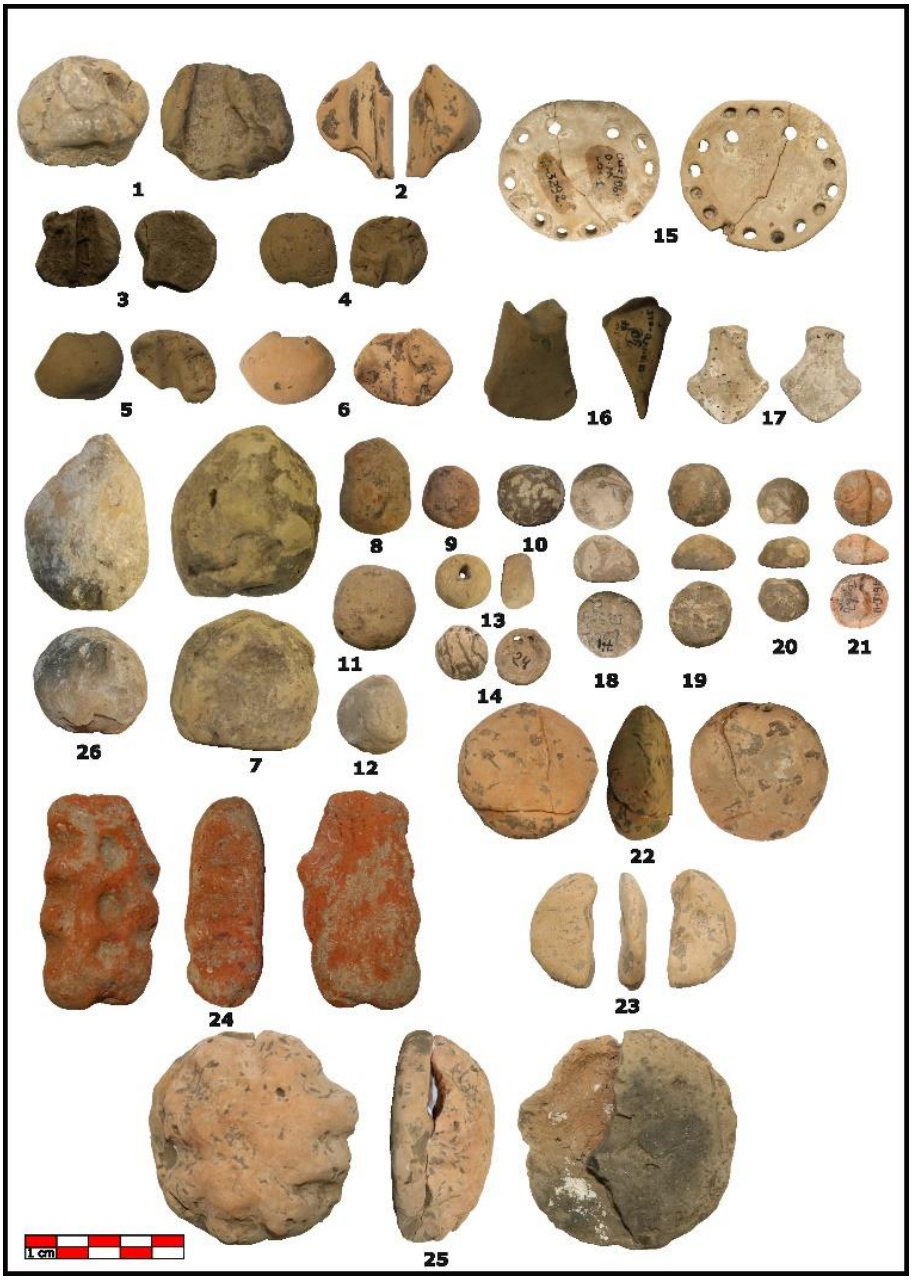

Figure 4. Clay objects discovered at *Dâmbul Morii*. 1-6 spindle whorles; 7-12, 26, clay projectiles; 13-14 beads; 15. Clay disc; 16 miniature clay axe; 17 en violon idol; 18-21 clay tokens; 22-23 clay tiles; 24-25 clay objects of unknown use. Context of discovery: 12, 15, 21 dwelling no. 1; 1, 3. 17, 25-26 dwelling no. 2; 10, 23 dwelling no. 5; 7-9 dwelling no 6; 16 dwelling no 10; 2, 5, 18 dweling no 11; 6 dwelling no 13; 4, 11, 22 under the platform of an unspecified dwelling from the 1978 campaign; 14, 19, 20, 24 unspecified context from the 1977 and 1978 campaigns; 13 cas 1E, 1989 campaign.

Clay balls

In the category of clay objects, clay balls or projectiles, are also included. Usually, they were spherical, non-perforated or only with a beginning of perforation, with different diameters, about 2-6 cm. As for functionality, opinions are divided. They are considered by some researchers children's toys or beads in the early stage of manufacturing[28], or slingshot projectiles[29]. The defensive function of clay balls is contested by some researchers, based on the fact that these pieces had a low strength and resistance to impact, but also the fact that they were made of a light and friable material[30]. The possibility of having been used in some cult practices is also not excluded, as suggested by the discoveries from Vorniceni, where, such small clay balls were placed in the so-called "vessels with a threshold" together with anthropomorphic statuettes[31]. Also, some researchers consider the clay balls with perforations to be more likely beads[32].

Such artefacts are currently mentioned in the settlements of Cucuteni–*Cetatuie*, phases A-B and B[33], Hăbăsesti[34], Drăguseni – *Ocoale* [35] or Vorniceni[36]. At *Dambul Morii*, seven such pieces were discovered (Fig. 4/7-12, 26), four with approximately circular shape (Fig. 4/9-12), with diameters ranging from 1.8 to 2.5 cm, and a slightly elongated one (Fig. 4/8). Two of them (Fig. 4/7, 26) are different from the rest of the clay balls discovered by having approximately double dimensions. The artefacts under discussion were discovered in dwelling no 6, three clay balls (Fig. 4/7-9), one in each of the dwellings no 1 (fig. 4/12), no 2 (fig. 4/26), and no 5 (Fig. 4/10), and another discovered under the platform of a dwelling investigated in the 1978 campaign, without specifying which one (Fig. 4/11).

Clay tokens

Apart from the above mentioned clay artefacts, we also know some objects whose utility is difficult to specify, namely the so-called clay tokens. In the Near East such pieces were used in temples, altars, ritual deposition, or were considered protective or blessing amulets[37]. At *Dambul Morii* four such pieces of clay tokens were discovered (Fig. 4/18-21), with circular base, and diameters ranging from 1.6 to 2 cm with a height of about 1 and 1.5 cm. These objects

[28] BOGHIAN 2004, 162; SCHMIDT 1932, 68; DUMITRESCU 1954, 459, fig. 48/5-6, 8-9, 12.

[29] CRÎȘMARU 1977, 97; BOGHIAN 2004, 102.

[30] MELNICIUC 2011, 135.

[31] MELNICIUC 2011, 135-136

[32] SZTANCSUJ 2015, 198.

[33] SCHMIDT 1932, 68.

[34] DUMITRESCU 1954, Fig. 150/9, 17.

[35] MELNICIUC 2011, 135-136, fig. 44/1; CRÎȘMARU 1977, 97.

[36] MELNICIUC 2011, 135-136.

[37] PALKA 2021, 414.

are interpreted by specialists either as schematic anthropomorphic representations or game pieces, either they give to these objects a cult character[38].

Objects of adornment

The beauty is not only manifested by the manner of decorating the various pieces discovered in the Cucuteni communities, but also by the presence of ornaments, made of different materials. The first category of artefacts considered refers to clay beads. They were made from a better quality paste, burned to red or brown. Also they are found in different forms, such as elongated cylindrical, perforated centrally or slightly laterally, as is the case at Hăbăşeşti[39], Cucuteni – *Cetătăuia*[40] and Giurgeşti[41], biconic and conical, like those at Cucuteni – *Cetătăuie*[42] or Hăbăşeşti[43], or spherical and flattened spherical, like those discovered in Hăbășești[44] or Cucuteni – *Cetățuia* and *Dâmbul Morii*[45]. Other discoveries of this kind were found at Târpeşti, level A_1-A_2[46], Truşeşti[47], Drăguşeni[48] or Scânteia[49]. At *Dâmbul Morii*, the existence of "clay rings" is also mentioned, but considering their size, the researchers rather believe that they are also beads[50].

In addition to the above mentioned piece, considered clay ring, at *Dambul Morii* a single bead (fig. 4/13) was discovered, in the 1989 campaign. It had a circular shape, slightly flattened, with a diameter of 1.8 cm and a width of about 1 cm, perforated in the upper part.

The discovery from dwelling no 10 can also be included in this category of decorative items. It is a small disk, with a diameter of about 1.7 cm, provided with two mounting holes, with an incised decoration on the concave side (Fig. 4/14). The author of the discovery considered this piece rather an amulet or an idol[51]. There is also the opinion that this type of piece may rather represent a button[52].

[38] SZTANCSUJ 2015. 194.

[39] DUMITRESCU 1954, 456, fig. 43/10, 15-17, 22-23; BOGHIAN 2004,161, fig. 157/19, 21, 31, 32, 37-38.

[40] SCHMIDT 1932, 68, fig. 18/d-f, pl. 35/9, 10; BOGHIAN 2004, 161.

[41] BOGHIAN 2004, 161.

[42] SCHMIDT 68, fig. 18/b, c, e, pl. 35/6, 7; BOGHIAN 2004,161.

[43] DUMITRESCU 1954, 456, fig. 43/14; BOGHIAN 2004, 161, fig. 157/20.

[44] DUMITRESCU 1954, fig. 43/12-13, 18-21, 25-28; BOGHIAN 2004, 161, fig. 157/34-36, 43, 53-54.

[45] SCHMIDT, 1932, 68-69, fig. 18/g, h, pl. 35/7, 8; BOGHIAN 2004, 161.

[46] BOGHIAN 2004, 161.

[47] PETRESCU-DÎMBOVITA, FLORESCU, FLORESCU, 1999, 540, fig. 381/9; BOGHIAN 2004, 161.

[48] MARINESCU-BÎLCU, BOLOMEY 2000, 151, fig. 178/37, 179/12; BOGHIAN 2004, 161.

[49] MANTU, ŢURCANU 1999, nr. 375-382 din catalog; BOGHIAN 2004, 161.

[50] BOGHIAN 2004, 161.

[51] Cucuteni – Baiceni – *Dâmbul Morii* – Carnet de săpătură 3. Campania din 1977.

[52] SZTANCSUJ 2015, 189.

The second category under discussion refers to clay discs. Most of the time they represent copies of similar pieces of gold, similar to those discovered at la Brad[53] or copper discs at Habasesti[54] or Cărbuna[55]. Such clay discs have also been discovered at Cucuteni – *Cetatuia*[56] , Scânteia[57] or Draguseni[58].

The piece from *Dambul Morii* (Fig. 4/15), discovered in the 1961 campaign, in dwelling no 1, differs from those mentioned above by its decoration and form. The convex disc, measuring 5.2 cm in diameter, had total or partial perforations on the edge, most likely made from the inside out. In the central area, it has two perforations, probably mounting holes. We mention that in the area of the two mounting holes the disc was slightly flattened. This piece seems rather to have played the role of amulet, if we take into account the two perforations in the central area.

Another type of object discussed in this category is the *en violon* idols. These plastic pieces are usually flat, being made of clay. The paste from which they were made was well purified and burnt brick-red or brick-brown. There are two variants of such pieces, simple, only sketched, with perforations in place of the eyes, having the shape of a violin box with the head and body rounded, and complex, which drew some anatomical details and decorative elements, especially the stitches that mimic the technique *au repousse*. The decoration is also individualized for each piece, varying from simple punctures, arranged either around the head and body, in a single row or in two rows, as observed in the case of two discoveries from Hăbăşeşti[59], or on the whole dorsal surface, as in the case of some specimens from Hăbăşeşti[60] and Cucuteni - *Cetățuia*[61]. The fact that there have been no duplicate pieces discovered so far demonstrates the unique character and uniqueness of each idol in its own way[62].

The piece discovered at *Dâmbul Morii* (Fig. 4/17), in the 1963 campaign, in dwelling no 2, falls into the category of complex pieces in terms of shape and decoration. It shows a string of punctures all around the body and head, most likely with two unfinished perforations in the head area, representing the eyes. In the body area, the decoration consists of a circle of incised dots, the center of the circle being marked by another incised dot. On the other hand, this piece has no decoration[63].

[53] URSACHI 2012, 4, fig. 26

[54] DUMITRESCU 1954, Fig. 41/1.

[55] DERGACEV 2016, 183-184; Pl. VIII.

[56] BOGHIAN 2004, 159; SCHMIDT 1932, 69, pl. 37, 6 sus.

[57] MANTU, ȚURCANU 1999, 125, piesa 275.

[58] MARINESCU-BÎLCU, BOLOMEY 2000, fig. 178/2, 179/14, 27.

[59] BOGHIAN 2004, 147; DUMITRESCU 1954, fig. 146/6-7.

[60] BOGHIAN 2004, 147; DUMITRESCU 1954, fig. 146/12.

[61] BOGHIAN 2004, 147; SCHMIDT 1932, fig. 33/6.

[62] BOGHIAN 2004, 147.

[63] BALAUR 2021, 383, Fig. 6.1.

Miniature clay axe

The miniature clay models reproduce, in a miniaturized, more naturalistic or schematized form, different categories of neolithic and neolithic weapons and tools made of stone, copper and, perhaps, bone. These pieces are linked, according to the researchers, to some cults of sacralisation of objects[64].

Among the pieces of this kind discovered, we mention the 21 miniature models and a single, fragmentary, normal-sized specimen from Hăbășești[65], or Târpesti, Cucuteni A_1-A_2 level[66], Drăguşeni[67] or the two pieces from Rugionoasa[68]. These were considered either votive pieces or amulets, with the aim of ensuring the strength and health of those who possessed and wore them, or symbols of "craft" and even signs of power, if we consider the fact that copper axes also had this destination, marking the social and religious hierarchy. Nor the possibility that these pieces are models of metallurgical artisans for copper pieces or templates for patterns in the case of natural-sized artifacts, given their realistic modeling is not excluded. Pieces of this kind were made of a semi-fine paste, with crushed shards in the composition, fired to a brick-red or gray-brown color[69].

The fragmentary piece from *Dambul Morii* (Fig. 4/16), which only has 4 cm of its original size, was discovered during the 1977 campaign in dwelling no 10 at a depth of 0.25 m. It is probable that the axe had two cross-edges with a transverse hole that were made from a brick paste. As for the cutting edge, it was slightly arched, widened on one side[70].

Various objects

Among the clay pieces discovered at *Dâmbul Morii* we can include the so-called clay tiles. There are two such objects (Fig. 4/22-23), one complete and the other fragmentary. They are round or oval in shape, and made of a semi-fine paste. The whole piece was about 4.5 cm in diameter and about 2 cm thick. The second piece had a diameter of about 3.7 cm and a thickness of about 1 cm. Such pieces were discovered in settlements such as Cucuteni, Scânteia, Ghelăiesti - *Nedeia*[71].

At *Dambul Morii*, two other clay artefacts seem to be interesting. The first piece under discussion is a brick-red clay artefact with dimensions of 7x3.8x2.5 cm (Fig. 4/24). It is flat on the dorsal side and has circular impressions on the other side. The second artifact (Fig. 4/25), light brown in color, had a circular shape, with a diameter of about 6.5 cm and a height of 3.6

[64] ENEA 2013, 89.

[65] BOGHIAN 2004, 159 fig. 157/1-5, 11-14, 22-27, 39-41, 48-5; DUMITRESCU 1954, 469, fig. 46/1-22.

[66] BOGHIAN 2004, 159; MARINESCU-BÎLCU 1981, 70-71.

[67] MARINESCU-BÎLCU, BOLOMEY, 2000, 151, fig. 178/45-46; 180/4-7.

[68] LAZAROVICI, LAZAROVICI 2012, 337; fig. VIII.9/6; fig. VIII.65.

[69] BOGHIAN 2004, 159; LAZAROVICI, LAZAROVICI 2012, 337, 339; DUMITRESCU 1954, 469, 472.

[70] Cucuteni – Baiceni – *Dâmbul Morii* – Carnet de săpătură 3. Campania din 1977.

[71] LAZAROVICI, LAZAROVICI, 2012,337.

cm. On the flat side it was brown to dark gray in color. Unfortunately, we do not know the utility of these two pieces.

Discussion and conclusions

In archaeology, there have always been discussions about the world of miniatures and their significance. Whether it is anthropomorphic or zoomorphic statuettes, models of dwellings or their miniature models, ornaments or tools, they have always been considered elements that can be included in the interpretation of some aspects of spiritual life in prehistoric communities[72].

Due to the small number of pieces and different contexts of discovery, it is difficult to make a concrete hypothesis about the utility of these artifacts. Most of the pieces, six in number, were discovered in dwelling no 5, followed by dwelling no 2 with five artifacts, three pieces in dwellings no 6 and no 11, each, and one each in dwellings no 10 and no 13. The discovery context for 4 artefacts was not specified; we only know that they were discovered during the campaigns of 1977 and 1978. For three other pieces, it is mentioned that they were discovered under the platform, unfortunately, it is not specified of which dwelling.

From the above, we conclude that at *Dambul Morii* the discovered artefacts can be classified in the category of household objects (weights, spindle-whorls, clay balls, clay tokens), as well as ornaments (beads, clay disc, amulets, etc.). Although few in number, the presence of clay weights and spindles attests to the existence of the craft of textile production and processing in the community of *Dâmbul Morii*.

In the same category of objects with a symbolic character are the miniature clay axe and clay disc. Interpreted mainly as amulets, in some opinions, their apotropaic function is emphasized, for protection and gender identification, boys - axes, girls - other objects[73]. The possibility that clay axes were considered votive pieces used in certain rituals is not excluded.

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[72] ENEA 2013, 94.

[73] ENEA 2013, 94.

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Studia Antiqua et Archaeologica 29(2):221-233
DOI: 10.47743/saa-2023-29-2-3

Analysis of the Elemental Composition of Four Bronze Sickles Dated at the Late Bronze Age

Ciprian-Cătălin LAZANU[1]

to Carol Kacsó at his 80th aniverssary

Abstract. *The present study presents the analysis of the elemental composition of four bronze sickles, three with hooked handle and one with holes on the handle, two from the deposit at Valea lui Darie, Vaslui county, one from the bronze deposit at Ciorani, and one discovered in a dwelling from the settlement belonging to the Noua culture from Dodești, following systematic archaeological research. The sickles from the Valea lui Darie deposit belong to the Ghermănești type, the Ghermănești variant, the Ciorani sickle to the Ilișești variant of the Ghermănești type, and the Dodești sickle to the Helești type. These types of sickles are characteristic for the Late Bronze Age east of the Carpathians, being chronologically placed between XII – X BC. The elemental composition of the four pieces was identified by employing non-invasive analysis with a mobile spectrometer, Thermo Niton XL3, resulting in a composition of a binary copper-tin alloy (Cu-Sn), to which a number of secondary elements are added: arsenic, antimony, iron, nickel, lead, titanium, and sulphur. In the case of the sickle from Dodești, the percentage of lead is 1.593% which could come from the composition of the copper or tin ores used, given that the percentage should be higher than 2-3% to be considered an intentional addition. Arsenic was also identified in the composition of the four sickles, but in small percentages, > 1%, most likely coming from the composition of the copper ore used. The elemental composition of ancient artefacts enables the establishment of correlations between different types of objects, production areas, raw material resource areas, and distribution patterns. Based on the elemental composition, the four sickles fall into the group of copper objects with arsenic, antimony/antimony, and nickel as the main secondary elements.*

Rezumat. *Studiul de față prezintă analiza compoziției elementale pentru patru seceri din bronz, trei cu cârlig și una cu găuri pe mânerul de prindere, două provenind din depozitul de la Valea lui Darie, județul Vaslui, una din depozitul de bronzuri de la Ciorani și una descoperită într-o locuință din așezarea aparținând culturii Noua de la Dodești, descoperită în urma cercetărilor arheologice sistematice. Secerile din depozitul de la Valea lui Darie aparțin tipului Ghermănești, varianta Ghermănești, secera de la Ciorani variantei Ilișești a tipului Ghermănești și secera de la Dodești tipului Helești. Aceste tipuri de seceri sunt caracteristice pentru perioada târzie a epocii bronzului de la est de Carpați, fiind încadrate cronologic între sec. XII – X a. Chr. Pentru identificarea compoziției elementale a celor patru piese a fost utilizată analiza non-invazivă cu un spectometru mobil, Thermo Niton XL3, în urma căreia a rezultat o compoziție de aliaj binar cupru-staniu (Cu-Sn), la care se adaugă un număr de elemente secundare: arseniu, stibiu/antimoniu, fier, nichel, plumb, titaniu și sulf. În cazul secerei de la Dodești, procentul de plumb este de 1,593% care ar putea să provină din compoziția minereurilor de cupru sau staniu utilizate, în condițiile în care pentru a fi considerată adăugare intenționată procentul trebuind să fie de 2-3%. În compoziția celor patru seceri a*

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fost identificat și arseniul, dar în procente mici, > 1%, provenind cel mai probabil din compoziția minereului de cupru utilizat. Compoziția elementală a artefactelor antice permite realizarea unor corelații între diferite tipuri de obiecte, zone de producere, zone de resurse ale materiei prime și a unor tipare de distribuție. Cele patru seceri, pe baza compoziției elementale, se încadrează în grupa obiectelor de cupru cu arseniu, antimoniu/stibiu și nichel ca principale elemente secundare.

Keywords: *sickles, elemental compositional, XRF, Late Bronze Age, Moldova*

Introduction

In this study we propose to discuss four bronze objects, namely four sickles, belonging to the collections of the Ștefan cel Mare Vaslui County Museum (Fig. 1). Although they have been discussed in various studies on either bronze sickles or bronze deposits, the paper herein approaches a new anngle of investigation by presenting the results of elemental composition analysis. The analysis of metallographic data of different types of bronze objects, including but not restricted to sickles, is a key factor in understanding the metallurgical phenomenon at the End of the Bronze Age. Our results extend a very small collection of reported data recorded on objects from the area between the Carpathians and the Prut, and originating from the end of the Bronze Age, that have been analyzed metallographically[2].

Of the four sickles, three come from hoards and one was discovered isolated. Three of them are sickles with their handle ending in an all-cast hook and are from the Ghermănești type, Ghermănești and Ilieșeni variants, and the fourth with holes on handle, from the Heleșteni type.

Description of the sickles

The first two sickles from Valea lui Darie, Roșiești commune, Vaslui county, come from a bronze hoard discovered accidentally in 1981 in the vicinity of a Noua settlement[3].

The first sickle is complete (Fig.2), the blade is wide and strongly arched, with rounded tip, the handle is short and ends in a short one-part hook, and the edge presents a prominent line from the extremity of the hook to the tip of the blade, with the role of strengthening the sickle. It was cast in a closed monovalve mould from the handle joining side of the blade, with the casting stub visible, and it was processed after casting by hammering and sharpening. The blade shows usage marks and it is covered with dark green

[2] NICOLESCU-OTIN 1913, 404-405, 416-417, 422-423, 425-426; PETRESCU-DÎMBOVIȚA 1977, 18, note 58, 78, where are included *Studien zu den Anfängen der Metallurgie* project dates, Stuttgart; NICULICĂ 1999, 215-220; POPESCU 2009, 272-278; BOROFFKA, MANTU-LAZAROVICI 2011, 148-165; VASILACHE *et alii* 2015, 633-642; DIACONU 2016, 99; LAZANU 2020, 579-592; VASILACHE *et alii* 2021, 1811.

[3]MAXIM-ALAIBA 1983-1984, 381, fig. 1/1-2.

patina. Dimensions: length - 234 mm, blade width - 35 mm, height of the arch - 125 mm, and weight - 241 g. Inventory no 15331[4].

The second sickle presents some differences compared to the first one (Fig. 3). It has a wide, knee-shaped bent blade with rounded tip and the handle is long and ends in a short one-part hook. The edge presents a prominent line from the extremity of the hook to the tip and a second line extending from the base of the hook to the tip, going through the middle of the handle and the blade. It was cast in a closed monovalve mould from the handle joining side of the blade, with the casting stub visible. It was processed after casting by hammering and sharpening. A dark and light green patina covers the entire surface of the object. Dimensions: length - 240 mm, blade width - 40 mm, height of arch - 139 mm, and weight - 236 g. Inventory no. 15332[5].

The third sickle is from Ciorani, Pufești commune, Vrancea county (Fig.4), and belongs to a bronze hourd consisting of eight pieces: six hooked sickles, one sickle with simple handle and with two holes (the Helești type), and one socketed axe[6]. The blade is narrow and slightly arched, with tapered tip, and the handle is short and ends with a long hook. The object has a prominent line from the extremity of the hook to the tip of the blade on both edges, making a complete contour of the sickle which was never processed after casting. It was cast in a closed monovalve mould from the handle joining side of the blade, with the casting stub visible. The entire surface is covered with brownish green patina. Dimensions: length - 150 mm, blade width - 25 mm, height of arch - 84 mm, and weight - 70 g. Inventory no. 9.

The fourth sickle (Fig.5) is from Dodești, Dodești commune, Vaslui County, and it was discovered in a settlement belonging to Noua culture[7]. The blade is strongly arched and wide, and the handle has two holes for fixing the handle. The edge has a prominent line from the handle to the tip of the blade which has the role to strengthen the sickle. It was cast from the handle joining side of the blade in a one-part closed mould, with the casting stub visible. It was processed after casting by hammering and sharpening, and the blade shows usage marks. The sickle is covered with dark green patina on the entire surface. Dimensions: length - 170 mm, blade width - 35 mm, height of arch - 95 mm, and weight - 132 g. Inventory no. 1757.

[4]ДЕРГАЧЕВ, БОЧКАРЕВ 2002, 200, тав. 64/827; DERGAČEV 2002, 149; DERGAČEV, BOČKAREV 2006, 246, pct. 827, pl. 64/827.

[5]MAXIM-ALAIBA 1983-1984, 381, fig. 1/2; ДЕРГАЧЕВ, БОЧКАРЕВ 2002, 200, тав. 64/826; DERGAČEV 2002, 149; DERGAČEV, BOČKAREV 2006, 246, pct. 826, pl. 64/826.

[6]PETRESCU-DÎMBOVIȚA 1964, 255, fig. 1/20, 3/2-7; PETRESCU-DÎMBOVIȚA 1977, 74, pl. 78/19, 79/1-4; UDRESCU 1973-1974, 35, fig. 7/3; ДЕРГАЧЕВ., БОЧКАРЕВ 2002, 245, тав. 83.1147; DERGAČEV 2002, 151; DERGAČEV, BOČKAREV 2006, 261, pct. 926, pl. 72/926.

[7]FLORESCU 1991, 60, fig. 106A/9; ДЕРГАЧЕВ., БОЧКАРЕВ 2006, 211, тав. 72.926; DERGAČEV 2002, 147; DERGAČEV, BOČKAREV 2006, 297, pct. 1148, pl. 84/1148.

The four sickles are of two different types: three are hooked sickles and one with holes on the handle. The typological and chronological aspects of these types of sickles were discussed in previous studies. Petrescu-Dîmbovița made the first typological classification of the sickles and divided the hooked sickles into seven types[8]. Another typological classification was made by Dergačev, considering the metric parameters in particular[9]. The sickles from Valea lui Darie belong to the Ghermănești type, Ghermănești variant, after Dergačev typology[10], to the Ghermănești-Ruginoasa type[11] after Petrescu-Dîmbovița typology, and to the C 24 and C 26 types after Cernych typology, respectively, all of them belonging to the hooked sickles from the North-Pontic region[12]. The sickle from Ciorani is of Ghermănești type, Ilieșeni variant, after Dergačev tipology[13], and of Cristian-Drajna 2 type after Petrescu-Dîmbovița tipology[14], respectively. Ghermănești type, Ilieșeni variant is characterized by small size and is from the same typological range as Ghermănești and Ruginoasa variant of Ghermănești type.

The sickle from Dodești belongs to the Heleșteni type, Heleșteni variant, after Dergačev typology[15], and type C 2/4, after Cernych typology[16]. The Ghermănești type sickles are common in Moldova in the Râșești-Băleni hoard series, in Transylvania in the Uriu-Domănești hoard series[17], while in the early Hallstatt period this type of sickle declines in number and it can be found only during Ha A1 period[18]. The Ghermănești and Ilieșeni variants emerged at the end of the Late Bronze Age, in Br D (XIIth century BC) and developed until the Ha A1 period (Xth century BC).

During the Br D period, hooked sickles were concentrated at the East of Carpathians, whith a lower presence in Transilvanya, a situation that reverses during the Ha A and Ha B, suggesting that these sickles appeared east of the Carpathians and then spread to the neighboring areas. However, there are also hypothesis supporting the appearance of these sickles in Transylvania[19]. Metrical analysis of the three types shows that they are evolutionarily related, evolving from large, large-handled, heavy sickles, to lighter-weight, smaller-handled sickles that required less raw material for casting[20].

[8]PETRESCU-DÂMBOVIȚA 1978, 57-72.

[9]DERGAČEV, BOČKAREV 2006, 229-304.

[10]DERGAČEV 2002, 149-150; DERGAČEV, BOČKAREV 2006, 241.

[11]PETRESCU-DÎMBOVIȚA 1978, 63.

[12]ЧЕРНЫХ 1976, 96-97, рис. 44.

[13]DERGAČEV 2002, 151-152; DERGAČEV, BOČKAREV 2006, 257-259.

[14]PETRESCU-DÎMBOVIȚA 1978, 60-61.

[15]DERGAČEV 2002, 146-148; DERGAČEV, BOČKAREV 2006, 286-291.

[16]ЧЕРНЫХ 1976, 89, рис. 40.

[17]PETRESCU-DÎMBOVIȚA 1977, 73-77, 51-72.

[18]PETRESCU-DÎMBOVIȚA 1977, 80-120.

[19]PETRESCU-DÎMBOVIȚA 1953, 475; PETRESCU-DÎMBOVIȚA 1964, 264; PETRESCU-DÎMBOVIȚA 1966, 348.

[20]DERGAČEV, BOČKAREV 2006, 279.

The Heleșteni type, Heleșteni variant has no prototype and emerged in the Noua culture area, being produced in the Prut-Dniester interfluve from where it expanded to the East in the Sabatinovka culture. The Heleșteni sickles are dated to the Br D - Ha A1 (XIIth century BC - Xth century BC).

Methods of Analysis

The four sickles were investigated through nondestructive X-ray fluorescence analysis with a portable spectometer, Thermo Niton XL3, using a Si-PIN diode and a 50 kV voltage for X-ray excitation, 40 μA, 2 Watt max. In order to perform the measurements, a surface of 1 square cm of patina was cleaned. The depth of the analysis was 0,01 mm, therefore the recorded data show the elemental composition status of the surface layer of the pieces only. Measurement data were processed with Thermo Nito, a program developed by the device manufacturer. The spectrometer can identify a number of 30 chemical elements, but some elements were indentified below the limit of detection and their concentration could not be quantified. Thus, the elements indicated as <LOD> by the software were not included in our analysis.

For each element identified, the software adds to the database the analysis error, which is helpful when the data is centralized, analyzed, and corroborated with other data.

Results and Discussions

Analysis of the four sickles has shown that the objects are made of bronze, binar copper – tin alloy, with values of tin ranging between 0,179% and 12,01%. The sickles from Ciorani and Dodești have values of tin of 10,806% and 12,01%, respectively, which is within the normal ratio of copper and tin for bronze (90+10%). In the case of the sickles from Valea lui Darie, the percentage of Sn is extremely small, 1,068% and 0,179%, which is unusual but not unique. In the elemental analysis made by E. N. Cernych, there are twelve bronze sickles with tin concentrations between 0,015% and 2%, all of them from bronze hoards: Knjaze-Grigorovka, Becilovo, Rajgorodka, Orekhovo (Ukraine)[21]. From the Ulmi-Liteni hoard there is a hooked sickle with 0,35% tin in composition[22]. Usual content of tin in copper-tin alloys is around 10%, which could be an indication that the artefact is not recycled but at the primary alloy. When tin is found in alloys in small percentages, around 2% and even below 1%, it could be a sign of recycling of bronzes with different tin levels[23]. The most important source of tin is cassiterite (SnO_2), and the closest source apears at Băile Borșa, Maramureș county, at *Burloaia*, *Măgura*, *Gura Băii*, *Izvoru Ursului*, and *Toroiaga* veins[24]. Another source that could have been used is stannite (Cu_2FeSnS_4) which is a sulfide mineral of copper, iron, tin, and sulphur (28%

[21] ЧЕРНЫХ 1976, таб 3,4, 8.

[22] PETRESCU-DÎMBOVIȚA 1977, 78, inv. no. 893.

[23] BRAY *et alii* 2015, 207.

[24] RĂDULESCU, DIMITRESCU 1966, 94; KACSÓ 2011, 269-270.

tin, 12% iron, 30% copper, 30% sulphur) and occurs with chalcopyrite, tetrahedrite, and could be used to obtain a copper – tin alloy. This mineral is rare and has been identified at Băile Borșa, *Burloaia* and *Izvoru Ursului* veins[25], Valea lui Stan, Vâlcea county, Hondol, *Pârâul lui Avram – Livia* veins, Hunedoara county, here being associated with chalcopyrite and tetrahedrite[26]. It is hard to believe that upon obtaining this type of *alloy*, the ancient metallurgists would have left it at this stage to make the two sickles.

All four sickles contain arsenic as a trace element and is difficult to say whether they come from recycling arsenical bronze objects or that minerals containing copper and arsenic were used. It is well known that arsenic losses under oxidizing condition, which occurs during solidification and in smaller scale during melting and puring in moulds[27]. The sickle from Dodești (read no 1971) contains a small percentage of Pb, 1,593%, that could come from lead impurities in copper or tin ore residues, since an intentional alloy of lead should be considerated only when it is above 2%.

Correlation between chemical composition af ancient bronze artefacts and geological sources of metal through trace elements is difficult to establish since it requires a large number of analysis from all known copper deposits. Furthermore, re/melting of metals makes it difficult to relate an object to a specific ore source.

The copper ores that could have been used by metallurgists from the region between Carpathians and Pruth at the Late Bronze Age are in the Carpathian Mountains and Măcinului Mountains, where accumulations of copper sulphosalts, sulphates, carbonates and oxides were present[28]. To carry out an analysis of the link between the bronze artefacts and resource areas, two minimum conditions must be met: the existence of elemental composition analysis of bronze artifacts and analysis of the chemical composition of copper ores. An increase in the number of elemental composition analyses for artefacts is ongoing. However, analyses on ores are very rare[29] and thus, the two conditions are not met.

One usseful tool to be used in provenancing copper ores is Pb isotopic analysis, but this method has its limitations since some objects have lower levels of Pb than required to obtain isotopic analysis results[30]. Using Cu and Sn isotopic information is also a possibility to trace a bronze artifact to the original ore source[31], but there is no absolute technique of direct provenance in bronze metallurgy. An ancient bronze artefact has a long *journey* which starts with extracting copper and tin ores, casting the material in different forms of ingots later transformed into various objects which are being used, re/melted, repurposed, and finally

[25] KACSÓ 2011, 269.

[26] RĂDULESCU, DIMITRESCU 1966, 276; SZAKÁLL 2002, 178.

[27] MÖDLINGER *et alii* 2019, 133-140.

[28] For a complete list of copper ores and there occurens see RĂDULESCU, DIMITRESCU 1966.

[29] RĂDULESCU, DIMITRESCU 1966, 51, 75.

[30] GALE 1997, 71-82.

[31] BALLIANA *et alii* 2013, 2973-2986.

deposited. The time between origin and deposition of the object is dependent on the social and economic context[32].

Bray considers that interpreting trace elements of copper could be done through the presence/absence of four elements: arsenic, antimony, silver, and nickel, which are the most common in ores. Using this metod ancient bronze objects could be included in so-called *copper groups* which are not necessarily related to a specific ore source but rather to the geographical distribution of these artifacts over a certain period[33]. Using this method, the four sickles can be included in group 14, copper with arsenic (As), antimony (Sb) and nickel (Ni). In the future, using more data, a statistical analysis regarding the distribution and connections between the copper groups in a certain areal can be made and, if chemical analyses of copper ores exist, relations between ores centres and copper groups could be established.

Conclusions

This paper analyzes four sickles, three with hocked handle and one with holes on the handle, whose elemental composition was determined using a portable X-ray fluorescence spectrometer (XRF). This noninvasive technique yields information about the elemental composition of the objects, but only at the level of the surface layer, were patina was removed, and enables rapid and inexpensive analysis of multiple objects. Three of the four sickles have wear traces, except the one from Ciorani that was never used, and all four were discovered in so-called *closed complexes*.

Elemental composition revealed that all four sickles have arsenic traces which could be explained by the use of sulphidic copper ores, possible tetraehidrite. The recycling of bronze artifacts is attested in the sickles from Valea lui Darie, being the most plausible explanation for the small percentage of tin in their composition.

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[32] BRAY *et alii* 2015, 204.

[33] BRAY *et alii* 2015, 205.

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LIST OF ILLUSTRATIONS

Figure. 1. The map with the sickles discussed in this paper. 1. Valea lui Darie; 2. Ciorani; 3. Dodești. (drawn in QGIS v. 3.34.1 by Lazanu Ciprian)

Figure. 2. The sickle from Valea lui Darie (no. inv. 15331). (Photo and drawn by Lazanu Ciprian)

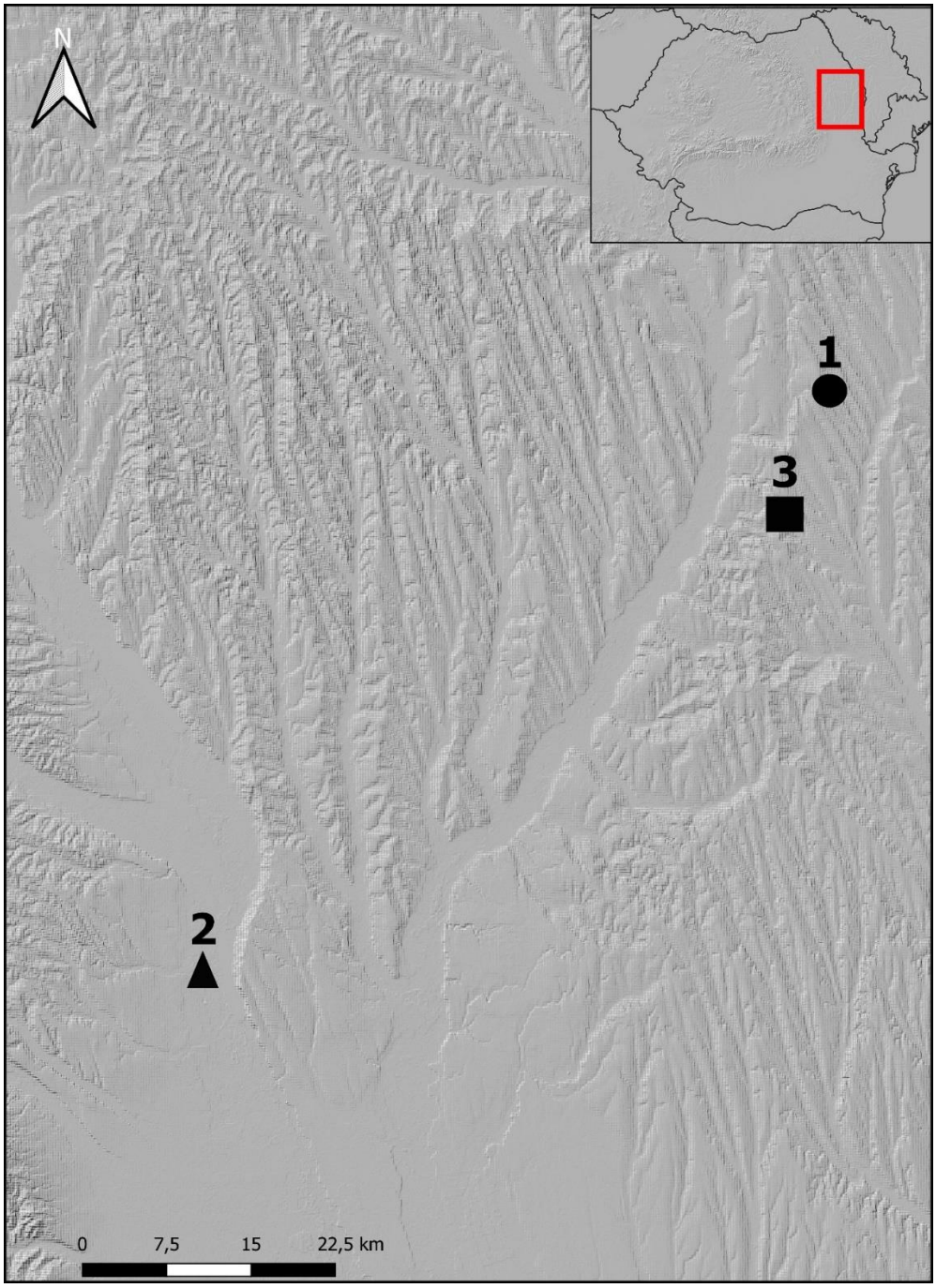
Figure. 3. The sickle form Valea lui Darie (no. inv. 15332). (Photo and drawn by Lazanu Ciprian)

Figure. 4. The sickle form Ciorani (no. inv. 9). (Photo and drawn by Lazanu Ciprian)

Figure. 5. The sickle from Dodești (no. inv. 1757). (Photo and drawn by Lazanu Ciprian)

No Inv.	Reading No	Cu	Cu Error	Sn	Sn Error	As	As Error	Fe	Fe Error	P	P Error	S	S Error	Ti	Ti Error	Ni	Ni Error	Sb	Sb Error	Pb	Pb Error
9	1974	87,568	0,245	10,806	0,066	0,251	0,019	< LOD	0,017	0,106	0,019	< LOD	0,083	0,1	0,006	0,458	0,022	0,222	0,014	0,247	0,016
1757	1971	81,171	0,331	12,01	0,085	0,169	0,035	0,186	0,014	0,554	0,028	< LOD	0,124	0,158	0,007	0,293	0,02	0,17	0,014	1,593	0,037
15331	1953	97,115	0,212	1,068	0,021	0,415	0,021	0,026	0,007	0,077	0,014	< LOD	0,093	0,041	0,004	0,283	0,016	0,111	0,011	0,095	0,011
15332	1951	97,755	0,208	0,179	0,011	0,751	0,031	0,201	0,011	< LOD	0,024	0,2	0,041	0,018	0,003	0,333	0,018	0,116	0,011	0,323	0,02

Table 1. Elemental composition of the sickles from Ciorani (no. inv. 9), Dodești (no. inv. 1757), and Valea lui Darie (no. inv. 15331, 15332).



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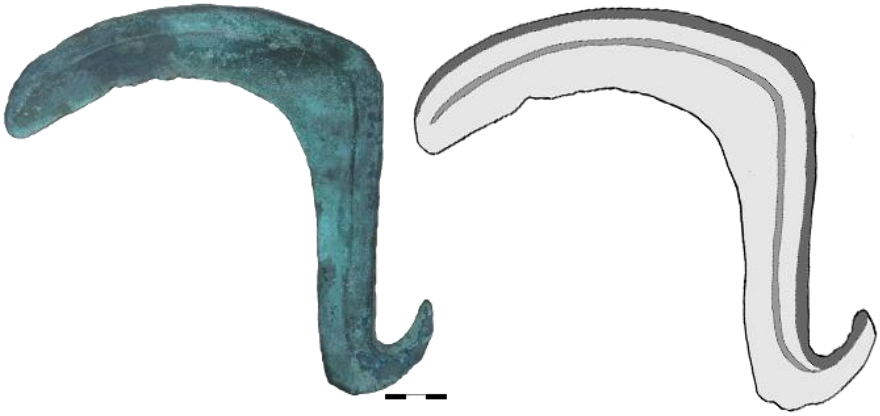

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Studia Antiqua et Archaeologica 29(2):235-245
DOI: 10.47743/saa-2023-29-2-4

The Highest God and His Oracular Disclosure

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Abstract. *The question of the Most High God is very difficult to address from many points of view. First, because of the disproportionality of ancient sources. Most sources are epigraphic in nature, including simple dedications or those resulting from a covenant, and contain rather little information that can be addressed in detail. The literary sources are four in number and raise serious problems of interpretation. The numismatic ones are completely missing from the context in the case of Hypsistos. Moreover, the way the subject has been treated in modern historiography, especially in relation to pagan sympathisers or God-fearers orbiting around the synagogue environment, makes this sensitive issue even more cautious. Finally, the perception itself of the identity of this Most High god, as well as the typology of the cult, its potential unitary character is another thorny issue. Two of the epigraphs discovered in the Lycian town of Oinoanda, that of Chromatis and the oracular response of Apollo of Claros, are, we believe, a very good starting point for clarifying some of the imagological aspects of this abstract and anonymous god.*

Rezumat. Chestiunea Zeului Prea înalt este foarte greu de abordat din multe puncte de vedere. În primul rând, din cauza disproporționalității surselor antice. Majoritatea surselor sunt de natură epigrafică, inclusiv simple dedicații sau cele rezultate dintr-o promisiune, și conțin destul de puține informații care pot fi aanalizate în detaliu. Izvoarele literare sunt în număr de patru și ridică serioase probleme de interpretare. Cele numismatice lipsesc cu desăvârșire din context în cazul lui Hypsistos. Mai mult, felul în care subiectul a fost tratat în istoriografia modernă, în special în legătură cu simpatizanții păgâni sau cu adoratorii zeului care orbitează în jurul mediului sinagogii, face această problemă sensibilă și trebuie tratată cu precauție. În fine, percepția în sine a identității acestui Zeu Prea Înalt, precum și tipologia cultului, potențialul său caracter unitar reprezintă o altă problemă spinoasă. Două dintre epigrafele descoperite în orașul lician Oinoanda, cea a lui Chromatis și răspunsul oracular al lui Apollo din Claros, sunt, credem, un foarte bun punct de plecare pentru clarificarea unora dintre aspectele imagologice ale acestui zeu abstract și anonim.

Keywords: Hypsistos, oracles, Oinoanda, Claros, Didyma.

At least three literary ancient sources mention the diminishing role, whether not disappearance of certain oracles through the late Hellenistic period and the beginning of the Principate (i.e. 2nd century BC to 2nd century AD). Among them, the most prominent is certainly Plutarch who, in two of his Pythian dialogues, is very reluctant to the idea that they would ever be revived. Prior to him, the satire writer Juvenal pleaded in his sixth satire (vv. 553-6) that: "Whatever an astrologer says, they will believe it has been reported from the spring of

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Hammon, since oracles cease at Delphi and the murkiness of future afflicts mankind."[2] Plutarch remarks with regret that precisely at Delphi, where he was a priest in AD 95 at least "the theology of mantic revelation was still a lively subject"[3]. He could envisage a modest revival during his lifetime. The reality was that, at least at Delphi the temple seemed to be deserted all the time as it was devoid of crowds like it used to be once[4]. Therefore, "Plutarch's classic and melancholy statement on the general disappearance of the oracles leaves it unclear when most of them became extinct", as Saul Levin says in his study *The Old Greek Oracles in Decline* or if they truly became so or just devoid of people. Strabo, in his *Geography*, remarked that in his time Dodona and Epirus were quite depopulated and the oracular centre was rarely consulted[5]. So says the Christian writer Clement of Alexandria about the oracle of Ammon at Siwah, that it was "honoured by the desert sands" and "was forsaken". In his *Protreptikos* (2, 11, 1), Clement states: "So do not search diligently for godless shrines or the mouths of caves full of gibberish, or the Thesprotian cauldron, or the tripod of Kirrha, or the Dodonian bronze. Commit to the realm of aged legends the old tree-stump, once honoured by the desert sands, and the oracle there which has decayed along with the oak itself. Kastalia's spring has been silenced, like the other spring at Kolophon, while all the other prophetic founts are likewise dead, and empty of their boasting — finally! — have been unmasked, now waterless along with their particular legends. Tell me too of the futile oracles that other kind of divination — or rather dementia! — Apollo's oracles at Claros, the Pythian, and Didymaian, and those of Amphiaraos and Amphilochos."

But did the oracles really ceased? Not at all. It was too early at that time for a statement as such. For example, at Delphi the mantic sessions occurred unceasingly until 392, when the Roman emperor Theodosius I banned all pagan cults in the empire. As for Didyma and Claros, on the other hand, at least the 2nd and the 3rd centuries were particularly flourishing.

It was Polymnia Athanassiadi who, at the beginning of one of her studies concerning the oracles in Antiquity, stated that "oracles were the psychiatrists of the ancient world."[6] Thus they responded to the need of the enquirers to receive revelated answers by the gods themselves and are a clear indicator regarding the metaphysical preoccupations of the time. The reality proved that, at least Didyma and Claros did not cease and did not lose their vigour, but their vitality increased and so did the topics addressed by the enquirers, particularly belonging to some delegations of several cities: either what measures should be taken to eradicate the effects of "the great plague" during the Antonine period (AD 165-180) and of some particular earthquakes, or, more interestingly, questions were addressed about the nature of

[2] LEVIN 1989, 1599.

[3] LEVIN 1989, 1600.

[4] LEVIN 1989, 1605.

[5] DILLON 2017, 323.

[6] ATHANASSIADI, 1992, 45.

soul, about the ether, about the nature of divinity, and if we are to believe the Christian writer Lactance (*Divine Institutions*, 4, 3, 11-15), Apollo of Didyma was even required about the nature of Jesus Christ himself! Therefore, it was during the 2nd and 3rd centuries AD that the most sophisticated oracular responses were issued at the most representative Anatolian apollinic oracular centres. At least at Claros we have two important types: the pestoracles, i.e. those which contain cultic instructions to fight against the plague (*loimos*), and the so-called theological oracles. Particularly these Clarian theological oracles offer a very interesting perspective not only for the potential comparison that could be made with the image of God as Theos Hypsistos or simply Hypsistos in the *Sibylline Oracles*, but also due to the thematic shift that could be perceived in their approach.

The theological oracles, as they were named by Arthur Darby Nock in 1928, were conceived to respond mostly to the metaphysical needs of the enquirers[7]. If we are to trust the *Tubingen Theosophy*, a certain oracular response was rendered when Apollo was asked by a certain Theophilos, if he were *the* God or another, a question that could in itself contain the idea of oneness[8]. Both the unique character of this single supreme deity called 'the Aether who sees all' and the idea of hierarchization of the divine world are most clearly stated in the oracular response discovered at Oinoanda, a small Lycian city in southern Anatolia. The Aetherial god is perceived here as a self-born in essence, untaught, motherless, unshakeable, not to be contained by any name or bearing no specific name. He is polyonymic as he could bear many names according to his very diversified attributes[9]. Apollo, like the other gods are only 'a small portion' of this higher god that dwells in fire and they are all his messengers (1.7.4). Yet, we cannot agree to Stephen Mitchell's theory that these gods were just 'demoted to the rank of angels' and we could have here a 'soft monotheism', according to Dillon's definition[10]. It is rather a henotheistic perception within the limits described by Max Muller and Henk Versnel[11]. It is needless to underline in this respect that this highly sophisticated metalanguage, corresponding to a negative theology, employs ideas specific to Neoplatonic, Neopythagorean and late Stoic conceptions of the period[12]. But this language could be easily understandable for the common people as well in this very competitive period for all the cults on the Eastern fringe of the Empire, be they pagan, Jewish or Christian. This is why only half a century later, another small altar was embedded into the Hellenistic wall of the city, at a very close distance, in full awareness of the oracle's content, with the inscription: 'Chromatis

[7] BUSINE 2005, 195; MERKELBACH, STAUBER 1996, 2-5.

[8] BUSINE 2005, 111. See also BUSINE, 2014, 207-208 for the problems of addressability and authenticity.

[9] BELAYCHE 2010, 164 for the polyonymous formulae attested in *heis theos*-type of acclamations.

[10] MITCHELL 2003, 154-155. The definition of 'pagan monotheism' itself is highly controversial. See BELAYCHE 2005, 35-36.

[11] CHIAI 2010, 189; VERSNEL 1990, 232-6; VERSNEL 2000, 85-8. See also CHANIOTIS 2010, 112-113; VAN NUFFELEN 2010, 16-21.

[12] BUSINE 2005, 206-7 ff. with other examples.

(dedicated) the lamp to the Most High God, in fulfilment of the vow'. The place is very important, as Alan Hall noticed in 1978, because Chromatis and her private group of Hypsistarians could pray to their god in the precinct identified by Mitchell with a house of prayer (*proseuche*), watching the first sunrays at dawn that struck the polygonal Hellenistic wall[13], similar to the prescriptions of the Clarian oracle: 'to him (=the god) then look and pray at dawn, turning your gaze to the East' (1.7.4). The Hypsistarians therefore identified their own highest god with that described by the oracle.

Furthermore, another interesting inscription was found on a rectangular block with a statue of Clarian Apollo on the top, it was discovered at Melli (former Kocaaliler) in Pisidia, and reads: 'To the gods and goddesses according to the interpretation of the Clarian Apollo'. It belongs to the group of ten other epigraphs with a similar content spread throughout the empire that could refer, according to Mitchell, to the prescriptions of the Clarian oracle given to the Oinoandans[14]: 'Traditional worshippers will have sought clarification and reassurance through an interpretation. The "gods and goddesses" text fulfils exactly this role. Claros explained that even though the Olympians ranked below the highest god, it was right to continue to worship them in the traditional way'[15].

In various instances, Anatolian inscriptions provide examples of divine hierarchization, where gods acted as divine messengers of a superior god and their position was not considered as degraded. Their function was to mediate the communication between the superior god and the mortals[16]. For example, Men acted as an advocate (parakletos) for a sinner in relation to Zeus in a confession inscription[17]. In other instances, in most of the situations when Men received dedications together with other deities like Artemis Anaitis, he is placed in a position that could be considered superior hierarchically.

Returning to the Highest god, there are numerous examples when he is accompanied on the dedications both by other gods and by divine beings that could be considered angelic in nature. Due to the fact that in almost all the dedications the other divine assistants are placed mostly *after* the Most High God, but venerated *along with* him, could be a proof of their lesser position within the divine hierarchy and not of the existence of a so-called 'pagan monotheism'. Thus, in Cos, (Zeus) Hypsistos was venerated together with Hera Ourania, Poseidon Asphaleios, Apollo, and 'other gods'[18]. At Neisa, in Caria, a thanksgiving of the lykiarkhes Marcus Aurelius Dionysios (?) is addressed to the Most High God, to the Mountain Mother (Meter Oreia), an unknown god whose name is incomplete (Kele--) and to 'all the gods (and) godesses' (1.7.3). A

[13] HALL 1978, 265-7.

[14] MITCHELL 2003, 151; BUSINE 2014, 206.

[15] MITCHELL 2003, 154.

[16] CHANIOTIS 2010, 139-140.

[17] BWK, 5. See also CHANIOTIS 2010a, 126 (with an English translation).

[18] ZP 79.

dedication written on a rectangular stone block from Stratonikeia in Caria is placed 'To Zeus the Most High, Hekate the Saviour, Zeus Capitolinus and the Fortune of the venerated emperor Caesar Titus Aelius Hadrianus Antoninus Augustus Pius' (1.2.1). A certain Ariagne, sacred slave of the Autochthonous Mother of Gods erected an altar together with her son, Paramonos, in Leukopetra, near Beroia in Macedon, according to the command (kat' epitagen) received from the Most High God. This divine order is mentioned twice in this inscription[19]. Moreover, a priest of Men Ouranios, Quintus Numerius, dedicated an altar to Theos Hypsistos in thanksgiving, in accordance with an oracular vision (kata khrematismon) that he received from this god. Finally, there is a curious case on a Lydian epigraph that mentions the oath accomplished by a certain Meltine who prayed for her husband Glaukos, where the name of Theos Hypsistos, initially written on the stone, was thereafter erased and replaced by that of Hosios kai Dikaios. Georg Petzl gives two possible explanations for this: either Hosios kai Dikaios was a divine mediator between her and Theos Hypsistos and was perceived as being issued as an emanation by the latter[20] or that this Hosios kai Dikaios was actually the Most High God in his predominant aspect of holy and just[21]. We will return to this idea.

Divine beings, angelic or not, are frequently met in the company of the Most High God, especially in north-eastern Lydia and Caria, where thanksgivings are given to him and to the Divine (Theios)[22], the Royal Divine (Theios Basilikos)[23], the Great Divine (Megalos Theios)[24], the Good Divine[25], the Heavenly Divine Angel (Theios Angelos Ouranios)[26], the Divine Angel (Theios Angelos)[27] or the Good Angel (Agathos Angelos)[28]. At Ankyra, in Galatia, a dedication mentions that the buildings there were erected 'To the Great Most High and Heavenly God, to his holy angels, and for his venerable house of prayer'[29].

It was probably due to both his solar attributes, but also as a god of justice that the Most High God was twice identified in inscriptions with Helios[30], who had the capacity of being an all-seeing god (*pantepoptes*), just like the Aetherial Clarian supreme god with whom the Oinoandan Hypsistarians identified their deity. He is the dreadful and vengeful protector of both living and the dead, and also their saviour. At Amastris, in Paphlagonia, his image was that of a dreadful supreme eternal omnipotent master who rules everywhere. It was 'by prophetic

[19] ZP 68.

[20] PETZL 1998, 22-23.

[21] PETZL 2014, 76-77.

[22] H 1.1.22; 1.1.26; 1.1.27; 1.1.28; 1.1.29; 1.1.31; 1.1.32 (Stratonikeia, Caria).

[23] ZP 149 = 1.1.8 (Labraunda, Caria); 1.1.34; 1.1.35 (Stratonikeia, Caria).

[24] H 1.1.30 (Stratonikeia, Caria).

[25] H 1.1.33 (Stratonikeia, Caria).

[26] H 1.1.23 (Stratonikeia, Caria).

[27] H 1.1.24; 1.1.25; 1.1.36 (Stratonikeia, Caria).

[28] H 1.1.37 (Stratonikeia, Caria).

[29] H 1.5.1.

[30] H 1.4.2 (Amastris, Paphlagonia); 1.3.8 (Pergamon).

voice' that an altar was raised 'to the Most High God, he who is in the power of youth, who has power of everything, who cannot be seen, whose gaze is so dreadful that overthrows the mortal ground'[31]. We encounter the same accent on its immortality set in two other dedications: (a) one from Pergamon, where Zopyrios erected an altar and the lamp with a support to 'God, Lord, the One who is forever'[32], and (b) the other from Hadrianopolis in Bithynia, related to Aurelius Epithymetos, his wife Basilike and their children who dedicate an altar to Theos Hypsistos as an immortal god (*theos athanatos*)[33]. One of the funerary imprecation inscriptions from Akmonia in Phrygia provides the image of the Most High God as the protector of the dead, using a preventive curse called the Eumenian formula against any eventual desecrator of the grave. The potential culprit is thus menaced that he 'will have to reckon with the Most High God and may the sickle of curse come into his house and leave no one behind'[34].

As a polymorphic god, he probably absorbed identities of many local deities in Macedon and Samaria (gods of the mountains), the Bosporan area (an Iranian god), Syro-Palmyrean area (god of the heaven), and even in western Asia Minor most probably Zeus Bronton (the Thundering Zeus). In a series of inscriptions from Palmyra dated from the beginning of the 2nd century to the second half of the 3rd century, the dedications addressed to Zeus Hypsistos kai epekoos have as Palmyrian translation the name of Baalshamin the Great and Merciful[35].

Even remote, situated in the uppermost spheres of the universe, the Highest God has a personal bond to the dedicants by communicating with them directly or through intermediaries, helping the ones in need and providing them the means for their salvation. It was a whole community belonging to a village next to Prusa in Bithynia that provide thanksgivings to Zeus Hypsistos according to a vow, because the god determined Paterion (we do not know how, probably through a divine order) to 'generously' donate to the rural community an arable land that produced ten *medimnoi*[36]. We suppose he might have done that in a very difficult period for the whole community, during a famine, earthquake or any other similar calamity. There are numerous situations when certain individuals, either alone or together with friends, relatives[37], the whole families provide dedications and ex-votos to the god for their deliverance from grave dangers[38] (Gaius Pescennius Onesimos from Kyzikos in

[31] H 1.4.4.

[32] H 1.3.10.

[33] H 1.4.6.

[34] H 1.6.9.

[35] SANIE 1981, 159.

[36] H 1.4.10.

[37] H 1.2.1 (Bagis, Lydia); 1.2.15 (Thyaira, Lydia).

[38] H 1.4.1 (Amaseia, Pontus).

Mysia even adding 'for the victory'[39]), for their own well-being[40], personal[41] and family deliverance[42], or even 'for saving his cattle and his family'[43]. Aurelius Hekatomnon from Stratonikeia in Caria, in his altruism erected an altar and prayed to the Royal Divine and the Most High 'for himself and for the children, wife, friends, relatives, his immediate family and for the city'[44]. Some dedicants found themselves at the mercy of the god: having made a vow, Aurelius Asklepiades together with his family deliver thanksgiving to the Most High God at Aizanoi in Phrygia 'because of the merciful delivery from many sufferings'[45].

As a token of appreciation for deliverance from their diseases, some of the dedicants provided votive objects with the representation of the healed parts of their body, a practice that is attested for other thaumaturgic healing gods like Asklepios or Sarapis. A bronze plaque now in custody of the Museum for Arts and Crafts in Hamburg has an accurate representation of a partial human face, between cheekbones and the eyebrows, where the character seems to be eye-crossed. The text can read: 'To the listening Most High God, Aurelia Artemisia from Ephesos, having made a vow and found his pity dedicated (this)'[46]. In other instances, *epekoos* that we encounter as epithet here is accompanied by a visual representation of ears — as a token of appreciation for the fact that the god listened to the prayer of the dedicant without delay — or a support for lighting a lamp[47]. Another bronze female torso of an unknown Anatolian provenance has the following incised inscription: 'Moscheni, in fulfilment of the vow, to the Most High God'.

The god also manifested himself through visions, epiphanies, commands and oracles, and this is why many times we encounter expressions like *kat' onar*[48], *kata epitagen*[49], *kata khresmon*[50] or *kata keleusin*. This reflect a close personal relationship with the god and a good

[39] H 1.3.6 = ZP 148.

[40] H 1.6.1 (Aizanoi, Phrygia); 1.6.13 (Eumeneia, Phrygia); 1.2.14 (Silandos, Lydia): 'for their own well-being and for the children'.

[41] H 1.2.20 (area of Thyateira, Lydia).

[42] H 1.1.23 (Stratonikeia, Caria); 1.1.24 (Stratonikeia, Caria); 1.1.8 (Lagina, Caria): 'for himself and the members of his family'.

[43] H 1.6.17 (Nakoleia, Phrygia).

[44] H 1.1.25 (Stratonikeia, Caria).

[45] H 1.6.2 (Aizanoi, Phrygia).

[46] H 1.1.5 (Ephesos, Ionia; 3rd century AD). The epithet *epekoos* also appears on an inscription from Alexandreia Troas, where the unknown dedicant provides thanksgiving to the listening Most High God (H 1.3.1).

[47] H 1.6.26 (Tiberiopolis, Phrygia; 2-3rd centuries AD). There are good examples of bronze lamp-hangers of Anatolian provenance in the J. Paul Getty Museum of Malibu, California (H 1.10.1; 1.103-10) with representation of dolphins and other visual motives.

[48] ZP 98 (Edessa, Macedonia; 2nd-3rd centuries AD).

[49] H 1.3.7 (area of Miletupolis, Mysia).

[50] H 1.1.18 (Rhodian Peraia, Caria; 2nd-3rd centuries): dedication in thanksgiving by Ariston to Zeus Hypsistos 'in accordance with the oracle' (*kata khresmon*). H 1.1.5 (Ephesos; 3rd century AD): a certain Hermias give thanks to Zeus Hypsistos 'in accordance with the oracle' (*kata khresmon*).

deal of confidence. In Pergamon, Glykina is grateful to Theos Hypsistos probably because after enquiring the god she could make a decision[51]. Oracles could be delivered not only to individuals, but also to the professionals. Two Milesian honorary inscriptions are dedicated by local professional associations (city gardners and razor-fishermen) to praise their benefactor, Ulpius Carpus, the priest and prophet of the Most High God, that receive both the epithet of saviour (*sōtēros*) and the holy (*hagiotatos*)[52].

From a curious inscription belonging to the area of Nakoleia in Phrygia we find out that the honoured character was a man of a noble offspring named Zosimos, highly esteemed in his fatherland, whom Robin Lane Fox considered wrongly to be Christian[53]. As the 3rd century text of the epigram reads, he most probably belonged to the 'people of the Most High God' and, according to the translation of Angelos Chaniotis, 'wrote whatever mortals need on a folded tablet with spiritual writings and Homeric verses, predicting for the wise the future'. From a fourth century magic papyrus (*PGM* 7.1-148) we can see how this type of Homeromanteion could work. It functioned like a dice oracle, in a very similar way to the 28 astragalomanteia discovered in southern part of Anatolia and published by Johannes Nolle recently. In this papyrus, the 216 hexameter verses from Iliad and Odyssey were ordered in groups of six verses and served as answers to mantic enquiries. The oracular process began with the invocation of Apollo, and not Hermes as in Anatolia. Three dice were used to find the right combination corresponding to the proper verse[54].

Finally, a 2nd century inscription from Termessos in Pisidia reads: 'Tychos, the one also named Attalianos, son of Hermaios, grandson of Hermaios, the Syrian, a *paroikos*, erected (this monument) to the listening Most High God, with a foot that follows the god, in accordance with the gods command'[55]. According to Mitchell, a bronze left foot of a normal size should have been placed above the small inscribed column[56], in reminding of the materiality of the divine presence and visitation (*epiphaneia*), and in the event of reiteration of the divine revelation (*parousia*)[57]. Most probably, the epiphanic tangible presence of the Most High God was perceived as a miracle for the foreign Syrian resident of Termessos, but not necessarily as a healing miracle. All indications that we have point to the fact that in this case, this extraordinary epiphanic miracle concerned rather a miracle of faith, that determined Tychos to follow the god. The god ordered him (*kata keleusin*) to remind people of the epiphany and to advertise the power of god. As in other instances of divine feet and footprints analysed by Georgia Petridou

[51] H 1.3.9 (Pergamon; 1st-2nd century).

[52] H 1.1.12 and 1.1.13 (Miletos; Hadrian's reign).

[53] LANE FOX 1988, 404.

[54] CHANIOTIS 2010b, 258; CLUZEAU 2014, 169.

[55] H 1.7.11. See also CLUZEAU 2014, 161 who translates 'footprint'.

[56] MITCHELL 1999, 143, no. 231.

[57] PETRIDOU 2015, 80-81.

in her studies, this *ichnos* monument, together with its material representation, could have become an object of viewing and prosternation (*proskynesis*)[58].

Unlike other deities present in the Anatolian area (notably Men and Anaitis, Asklepios, Isis or Sarapis), the emphasis in the case of the Most High God is not on aretalogy and the exaltation of divine powers in order to glorify the attributes of divinity, but rather this type of theological message is *implicit* in the kind of language used and the emphasis on the exceptional characteristics of the god, the close, direct and personal link between the divinity and the worshipper, his quality of protector and saviour, all-powerful supreme god and arbiter of destinies. The god probably did not need aretalogies in the Hypsistarian view, but thanksgivings, humble obedience, total compliance and prayers. We therefore have to deal with a healer, saviour anonymous god that communicates with the dedicants through visions and epiphanies, whose real identity had to remain unknown due to the dedicants' own volition in this respect.

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[58] See LUCIAN, *True Story*, I, 7, where the Herakles and Dionysos footprints were regarded as such. PETRIDOU 2015, 77.

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Studia Antiqua et Archaeologica 29(2):247-252
DOI: 10.47743/saa-2023-29-2-5

Researches on Salt Archaeology and Salt History in Roman Dacia

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Abstract: *Even if the researches on salt exploitation and salt administration in Roman Dacia are scarce and the results are far from offering a coherent image on this economic activity, there are however some works which are important for this stage of our approach. These works are treating the aforementioned issues from historical, ethnographic and archaeological perspectives, both in synchronic and diachronic way. I shall briefly present the most important researches and their results.*

Rezumat: *Chiar dacă cercetările asupra exploatării sării și administrației salinelor în Dacia romană sunt puțin numeroase și rezultatele sunt departe de a oferi o imagine coerentă asupra acestor activități, există totuși câteva lucrări care pot constitui puncte de reper pentru stadiul actual al cercetării. Acestea tratează problemele menționate mai sus din perspective istorice, etnografice și arheologice, atât sincronic, cât și diacronic. Voi prezenta pe scurt cele mai importante rezultate ale acestor cercetări.*

Keywords: Roman Dacia, salt exploitation, historiography.

Even if the researches on salt exploitation and salt administration in Roman Dacia are scarce and the results are far from offering a coherent image on this economic activity, there are however some works which are important for this stage of our approach. These works are treating the aforementioned issues from historical, ethnographic and archaeological perspectives, both in synchronic and diachronic way. I shall briefly present the most important researches and their results.

The exploitation of salt in Roman Dacia has become the topic of more detailed studies during the last two decades. The absence of archaeological research, also caused by the fact that the traces of the old mines have not survived, as well as the precarious epigraphic evidence have resulted in a sparse literature on the economy of salt in this province. Nevertheless, older information on several exploitations first appears in the 17th–18th centuries by J. Fridwaldszky,[2] J. E. Fichtel,[3] M. Ackner.[4] A very interesting study treats the first map of salt exploitations, realized by Fichtel.[5] D. Moscal analyzes the correspondence between the toponyms in the 18th

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[2] FRIDWALDSZKY 1767, 159.

[3] FICHTEL 1780, 89.

[4] ACKNER 1856, 23.

[5] MOSCAL 2018, 1-11.

century and the actual placenames. The map of Fichtele includes the salt exploitations not only in Transylvania, but also in Moldavia and Wallachia. It remains an important source which documented the salt resources in the area. From our point of view, the map presents interest in locating the salt exploitations which provide continuity from ancient to modern times. It is worth to notice that the richest salt resources are coming from Transylvania, which corresponds generally with Roman Dacia.

The first monograph work on mining in Roman Dacia was published by V. Wollmann[6], who identifies several salt exploitation centers (many surface ones) during the Roman era, on the basis of older evidence: Ocna Mureș, Turda, Cojocna, Sic, Pata, Ocna Dejului, Ocna Sibiului, Domnești, Rogna, Sânpaul, Mărtiniș, Ocnele Mari.[7] However, Wollmann dedicates only ten pages of his monograph to the exploitation of salt. In what concerns the administration of the saltworks in Roman Dacia, Wollmann addresses only in passing the topic, mentioning the *conductores pascui et salinarum* and three employees from this administration.[8] Nonetheless, according to Wollmann a great quantity of salt was produced in Roman Dacia, which was even exported.[9]

An exhibition catalogue published at Sfântu Gheorghe mentions several salt exploitations of the La Tène era in Dacia, such as at Praid–*Sânpaul* or Cârlomănești.[10] The catalogue also presents a repertoire of the salt-spring wells from Eastern Transylvania.[11]

In 2007, D. Benea dedicated two articles to the administration of the Dacian saltworks under the Romans, one more condensed, the other more extensive[12]. Reiterating to a large extent the information from Wollmann, Benea details however several aspects concerning the salt mines administration. She finds that in the proximity of the main salt exploitation centers there are castra or fortifications housing military units[13], but she fails to go into details for each of the exploitations — this approach would have been useful for revealing the importance placed by the Roman army and, implicitly, by the administration, on the exploitation of this resource. What should be stressed is the role of these troops in the wider Roman strategy in Dacia, not only from the economical point of view, but also military and political. In other words, these troops were *also* tasked with protecting the mining exploitations (not only the salt ones), but their main role was to defend the province, either along the *limes* or in the strategic areas from the military or commercial point of view (to wit, mountain passes, fords).

[6] WOLLMANN 1996.

[7] WOLLMANN 1996, 241-244.

[8] WOLLMANN 1996, 248-249.

[9] WOLLMANN 1996, 249.

[10] HARDING *ET ALII* 2006, 56-74.

[11] CHIRICESCU 2006, 164-167.

[12] BENEA 2007A, 41-46; BENEA 2007B, 91-112.

[13] BENEA 2007a, 42-43; BENEA 2007b, 102.

Benea presents rather briefly the *conductores salinarum* mentioned by the epigraphic sources from Dacia.[14] The personnel of the administration is likewise presented in an abridged fashion.[15] Starting from the text of an inscription from Pannonia Inferior, D. Benea claims that the three *conductores* attested in Dacia originate without exception from the *canabae* of Apulum[16], despite the fact that two of the inscriptions date from the Severan era, when the urban structures of Apulum had already took form. In Dacia, the leaseholders bear the title of *conductores pascui et salinarum*. The link between the exploitation of salt and the administration of the pastures owned by the Roman state is natural, with the supplying of salt for cattle (including for the army horses) being an important part of tending the livestock. D. Benea suggests that these *conductores* from Dacia here responsible, among others, with the selling of salt into the Barbaricum.[17] We will discuss this hypothesis later on. In any case, for Benea the rigorous control on the exploitation of salt is instituted under Septimius Severus, on the backdrop by his incessant warring in the early years of his reign[18]. On this issue too I will return later. On the other hand, analyzing the salt administration in Roman Dacia, I. Tsigarida concludes that the state was in fact and *de jure* the real owner of the salt exploitation, the *conductores* being subordinated to *procuratores*.[19] The conclusion is correct in my opinion, but we have to pay attention at what *salinae* signify in every particular case.

I have relatively recently attempted to assess the epigraphic dossier on the clerks working in the administration of the salt (slaves and freedmen), and concluded that their presence exactly in the area of the salt exploitations (in other words, their direct involvement on the field) reveals the importance placed by the Roman state on this exploitation.[20] Furthermore, in a new article I have detailed the role of the army in the area of a salt exploitation (Ocna Mureș–Salinae in particular and Dacia in general) in the context of no archaeological remains being found yet of a castrum or a military fortification.[21]

As stated, the archaeological information concerning the exploitation of salt in Dacia is rather scant. Recent investigations carried out by A. Harding and V. Kavruk have confirmed the existence of a salt spring at Mărtiniș (which definitely functioned in the Roman era).[22] Geophysical surveys made by the same authors in the Sânpaul area led them to conclude that on the road to Ocland there was the Roman mining exploitation, though no investigations have

[14] BENEA 2007a, 43-44; BENEA 2007b, 102-105.

[15] BENEA 2007a, 44; BENEA 2007b, 105.

[16] BENEA 2007a, 44; BENEA 2007b, 105.

[17] BENEA 2007b, 107.

[18] BENEA 2007b, 108.

[19] TSIGARIDA 2012, 320-321.

[20] MIHAILESCU-BÎRLIBA 2016, 51-58.

[21] MIHAILESCU-BÎRLIBA 2018; MIHAILESCU-BÎRLIBA 2019a.

[22] HARDING, KAVRUK 2013, 43.

been made to confirm it.[23] The dating of timber samples pointed not to the Roman era, but to the Iron Age.[24] Even though the authors do not specify which period of the Iron Age is concerned, I hold the opinion that it refers to the La Tène period, preceding the Roman conquest. Likewise, excavations carried out at Băile Figa (Bistrița-Năsăud County) have yielded timber implements for extracting the salt from the springs, some likewise dating from the Iron Age (4th–3rd cent. BC).[25]

Recently, the project led by M. Alexianu on the ethnoarchaeolgy of salt[26] provided important field researches, published partially by the project leader, V. Kavruk, D. Ștefan, V. Vasilache,[27] myself and A. Asăndulesei.[28]

Besides these investigations, there are the identifications of exploitation points previously made by V. Wollmann at Ocna Mureș, Turda, Cojocna, Sic, Pata, Ocna Dejului, Ocna Sibiului, Domnești, Rogna, and Ocnele Mari.[29]

As one can notice, there are few archaeological investigations. Particularly important seems to be the continuity found at Sânpaul between the La Tène and Roman periods. Ample systematic excavations have been carried out at Băile Figa, identifying another La Tène exploitation. We do not know, however, if this exploitation was also used in the Roman period. In any case, not far from this site is Domnești, home to a salt spring and the discovery of an inscription set up by Atticus, the slave of a *conductor pascui et salinarum*.[30]

Even though from a quantitative point of view the surviving sources (both archaeological and epigraphic) are few, they nevertheless provide very important data with regards to the exploitation of salt in Roman Dacia.

The main objectives of larger approach should consist in analyzing the archaeological researches on salt exploitation achieved on the territory on Roman Dacia, in discussing the epigraphic information in order to have a better understanding on salt exploitation, administration and on the relationship of the mining and administrative staff with the military personnel. These types of information should be combined and finally should offer a global image on salt exploitation in Roman Dacia; besides, one should remark the particularities of salt production, industry and consumption of this province in comparison with the Roman world.

[23] HARDING, KAVRUK 2013, 43.

[24] HARDING, KAVRUK 2013, 47. S. also HARDING 2015, 216; HARDING 2016, 377.

[25] HARDING, KAVRUK 2013, 60-64, 120-121. See also HARDING, KAVRUK 2010, 139; HARDING 2015, 214; HARDING 2016, 378.

[26] KAVRUK, CURCĂ 2017.

[27] KAVRUK, ȘTEFAN, ALEXIANU, VASILACHE 2019. S. also the analysis of ancient texts (CURCĂ 2018).

[28] MIHAILESCU-BÎRLIBA 2019b; MIHAILESCU-BÎRLIBA, ASĂNDULESEI 2019. See more recently MIHAILESCU-BÎRLIBA, ALEXIANU 2021; MIHAILESCU-BÎRLIBA 2022a; MIHAILESCU-BÎRLIBA 2022b.

[29] WOLLMANN 1996, 241-244.

[30] ILD 804.

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Studia Antiqua et Archaeologica 29(2):253-265
DOI: 10.47743/saa-2023-29-2-6

Return from the Hunt: a Re-Discovered Votive Relief from Northern Moesia Inferior

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Abstract. Recent archival materials brought to attention a fragmentary marble votive relief found near Tulcea depicting the so-called Thracian horseman as a hunter with the prey in his raised right hand. This iconographic variant is very rare outside Thracia and the Balkans region. The evidence of the votive reliefs of the Thracian horseman in the northern Moesia Inferior is not rich but features a great iconographical variety, hinting at an intended choice from the part of the dedicants of the votives and great awareness of the iconographical composition. The material (imported marble) and the dimensions of several of the reliefs uncovered up to now in the region are quite large and make plausible the idea of votives intended for cult places/sanctuaries. The relief discussed is singular among the similar finds in the region, for it bears also an inscription on its upper border.

Rezumat. Materialele de arhivă recente au adus în atenție un relief votiv fragmentar de marmură găsit în apropiere de Tulcea, înfățișând așa-numitul călăreț trac ca un vânător cu prada în mâna dreaptă ridicată. Această variantă iconografică este foarte rară în afara Traciei și a regiunii Balcanilor. Dovezile reliefurilor votive ale călărețului trac din nordul Moesia Inferioară nu sunt bogate, dar prezintă o mare varietate iconografică, sugerând o alegere intenționată din partea dedicanților votive și o mare conștientizare a compoziției iconografice. Materialul (marmură de import) și dimensiunile câtorva dintre reliefurile descoperite până acum în regiune sunt destul de mari și fac plauzibilă ideea votivelor destinate locurilor/sanctuarelor de cult. Relieful discutat este singular printre descoperirile similare din regiune, deoarece poartă și o inscripție pe marginea superioară.

Keywords: votive relief, Tulcea, Moesia Inferior, Thracian horseman, *kyrios*.

The collections of the Archaeological Museum in Odesa included in the first half of the last century a fragmentary marble[2] relief with the depiction of the so-called Thracian horseman returning from the hunt (**Fig. 1**), with the pray in his raised right hand. Preserved is the upper left part of the relief[3]. The depicted subject was not recognized; the records used

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[2] The inventory number around 1942 was II[b]-75 (according to the inventory sheet MNA Archive D43/1942/Fişe cu provenienţă Muzeul Odessa, sheet 110). From the available image, it seems probable that the relief is carved in marble, as described by the inventory sheet. However, in the register entry from the time the relief was in Bucharest, it is stated that it was of limestone (MNA General register, entry 132/15.04.1942).

[3] Dimensions: preserved height 20 cm, preserved width 16 cm, thickness of the plate 2 cm (according to the inventory sheet MNA Archive D43/1942/Fişe cu provenienţă Muzeul Odessa, sheet 110).

a neutral description like "young man riding". Rests of a Greek inscription are mentioned on the upper, rounded border of the relief[4]. The publication of this find with its comparanda is now enabled through the recently found photograph, taken in April 1942, as the relief was in Bucharest[5].

The finding place and context of the relief are not known, only its provenance from the surroundings of Tulcea[6]. The history of the monument was not possible to trace back, as it seems not to be mentioned in the short catalog of the Museum of the Odesa Society of History and Antiquities[7].

The dating of the relief, in the late second century but most likely in the third century AD, can be based only on the available analogies[8]. This can be only a *terminus post quem*, especially in the region considered to be the provenance of the find, where the practice of use of earlier monuments, even with the iteration of the initial function or as building material, is both common[9].

The depiction of the rider is placed in a slightly deepened field with a narrow border and a rounded upper edge. It shows him galloping to the right, facing the viewer, and presenting his prey (hare or more likely a fawn or deer calf), which he grasps with the raised right hand by its back legs. He has a curly hairdo, wears a long-sleeved tunic and a cloak, fastened on his right shoulder with a brooch, and flutters in the wind, filling the background of the field with representation. The surface seems to be quite damaged; however, the rendering of details was not great to begin with, the carving being not very deep and limited to a minimum, with the exception of the rendering of the curly hair.

The Thracian horseman/Hero equitans is found in the northern Moesia Inferior[10] on several, although not many, examples of small to medium-sized marble reliefs (**Fig. 2**), with preference for the depiction of the wild boar hunt and with examples of shallow but also quite skillfully carved reliefs, with complex iconography and details hinting at the awareness of the customers and the availability of a quite wide iconographic spectrum within the

[4] "KVNIWS": MNA Archive D43/1942/Fişe cu provenienţă Muzeul Odessa, sheet 110.

[5] MNA Archive D43/1942/MNA vol. VII. Inventory, sheet 32, annex 3. - For the historical context of this action, see DRAGOMAN 2016.

[6] MNA Archive D43/1942/Fişe cu provenienţă Muzeul Odessa, sheet 110.

[7] YURGEVICH 1890. The Odesa Society of History and Antiquities, established around 1840, was a public organization that included scientists, local historians, and collectors of antiquities. It also had a museum and a journal. For the time being, it is unclear if the relief to be presented here was part of the collection before 1877 or entered it during the early 20th century.

[8] See GEORGIEVA 1965; CERMANOVIĆ-KUZMANOVIĆ *et al.* 1992, 1072 (in Thracia), 1076 (eastern part of the Balkan Peninsula), 1078 (middle and northern parts of the Balkan Peninsula) ; OPPERMANN 2006, cat. no. 931-943.

[9] See also BOTEVA 2017.

[10] A fragment of a further marble relief from this region, but without documented or recorded provenance, is kept in the collections of the museum in Tulcea (stand 2023); it is located in the lower middle part of the rather small-sized plate; only the boots of the horseman riding to the right are recognizable.

province. The iconographic analysis is a matter of discussion, which cannot be approached here. The motif depicted on the relief from Tulcea could be included in group C in the classification of G. Kazarow[11], was analyzed in more detail by Georgieva[12], corresponds to type C2 by M. Oppermann[13] and needs to find its place in one of the representation-narrative as defined by D. Boteva[14].

The question of the production of those reliefs remains open, especially given the, in some cases, remarkable differences between the pieces. Based on several criteria, hypotheses can be advanced, but without direct evidence of the production site etc., more cannot be safely stated. The fact that marble was imported to northern Moesia Inferior through the harbor in Tomis, together with the finds from this city, makes it probable that a production existed there. If in another ancient center, along the Danube, for instance, such a workshop functioned, it is also probable, but without archaeological evidence up to now. Furthermore, when looking at the finds of marble votive reliefs from the region, it is remarkable that there are certain similar characteristics (like shape and dimensions of the slab, the general layout) to be observed on reliefs with different subjects (Thracian rider, Mithras, Bacchus/Dionysos, etc.). Thus, it is quite possible that the sculpture workshop worked on demand quite different subjects. The rarity of the finds compared to the geographic area and the number of ancient sites hints toward this. To be highlighted is the basic shape of the plates: rectangular, preference for 2 registers, and the red frame of the main register, – common for Bacchus/Dionysos[15], Thracian horseman but also Mithras reliefs. In some cases, – more frequently related to Mithras and the Thracian horseman - the reliefs have a rounded top[16]. One hypothesis, based on occurrence and production details (like reuse or recarving[17]) – is that the production occurs in one center, like *Tomis*, *Troesmis* or even *Axiopolis*/ near Cernavodă, the latter being one of the main Odryssian military centers before becoming a strategic Roman one. Its location would have easily enabled material supply as well as distribution of products, and marble was certainly worked there, as the finds of reliefs, sculptures etc. attest.

There is up to now no evidence of a main cult place that would require and make profitable a workshop nearby providing votive reliefs specialized on a particular

[11] KAZAROW 1938, 5-9; BOTEVA 2017, 95-96.

[12] GEORGIEVA 1965, 113-115.

[13] OPPERMANN 2006, 74.

[14] BOTEVA 2017, 95-97.

[15] DRAGOMIR 1969; ALEXANDRESCU 2017.

[16] The interpretation of this detail is not conclusive and needs caution; cf. BOTEVA 2011, 96-97.

[17] MOSCALU, PETOLESCU 1972; HAMPARŢUMIAN 1979, cat. no. 13.

iconography, as it seems to have been the case in other regions within the same province[18], not to mention more famous sanctuaries or cult centers[19].

Differences in size, and in the execution of details, and quality of sculpture need to be systematically investigated in order to differentiate between so-called portable votives and those that were part of the inventory of a sanctuary, which are of middle and large sizes. Certainly, this observation may not be generalized, for the situation is different from region to region. This kind of approach requires the systematic and complete investigation of so-called inventories of sanctuaries. For Moesia Inferior, only the southern regions can bring this matter forward, as the northern area lacks such structures.

In the surroundings of ancient Troesmis, finds of reliefs, especially large-scale ones, carved in local stone, although the examples are stray finds without a documented context, can be interpreted as cult reliefs[20]. The exact location of sanctuaries in the surroundings of Troesmis is difficult to elucidate due to intensive and aggressive agricultural activities of more than 100 years. However, the fact that a relief depicting the Thracian horseman (with military attributes[21]!) was uncovered in Traian, quite skillfully executed in local Cerna sandstone, and featuring also rests of its initial elaborated detailing through color[22], makes plausible the existence of a local sculpture workshop as well.

To be highlighted is the fact that in the north there are, with this exception, no reliefs depicting the Thracian horseman/Heros equitans carved in local stones, like in the surroundings of Tomis and in the central and southern parts of the province, but up to now they are missing from the northernmost part of the province, an aspect that can be eventually explained as an expression of the state of the research.

Not many finds have been uncovered in the main settlements – military or civilian – but several are reported as accidental ones, brought to the museums by locals, and treated in the literature as individual, exceptional finds. One such case is the otherwise not spectacular fortlet from *Beroe* on the Danube, from where also two exquisite, entirely preserved marble votive reliefs with depictions of Dionysos are known[23]. The secondary use as building material was not always properly documented and published, or individual finds might have been

[18] The finds of marble votives with limited iconographic variations should be investigated, also taking into account the question of whether the plates were possibly produced or at least sold on site, being thus a special supply for the sanctuary and not a special choice of the dedicant; this task should be pursued especially if an intensive lithic material provenance survey of the finds is possible; see, for example, the overviews (with previous literature) by GOČEVA 1995 (Glava Panega); BOTEVA 2011, 87-94; BOTEVA 2017 (Slivnica, Sofia region).

[19] For example, see the recent results on the Meter reliefs from Ephesus: ANEVLAVI et al. 2022.

[20] ALEXANDRESCU 2017, 15-17.

[21] On these iconographical aspects, see OPPERMANN 2006, 282.

[22] ALEXANDRESCU et al. forthcoming.

[23] DRAGOMIR 1962.

overinterpreted (in identifying the place as a possible sanctuary[24]). Relevant is the fragmentary marble relief (**Fig. 3**) found most probably reused as building material in the fortification from Murighiol/*Halmyris*[25]. The relief features a complex layout with two fields with depictions, common for Mithras or Dionysos. Further, the depicted animals (lion and bull, facing each other) are not fighting, which hints at the specific meaning of the representation. The same static lion figure occurs on the entirely preserved and also skillfully executed relief from Casimcea[26]. The lion as rider's acolyte or help occurs on the reliefs, starting with the early third century[27].

The relief from Dăieni[28], on the Danube, not far from *Beroe*, through its layout as a naiskos-stele and the featured details (**Fig. 4**) seems to be the product of a workshop from the western shores of the Black Sea and might very well have been a funerary relief, depicting the heroized deceased, and not a votive relief[29]. The decoration of the pediment (vine) and the rython the rider is holding in his right hand can be simply motifs common to funerary representations, especially in the Greek/Hellenistic iconographic traditions, where the so-called Heros equitans riding towards a snake-coiled tree is no rarity[30]. The fact that in this region the funerary monuments, mainly tall funerary steles, feature a mainly vegetal and non-figurative decorative repertoire, compared to other areas of the province, is also a characteristic and an expression of the taste and habit of the local society and its deliberate choices.

The other examples mapped in Fig. 2 make evident that the situation in the northern part of the province is quite particular. As a direct expression of the little advanced state of the research of the settlements in the countryside of the main military and urban centers, the finds of sculpture and especially of marble items (not only those related to the so-called Thracian horseman) highlight the financial means and the taste of the population residing in the area starting with the late second century AD. Furthermore, for this population, the

[24] See also the find from Telița-Amza: BAUMANN 1995, 28. 34-35, pl. 35/4-5.

[25] BOTTEZ, TOPOLEANU 2021. Almost ten years ago, the find was said to have been found at *Beroe*, but the recent publication provided information on its provenance.

[26] OPAIȚ 1973-1975; HAMPARȚUMIAN 1979, cat. no. 10; BAUMANN 1984, 211 no. 11, fig. 12.

[27] OPPERMANN, in: CERMANOVIĆ-KUZMANOVIĆ et al. 1992, 1076.

[28] It was not possible to localize and suitably analyze the monument. Thus, all details rely on the only available publication, TOROPU 1974. See also OPPERMANN 2006, 99 (with literature, however, going back to the same initial publication).

[29] Relevant are also the dimensions of the monument: the thickness of the plate, which, with 7.5 cm, is similar to the funerary steles rather than the votive plates. The preserved height is about 32.5 cm, while the width measures 32 cm.

[30] See also the observations on the need for contextual analysis and necessary distinction in the investigation between votive and funerary monuments, as well as between Thracian and Greek/Hellenistic traditions of the motif: BOTEVA 2017, 99; cf. DIMITROVA 2002, 225-226. CERMANOVIĆ-KUZMANOVIĆ et al. 1992, 1078.

Thracian traditions and iconography were significant enough to procure the necessary monuments from imports, distant manufacturing centers or local workshops.

The relief from Tulcea is, for the time being, the most northerly known example of this group of depictions of the Hero Equitans as a hunter, holding his prey in his raised right hand. In his detailed study of the reliefs of the Thracian horseman, M. Oppermann identifies only 13 examples with this gesture of the depicted god holding the prey, none outside the territory of Thracia and the Balkans[31]. This can mean that the fragment does not exist anymore or that it is in Odesa but not on display or in a record available to the public. Oppermann seems to not have visited the museum himself but to have relied on the literature, as he quotes the Thracian horsemen relief finds from Tyras[32].

Several of the reliefs from the group bear inscriptions with mentions of the addressed god, which can be a Hero or even Apollo[33]. The information on the inscription in Tulcea is too fragmentary for further appreciation[34]. However, the inscription – most probably κυρίῳ – hints, according to the recent analysis of N. Belayche, at the dedication of the relief within the sanctuary of the addressed divinity[35], where "any divine power is implicitly *kyrios* in his/her own sanctuary". Given the known analogies bearing inscriptions with precise mention of the addressed god, it remains open in the case of the relief from Tulcea to which god it was dedicated. If we accept the demonstration of N. Belayche and the discussion of the epigraphic evidence together with the evaluation of its discussion and interpretation[36], the relief from Tulcea is also the first direct information that relates a Heros equitans relief bearing inscription and a sanctuary in the region of interest here.

Worth mentioning is the observation that the example from Tulcea seems to have initially had quite large dimensions, being of middle size, while the other smaller examples could have been not less expensive but also more easily transported by individuals. Expression of such individual choices can also be considered a marble relief featuring a related depiction (**Fig. 5**), said to have been found in *Potaissa*/Turda in Dacia, the headquarters of the legio V Macedonica after its deployment from Troesmis. The relief is much smaller and less carefully executed, but better preserved[37].

[31]OPPERMANN 2006, cat. no. 931-943, style group type C2, p. 73-75.

[32]OPPERMANN 2006, p. 266, 284, 293 (the quoted publications were not available to us during the preparation of this note).

[33] DIMITROVA 2002; BOTEVA 2011, 86-87 (with literature). - See, for example, MIHAILOV 1997, 5164, but also ISM III 246.

[34] See above note 3.

[35] BELAYCHE 2020, 103-106 (for Thracia and its surroundings).

[36] BELAYCHE 2020, 105-106; cf. TACHEVA-HITOVA 1978; DIMITROVA 2002.

[37] Dimensions 28 x 22 x 2 cm: BĂRBULESCU 2015, 61, fig. 56, 277 no. 22 (with literature).

The research on the so-called Thracian horseman/Heros equitans reliefs is far from unanimous about any aspect of the iconography, cult, and interpretation/meaning[38]. At this point, it can only be highlighted that the evidence uncovered in the northern Moesia Inferior attests to a wide variety of iconographic schemata that seem to have been chosen in awareness of the depicted details. Further, the examples are skillfully carved, with reliefs of quite large dimensions, most probably expensive items delivered on special request. As it is quite common, on site the customization of the votive might have been done through the carving of dedication on the specially provided lower border or/and on other places, like the narrow upper border of the relief. This last detail can be appreciated only in the case of entirely preserved examples. The ideal association between depiction and inscription makes evident the wide range of meaning the votive reliefs could receive, especially in the case of the direct statement of the addressed god[39]. With this one significant exception presented here, the reliefs from northern Moesia Inferior are not inscribed.

The scarce evidence enables, for the time being, only this general overview, to which the presented relief from Tulcea provides a further piece of the puzzle.

Acknowledgements

The research was made within the NCSR Project PN-III-P4-ID-PCE-2020-1031 (*Roman Stone Monuments from North Dobruja. Multidisciplinary Recovery of the Loss of Time and Context*). The author would like to thank her colleagues Oana Damian, Roxana Dobrescu and Dragoș Hălmagi ("Vasile Pârvan" Archaeological Institute) for the information on the 1942 documentation in the archives of the MNA.

Abbreviations

ISM – *Inscriptions Scythiae Minoris*. Bucharest-Paris.
MINAC – Museum of National History and Archaeology Constanța.
MNA – National Museum of Antiquities, Bucharest, now part of the "Vasile Pârvan" Archaeological Institute.

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[38] See, for example, next to the corpora like HAMPARŢUMIAN 1979, OPPERMANN 2006, the overview by BOTEVA 2011.
[39] DIMITROVA 2002; BOTEVA 2011.

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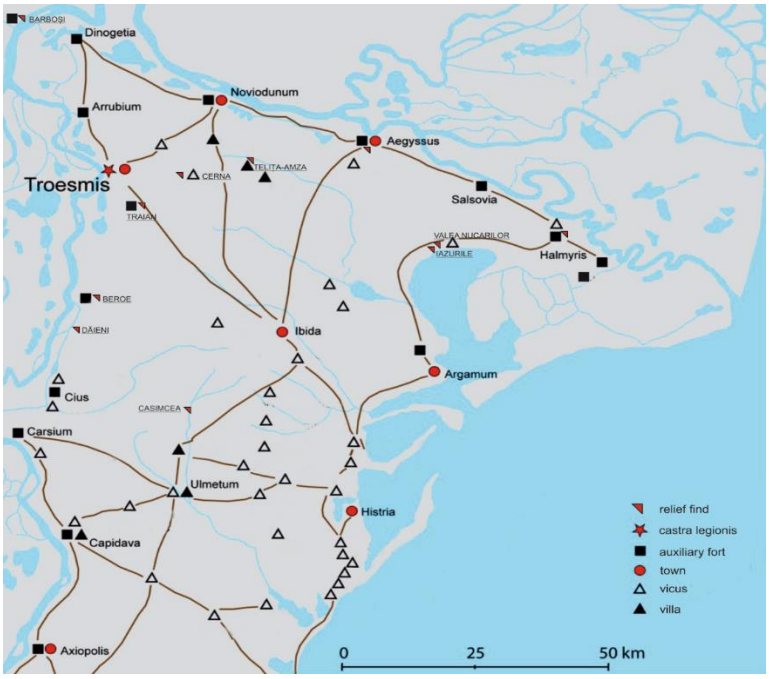
Fig. 1 Votive relief from Tulcea (detail from MNA Archive D43/1942/MNA vol.VII.Inventory, sheet 32, annex 3).



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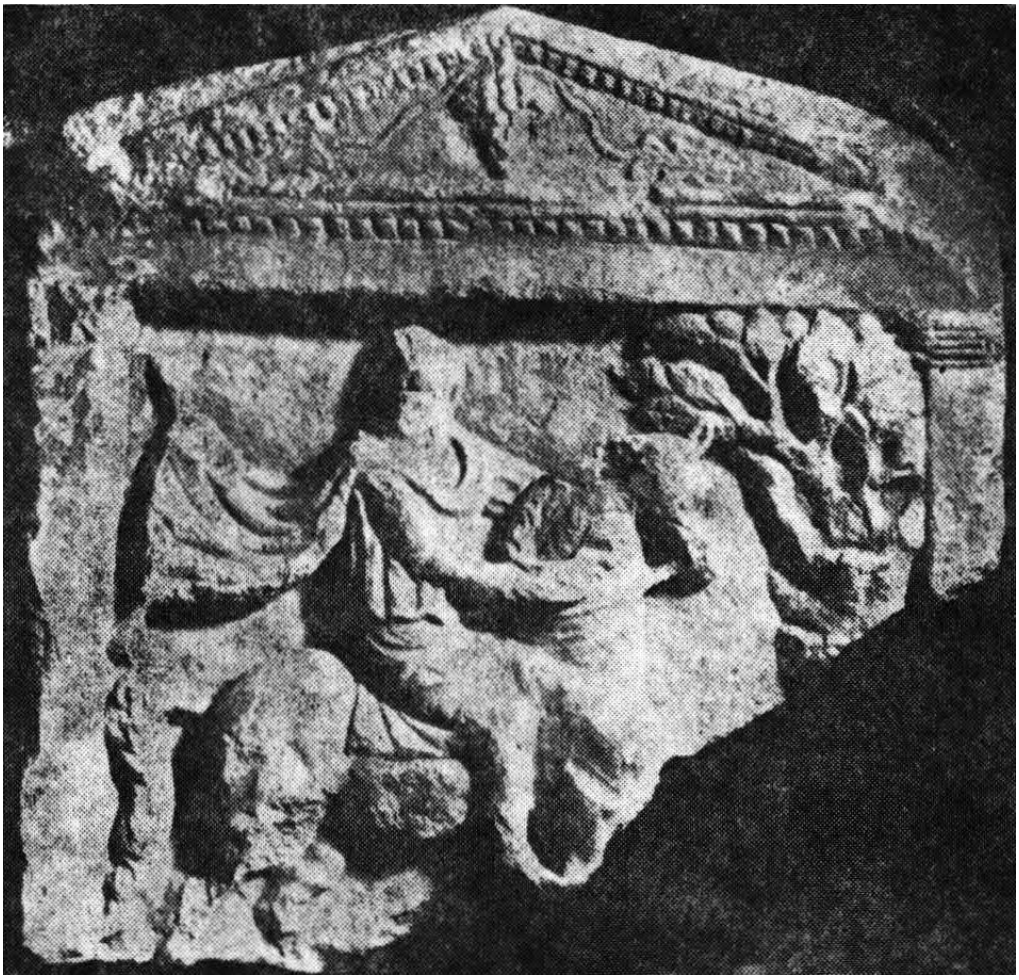

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Studia Antiqua et Archaeologica 29(2):267-330
DOI: 10.47743/saa-2023-29-2-7

Considerations on the *Po[ta]toria* Pottery of (L)Ibida. Case Study: Sector Curtina G - Tower 8[1]

Alex–Marian CORNEA[2]

Abstract: *The sample of vassa po[ta]toria presented in this article was found in the Curtina G - Tower 8 sector of the (L)Ibida archaeological site, Slava Rusă, com. Slava Cercheză, county. Tulcea, during excavations, carried out between 2002 and 2014. With the processing and selection of the material, a pottery sample of 130 vessels was outlined. These are chronologically classified between the 2nd and 5th centuries p.Chr.*

Rezumat: *Eșantionul de vassa po[ta]toria prezentat în acest articol a fost descoperit în sectorul Curtina G - Turnul 8 din situl arheologic de la (L)Ibida, Slava Rusă, com. Slava Cercheză, jud. Tulcea, în timpul săpăturilor, efectuate între anii 2002 și 2014. Odată cu prelucrarea și selecția materialului, s-a conturat un eșantion ceramic de 130 de vase. Acestea sunt încadrate cronologic între secolele II și V p.Chr.*

Keywords: *vassa po[ta]toria; Late Antiquity; West Pontic area; Scythia; (L)Ibida*

The fortress of Slava Rusă is located in the central-northern part of Dobrogea, in Tulcea county, an eloquent area for the great Roman sites in this area. It stands out for its unusual spatial layout and strategic position[3]. It enjoys an excellent geographical and strategic position[4], being situated somewhere between the Danube and Pontic areas.

The Roman-Byzantine fortification has been the subject of systematic archaeological research for about 22 years. The archaeological inventory presented in this work is part of the batch of finds from the 2002-2014 campaigns in the Curtina G - Tower 8 sector. Systematic archaeological research at Slava Rusă began in 2001, with the aim of uncovering the Ibida fortress and investigating the area surrounding it[5]. The research team was composed of several researchers from ICEM Tulcea, IA Iasi, UAIC Iasi[6]. In the case of the research in the Curtina G -

[1] Product article during the internship at the Accademia di Romania in Rome, obtained with the support of the Romanian State through the national grant program "Vasile Pârvan".

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[3] ȘTEFAN 1977, 5.

[4] PÂRVAN 1912, 578.

[5] MOCANU 2011, 294.

[6] Institute of Eco-Museum Research "Gavrilă Simion" Tulcea; Institute of Archaeology of Iasi; "Alexandru Ioan Cuza" University of Iasi.

Tower 8 sector[7], the aim was to capture the construction phases of the enclosure wall; its general stratigraphy; the intra- and extramural area *intra* and *extramuros*.

The importance of this category of archaeological material is conferred by the information it provides us with, from an economic, but above all from a social point of view. The research of drinking vessels highlights certain aspects of a community; it shows us the transformations that took place over time, the ways of travel, and aspects of the social and religious thinking of the inhabitants of the Western Pontic area who came into contact with Roman civilization. Ceramics in its integrity gives a way of expression to the community. Through its production, populations expressed their social, political and religious apartness. We consider it necessary to define the term drinking pottery. By drinking pottery (vasa *po[ta]toria*) we mean all the vessels that were used for serving liquids, i.e. jugs, mugs, glasses and *craters*. This category should be distinguished from pottery used for preparing food (vasa *conquina(to)ria*) or for serving various dishes (vasa *escaria* - tableware)[8]. Originally the two categories, kitchen and drinking, were treated together as fine limestone pottery. Then, at a later stage, they were separated[9]. The individualization of pottery is also conferred by the major distinction between pottery intended for firing (referred to in the literature as kitchen or fire pottery) and pottery used for the table or the pantry (drinking or purified pottery). This distinction is not new, as it is already well known to the ancients, based on the fact that ceramics exposed to fire, especially quality ceramics, are made from clays with specific characteristics and involve a certain manufacturing technology. On the other hand, pottery intended for serving liquids is not so much individualized by its shape as by its mixing characteristics[10].

As for the pottery from Ibida, sector Curtina G - Tower 8, the paste from which the pots are made is usually scarlet, with iron oxide, limestone and silver mica in its composition. There are also those made of beige, beige-brown, brown, brownish-brown and greyish paste. At the present stage of research, we cannot say whether they were made in a single centre. We have locally made and imported vessels for the area between the Danube and the Sea.

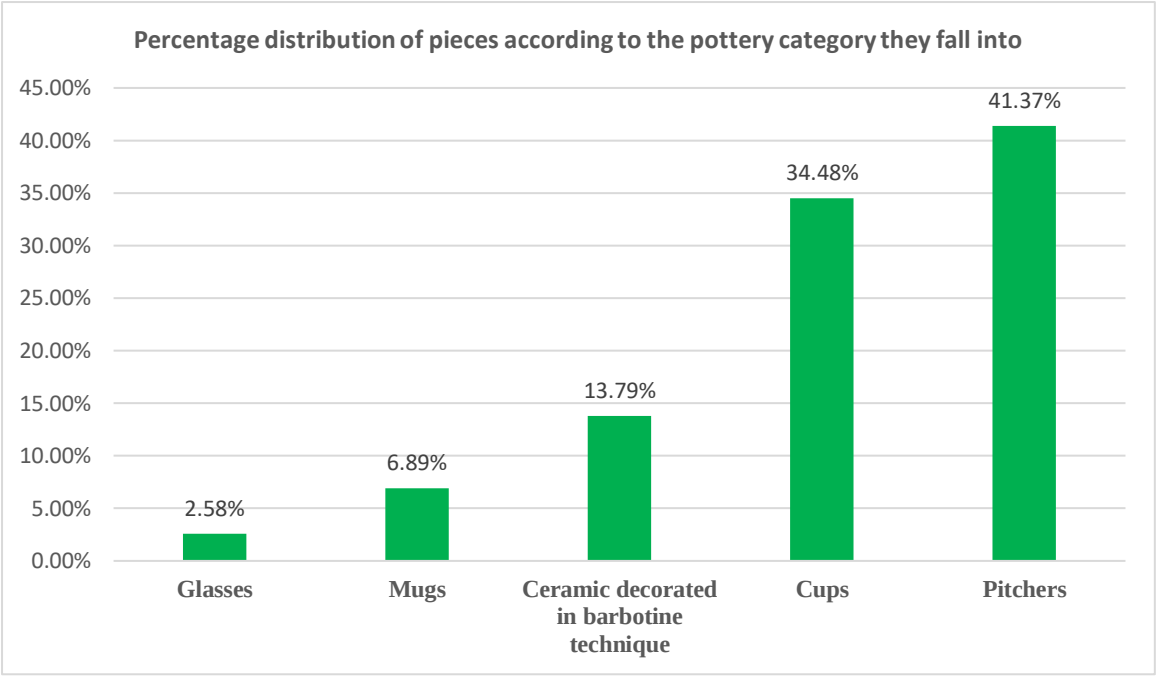
The structure of the pottery lot of the *po[ta]toria* type found in the Curtina G - Tower 8 sector is as follows: jugs predominate, representing 41.37% of the pieces. They are divided into 15 types. The most numerous is type XV, which stands out for its trilobed lip, short neck and lamellar or rounded rim. In the literature, we also find this type of vessel under the name of oinochoe. In this context, type IX is also distinguished by its rounded lip, funnel-shaped mouth, ovoid or globular body and inwardly widened rim.

[7] The archaeological research in this sector was coordinated by Dr. Dorel Paraschiv who offered us the ceramic lot, which is the subject of this article, for publication.

[8] OLCESE 1993, 48.

[9] OLCESE 1993, 49.

[10] OLCESE 1993, 191.



Next in terms of the number of pieces are the cups, 34.48% of which are in our catalogue. Within the small cups, we note type IV. Ceramics of this type have a flared lip, short neck and globular body. They have grooves on the vessel's upper surface; their base is ring-shaped or flat and the rim is flattened.

The ceramics decorated in the barbotine technique account for 13.79%. Of this ceramic category, type IV stands out. Ceramics of this type have a straight lip. The body of the vessels is globular or ovoid, the base is annular and the decoration is made using the slip technique. Large-sized earthenware is found in 6.89% of our catalogue. Within this category, we note type I. The handles of this type of vessel have a wide mouth, a long neck and a rounded, slightly raised section. The body of the vessels is ovoid and the base is annular.

The least numerous category, that of glasses, is represented in our work by 2.58%. In the case of glasses, we have only one typology. Glasses in this group have a rounded, upturned rim. The body of the vessels is cylindrical and the base is annular. They have grooves on the outer surface. The glasses were made from a single type of paste. In this case, the paste is of a scarlet colour, with iron oxide, limestone and *mica* silver in its composition.

CATALOGUE OF POTTERY *PO[TA]TORY* OF (L)IBIDA

1. PITCHERS

Type I

This type of pitcher has a rounded, upturned lip with a slightly convex cylindrical neck. The body of the vessel is globular, with grooves in the middle area ending in an annular base. It has two toards, lamellar in cross-section, which are attached to the slightly convex neck and shoulders of the vessel. The paste from which the vessel is made is beige in colour, with iron oxide, limestone and a little silver in its composition.

The diameter of the mouth is between 7 and 8 cm.

This type of vessel is found in the province of *Moesia Inferior* in the tumulus necropolis of Noviodunum[11], Halmyris[12], Tropaichioi[13], Tropaeum Traiani[14] and Tomis[15]. In Dacia, in the necropolis of the Romula[16] and Bulgaria of Odărci[17] and Sadovec[18].

The chronological setting of these vessels is quite extensive, from the 2nd century BC to the 6th century BC[19]. We believe that a dating of the vessels in question must take into account, first of all, the context in which these jugs were discovered. In our case, we believe that the example in question would possibly be dated to the second half of the 4th century BC.

1. P.d.: *Ibida* 2009, inside T8, -1,95m. **Dimensions:** Dg.= 7,6 cm, Hp.= 5,5 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** second half of the 4th century BC. ***(Plate I/1)***

Type II

The pitchers belonging to this group of vessels have a raised funnel-shaped mouth, a short neck, and an annular base; the outer surface of the vessels is grooved and the rim is banded with profiled edges. The paste from which these pots are made is of several kinds. The first type of paste is of a scarlet colour, with iron oxide, limestone and silvery mica in its composition. The second type of paste is beige, with traces of slip, iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 7 and 8 cm.

[11] SIMION 1984, 85, fig. g, pl. XIV/5.

[12] TOPOLEANU 2000, 89, type I, variant D, pl. XXI/187.

[13] OPAIȚ 1991, 226, type V, pl 38/8.

[14] BOGDAN-CĂTĂNICIU, BARNEA 1979, 187, pl. 164/3,8.

[15] OPAIȚ 1996, type III, pl. 48/1.

[16] POPILIAN 1976, 96, type 1, pl. XLI/429.

[17] DONCEVA-PETKOVA, TOPTANOV 1982, 117, pl. II/7.

[18] KUZMANOV 1992, pl 68/ 3,5.

[19] TOPOLEANU 2000, 89.

This type of vessel is found in the province of *Moesia Inferior* in the tumulus necropolis of Noviodunum[20], in rural areas noviodunens, of Telița – Valea Morilor[21], Halmyris[22], Troesmis[23], Callatis[24], Histria[25], Tropaeum Traiani[26] and in the necropolis at Ostrov[27]. In *Dacia,* these are found in the Roman necropolis at Romula[28].

The chronological setting of these vases is extensive, from the 2nd century BC to the 4th century BC[29].

2. P.d.: *Ibida* 2010, Curtina G, S1, C18, -1,10-1,30 m. **Dimensions:** Dg.= 8 cm, Hp.= 3 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has a beige coloured angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate I/2)***

3. P.d.: *Ibida* 2009, T8, S4, -2,83m. **Dimensions:** Dg.= 7 cm, Hp.= 2,5 cm. **Descriptions:** Beige-coloured paste, traces of slip, with iron oxide, limestone and mica silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate I/3)***

4. P.d.: *Ibida* 2009, T8, S4, 2,80m. **Dimensions:** Dg.= 8 cm, Hp.= 3 cm. **Descriptions:** Crimson-coloured paste, traces of slip, with iron oxide, limestone and mica silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate I/4)***

Type III

The pitchers of this type have a slightly straight, thickened, flared lip. They have a groove on the inner surface and grooves on the outer surface. The throat is short and truncated. The muzzle is banded. The body is globular or ovoid and the base is annular or concave. The paste from which these vessels are made is of several kinds. The first type of paste is scarlet in colour, with iron oxide, limestone and mica silver in its composition. The second type of paste is grey in colour, with iron oxide, limestone and mica silver in its composition. The third type of paste is beige-brownish in colour, with iron oxide, limestone and mica silver in the composition.

The mouth diameter is between 7 and 8 cm.

[20] SIMION 1984, 85, g, pl. XIV/7.

[21] BAUMANN 1997, 42, type IV, pl. VIII/B.

[22] TOPOLEANU 2000, 89, type I, variant D, pl. XXI/186.

[23] OPAIȚ 1980, 333, pl. VII/4.

[24] PREDA 1980, pl. XI/1.

[25] SUCEVEANU 2000, type XLVIII, pl. 74/3.

[26] GĂMUREAC 2009, 254, type 1/A, pl. IV/30.

[27] RĂDULESCU 1975, 349, type b, pl. XIII/2.

[28] POPILIAN 1976, 96, type 2, pl. XLIII/ 454-456.

[29] POPILIAN 1976, 96.

This type of vessel is found in the province of *Moesia Inferior* in the settlement of Murighiol[30], Telița – Valea Morilor[31], Beroe[32], Capidava[33], Histria[34], Noviodunum necropolis[35] and Ostrov necropolis[36]. In *Dacia,* such vessels are found in the Romula Roman necropolis[37] and Sacidava[38].

The chronological setting of these vases is extensive, from the 2nd century BC to the 4th century BC[39].

5. P.d.: *Ibida* 2010, Curtina G, I.M., S1, *passim*. **Dimensions:** Dg.= 7 cm, Hp.= 3 cm. **Descriptions:** Greyish-coloured date with iron oxide, limestone and a little silver in its composition. Bibliography: unpublished. Dating: first half of the 2nd century BC. ***(Plate I/5)***

6. P.d.: *Ibida* 2010, Curtina G, S1, *passim*. **Dimensions:** Dg.= 8 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate I/6)***

7. P.d.: *Ibida* 2009, inside T8, -3,4m. **Dimensions:** Dg.=8 cm, Hp.=2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. Present briefs. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate II/7)***

8. P.d.: *Ibida* 2009, T8, S4, -2,80m. **Dimensions:** Dg.= 7 cm, Hp.= 3 cm. **Descriptions:** Beige-brownish paste with iron oxide, limestone and a little silver in the composition. Features brown briefs. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate III/8)***

Type IV

The pitchers of this type have a rounded, slightly upturned lip with an outer ridge just below the lip, and an elongated truncated conical neck. The body of the vessels is ovoid and the base is annular. The totem is band-shaped with serrations. The paste from which these vessels are made is of several kinds. The first type of paste is of a scarlet colour, with iron oxide,

[30] OPAIȚ 1991, 265, fig. 261-262.

[31] OPAIȚ 1996, 317, type II, pl. 47/3; Pl. 48/7.

[32] OPAIȚ 1996, 319, Pl. 49/11.

[33] OPRIȘ 2003, 129, type VII, pl. XLII/276; COVACEF 1999, 176, pl XXI/ 4.

[34] SUCEVEANU 1982, 94, Fig. 12/55.

[35] SIMION 1984, 85, g, pl. XIII/2.

[36] RĂDULESCU 1975, 346, pl. 9/1a-b.

[37] POPILIAN 1976, 96-97, type 2, pl. XLI/ 433-435, pl. XLII/439-441.

[38] SCORPAN 1975, 285, type B, pl. VIII/3,4.

[39] POPILIAN 1976, 96.

limestone and silver mica in its composition. The second type of paste is dark brown, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 7 and 13 cm.

This type of vessel is found in the province of *Moesia Inferior* at Histria[40], Capidava[41], Ibida[42], Tomis[43], Halmyris[44] and Carsium[45].

The chronological dating of these vessels is quite extensive, from the 2nd century BC[46] to the 6th century BC[47].

9. P.d.: *Ibida* 2008, Curtina G, S3, C4. **Dimensions:** Dg.= 13 cm, Hp.= 4,3 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. The example shows grooves on the body of the vessel and a brownish angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate II/9)***

10. P.d.: *Ibida* 2005, Curtina G, S3,C6, -2,6 m. **Dimensions:** Dg.= 9 cm, Hp. =4,7 cm. **Descriptions:** Dark brown paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate II/10)***

11. P.d.: *Ibida* 2010, Curtina G, *passim*. **Dimensions:** Dg.= 7,2 cm, Hp.= 8,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has brownish angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate II/11)***

Type V

The pitchers of this type have a vertical, flared lip with one or two grooves on it, the body of the vessel is ovoid. The upper part of the vessel has a slightly pointed rim. Vessels have a lamellar or rounded top which is slightly raised in section. The paste from which these pots are made is of several kinds. In this case, the paste from which they are made is scarlet, with iron oxide, limestone and a little silver in its composition.

The diameter of the mouth is 8 cm.

[40] BĂDESCU 2015, 215, type II.I, fig.3/1.

[41] OPAIȚ 1996, 315, type I, pl. 46/1.

[42] OPAIȚ 1991 A,171, fig. 37.

[43] SCORPAN 1976, 171, type E, pl. XXIV/1; SCORPAN 1977, 288, type D, fig. 31/1.

[44] TOPOLEANU 2000, 89, type III C, pl. XXI/194.

[45] NICOLAE 1995-1996, 143, pl. 3.

[46] SCORPAN 1976, 171.

[47] SCORPAN 1977, 288.

This type of vessel is found in the province of *Moesia Inferior* at Murighiol[48], Carsium[49] and Histria[50], but also in the rural settlement of Slava Rusă-Coșari[51]. In *Dacia,* this type of vase is found in the Roman necropolis at Romula[52].

The chronological setting of these vases is quite extensive, from the 2nd century BC to the first half of the 5th century BC[53].

12. P.d.: *Ibida* 2010, Curtina G, S3, -3,00m. **Dimensions:** Dg.= 8 cm, Hp.= 6 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It shows traces of brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate II/12)***

13. P.d.: *Ibida* 2010, Curtina G, S3, -3,00m. **Dimensions:** Dg.= 8 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It shows traces of brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate III/13)***

Type VI

This type of pitcher has a thickened lip in the section followed by a ridge on the outside. The lip may be flared. The body of the pot is slightly domed, the neck is short and the base is annular. The body of the vessel has grooves both on the inner surface and the tote has a median groove. The paste from which these jugs are made is of several kinds. In this case, the jugs are made of a scarlet-coloured paste with iron oxide, limestone and mica silver in their composition.

The diameter of the mouth is between 8 and 9 cm.

This type of vessel is found in the province of *Moesia Inferior* in the necropolis of Noviodunum[54], Ibida[55], Troesmis[56] and Histria[57]. In *Dacia* are found in the Roman necropolis at Romula[58]. In Bulgaria, this type of pitcher is found at Odărci[59],

[48] OPAIȚ 1991 a, 160, pl. 39/226.
[49] NICOLAE 1995-1996, 143, pl. 3.
[50] SUCEVEANU 1982, 94, Fig. 12/56.
[51] OPAIȚ 1996, 117, type II-B, pl. 48/5,7.
[52] POPILIAN 1976, 96, type 1, pl. XLI/435.
[53] OPAIȚ 1996, 117.
[54] SIMION 1984, 85, g, pl. XIV/8.
[55] OPAIȚ 1991 a, 172, fig. 225.
[56] OPAIȚ 1980, 340, pl. VIII, Fig. 2.
[57] SUCEVEANU 1982, 89, fig. 9/20; fig. 12/56.
[58] POPILIAN 1976, 98, type 7, pl. XLVI/493-496.
[59] DONCEVA-PETKOVA, TOPTANOV 1982, 117, pl. II/5.

These vessels are dated to the 2nd and 3rd centuries BC[60].

14. P.d.: *Ibida* 2006, Curtina G, S3, C6. **Dimensions:** Dg.= 9 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has a beige-coloured angobe on the outer surface. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate III/14)***

15. P.d.: *Ibida* 2003, T8, *passim*. **Dimensions:** Dg.= 8 cm, Hp.= 6,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate III/15)***

Type VII

This type of pitcher has a rounded lip, an elongated neck, and the barrel is notched on the outer surface. The body of the vessels is globular or ovoid with grooves and the base is annular. The paste from which this type of vessel is made is, in this case, of a scarlet colour, with iron oxide, limestone and silvery mica in its composition.

The diameter of the mouth is 8 cm.

This type of vessel is found in the province of *Moesia Inferior* in the necropolis of Noviodunum[61], Murighiol[62], Castelu[63], Histria[64] and Babadag-Tropraichioi[65]. In *Dacia,* the pitchers in question were found in the necropolis at Romula[66].

The chronological setting of these vessels is quite extensive, late 4th century BC to the first half of the 5th century BC[67].

16. P.d.: *Ibida* 2001, Curtina G, S1, C4. **Dimensions:** Dg.= 3,6 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has a greyish angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate III/16)***

17. P.d.: *Ibida*, Curtina G. **Dimensions:** Dg.= 5,8 cm, Hp.= 6,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate III/17)***

[60] POPILIAN 1976, 98.
[61] SIMION 1984, 85, g, pl. XIV/9.
[62] OPAIȚ 1991 a, 202, fig. 39/228.
[63] OPAIȚ 1996, 119, type IV-B, pl. 48/6.
[64] SUCEVEANU 1982, 94, fig. 12/51.
[65] OPAIȚ 1991 a, 226, pl. 37/5, 38/1.
[66] POPILIAN 1976, 96, type 1, pl. XLI/428.
[67] OPAIȚ 1996, 119.

Type VIII

This type of pitcher has a widened rim under which a rib can be seen. The neck is short, the body is globular and the torso has a median groove. The paste from which this type of pot is made is of several kinds. In this case, we have a scarlet-coloured paste, with iron oxide, limestone and mica silver in its composition.

The mouth diameter is 8 cm.

This type of vessel is found in the province of *Moesia Inferior* at Mangalia-Neptun[68], Tomis[69], Tropaeum Traiani[70], Carsium[71], Niculițel[72], the necropolis of Noviodunthe um[73], necropolis of Gura Caniliei[74] and the Tropaeum Traiani[75]. In *Dacia* in the Roman necropolis at Romula[76] and Sacidava[77].

The chronological setting of these vessels is extensive, from the 2nd century BC to the 3rd century BC[78].

18. P.d.: *Ibida* 2001, Curtina G, *passim*. **Dimensions:** Dg.= 8 cm, Hp.= 1,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate III/18).***

19. P.d.: *Ibida* 2009, Curtina G, S5, strat vegetal. **Dimensions:** Dg.= 8 cm, Hp.= 4,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate IV/19)***

Type IX

Pitchers of this type have a rounded, upturned lip and a palliform mouth. The body of the vessels is globular or ovoid and the base is annular. The rim is widened inwards and has grooves on the outer surface. The paste from which these vessels are made is of several kinds. The first type of paste is beige in colour, with iron oxide, limestone and mica silver in its composition. The second type of paste is grey in colour, with iron oxide and silver mica in its

[68] RĂDULESCU 1975, 343, type 12, pl. X/3-4.
[69] SCORPAN 1976, 170, type A, pl. XXIII/1-2.
[70] GĂMUREAC 2009, 255, type 6, pl. V/38.
[71] NICOLAE 1995-1996, 143, pl. 3.
[72] HONCu 2014, 82-83, type 3, pl. 24/ 182, 183.
[73] BOGDAN-CĂTĂNICIU, BARNEA 1979, 184, fig. 152/4.1.
[74] PAPASIMa 1997, 312, pl. VI/3.
[75] SIMION 1984a, 85, type C, pl. 14/8.
[76] POPILIAN 1976, 98, type 5, pl. XLV/475-477.
[77] SCORPAN 1975, 285, type C, pl. VIII/5.
[78] HONCU 2014, 83.

composition. The third type of paste is scarlet, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is about 6 to 10 cm.

This kind of vessel is found in the province of *Moesia Inferior* at Beroe[79], Murighiol[80], Histria[81], Tropaeum Traiani[82], and in the territory noviodunens Valea Morilor[83]. In *Dacia* are found in the Roman necropolis at Romula[84] and Sucidava[85]. Such vessels can also be found in the Iberian area[86].

The chronological setting of these vases is quite extensive, late 2nd century BC to the first half of the 4th century BC[87].

20. P.d.: *Ibida* 2010, Curtina G, I.M., S5, *passim*. **Dimensions:** Dg.= 7 cm, Hp.= 2,5 cm. Descriptions: The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It has a greyish angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate IV/20)***

21. P.d.: *Ibida* 2009, inside T8, 1,95m. **Dimensions:** Dg.= 6 cm, Hp.= 5 cm. **Descriptions:** Grey paste with iron oxide and a little silver in its composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate IV/21)***

22. P.d.: *Ibida* 2009, *passim*. **Dimensions:** Dg.= 10 cm, Hp.= 5,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has a greyish angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate IV/22)***

Type X

This type of pitcher has a rounded lip, a globular body with grooves on the outer surface and an annular base. The paste from which these pots are made is of several kinds, and in this case, the paste is scarlet, with iron oxide, limestone and silvery mica in its composition.

The diameter of the mouth is about 10 cm.

[79] OPAIȚ 1996, 119, type IV D, pl. 50/1.
[80] OPAIȚ 1991 a, 161, type IV, pl. 39/229.
[81] SUCEVEANU 1982, 94, fig. 12/57.
[82] GĂMUREAC 2009, 255, type 4, pl. V/35.
[83] BAUMANN 1995, 412, pl. VI/7.
[84] POPILIAN 1976, 96, type 2, pl. XVIII/454.
[85] SUCEVEANU 1975, 285, type B, pl. VIII/6.
[86] VEGAS 1972, 75, fig. 25/3
[87] POPILIAN 1976, 96.

This type of vessel is found in the province of *Moesia Inferior* at Capidava[88], Tomis[89], Beroe[90], Tropaeum Traiani[91] and Histria[92].

The chronological setting of these vessels is quite extensive, from the second half of the 5th century BC to the 6th century BC[93].

23. P.d.: *Ibida* 2010, Curtina G, I.M., S1. **Dimensions:** Dg.= 9 cm, Hp.= 3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It shows greyish angobe on both surfaces. **Bibliography:** unpublished. **Dating:** 5th century BC. ***(Plate IV/23)***

Type XI

The pitchers of this type have an outwardly widened lip with two well-defined grooves on it. The body of the vessels is usually ovoid or globular with an annular base. The paste from which these types of vessels are made is multiple, and in this case, we are talking about a greyish paste with iron oxide and a little silver in its composition.

The diameter of the mouth is 10 cm.

This type of vessel is found in the province of *Moesia Inferior* in the necropolis of Noviodunum[94], Mangalia-Neptun[95] and Niculițel[96]. In *Dacia* in the necropolis of Romula[97], Sucidava[98] and of Napoca[99].

The chronological setting of these vases is quite extensive, from the 3rd century BC to the first half of the 4th century BC[100].

24. P.d.: *Ibida* 2010, Curtina G, I.M., S5. **Dimensions:** Dg.= 10 cm, Hp.= 2,5 cm. **Descriptions:** Grey paste with iron oxide and a little silver in its composition. The example shows briefs with shades of black and grey on the outside. **Bibliography:** unpublished. **Dating:** first half of the 4th century BC. ***(Plate IV/24)***

Type XII

[88] OPRIȘ 2003, 123, type VII, pl. XLII/273.
[89] OPAIȚ 1996, 119, type IV-C, pl. 49/4.
[90] OPAIȚ 1996, 119, type IV -C, pl. 49/11.
[91] CĂTĂNICIU, BARNEA 1979, 187, fig. 162/4.1-4.2.
[92] SUCEVEANU 1982, 94, fig. 12/55.
[93] OPAIȚ 1996, 119.
[94] SIMION 1984, 85, type a, pl. 13/2.
[95] RĂDULESCU 1975, 346, pl. 9/1a-b.
[96] HONCU 2014, 82, type 1, pl. 24/178.
[97] POPILIAN 1976, 97, type 2-b, pl. XLIII/433;439 ;440.
[98] SCORPAN 1975, 285, type B, pl. VIII/5.
[99] RUSU-BOLINDEȚ 2007, 424, type 13G, pl. 99/612–613.
[100] PAPILIAN 1976, 97.

The pitchers framed in this type of vessel have a rounded lip, the inner part of the lip being widened inwards, the body of the vessels is globular or ovoid with an annular base, being well defined with a groove. The paste from which it is made is scarlet in colour, with iron oxide, limestone and mica silver in the composition.

The diameter of the mouth is approximately 11 cm.

This type of vessel is found in the province of *Moesia Inferior* at Murighiol[101], Noviodunum[102], Histria[103] and of Tropraichioi[104].

The chronological setting of these vessels is extensive, from the 5th century BC to the 6th century BC[105].

25. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,5-3,7m. **Dimensions:** Dg.= 11 cm, Hp.= 2,7 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has brownish-brown angobe. **Bibliography:** unpublished. **Dating:** 5th century BC. ***(Plate V/25)***

Type XIII

The pitchers belonging to this group of vessels have a rounded lip, a narrow neck and a globular, slightly flattened vessel body. The base of these vessels is ring-shaped and the rim is banded. The paste from which they are made is of several types, in this case, we are talking about a scarlet-coloured paste, with iron oxide, limestone and silver mica in its composition.

The diameter of the mouth is about 17 cm.

This type of vessel is found in the province of *Moesia Inferior* at Tropaeum Traiani[106] and Halmyris[107].

The chronological setting of these vases is quite extensive, from the mid-4th century BC to the 6th century BC[108].

26. P.d.: *Ibida* 2010, Curtina G, I.M., S1, *passim*. **Dimensions:** Dg.= 17 cm, Hp.= 3 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate V/26)***

TYPE XIV

[101] OPAIȚ 1996, 188, type III, pl. 48/3.
[102] TOPOLEANU 2014, pl. VI/40, 132.
[103] SUCEVEANU 1982, 94, fig. 12/58.
[104] OPAIȚ 1991 b, 226, type V, pl. 38/8.
[105] OPAIȚ 1996, 188.
[106] CĂTĂNICIU, BARNEA 1979, 187, fig. 162.
[107] TOPOLEANU 2000, 90, type II, variant B, pl. XXI/193.
[108] TOPOLEANU 2000, 90.

Pitchers belonging to this group of vessels have a rounded lip, a globular body and an annular base. The paste from which the jugs are made is of several kinds, as follows paste of a scarlet colour, with iron oxide, limestone and silvery mica in its composition.

The diameter of the mouth is 8 cm.

These vessels are found in the province of *Moesia Inferior* at Histria[109], Niculițel[110] and in the Histrian territory at Fântânele[111]. In *Dacia,* these jugs were discovered in the Roman necropolis at Romula[112].

The chronological setting of these vases is quite extensive, from the 2nd century BC to the mid-3rd century BC[113].

27. P.d.: *Ibida* 2012, Curtina G, S3, C3, -3,00-3,4m. **Dimensions:** Dg.= 8 cm, Hp.= 3,6 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate V/27)***

Type XV

The pitchers of this type have a trilobed lip, short neck, lamellar or rounded tote and a slightly raised section. The body of the vessels is globular or ovoid and the base is annular. The paste from which the jugs are made is of several kinds. The first type of paste is reddish-brown in colour, with iron oxide, limestone and a little silver in its composition. The second type of paste is beige-brown (kaolin) with iron oxide, and mica silver in the composition. The third type of paste is brown with iron oxide, limestone and mica silver in the composition. The fourth type of paste is grey in colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 3 and 10 cm.

[109] SCORPAN 1976, 287, type c, fig. 3; SUCEVEANU 2000, 150, type XLVI, pl. 70/1; SUCEVEANU 1982, 94, fig. 12/53.

[110] HONCU 2014, 82, type 2, pl. 24/180.

[111] SUCEVEANU 1998, 231, pl. XVI/146.

[112] POPILIAN 1976, 98-99, type 7, pl. XLVIII/516.

[113] HONCU 2014, 82.

This type of vessel is found in the province of *Moesia Inferior* at Tropaeum Traiani[114], necropolis of Noviodunum[115], necropolis of Ostrov[116], Durostorum[117], Carsium[118], Niculițel[119], Troesmis[120]. In *Dacia* were discovered at the necropolis of Romula[121]; in Bulgaria at Shabla[122].

The chronological setting of these vases is quite extensive, from the 1st century BC to the mid-4th century BC[123].

28. P.d.: *Ibida* 2010, Curtina G, C12, 4,5m. **Dimensions:** Dg.= 9 cm, Hp.= 3,4 cm. **Descriptions:** Red - scarlet coloured paste, with iron oxide, limestone and a little silver in its composition. It shows a brownish angobe on the outer surface. **Bibliography:** unpublished. **Dating:** second half of the 2nd century BC. ***(Plate V/28)***

29. P.d.: *Ibida* 2003, inside T8, 1,80m. **Dimensions:** Dg.= 8 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate V/29)***

30. P.d.: *Ibida* 2009, T8, S4, -2,83m. **Dimensions:** Dg.= 6 cm, Hp.= 3 cm. **Descriptions:** Greyish-coloured paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate V/30)***

31. P.d.: *Ibida* 2002, Curtina G, S1, C16, 0,70m. **Dimensions:** Dg.= 3 cm, Db.= 4 cm, Hp.= 4 cm. **Descriptions:** Brown paste with iron oxide, limestone and a little silver in its composition. Dark brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VI/31)***

32. P.d.: *Ibida*, Curtina G, S3. **Dimensions:** Dg. = 8 cm, Db.=5 cm, Hp. = 7,1 cm. Descriptions: Brown paste with iron oxide and a little silver in its composition. Dark brown angobe. Bibliography: unpublished. Dating: first half of the 2nd century BC.***(Plate VI/32).***

[114] BOGDAN-CĂTĂNICIU, BARNEA 1979, 182, fig, 146/4.7

[115] SIMION 1984a, 85, type b, pl. 13/7; TOPOLEANU 2014, pl. VI/41, 133.

[116] RĂDULESCU 1975, 343, pl. 8/1-3; pl. 9/1-2.

[117] MUȘEȚEANU 2003, 106, pl. 31/424-325.

[118] NICOLAE 1995-1996, 143, pl. 3.

[119] HONCU 2014, 83, type 4, pl. 24/184-185.

[120] OPAIȚ 1980, 333, pl. 7/5.

[121] POPILIAN 1976, 101, type 12/d, e, pl. 49/529-531.

[122] TORBATOV 1997, pl. 2/1-3.

[123] POPILIAN 1976, 101.

33. P.d.: *Ibida* 2009, Curtina G, I.M., S1, profile. **Dimensions:** Dg.= 7 cm, Hp.= 7,5 cm. **Descriptions:** Reddish paste with iron oxide, limestone and a little silver in its composition.**Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VI/33)***

34. P.d.: *Ibida* 2010, Curtina G, I.M.,S1, cleaning. **Dimensions:** Dg.= 4 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide and a little silver in the composition. Prezintă urme de arsură. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VI/34)***

35. P.d.: *Ibida* 2009, Curtina G, I.M., S1. **Dimensions:** Dg.= 6 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VII/35)***

36. P.d.: *Ibida* 2001, Curtina G, S1, C10, -1,40-1,70m. **Dimensions:** Dg.= 9 cm, Hp.= 5,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has a brownish angobe on the outer surface of the vessel. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VII/36)***

37. P.d.: *Ibida* 2001, Curtina G, S1, C12, -1,00. **Dimensions:** Dg.= 10 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VII/37)***

38. P.d.: *Ibida* 2001, Curtina G, S1, C11. **Dimensions:** Dg.= 5 cm, Hp.= 3 cm. **Descriptions:** Beige-brownish paste with iron oxide, limestone and a little silver in the composition. It has brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VII/38)***

39. P.d.: *Ibida* 2010, Curtina G, S1, passim. **Dimensions:** Dg.= 3 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VII/39)***

40. P.d.: *Ibida* 2001, Curtina G, S1, C9, -1,30m. **Dimensions:** Dg.= 8 cm, Hp.= 2,1 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VII/40)***

41. P.d.: *Ibida* 2002, Curtina G, S1, C17, -2,00m. **Dimensions:** Dg.= 7 cm, Hp.= 1,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It shows greyish angobe and burn marks. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VIII/41)***

42. P.d.: *Ibida* 2010, Curtina G, S3, -3,00m. **Dimensions:** Dg.= 4 cm, Hp.= 2 cm. **Descriptions:** Beige to off-white paste with iron oxide, limestone, pebbles and pyroxene in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VIII/42)***

43. P.d.: *Ibida* 2002, Curtina G, S1, C16, 0,70m. **Dimensions:** Dg.= 4 cm, Hp.= 3 cm. **Descriptions:** Greyish-coloured paste with iron oxide, limestone and a little silver in its composition. It has brownish-grey angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VIII/43)***

44. P.d.: *Ibida* 2010, Curtina G, I.M., S1, *passim*. **Dimensions:** Dg.= 4 cm, Hp.= 2 cm. **Descriptions:** Brown paste with iron oxide, limestone and a little silver in its composition. It has a dark brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VIII/44)***

45. P.d.: *Ibida* 2010, T8, S3, -1,00m. **Dimensions:** Dg.= 3 cm, Hp.= 2,5 cm. **Descriptions:** Brownish paste with iron oxide, limestone and a little silver in its composition. Dark brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VIII/45)***

46. P.d.: *Ibida* 2010, Curtina G, S2, C5-6, -2,8-3,00m. **Dimensions:** Dg.= 8 cm, Hp.= 2 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It has its own angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate VIII/46)***

47. P.d.: *Ibida* 2012, Curtina G, S2, -3,4-3,5m. **Dimensions:** Dg.= 5 cm, Hp.= 7,5 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It has its own angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate IX/47)***

48. P.d.: *Ibida* 2012, Curtina G, S4, -3,4-3,5. **Dimensions:** Dg.= 4 cm, Hp.= 2,5 cm. **Descriptions:** Greyish coloured paste with iron oxide, limestone and a little silver in its composition. Prezintă slip de culoare bej. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate IX/48)***

2. Mugs

Type I

The mugs falling into this type of vessel have a wide mouth, long neck, and rounded tote in a slightly raised section. The body of the vessels is ovoid and the base is annular. The paste from which the mugs are made is of several kinds. The first type of paste is scarlet in colour, with iron oxide, limestone and mica silver in its composition. The second type of paste is grey in colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 8 and 9 cm.

This type of vessel is found in the province of *Moesia Inferior* at Tropraichioi[124] and Murighiol[125].

The chronological setting of these vases is quite extensive, from the 4th century BC to the 5th century BC[126].

49. P.d.: *Ibida* 2005, Curtina G, S1, C23, -0,30m. **Dimensions:** Dg.= 9 cm, Hp.= 3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate X/49)***

50. P.d.: *Ibida* 2001, Curtina G, S1, C4, -0,5m. **Dimensions:** Dg.= 8 cm, Hp.= 6,5 cm. **Descriptions:** Greyish-coloured paste with iron oxide, limestone and a little silver in its composition. It has a greyish-dark angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate X/50)***

Type II

The mugs framed in this type of vessel have a wide mouth, and the lip is flared, and slightly thickened. They have grooves on the outer surface. The body of the vessels is globular and the base is annular. The paste from which the mugs are made is of several kinds. In this case, the paste is a scarlet colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is 14 cm.

This type of vessel is found in the province of Lower Moesia at Capidava[127], Murighiol[128] and Tropraichioi[129].

[124] OPAIȚ 1996, 112, type I, pl. 44/3; OPAIȚ 2004, 66, type I, pl. 50/8.

[125] OPAIȚ 1991b, 160, pl. 37/221.

[126] OPAIȚ 1996, 112.

[127] OPRIȘ 2003, 134, type I, pl. XLVI/313.

[128] OPAIȚ 1991 b, 160, pl. 37/222.

[129] OPAIȚ 2004, 66, type II, pl. 50/1;4.

The chronological setting of these vessels is quite extensive, from the 5th century BC to the 6th century BC[130].

51. P.d.: *Ibida* 2003, Curtina G, E.M., S1, *passim*. **Dimensions:** Dg.= 14 cm, Hp.= 4,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has beige coloured angobe. **Bibliography:** unpublished. **Dating:** 5th century BC. ***(Plate X/51)***

Type III

The mugs that fall into this type of vessel have a wide mouth, and the lip is flared, and slightly thickened. The body of the vessels is globular or ovoid and the base is annular. The paste from which the mugs are made is of several kinds. In this case, the paste is beige in colour, with iron oxide and a little silver in its composition.

The diameter of the mouth is 12 cm.

This type of vessel is found in the province of *Moesia Inferior* at Murighiol[131], in the Histrian territory at Fântânele[132] and Tropaeum Traiani[133].

The chronological setting of these vases is quite extensive, from the 3rd century BC to the 5th century BC[134].

52. P.d.: *Ibida* 2003, T8, -1,30-1,50m. **Dimensions:** Dg.= 12 cm, Hp.= 4 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It has a greyish angobe. **Bibliography:** unpublished. **Dating:** 5th century BC. ***(Plate X/52).***

Type IV

The mugs in this type of vessel have a lip that tapers inwards and a cylindrical neck. The body of the vessels is globular and the base is annular. The paste from which the mugs are made is of several kinds. In this case, the paste is beige in colour, with fine limestone, mica silver and iron oxide in its composition.

The diameter of the mouth is 10 cm.

This type of vessel is found in the province of *Moesia Inferior* at Capidava[135] and Murighiol[136].

[130] OPRIȘ 2003, 134.

[131] OPAIȚ 1996, 112, type I, pl. 44/2; OPAIȚ 1991 b, 225, pl. 37/4.

[132] SUCEVEANU 1998, 223, pl. IX/50.

[133] BOGDAN-CĂTĂNICIU, BARNEA, 1979, 186, fig. 158.1.1.

[134] OPAIȚ 1996, 112.

[135] OPRIȘ 2003, 134, type I, pl. XLVI/310.

[136] OPAIȚ 1991 b, 159, pl. 37/216.

The chronological setting of these vases is quite extensive, from the 4th century BC to the 6th century BC[137].

53. P.d.: *Ibida* 2016, Curtina G, S1, C10, stuffing. **Dimensions:** Dg.= 10 cm, Hp.= 3,5 cm. **Descriptions:** Beige-coloured paste with fine limestone, mica silver and iron oxide in the composition.**Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate X/53)***

Type V

The mugs in this type of vessel have an inward-sloping lip and a long neck. The body of the vessels is globular and the base is annular. They have a groove on the inner surface. The paste from which the mugs are made is of several kinds. In the present case, the paste is of a scarlet colour, with iron oxide, limestone and a little silver in its composition.

The diameter of the mouth is 6 cm.

This type of container is found in the province of *Moesia Inferior* at Murighiol[138], Halmyris[139] și Histria[140].

The chronological setting of these vessels is quite extensive, from the 2nd century BC to the 3rd century BC[141].

54. P.d.: *Ibida* 2010, Curtina G, C12. **Dimensions:** Dg.= 6 cm, Hp.= 3,2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate X/54)***

Type VI

The mugs in this type of vessel have an upturned lip and a short, arched neck. The body of the vessels is globular and the base is annular. They have grooves on the inner surface. The paste from which the mugs are made is of several kinds. In this case, the paste is beige in colour, with iron oxide and limestone in the composition.

The diameter of the mouth is 8 cm.

[137] OPAIȚ 1991b, 159.

[138] OPAIȚ 2004, 66, type III, pl. 50/5

[139] TOPOLEANU 2000, 94, type II,variant C, pl. XXIV/211.

[140] SUCEVEANU 2000, 79, type IX, pl. 30/ 15-16; pl. 33/5.

[141] SUCEVEANU 2000, 79.

This type of vessel is found in the province of Lower Moesia in Calatis[142], Capidava[143], Tropaeum Traiani[144] and Histria[145].

The chronological range of these vessels is broad, from the 2nd century BC to the 4th century BC[146].

55. P.d.: *Ibida* 2002, Curtina G, S1, C18, -2,00 m. **Dimensions:** Dg.= 8 cm, Hp.= 4 cm. **Descriptions:** Beige-coloured paste, glazed on both surfaces, with iron oxide and limestone. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XI/55)***

Type VII

The mugs in this type of vessel have an outwardly turned lip and a cylindrical or truncated neck. The body of the vessels is globular and the base is annular. They have a groove on the inner surface. The paste from which the mugs are made is of several kinds. In the present case, the paste is of a scarlet colour, with iron oxide, limestone and a little silver in its composition.

The diameter of the mouth is 10 cm.

This type of container is found in the province of *Moesia Inferior* in Halmyris[147], Histria[148] and of histrian teriotorium la Fântânele[149]. In *Dacia* in the Roman necropolis at Romula[150].

The chronological setting of these vases is quite extensive, from the 2nd century BC to the 3rd century BC[151].

56. P.d.: *Ibida* 2010, Curtina G, I.M., S1, *passim*. **Dimensions:** Dg.= 10 cm, Hp.= 2,2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XI/56)***

3. CERAMICS DECORATED IN THE BARBOTINE TECHNIQUE

Type I

Ceramics framed in this type of vessel have an outwardly profiled lip. The body of the vessels is globular or ovoid and the base is ring-shaped. The rim is banded and the decoration

[142] OPAIȚ 1996, 113, type II, pl. 45/1.

[143] OPRIȘ 2003, 133-134, type I, pl. XLV/301;311.

[144] BOGDAN-CĂTĂNICIU, BARNEA 1979, 190, fig. 169/6.2.

[145] OPAIȚ 2004, 60, type III, pl. 50/1; SUCEVEANU 2000, 84, type XIII, pl. 33/4.

[146] OPAIȚ 1996, 113.

[147] TOPOLEANU 2000, 93, type II, variant I, pl. XXIII/206.

[148] SUCEVEANU 2000, 87, type XXIV, pl. 25/3.

[149] SUCEVEANU 1998, 219, pl. XII/94;97.

[150] POPILIAN 1976, 95, type 4, pl. XL/417.

[151] POPILIAN 1976, 95.

is made using the barbotine technique. The paste from which the vessels are made is of various kinds. The first type of paste is scarlet in colour, with fine limestone and mica silver in the composition. The exemple also shows brownish angobe. The second type of paste is greyish in colour, with iron oxide, limestone and silver mica in its composition. The third type of paste is brownish brown, with iron oxide, limestone and mica silver in the composition. The fourth type of paste is brown in colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 8 and 12 cm.

This type of vessel is found in the province of *Moesia Inferior* at Hârșova[152], Dinogeția[153] and Histria[154]. In *Dacia* are found in the Roman necropolis at Romula[155].

The chronological setting of these vessels is extensive, from the 2nd century BC to the 3rd century BC[156].

57. P.d.: *Ibida* 2010, Ext. T8, S4,-3,45m. **Dimensions:** Dg.= 8 cm, Hp.= 3,5 cm. **Descriptions:** A brownish-brown paste with iron oxide, limestone and a little silver in its composition. It has its own angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XII/57)***

58. P.d.: *Ibida* 2006, Curtina G, S3, C4. **Dimensions:** Dg.= 8 cm, Hp.= 3 cm. **Descriptions:** Brown paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XII/58)***

59. P.d.: *Ibida* 2010, Curtina G, S2, -2,00 m. **Dimensions:** Dg.= 8 cm, Hp.= 2 cm. **Descriptions:** A scarlet-coloured paste, with iron oxide, limestone, and a little silver in the composition and with its own angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XII/59)***

60. P.d.: *Ibida* 2003, Curtina G, E.M., S1, in front of the building with the pitcher. **Dimensions:** Dg. =8 cm, Hp. =3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. The piece is chiselled and has a pattern. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XII/60)***

61. P.d.: *Ibida* 2012, Curtina G, S3, C6-7, -3,4-3,7m. **Dimensions:** Dg.= 12 cm, Hp.= 5,5 cm. **Descriptions:** Greyish-coloured paste with iron oxide, limestone and a little silver in its composition. It shows a black angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XII/61)***

[152] BOUNEGRU 1988-1989, 99-111, fig. 3/7.
[153] OPAIȚ 1996, 114, pl. 44/4.
[154] SUCEVEANU 2000, 83, pl. XXII/1-3; 6-9.
[155] POPILIAN 1976, 50-51, type 3, pl. XX/229.
[156] SUCEVEANU 2000, 83.

Type II

The pottery in this type of pot has a slightly flared lip. The body of the vessels is ovoid and the base is annular. The rim is banded and the decoration is made using the barbotine technique. The paste from which the vessels are made is of various kinds. The first type of paste is beige in colour, with iron oxide, limestone and mica silver in the composition. The second type of paste is scarlet in colour, with iron oxide, limestone and silver mica in its composition.

The diameter of the mouth is between 6 and 10 cm.

This type of vessel is found in the province of *Moesia Inferior* at Histria[157], Hârșova[158] și Halmyris[159]. In *Dacia*, this type of vase is found in the Roman necropolis at Romula[160].

The chronological setting of these vessels is extensive, from the 2nd century BC to the 3rd century BC[161].

62. P.d.: *Ibida* 2010, Curtina G, S3, -3,00m. **Dimensions:** Dg.= 10 cm, Hp.= 4,5 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. Dark brown angobe on the outer surface. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XII/62)***

63. P.d.: *Ibida*, Curtina G, S1, C9, -1,8m. **Dimensions:** Dg.= 6 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It shows a brownish angobe on the outer surface. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIII/63)***

Type III

The pottery framed in this type of vessel has a slightly flared lip and a thick neck. The body of the vessels is globular or ovoid, the base is annular and the decoration is made using the slip technique. The paste from which the pots are made is of several kinds. The first type of paste is beige in colour, with iron oxide, limestone and mica silver in the composition. The second type of paste is scarlet - reddish in colour, with iron oxide, limestone and silver mica in its composition.

The diameter of the mouth is between 8 and 10 cm.

[157] SUCEVEANU 2000, 82, type XXII, pl. XXII/2;

[158] BOUNEGRU 1988-1989, 99-111, fig. 3/6.

[159] OPAIȚ 2004, 66 type I, pl. 50/14-16.

[160] POPILIAN 1976, 50, type 2, pl. XIX/223; 225.

[161] SUCEVEANU 2000, 82.

This type of vessel is found in the province of *Moesia Inferior* at Troesmis[162] and Histria[163]. In *Dacia* are found in the Roman necropolis at Romula [164]. This type of pottery has also been found in the Roman province of Hispania[165].

The chronological setting of these vessels is extensive, from the 2nd century BC to the 3rd century BC[166].

64. P.d.: *Ibida* 2006, Curtina G, S3, C4, -3,30m. **Dimensions:** Dg.= 10 cm, Hp.= 5 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It shows brownish angobe on both surfaces. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIII/64)***

65. P.d.: *Ibida* 2010, Curtina G, I.M., S1, passim. **Dimensions:** Dg.= 8 cm, Hp.= 2,8 cm. **Descriptions:** Crimson – reddish-coloured paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIII/65)***

Type IV

Ceramics framed in this type of vessel have a straight lip. The body of the vessels is globular or ovoid, the base is annular and the decoration is made using the slip technique. The paste from which the vessels are made is of several kinds. The first type of paste is of a scarlet colour, with fine limestone and mica silver in the composition. The second type of paste is brownish in colour, with iron oxide, limestone and silver mica in its composition. The third type of paste is beige in colour, with iron oxide, limestone and silver mica in its composition. The fourth type of paste is beige-scarlet in colour, with iron oxide, limestone and mica silver in the composition.

The mouth diameter is between 7 and 12 cm.

This type of vessel is found in the province of *Moesia Inferior* at Niculițel[167], the tumulus necropolis of Noviodunum[168] and Histria[169]. In *Dacia* are found in the Roman necropolis at Romula[170].

[162] OPAIȚ 1980, 336, pl. XIII/3;4.
[163] SUCEVEANU 2000, 82, type XII, pl. XXII/7.
[164] POPILIAN 1976, 51, type 5, pl. XX/241.
[165] VEGAS 1972, 77, fig. 25/11-12.
[166] SUCEVEANU 2000, 82.
[167] HONCU 2014, 85, type 4, pl. 25/197.
[168] SIMION 1984, 83, pl. XI/2.
[169] BOUNEGRU 1988-1989, 99-111, fig. 2/4;6.
[170] POPILIAN 1976, 50-51, type 6, pl. XX/242.

The chronological setting of these vessels is extensive, from the 2nd century BC to the 3rd century BC[171].

66. P.d.: *Ibida* 2006, Curtina G, S3, I4, -2,00 m. **Dimensions:** Dg.= 12 cm, Hp.= 5 cm. **Descriptions:** Crimson coloured paste with fine limestone and a little silver in the composition. The example also shows brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIII/66)***

67. P.d.: *Ibida* 2001, Curtina G, S1, C11, 3,40m. **Dimensions:** Dg.= 10 cm, Hp.= 5,5 cm. **Descriptions:** Brownish paste with iron oxide, limestone and a little silver in its composition. Dark brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIII/67)***

68. P.d.: *Ibida* 2012, Curtina G, C4. **Dimensions:** Dg.= 7 cm, Hp.= 2 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It has brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIII/68)***

69. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,7m. **Dimensions:** Dg.= 10 cm, Hp.= 4 cm. **Descriptions:** Beige-brownish paste with iron oxide, limestone and a little silver in the composition. It has brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIV/69)***

70. P.d.: *Ibida* 2010, T8, profil, S3-4. **Dimensions:** Dg.= 8 cm, Hp.= 3 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It has a brownish angobe and is a glazed piece. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIV/70)***

Type V

Ceramics framed in this type of vessel have a straight lip. Their body is globular or ovoid, their base is annular and the decoration is made using the slip technique. The paste from which the pots are made is of several kinds. The first type of paste is brownish-brown, with iron oxide, limestone and a little silver in its composition. The second type of paste is brown, with iron oxide, limestone and silver mica in its composition.

The diameter of the mouth is between 6 and 7 cm.

[171] HONCU 2014, 85.

This type of vessel is found in the province of *Moesia Inferior* at Histria[172] and Noviodunum[173]. In *Dacia* were discovered in the Roman necropolis at Romula[174].

The chronological setting of these vessels is extensive, from the 2nd century BC to the 3rd century BC[175].

71. P.d.: *Ibida* 2006, Curtina G, S3, C4, 3,3m. **Dimensions:** Dg.= 7 cm, Hp.= 5,5 cm. **Descriptions:** Brownish-brown paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIV/71)***

72. P.d.: *Ibida* 2010, Curtina G, S1, *passim*. **Dimensions:** Dg.= 6 cm, Hp.= 2,5 cm. **Descriptions:** Brown paste with iron oxide, limestone and a little silver in its composition. The piece is chiselled. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIV/72)***

4. Beakers

Type I

Beakers of this type have a rounded, upturned lip. The body of the vessels is cylindrical and the base is annular. They have grooves on the outer surface. The glasses were made from a single type of paste. In this case, the paste is of a scarlet colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 6 and 12 cm.

This type of vessel is found in the province of *Moesia Inferior* at Niculițel[176], Capidava[177], Calatis[178], Tropraichioi[179] and Durostorum[180]. In *Dacia*, are found in the Roman necropolis at Romula[181] and Napoca[182].

The chronological setting of these vessels is extensive, from the 2nd century BC to the 4th century BC[183].

[172] BOUNEGRU 1988-1989, 99-111, fig. 2/1;2.
[173] BAUMANN 2010, 116;118, fig. 1/6; fig. 2/15.
[174] POPILIAN 1976, 51, type 6, pl. XX/235;238.
[175] BOUNEGRU 1988-1989, 99.
[176] HONCU 2014, 86, pl. 25/199.
[177] MUȘEȚEANU 2003, 70, type 2, pl. 35/375.
[178] OPAIȚ 1996, 121, type I, pl. 50/13;14.
[179] OPAIȚ 1996, 121, type II, pl. 50/16.
[180] MUȘEȚEANU, ELEFTERESCU 2004, 102, type B2 a 1, pl.VI/4.
[181] POPILIAN 1976, 112-113, type 2, pl. 35/375.
[182] RUSU-BOLINDEȚ 2007, 398, pl. XC/536.
[183] OPAIȚ 1996, 121.

73. P.d.: *Ibida* 2005, Curtina G, S39. **Dimensions:** Dg.= 6 cm, Hp.= 5 cm. **Descriptions:** Crimson-coloured paste, with iron oxide, limestone, little silver in composition and brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XV/73)***

74. P.d.: *Ibida* 2010, Curtina G, S3, -3,00 m. **Dimensions:** Dg.= 10 cm, Hp.= 3 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XV/74)***

75. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,5-3,7m. **Dimensions:** Dg.= 12 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has brownish-brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XV/75)***

5. CUPS

Type I

Ceramics framed in this type of pottery have outwardly profiled lips, the body of the vessels is globular and the base is annular. They have grooves on the outer surface. The paste from which these pots are made is of several kinds. The first type of paste is of a scarlet colour with a greyish core, with fine limestone and a little silver in the composition. The second type of paste is brown with a greyish core, limestone, mica silver and iron oxide. The third type of paste is beige in colour, with iron oxide, limestone and silver mica in the composition. The fourth type of paste is reddish-crimson in colour, with iron oxide, limestone and silver mica in its composition.

The diameter of the mouth is between 5 and 10 cm.

This type of vessel is found in the province of *Moesia Inferior* at Tropraichioi[184], Niculițel[185], Beroe[186], Murighiol[187], and in the necropolis of Noviodunum[188]. In *Dacia* are found in the Roman necropolis at Romula[189].

The chronological dating of these vessels is quite extensive, from the 2nd century BC[190] until the 4th century BC[191].

[184] OPAIȚ 2004, 67, type II, pl. 50/ 13.
[185] HONCU 2014, 84, type I, pl. 25/192.
[186] OPAIȚ 2004, 67, type II, pl. 50/12.
[187] OPAIȚ 2004, 66, type II, pl. 50/12.
[188] SIMION 1984, 86, type d, pl. 16/11.
[189] POPILIAN 1976, 106, type 3b, pl. 57/658-670.
[190] HONCU 2014, 84.
[191] OPAIȚ 2004, 66.

76. P.d.: *Ibida* 2005, Curtina G, S3, C2. **Dimensions:** Dg.= 8 cm, Hp.= 3,5 cm. **Descriptions:** A scarlet-coloured paste with a greyish core, fine limestone and a little silver in the composition. The example shows grooves on the body of the vessel and scarlet angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XVI/76)***

77. P.d.: *Ibida* 2010, Curtina G, C3. **Dimensions:** Dg.= 5 cm, Hp.= 3,2 cm. **Descriptions:** Brown paste with a greyish core, with limestone, little silver in composition and iron oxide. **Bibliography:** unpublished. **Dating**: first half of the 2nd century BC. ***(Plate XVI/77)***

78. P.d.: *Ibida* 2010, Curtina G, I.M., S1, *passim*. **Dimensions:** Dg.= 6 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with greyish core, limestone and little silver in composition. The example shows grooves on the body of the vessel. **Bibliography:** unpublished. Dating: first half of the 2nd century BC. ***(Plate XVI/78)***

79. P.d.: *Ibida* 2010, Curtina G, I.M., S1, *passim*. **Dimensions:** Dg.= 8 cm, Hp.= 3,6 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. The example shows grooves on the body of the vessel p.Chr. **Bibliography:** unpublished. **Dating:** first half of the 2nd century. ***(Plate XVI/79)***

80. P.d.: *Ibida* 2001, Curtina G, C11, -0,4 m. **Dimensions:** Dg.= 8 cm, Hp.= 2,6 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition, own angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XVI/80)***

81. P.d.: *Ibida* 2001, Curtina G, S1, C10, -1,5 m. **Dimensions:** Dg.= 7 cm, Hp.= 3,7 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition, own angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XVI/81)***

82. P.d.: *Ibida* 2010, Curtina G, S1. **Dimensions:** Dg.= 10 cm, Hp.= 4 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XVII/82)***

83. P.d.: *Ibida* 2010, Curtina G, S1, C12, 1,00m. **Dimensions:** Dg.= 10 cm, Hp.= 2,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XVII/83)***

84. P.d.: *Ibida* 2012, Curtina G, passim. **Dimensions:** Dg.= 10 cm, Hp.= 3 cm. **Descriptions:** Reddish-crimson paste with iron oxide, limestone and a little silver in its composition. It has brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XVII/84)***

Type II

Pottery framed in this type of vessel has a slightly thickened lip with a raised neck, the body of the vessel is globular and slightly domed. Their base is annular. They have grooves on the outer surface and grooves on the inner surface. The paste from which these vessels are made is of several kinds. The first type of paste is of a scarlet colour, with iron oxide, limestone and mica silver in its composition. The second type of paste is a dark scarlet colour with iron oxide and mica silver in its composition.

The diameter of the mouth is between 7 and 13 cm.

This type of vessel is found in the province of *Moesia Inferior* at Calatis[192], Tropraichioi[193], Troesmis[194] and in the necropolis at Noviodunum[195]. In *Dacia* were found in the Roman necropolis at Romula[196].

The chronological dating of these vessels is quite extensive, from the 4th century BC[197] until the 6th century BC[198].

85. P.d.: *Ibida* 2010, Curtina G, S1, *passim*. **Dimensions:** Dg.= 10 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XVII/85)***

86. P.d.: *Ibida* 2010, Curtina G, S2, -3,00 m. **Dimensions:** Dg.= 13 cm, Hp.= 3 cm. **Descriptions:** Paste of a dark - scarlet colour, with iron oxide and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XVII/86)***

87. P.d.: *Ibida* 2009, inside T8, -2,8m. **Dimensions:** Dg.= 7 cm, Hp.= 3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. Burn marks on the outer surface. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XVII/87)***

[192] OPAIȚ 2004, 66, type I, pl.50/10.
[193] OPAIȚ 1991, 228, pl. 39/5.
[194] OPAIȚ 1980, 336, pl. VII/4;6.
[195] SIMION 1984, 86, pl. XVI/4-9.
[196] POPILIAN 1976, 107, type 6, pl. LVIII/681;682.
[197] OPAIȚ 2004, 66.
[198] OPAIȚ 1996, 123.

88. P.d.: *Ibida* 2006, Curtina G, S3, C4. **Dimensions:** Dg.= 8 cm, Hp.= 3 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has its own angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XVIII/88)***

89. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,5-3,7m. **Dimensions:** Dg.= 12 cm, Hp.= 2,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XVIII/89)***

Type III

Pottery framed in this type of vessel has a small straight lip, the body of the vessel is globular or oval, slightly domed. Their base is ring-shaped or flat. The paste from which these pots are made is of several kinds. The first type of paste is beige-brownish in colour, with iron oxide, limestone and a little silver in its composition. The second type of paste is brown, with iron oxide, limestone and silver mica in its composition. The third type of paste is scarlet in colour, with iron oxide, limestone and mica silver in its composition. The fourth type of paste is grey in colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 7 and 12 cm.

This type of vessel is found in the province of *Moesia Inferior* at Tropraichioi[199], Murighiol[200], Niculițel[201] and Capidava[202]. The type of vessels in question was also discovered in *Dacia* in the Roman necropolis of Romula[203].

The chronological dating of these vessels is quite extensive, from the 2nd century BC[204] until the 4th century BC[205].

90. P.d.: *Ibida* 2006, Curtina G, S2, C6, -2,7 m. **Dimensions:** Dg.= 8 cm, Hp.= 1,5 cm. **Descriptions:** Beige-brownish paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XVIII/90)***

91. P.d.: *Ibida* 2005, Curtina G, groapă menajeră. Dimensions: Dg. = 9 cm, Hp. = 2,3 cm. Descriptions: Brown paste with iron oxide, limestone and a little silver in its composition. Burn marks on both surfaces. Bibliography: unpublished. Dating: first half of the 2nd century BC. ***(Plate XVIII/91).***

[199] OPAIȚ 2004, 66, type I, pl. 50/8.
[200] OPAIȚ 2004, 66, type I, pl. 50/5.
[201] HONCU 2014, 85, type II, pl. 25/194.
[202] OPRIȘ 2003, 136, type I, pl. LVIII/325.
[203] POPILIAN 1976, 108, type I, pl. LVIII/687.
[204] HONCU 2014, 85.
[205] OPAIȚ 2004, 66.

92. P.d.: *Ibida* 2001, Curtina G, S5, *passim*. **Dimensions:** Dg.= 10 cm, Hp.= 2 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It shows brownish angobe on both surfaces. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XVIII/92)***

93. P.d.: *Ibida* 2001, Curtina G, I.M., S1, *passim*. **Dimensions:** Dg.= 8 cm, Hp.= 3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XVIII/93)***

94. P.d.: *Ibida* 2001, Curtina G, C11, -0,4 m. **Dimensions:** Dg.= 11 cm, Hp.= 2,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIX/94).***

95. P.d.: *Ibida* 2010, Curtina G, S1. **Dimensions:** Dg.=8 cm, Hp.= 3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIX/95)***

96. P.d.: *Ibida* 2010, Curtina G, S3, -3,00 m. **Dimensions:** Dg.= 9 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIX/96)***

97. P.d.: *Ibida* 2010, Curtina G, I.M., S1, *passim*. **Dimensions:** Dg.=12 cm, Hp.= 1,7 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIX/97)***

98. P.d.: *Ibida* 2010, Curtina G, S3, -3,00m. **Dimensions:** Dg.= 8 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIX/98)***

99. P.d.: *Ibida* 2009, T8, S4, -2,83m. **Dimensions:** Dg.= 7 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It shows traces of angobe on the inner surface. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XIX/99)***

100. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,5-3,7m. **Dimensions:** Dg.= 8 cm, Hp.= 2,3 cm. **Descriptions:** Greyish-coloured paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XX/100)***

Type IV

Ceramics framed in this type of vessel has flared lip, short neck and globular vessel body. They have grooves on the vessel's upper surface; their base is ring-shaped or flat and the rim is flattened. The paste from which these vessels are made is of several kinds. The first type of paste is brownish-brown in colour, with iron oxide, limestone and a little silver in its composition. The second type of paste is scarlet in colour, with iron oxide, limestone and mica silver in its composition. The third type of paste is beige in colour, with iron oxide, limestone and mica silver in the composition. The fourth type of paste is grey in colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 6 and 8 cm.

This type of container is found in the province of *Moesia Inferior* at Troesmis[206], Niculițel[207], Capidava[208]. In *Dacia,* such vessels were discovered in the Roman necropolis at Romula[209].

The chronological setting of these vessels is extensive, from the 2nd century BC to the 3rd century BC[210].

101. P.d.: *Ibida* 2002, Curtina G, S1, C17, -2,6 m. **Dimensions:** Dg.= 8 cm, Hp.= 2,8 cm. **Descriptions:** Brownish-brown paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XX/101)***

102. P.d.: *Ibida*, Curtina G, *passim*. **Dimensions:** Dg.= 7 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XX/102)***

103. P.d.: *Ibida* 2005, Curtina G, S1, landfill. **Dimensions:** Dg.= 7 cm, Hp.= 3,5 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XX/103)***

[206] OPAIȚ 1980, 336, pl. 8/7.

[207] HONCU 2014, 85, type III, pl. 25/195;196.

[208] OPRIȘ 2003, 135, type I, pl. XLVII/321;324, type III, pl. XLVIII/334.

[209] POPILIAN 1976, 110, type 3b, pl. 59/710;711.

[210] HONCU 2014, 85.

104. P.d.: *Ibida* 2009, survey T8, -3,70-3,85m. **Dimensions:** Dg.= 8 cm, Hp.= 3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XX/104)***

105. P.d.: *Ibida* 2012, Curtina G, C4, -3,4-3,5m. **Dimensions:** Dg.= 7 cm, Hp.= 2,7 cm. **Descriptions:** The paste is beige in colour, with iron oxide, limestone and a little silver in its composition. It has brown angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XX/105)***

106. P.d.: *Ibida* 2012, Curtina G, C4, -3,4-3,5m. **Dimensions:** Dg.= 6 cm, Hp.= 3 cm. **Descriptions:** Brown paste with iron oxide, limestone and a little silver in its composition. It has brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XXI/106)***

107. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,5-3,7m. **Dimensions:** Dg.= 7 cm, Hp.= 3,5 cm. **Descriptions:** Greyish-coloured paste with iron oxide, limestone and a little silver in its composition. It has brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XXI/107)***

108. P.d.: *Ibida* 2012, Curtina G, C4. **Dimensions:** Dg.= 7 cm, Hp.= 4,5 cm. **Descriptions:** Greyish-coloured paste with iron oxide, limestone and a little silver in its composition. It shows brownish angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XXI/108)***

109. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,5-3,7m. **Dimensions:** Dg.= 7 cm, Hp.= 7 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has its own angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XXI/109)***

Type V

Ceramics framed in this type of pottery have a raised lip and the body of the vessels is bitronconic. They have grooves on the upper surface of the vessel, the base of which is either ring-shaped or flat. It has two toards and grooves on the outer surface. The paste from which these vessels are made is of several kinds. In this case, the paste is a scarlet colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 6 and 8 cm.

This type of vessel is found in the province of *Moesia Inferior* at Tropraichioi[211] and Halmyris[212]. In *Dacia,* such vessels have been found in the Roman necropolis at Romula[213].

The chronological setting of these vases is quite extensive, from the 2nd century BC[214] until the first half of the 6th century BC[215].

110. P.d.: *Ibida* 2006, Curtina G, S3, C6, -2,5 m. **Dimensions:** Dg.= 6 cm, Hp.= 1,2 cm. **Descriptions:** Crimson-coloured paste, with iron oxide, limestone, and little silver in the composition and beige-coloured angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XXII/110)***

111. P.d.: *Ibida* 2010, Curtina G, S1. **Dimensions:** Dg.=8 cm, Hp.= 3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XXII/111)***

112. P.d.: *Ibida* 2012, Curtina G, *passim*. **Dimensions:** Dg.= 8 cm, Hp.= 2,7 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XXII/112)***

Type VI

Ceramics framed in this type of vessel has flared lip, and the body of the vessels is ovoid. They have grooves on the upper surface of the vessel, their base is annular or flat. The paste from which these pots are made is of several kinds. The first type of paste is of a scarlet colour, with iron oxide, limestone and silvery mica in its composition. The second type of paste is grey in colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is between 9 and 13 cm.

This type of container is found in the province of *Moesia Inferior* in Halmyris[216]. In *Dacia* in the Roman necropolis at Romula[217].

The chronological setting of these vases is quite extensive, from the 2nd century BC[218] until the first half of the 6th century BC[219].

[211] OPAIȚ 1996, 124, type III, pl.51/6.

[212] TOPOLEANU 2000, 94, type II, pl. XXIV/210; OPAIȚ 1991, 161, pl. 40/232.

[213] POPILIAN 1976, 105, type II, pl. LVI/612.

[214] POPILIAN 1976, 105.

[215] TOPOLEANU 2000, 94.

[216] TOPOLEANU 2000, 94, type II, pl. XXIV/212; OPAIȚ 2004, 66, type I, pl. 50/19.

[217] POPILIAN 1976, 107, type 4, pl. LVII/668.

[218] POPILIAN 1976, 107.

[219] TOPOLEANU 2000, 94.

113. P.d.: *Ibida* 2010, Curtina G, S4. **Dimensions:** Dg.= 13 cm, Hp.= 3 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XXII/113)***

114. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,5-3,7m. **Dimensions:** Dg.= 9 cm, Hp.= 3,3 cm. **Descriptions:** Greyish-coloured paste with iron oxide, limestone and a little silver in its composition. It has brownish-grey angobe. **Bibliography:** unpublished. **Dating:** first half of the 2nd century BC. ***(Plate XXII/114)***

Type VII

The ceramics framed in this type of pottery have a simple lip, slightly flared outwards, the body of the vessels is ovoid, slightly domed. The rim is wide and cylindrical, and the base is ring-shaped. The paste from which these pots are made is of several kinds. In this case, the paste is a scarlet colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is 8 cm.

This kind of vessel is found in the province of Lower Moesia at Murighiol, Capidava, Tropraichioi. In Dacia in the Roman necropolis of Romula[220].

The chronological dating of these vessels is quite extensive, from the 2nd century BC[221] until the 4th century BC[222].

115. P.d.: *Ibida* 2010, T8, S5. **Dimensions:** Dg. =8 cm, Hp. =2,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has brown angobe. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XXII/115)***

Type VIII

Ceramics framed in this type of vessel has a slightly flared lip, and short and arched neck, the body of the vessels is globular. They have grooves on the outer surface and their base is annular. The paste from which these pots are made is of several kinds. In this case, the paste is a scarlet colour, with iron oxide, limestone and mica silver in its composition.

The diameter of the mouth is 6 cm.

This type of vessel is found in the province of *Moesia Inferior* at Capidava[223], Tropraichioi[224], Halmyris[225].

[220] POPILIAN 1976, 105, type 2, pl. LIV/601.

[221] POPILIAN 1976, 105.

[222] OPAIȚ 2004, 66.

[223] OPRIȘ 2003, 136, type I, pl. XLVIII/331.

[224] OPAIȚ 1991, 159, pl. 37/219.

[225] TOPOLEANU 2000, 94, tyepe II, pl. XXIV/211.

The chronological setting of these vases is quite extensive, from the 3rd century BC to the first half of the 6th century BC[226].

116. P.d.: *Ibida* 2012, Curtina G, S3, C16, -3,5-3,7m. **Dimensions:** Dg.= 6 cm, Hp.= 3 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 4th century BC. ***(Plate XXIII/116)***

6. BASES

117. P.d.: *Ibida*, Curtina G, S1,C7, -3,00m. **Dimensions:** Db.= 3,7 cm, Hp.= 4 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXIV/117)***

118. P.d.: *Ibida* 2006, Curtina G, S3, C6, -2,5-3,00m. **Dimensions:** Db.= 3 cm, Hp.= 2 cm. **Descriptions:** Greyish coloured paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXIV/118)***

119. P.d.: *Ibida*, Curtina G, I.M. S1, passim. **Dimensions:** Dg.= 4 cm, Hp.= 2,5 cm. **Descriptions:** Greyish coloured paste with iron oxide, limestone and a little silver in its composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXIV/119)***

120. P.d.: *Ibida* 2005, Curtina G, S3, C4, -2,30m. **Dimensions:** Dg.= 3 cm, Hp.= 3 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXIV/120)***

121. P.d.: *Ibida* 2001, Curtina G, S1, C5, -2,70m. **Dimensions:** Dg.= 3 cm, Hp.= 2,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXIV/121)***

122. P.d.: *Ibida* 2009, inside T8, -3,40m. **Dimensions:** Db.= 4,6 cm, Hp.= 1 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXIV/122)***

123. P.d.: *Ibida* 2006, Curtina G, S3, C5-6, -2,8-3,00m. **Dimensions:** Dg.= 8 cm, Hp.= 3,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXV/123)***

[226] TOPOLEANU 2000, 94.

124. P.d.: *Ibida* 2009, Curtina G, S5, strat vegetal. **Dimensions:** Db.= 4,6 cm, Hp.= 1 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. It has its own angobe. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXV/124).***

125. P.d.: *Ibida* 2010, Curtina G, S3, C6, -3,3m. **Dimensions:** Db.= 3,2 cm, Hp.= 0,6 cm. **Descriptions:** Brown paste with iron oxide, limestone and a little silver in its composition. It shows own angobe and the piece is polished. **Bibliography:** unpublished. **Dating**: 2nd century BC. ***(Plate XXV/125)***

126. P.d.: *Ibida* 2010, Curtina G, S3, -3,00m. **Dimensions:** Db.= 4,6 cm, Hp.= 1,6 cm. **Descriptions:** Greyish coloured paste with iron oxide, limestone and a little silver in its composition. It has its own angobe. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXV/126)***

127. P.d.: *Ibida* 2010, Curtina G, S3, -3,00m. **Dimensions:** Db.= 4 cm, Hp.= 3 cm. **Descriptions:** Greyish coloured paste with iron oxide, limestone and a little silver in its composition. Beige coloured angobe on both surfaces. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXV/127)***

128. P.d.: *Ibida* 2012, Curtina G, S3, C3, -3,4-3,6m. **Dimensions:** Dg.= 5 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXV/128)***

129. P.d.: *Ibida* 2012, Curtina G, passim. **Dimensions:** Dg.= 4,4 cm, Hp.= 1,5 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXVI/129)***

130. P.d.: *Ibida* 2012, Curtina G, S3, C6, -3,5-3,7m. **Dimensions:** Db.= 4,6 cm, Hp.= 2 cm. **Descriptions:** Crimson-coloured paste with iron oxide, limestone and a little silver in the composition. **Bibliography:** unpublished. **Dating:** 2nd century BC. ***(Plate XXVI/130)***

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Abbreviations

AARMSI – Academia Română. Memoriile Secţiunii istorice, Bucureşti.

ArhMold – Arheologia Moldovei, Iași.

BAR – British Archaeological Reports, Oxford.

BiblThr – Bibliotheca Thracologica, București.

Dacia – Dacia. Revue d' archeologie et d' histoire ancienne, Bucureşti, I-XII, 1924-1947.

Histria – Histria. Les résultats des fouille.

MCA – Materiale şi Cercetări Arheologice, Bucureşti.

MIA – Materialy i Issledovanija po Arheologii SSSR, Moscova Leningrad (St. Petersburg).

Peuce – Peuce. Studii şi comunicări de istorie veche, arheologie şi numismatică, Tulcea.

Peuce S. N. – Peuce. Serie Nouă. Studii şi cercetări de istorie şi arheologie, Tulcea.

Pontica – Pontica. Muzeul de Istorie şi Arheologie Constanţa.

SCIV(A) – Studii şi Cercetări de Istorie Veche (şi Arheologie), București.

Ilustration

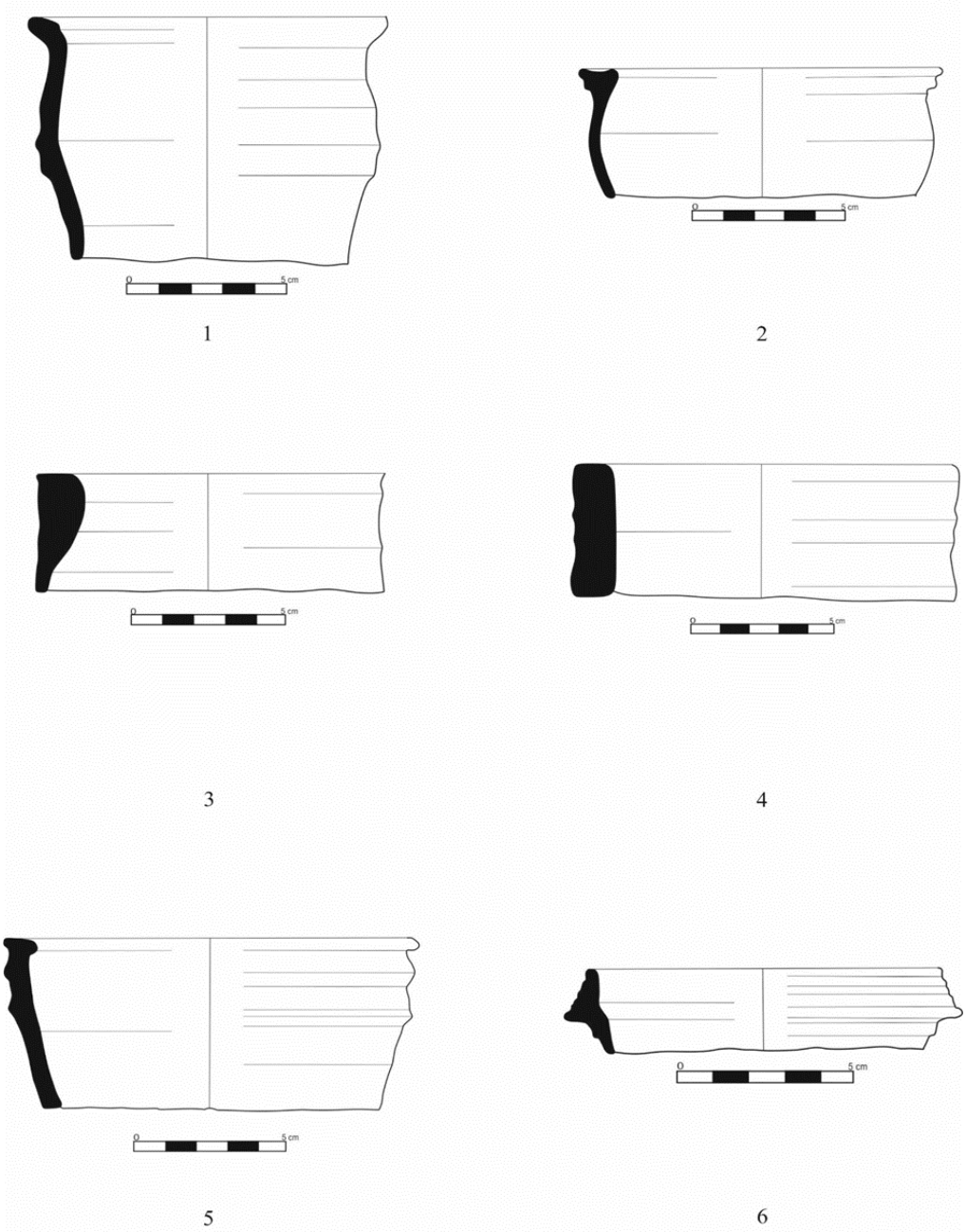


Plate I: Pitchers: Type I – 1; Type II – 2, 3, 4; Type III – 5, 6;

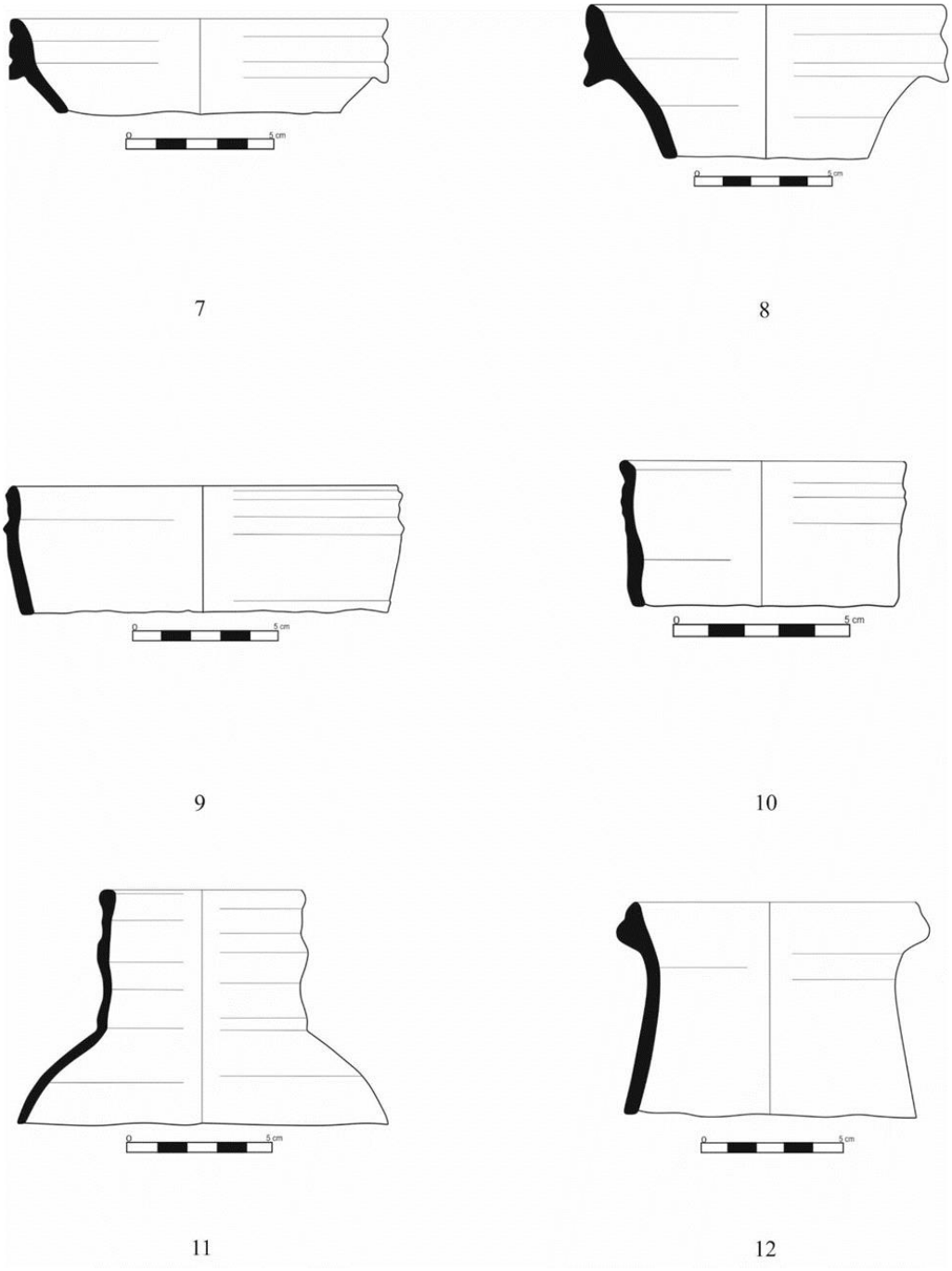


Plate II: Pitchers: Type III – 7, 8; Type IV – 9, 10, 11; Type V – 12;

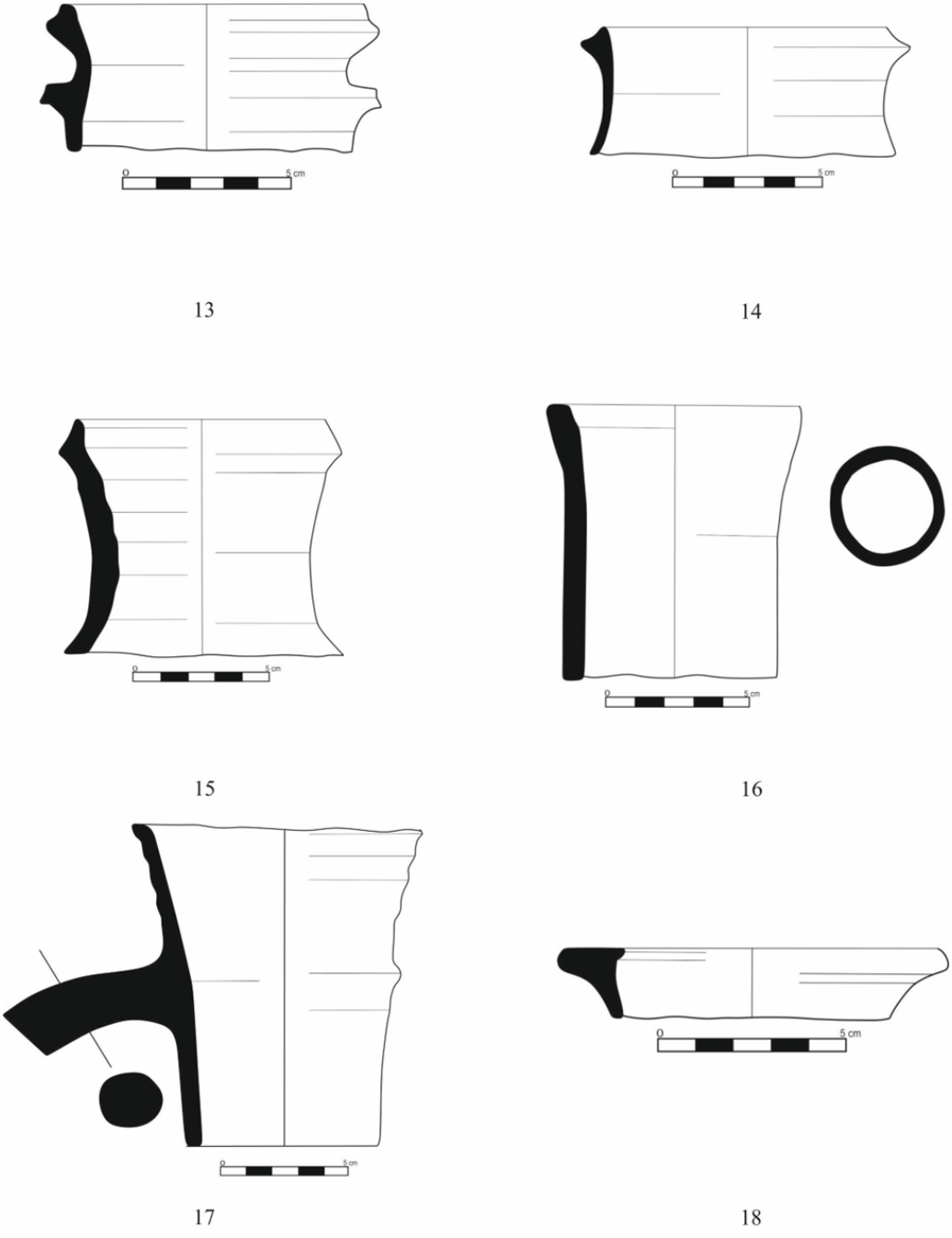
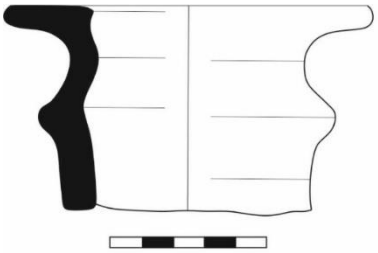


Plate III: Pitchers: Type V – 13; Type VI – 14, 15; Type VII – 16, 17; Type VIII -18;



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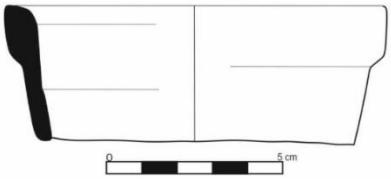

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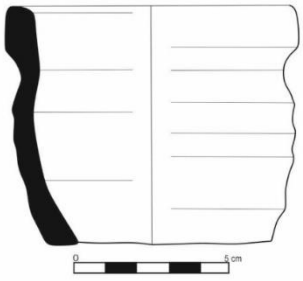

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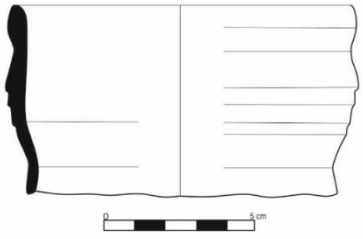

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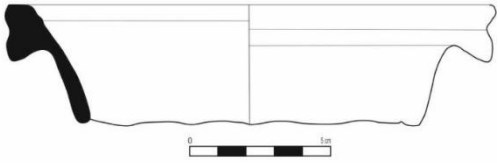

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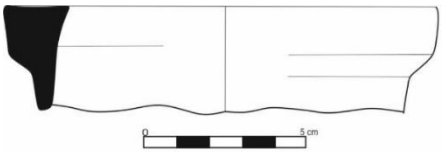
Plate IV: Pitchers: Type VIII – 19; Type IX – 20, 21, 22; Type X – 23; Type XI – 24;



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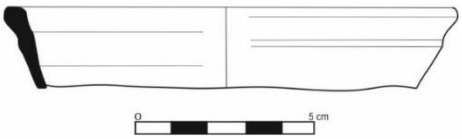

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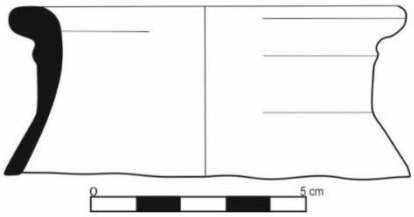

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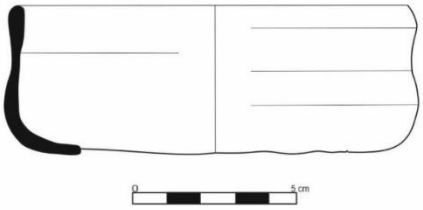

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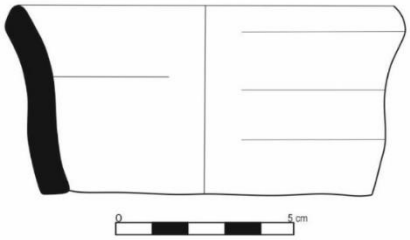

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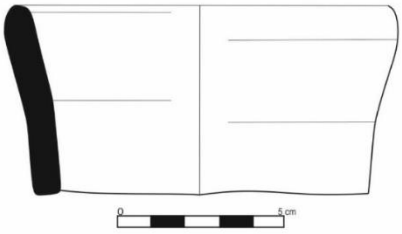

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Plate V: Pitchers: Type XII – 25; Type XII – 26; Type XIV – 27; Type XV – 28, 29, 30;

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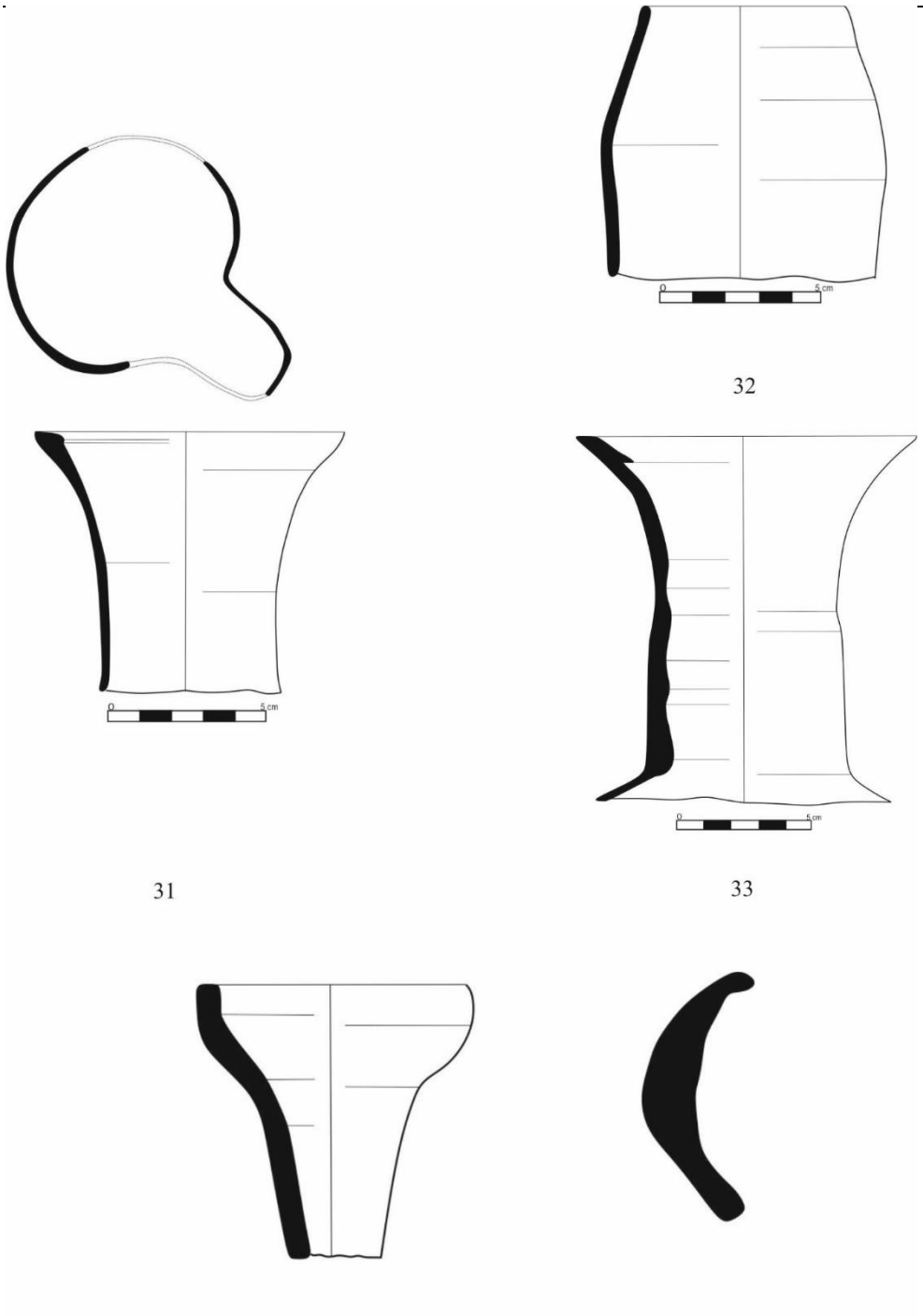


Plate VI: Pitchers: Type XV – 31, 32, 33, 34

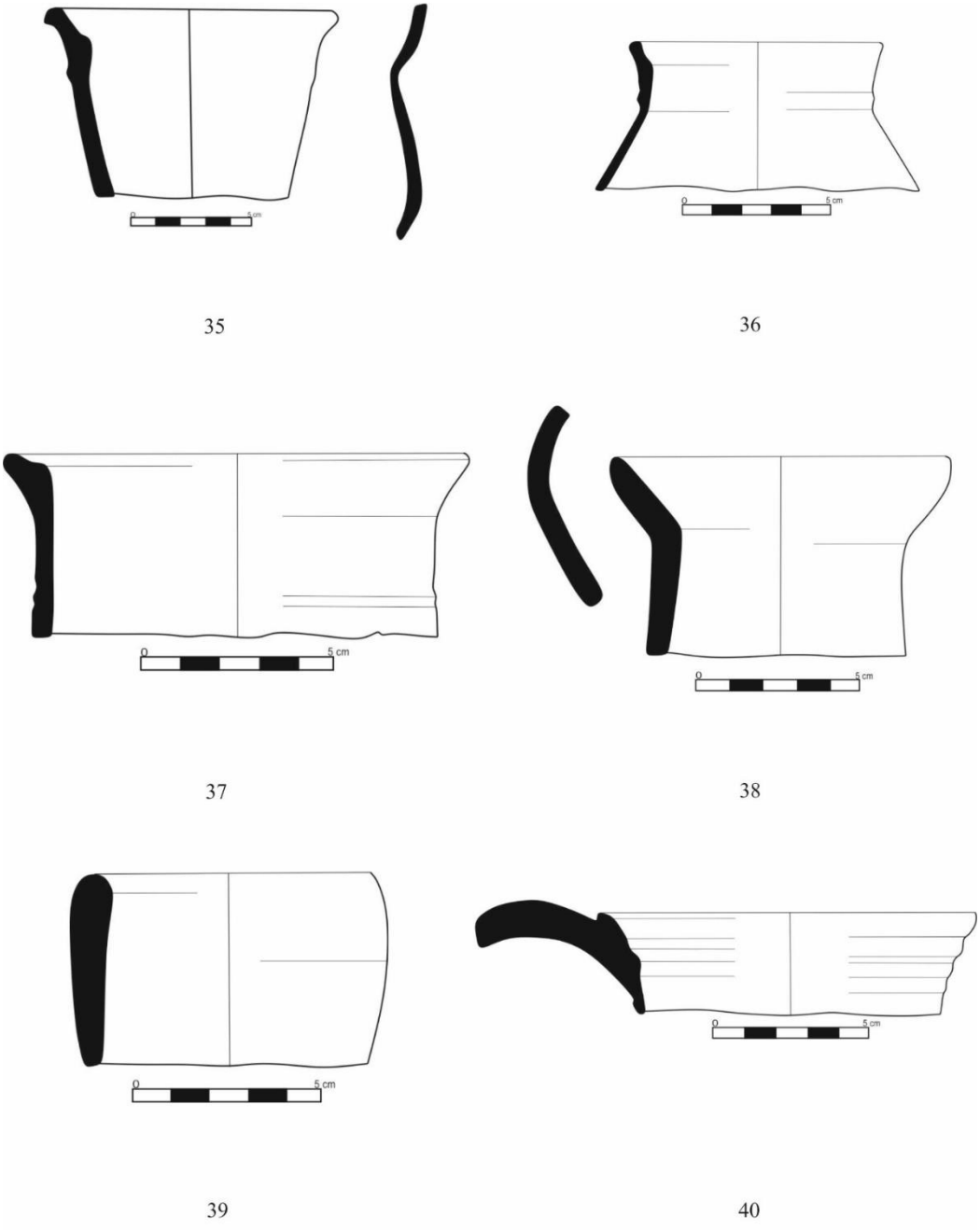


Plate VII: Pichers: Type XV – 35, 36, 37, 38, 39, 40;

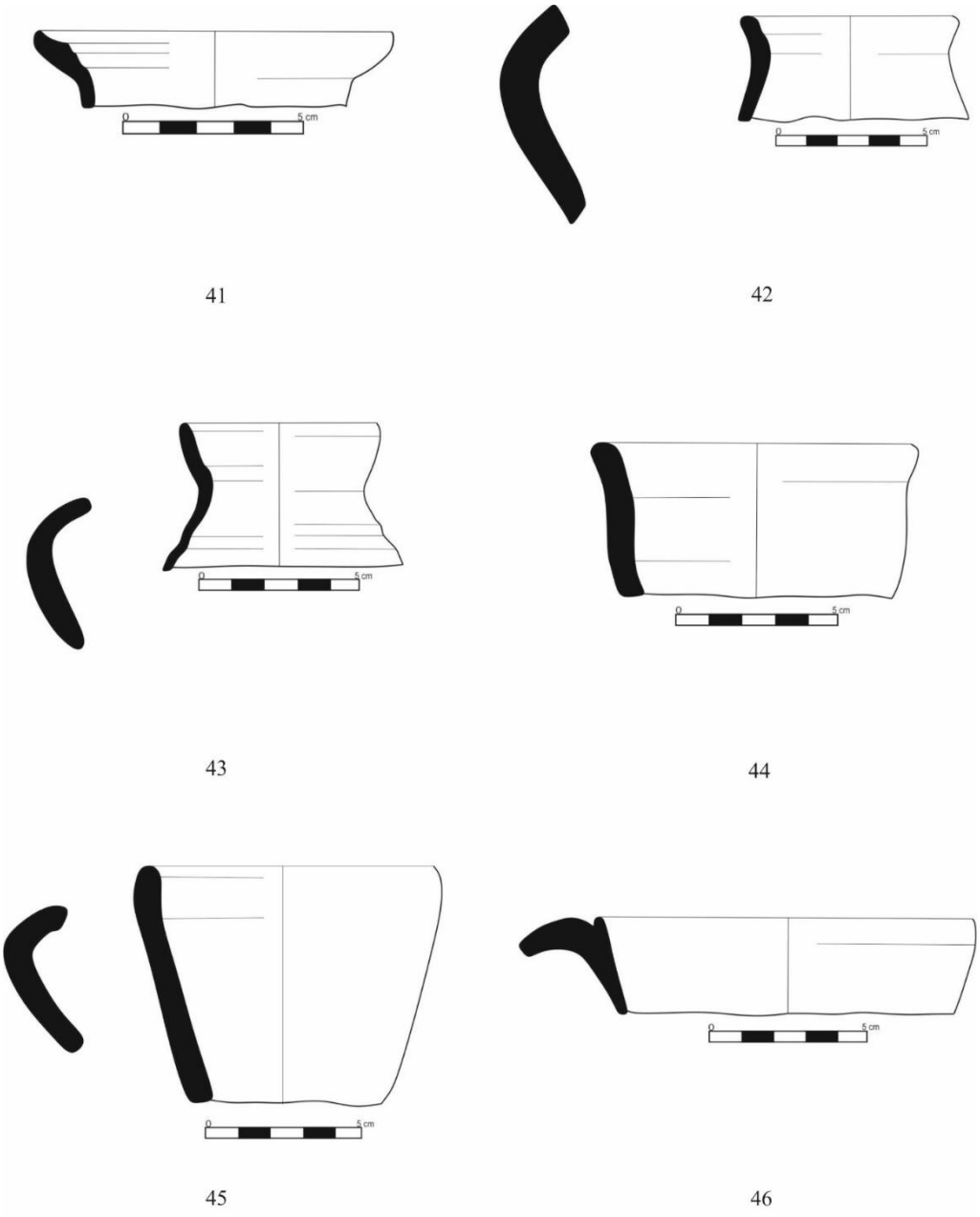
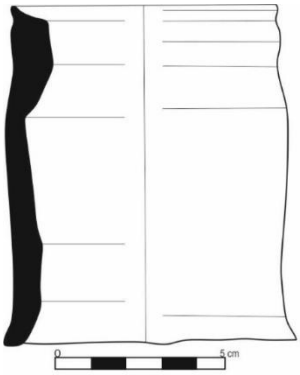


Plate VIII: Pitchers: Type XV – 41, 42, 43, 44, 45, 46;



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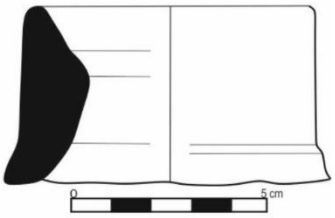

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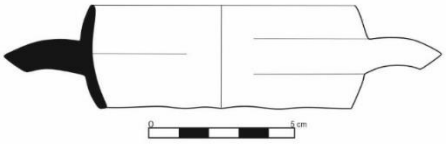

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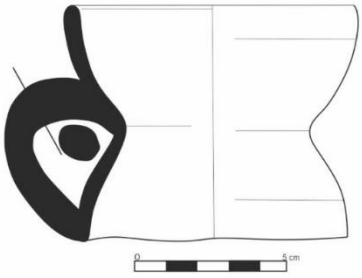

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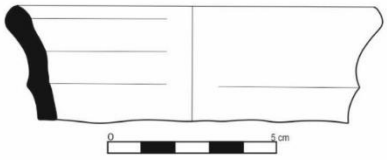

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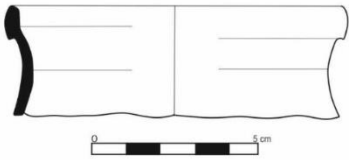

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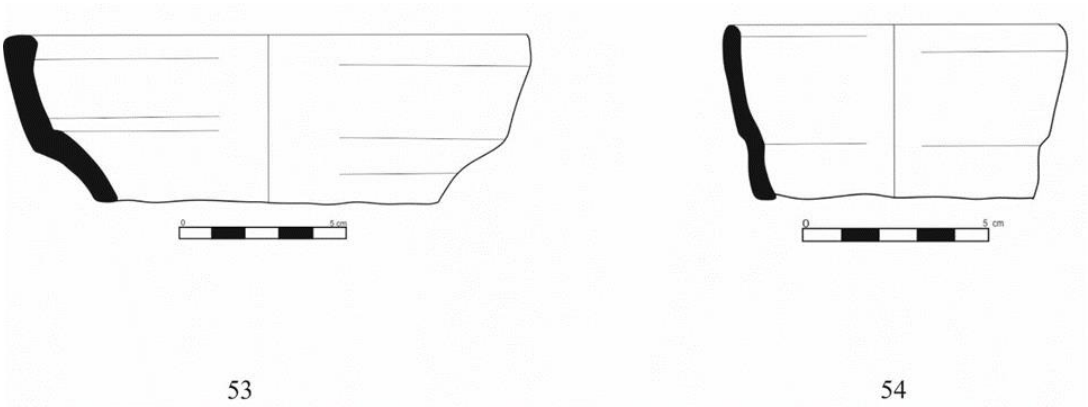
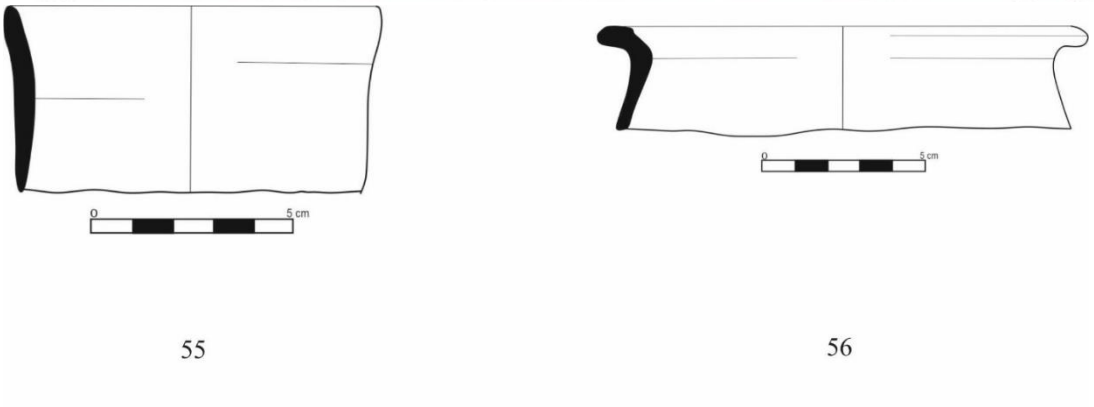
Plate IX: Pitchers: Type XV – 47, 48; **Mugs**: Tip I – 49,50; Tip II – 51; Type III – 52;





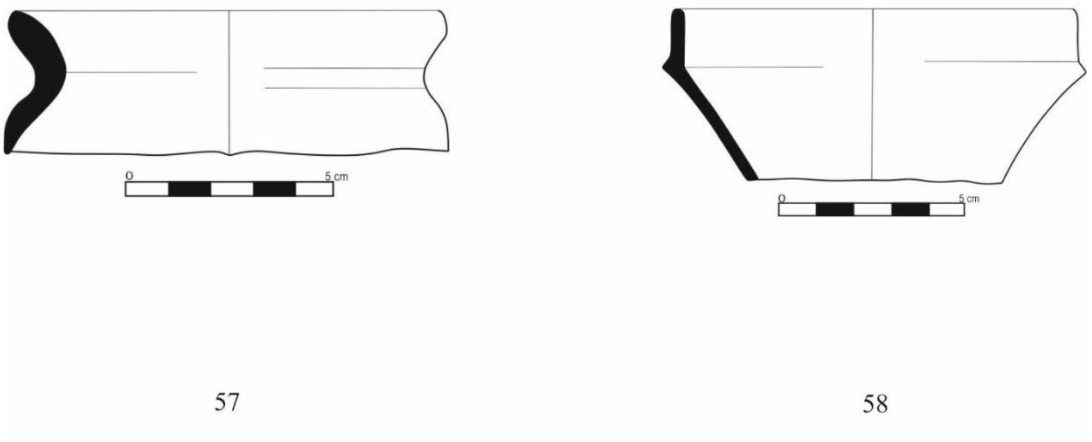
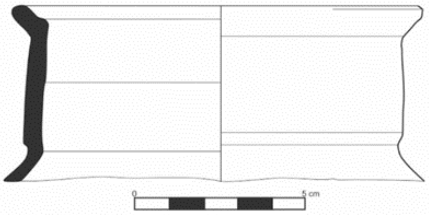


Plate X: Mugs: Type IV - 53; Type V – 54; Type VI – 55; Type VII – 56; **Ceramic decorated in barbotine technique**: Type I: 57,58;



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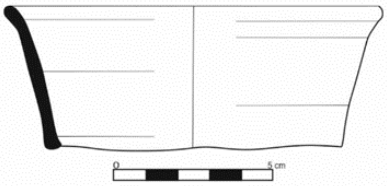

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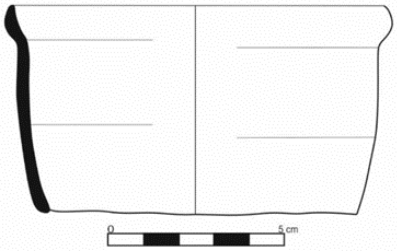

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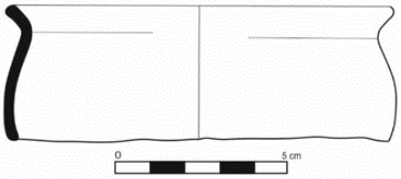

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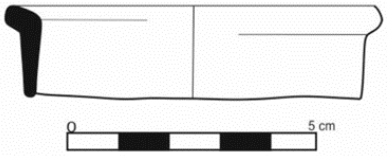

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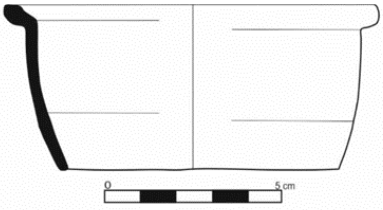

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Plate XI: Ceramic decorated in barbotine technique: Type I – 59, 60, 61; Type II – 62; 63; Type III – 64;

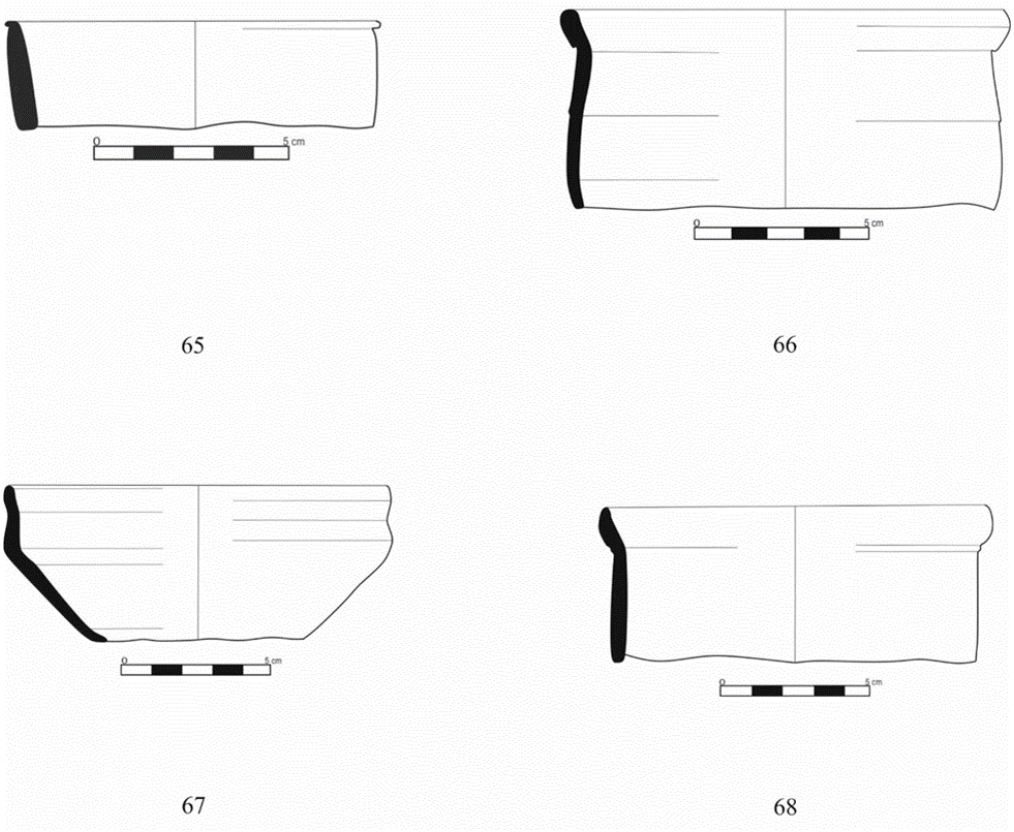
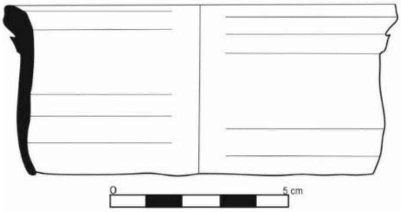


Plate XII: Ceramic decorated in barbotine technique: Type III – 65; Type IV – 66, 67, 68;



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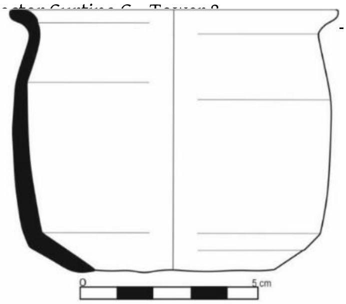

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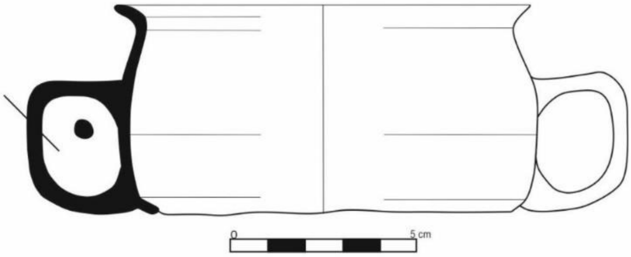

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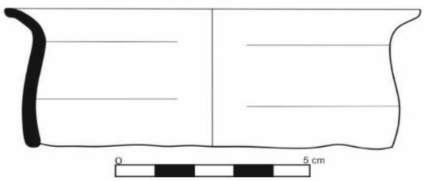

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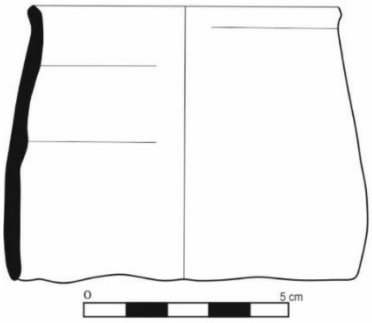
Plate XIII: Ceramic decorated in barbotine technique: Type IV – 69, 70; Type V – 71, 72;



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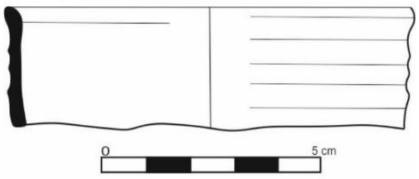

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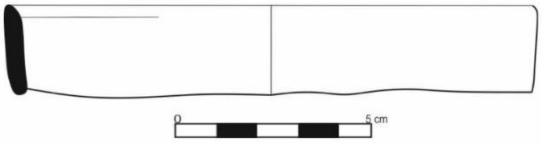

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Plate XIV: Beakers: Type I – 73, 74, 75;

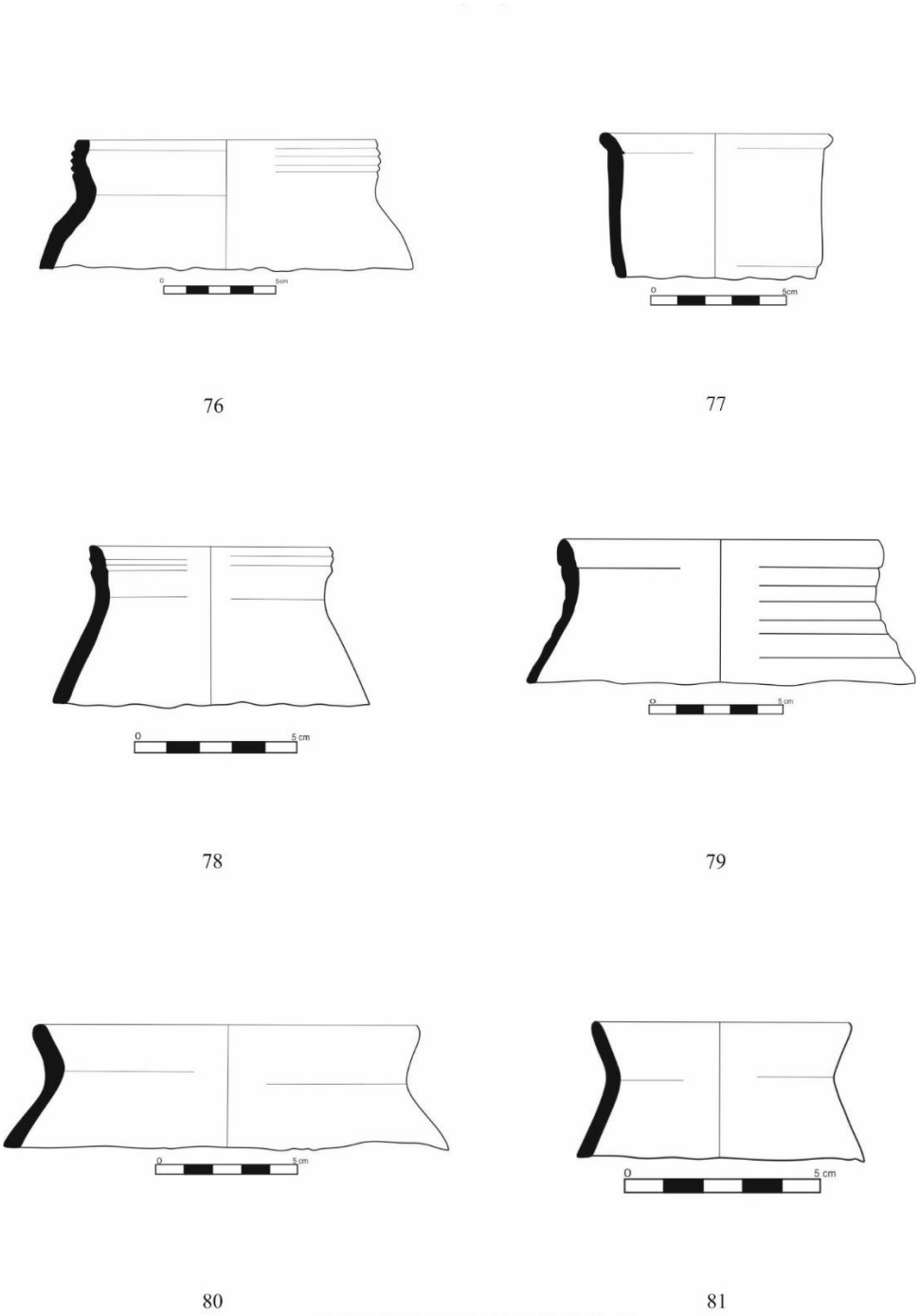
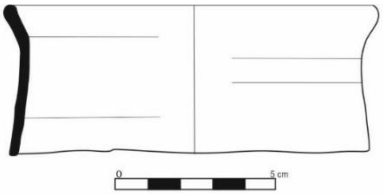


Plate XV: Cups: Type I – 76, 77, 78, 79, 80, 81;



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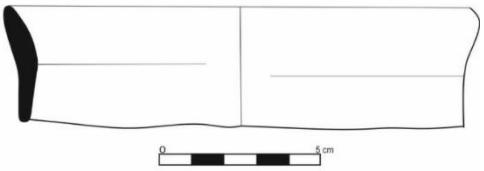

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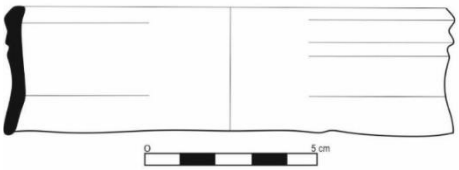

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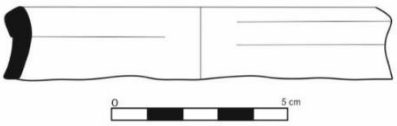

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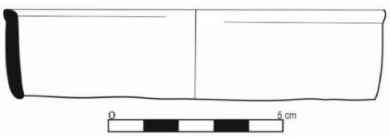

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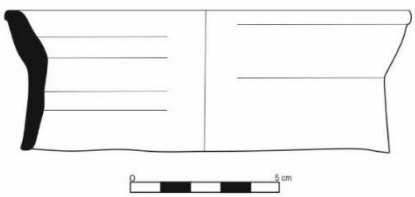

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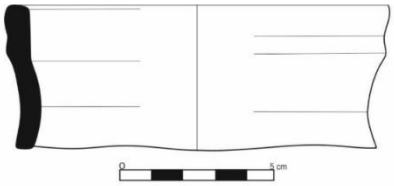
Plate XVI: Cups: Type I – 82, 83, 84; Type II – 85, 86, 87;



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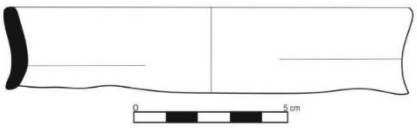

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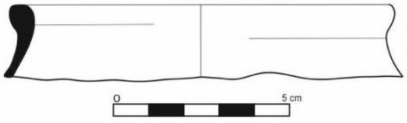
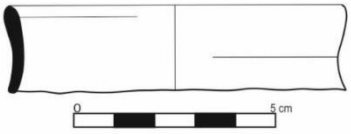
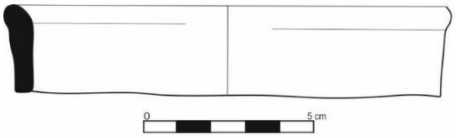


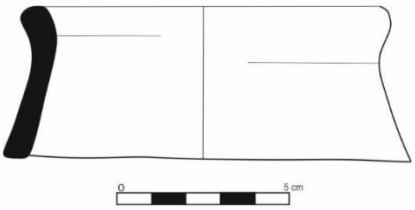
90



91

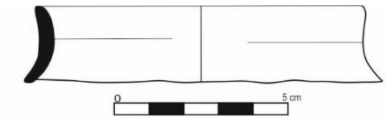


92

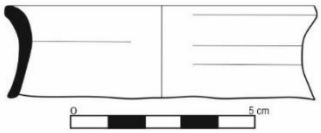


93

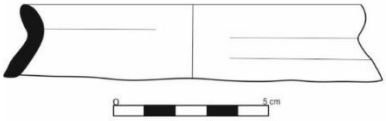
Plate XVII: Cups: Type II – 88, 89; Type III – 90, 91, 92, 93;



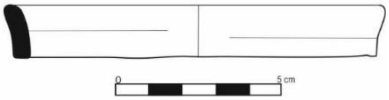
94



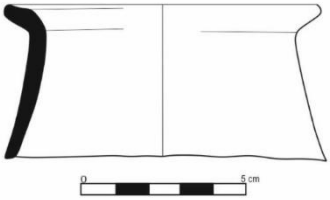
95



96



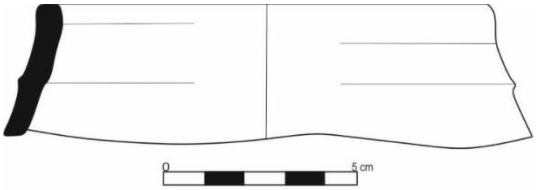
97



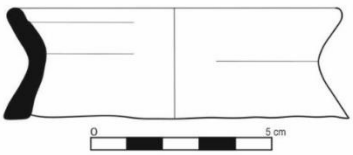
98

99

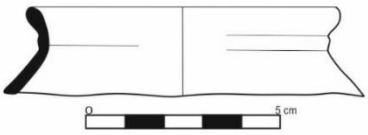
Plate XVIII: Cups: Type III – 94, 95, 96, 97, 98, 99;



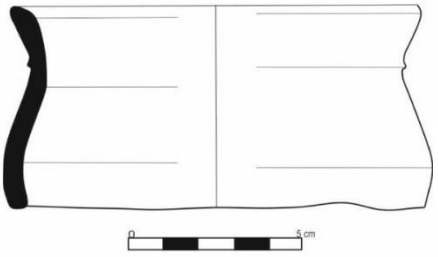
100



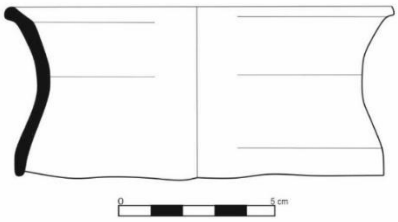
101



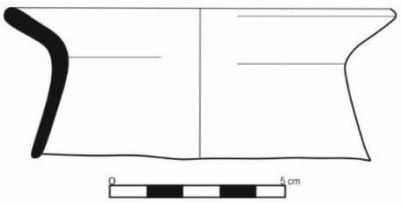
102



103

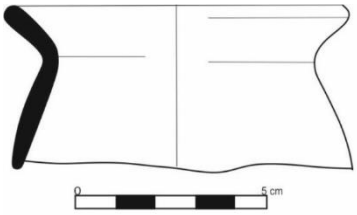


104

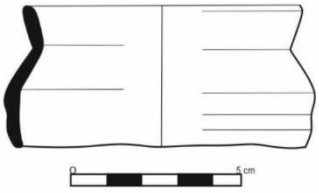


105

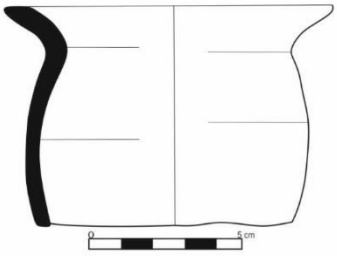
Plate XIX:Cups: Type III – 100; Type IV – 101, 102, 103, 104, 105;



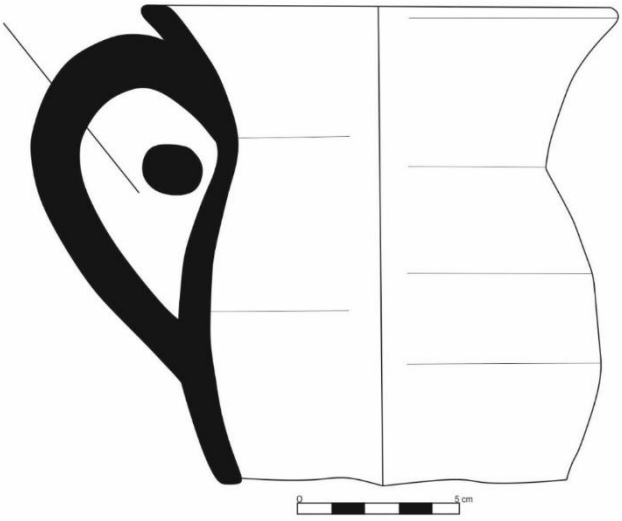
106



107



108



109

Plate XX: Cups: Type IV – 106, 107, 108; 109;

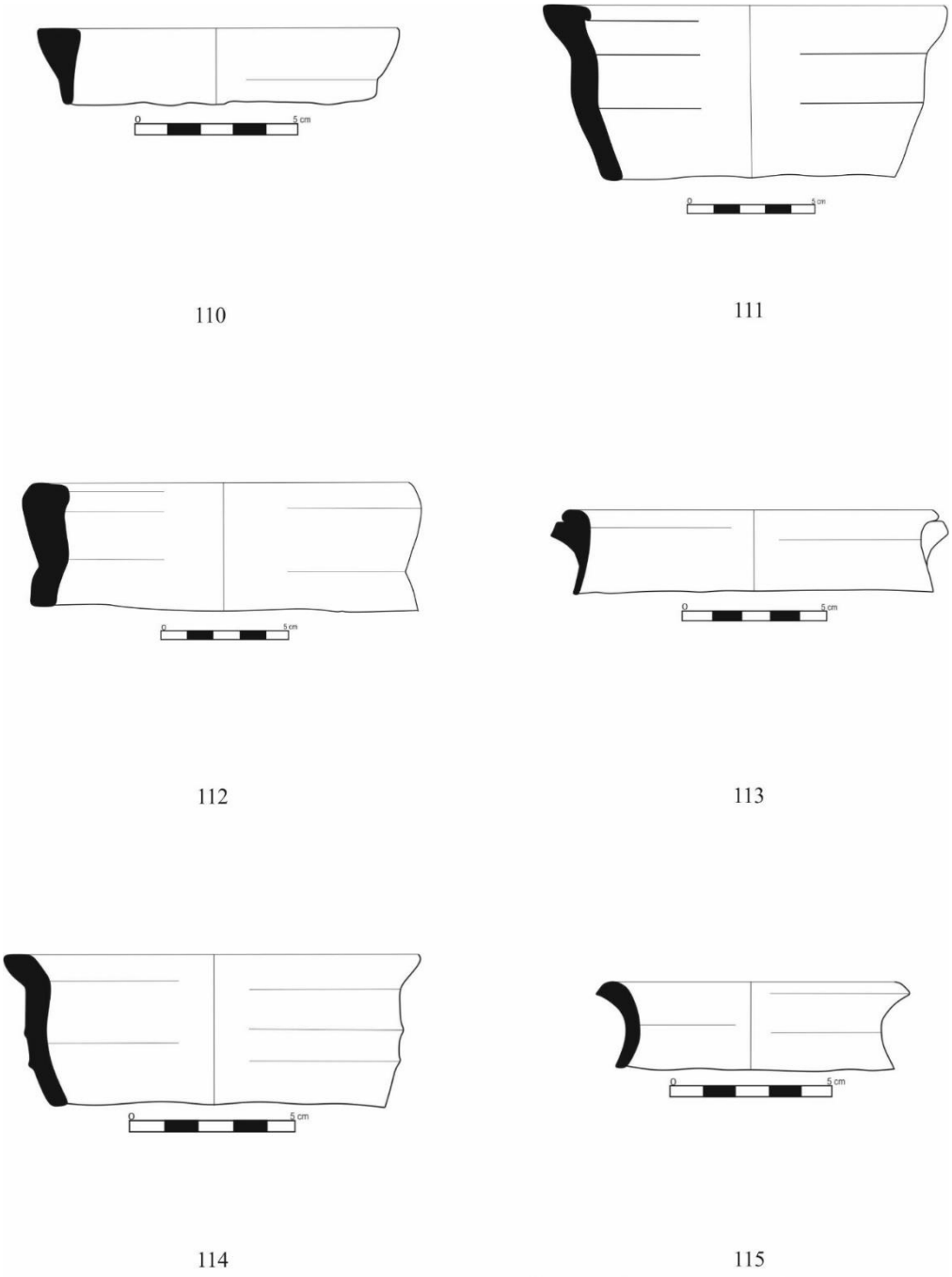
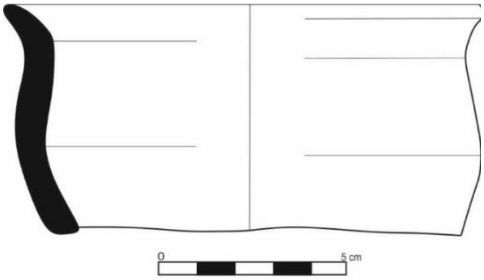
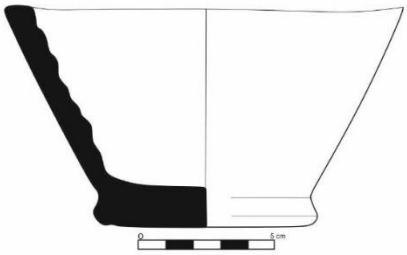


Plate XXI: Cups: Type V – 110, 111, 112; Type VI – 113, 114; Type VII – 115;

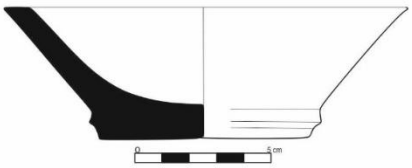


116

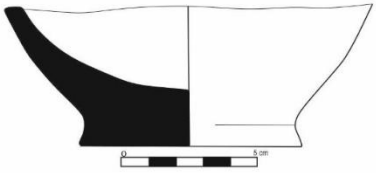
Plate XXII: Cups: Type VIII – 116;



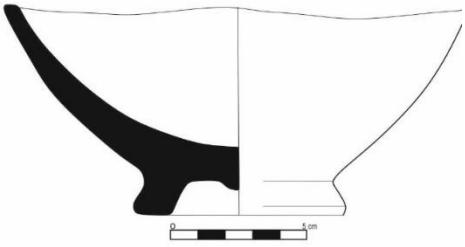
117



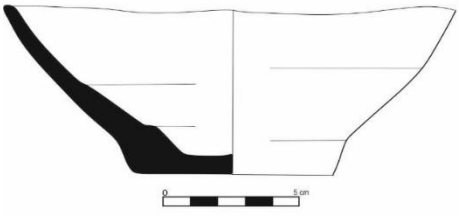
118



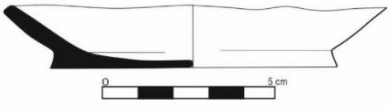
119



120

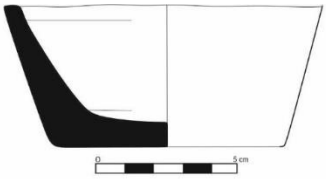


121

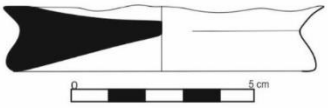


122

Plate XXIII: Bases: 117, 118, 119, 120, 121, 122;

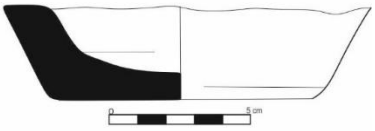


123

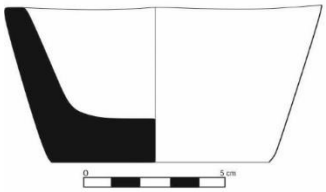


124

125



126



127

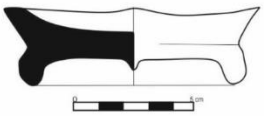


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Plate XXIV: Bases: 123,124, 125, 126, 127, 128;

Plate XXV: Bases: 129, 130;

Studia Antiqua et Archaeologica 29(2):331-345
DOI: 10.47743/saa-2023-29-2-8

Godfearers and Religious Syncretism: Investigating Aphrodisias' Stone Inscription and Its Time

Milan KOSTREŠEVIĆ[1]

Abstract: *The paper analyzes the stone inscription in the Asia Minor city of Aphrodisias in the context of the religious pluralism of this environment at the time of the creation of the inscription. Therefore, the questions of the cultural context of the origin of the inscription in Aphrodisias, its dating and linguistic specificities are analyzed in particular, and an attempt is made to find an answer to the question of who the Godfearers are in question here.*

Rezumat: *Lucrarea analizează inscripția din piatră din orașul Afrodisias din Asia Mică în contextul pluralismului religios al acestui mediu cultural în momentul realizării inscripției. Prin urmare, sunt analizate în special întrebările legate de contextul cultural al originii inscripției din Afrodisia, datarea și specificitățile lingvistice ale acesteia și se încearcă găsirea unui răspuns la întrebarea legată de adoratorii de aici.*

Keywords: Aphrodisias, godfearers, syncretism, Greek epigraphy.

Introduction

In 1976, while building a museum to house the numerous archaeological finds in the ancient city of Aphrodisias, the construction workers found a remarkable stone. This stone, a block of marble, is about 280 cm tall when standing up. It tapers slightly towards the top, at the bottom measuring 45 by 45 cm, at the top measuring 43 by 43 cm.[2] That in itself was not what drew the attention of many scholars, but rather the many lines of Greek lettering inscribed in it. These lines of Greek lettering contain over a hundred names. At least half of them are typical Jewish names derived from the Hebrew Bible, the remaining names are typical Greek and Anatolian ones. One side of the stone includes a short text from which we learn that it is erected to commemorate people who donated for a Jewish memorial building. What generated most interest is the list of people that are called θεοσεβῖς, God-worshipers. It is uncertain who these people were and why they are mentioned as a specific group of people. Could it be possible that there is a connection between these God-worshipers and Christians who frequented synagogues as we read in the biblical book of Acts, or are they exceptionally pious Jews? The first part of this paper exists out of an excursus on Aphrodisias in Antiquity and the inscriptions

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[2] Reynolds, Tannenbaum 1987, 3.

on the stone. In the second part, I attempt to define the identity marker θεοσεβεῖς more clearly by comparing it to other markers used for people sympathizing with Judaism, προσήλυτος, φοβούμενος τὸν θεὸν, and σεβόμενος τὸν θεὸν. In the third part, I assess the θεοσεβεῖς more closely to see how this word was used in other contexts. In the fourth part with my answer to the question of who these Aphrodisian Godworshipers might have been. In part five, I give an overview of my findings as well as questions for further research to conclude the paper.

1. The stone in Aphrodisias

1.1. Aphrodisias in Antiquity

The ruins of Aphrodisias are located in the west of modern-day Turkey, some two hundred and forty kilometers south-east of Izmir in a fertile valley carved out by the river Orsinus. Archaeological excavations in the valley have resulted in locating two prehistoric settlement mounds, dating to the sixth millennium BC. These mounds were periodically habited by humans until the end of the Bronze Age, ca. 1500–1200 BC. Pottery dating from the 7th and 6th centuries BC points at continued habitation in that period.[3] Around the end of the 6th century BC, a religious cult settled at Aphrodisias that probably built a temple there.[4] The name 'Aphrodisias' itself, however, is first attested only in the late second to early first century BC on bronze and silver coins. The original name of the city most likely was Nineuda or Nineudon, after Zeus Nineudios, a deity who is frequently named in inscriptions and depicted on walls in Aphrodisias.[5] An honorific inscription on a wall discovered in 2003 is evidence that the founding of the city as an independent *polis* called Aphrodisias can be dated more precisely between 188 and 167 BC.[6] Due to its favorable location and close ties to the Roman emperors, Aphrodisias became an administrative and religious center and the capital city of the Late Roman province Caria in the centuries that followed.[7]

Sometime in the third century a small Christian community emerged in the city and a bishop is attested for the year 325.[8] This community grew over time, as Christianity did in the whole Roman Empire. Polytheistic religion remained active in Aphrodisias for a long time, however, even after it was officially outlawed by Emperor Theodosius at the end of the fourth century. Around 450, the pagan philosopher Asklepiodotos of Alexandria was attracted to Aphrodisias's polytheistic community where he married the daughter of a leader of the city,

[3] Ratté 2008, 11.

[4] Erim 1986, 163.

[5] Chaniotis 2010, 456-466.

[6] CHANIOTIS 2010, 456-466.

[7] Ratté 2008, 10.

[8] Roueché 1989, 15-16, 322.

also named Asklepiodotos. Furhtermore, an honorary epigram dated around 480 AD dedicated to a man called Pytheas calls Aphrodisias 'City of the Paphian goddess and of Pytheas.'[9] Ultimately, Christianity managed to get the upper hand, and in the sixth or seventh century the city was renamed to Stauropolis, City of the Cross. Around that same time, the city started to deteriorate, possibly because of flooding, earthquakes and threats of Persian invasions. Later references to the city become rare. Sometimes a bishop of Aphrodisias is attested in patriarchal documents, and Byzantine sources indicate that the city had been captured by the Turks at least four times in the thirteenth century.[10] Its citizens gradually abandoned the city in the remainder of the Middle Ages, but Aphrodisias never really was 'lost'.[11] It saw some archaeological activity in the eighteenth and nineteenth century with several excavations organized mostly by European archaeologists, and in 1961 the University of New York started methodological excavations on a serious scale. It was during their expedition in 1976 that they found the remarkable stone that mentions Jews and God-worshipers, as I described in the introduction of this paper. It gives us valuable information about the Jewish community that existed next to the Christian and pagan communities in Aphrodisias and Asia Minor.

1.2. The Greek text of the Inscriptions

Two of the four sides of the stone have been inscribed and are commonly called side *a* and side *b*. Below, I cited those parts of the inscriptions that are most relevant for this paper. Letters between brackets are added to complete abbreviations

Inscription side *a*

Col. Θεὸς βοηθός, πατελλαδ̣ο̣[ς][12]
Οἱ ὑποτεταγμέ-
νοι τῆς δεκαν(ίας)
τῶν φιλομαθῶ̣[ν]
τῶν κὲ παντευλογ̣(--ων)
εἰς ἀπενθησίαν
τῷ πλήθι ἔκτισα[ν]
ἐξ ἰδίων μνῆμα
Ἰαηλ προστάτης
v. σὺν υἱῷ Ἰωσούᾳ ἄρχ(οντι?)
Θεόδοτος Παλατῖν(ος?) σὺν
v. υἱῷ Ἰλαριανῷ *vac.*

[9] CHANIOTIS 2010, 458.

[10] ERIM 1986, 34-35.

[11] ERIM 1986, 37.

[12] In contrast to REYNOLDS and TANNENBAUM, the 'πατέλλα? δ̣ο̣[. 1 or 2.].' For my argument, see section 1.3 below. Dating and interpretation of the inscriptions.

Σαμουηλ άρχιδ(έκανος?) προσήλ(υτος)
᾽Ιωσῆς ᾽Ιεσσέου *vacat*
Βενιαμιν ψαλμο(λόγος?)
᾽Ιούδας εὔκολος *vacat*
᾽Ιωσῆς προσήλυ(τος)
Σαββάτιος Ἀμαχίου
᾽Εμμόνιος θεοσεβ(ής) *v. v.*
᾽Αντωνῖνος θεοσεβ(ής)
Σαμουηλ Πολιτιανοῦ

Col. God, help, put [food] on our plates.[13]
Those listed below
of the decany
of the lovers of learning,
those who all fervently praise [God]
for relief of mourning
for the community, built
from their own [funding] a memorial building
Iael, president/patron[14]
with his son Iosua the archon
Theodotus Palatinos with
his son Hilarianos
Samouel the arch-deacon, proselyte
Ioses, son of Jesseos
Beniamin, psalm-singer (?)
Ioudas the good-natured
Ioses, proselyte
Sabbatios, son of Amachios
Emmonios the God-worshiper
Antoninos the God-worshiper
Samouel, son of Politianos[15]
22

[13] See the discussion below for this translation

[14] There has been some debate on the gender of Iael, as in two papers Bernadette J. Brooten argued that it is a woman. While it was certainly possible for Jewish women to be mentioned on such inscriptions, I do not think that in this case Iael is a woman because of the masculine προστάτης that accompanies the name instead of the expected feminine προστάτις. See for the two papers written by Brooten:1991, 149–162; 1990, 163–173.

[15] Translations of ancient languages are mine, unless indicated otherwise.

- [Four names, added later]
27

Inscription face *b*

Col. Καὶ ὅσοι θεοσεβῖς *stop* Ζήνων βουλ(ευτής)
35 Τέρτυλλος βουλ(ευτής) *stop* Διογένης βουλ(ευτής)
Ὀνήσιμος βουλ(ευτής) *stop* Ζήνων Λονγι(ανοῦ?) βουλ(ευτής)
Ἀντιπέος βουλ(ευτής) *stop* Ἀντίοχος βουλ(ευτής)
Ῥωμανός βουλ(ευτής) *stop* Ἀπονήριος βουλ(ευτής)

1
– [Approx. 55 names]
33

And as much as there are god-worshipers · Zenon, councilor
35 Tertullos, councilor · Diogeness, councilor
Onesimos, councilor · Zenon, son of Longianos, councilor
Antipeos, councilor · Antiochos, councilor
Romanos, councilor · Aponerios, councilor
39
– [Approx. 43 names of god-worshipers]
61

1.3. Dating and interpretation of the inscriptions

Reynolds and Tannenbaum, the authors of the *editio princeps*, come to the conclusion that both inscriptions – side *a* and side *b* – should be dated somewhere between the late second and early third centuries and that they were inscribed by two different epigraphers for the remembrance of a single memorial building. This dating is certainly not without debate, with other scholars offering datings from the third until the sixth centuries.[16]

The interpretation of the inscriptions given by Reynolds and Tannenbaum places the texts firmly in a rabbinical Jewish context, mainly because of the incomplete first line on side *a*. This line starts with invocation Θεὸς βοηθός, 'God, help' followed by the letters ΠΑΤΕΛΛΑΔΟ.

[16] Reynolds, Tannenbaum 1987, 19–23. They rely on epigraphic elements and the occurrence and frequency of certain names for their dating since the inscriptions themselves do not contain an explicit date or obvious feature to place it securely in a certain timeframe. For later datings, see e.g. Margaret Williams, who places it in the middle of the third century: Williams 2013, 216–230. Helga Botermann and Angelos Chaniotis argue for a fourth-century date: Botermann 1998, 184–194; CHANIOTIS 2002, 204–241. Concludingly, Marianne Palmer Bonz argues for a dating in the fifth century for side *a* and the sixth century for side *b*, refuting the arguments and reinterpreting the data from Reynolds and Tannenbaum rather radically: BONZ 1994, 281–299, esp. 282–291.

Reynolds and Tannenbaum take πατέλλα, originally 'plate' or 'dish', to be a Greek translation of the Mishnaic Hebrew תמחוי, *tamḥui* which means soup-kitchen. They interpret the remaining letters ΔΟ to be some form of either the verb δίδωμι, 'to give', or from the verb δέμω, 'to build' which for the former would entail that something is given to the πατέλλα, possibly funds. For the latter, it can refer to a building built for the πατέλλα.[17] There are some counter-arguments to be made for this interpretation. In both of the above explanations, it means that πατέλλα must be written in the dative case but the expected *iota subscriptum* is lacking in the inscription. Furthermore, as Williams points out, the succession of letters after the invocation might also be the aorist imperative verb πατελλαδός which she translates as 'put [food] on our plates'.[18] This would mean that the text begins with a double invocation, which was fairly common in Diasporic inscriptions.[19] I follow Williams in my translation because it is more elegant and is not dependent on a rather questionable connection with the Hebrew word *tamḥui.* Still, this option is not more than another possibility, we probably will never know for sure what it originally said. In any case, I agree with Williams that reconstructing a rabbinic Jewish context based on an unclear first line of side *a* is unsatisfactory.[20] What is clearer, is that this stone is erected to commemorate those people who donated for the construction of a memorial building in honor of the dead of the Jewish community in Aphrodisias.[21]

2. The Identity of sympathizers of Judaism

What did it mean to be called θεοσεβής? Why were these people not called φοβούμενοι τὸν θεὸν, σεβόμενος τὸν θεόν or προσήλυτοι, other terms used to describe people affiliated with and sympathizers of Judaism? Is θεοσεβής indeed a term used to describe gentile sympathizers as Reynolds and Tannenbaum think, or can it be a title to describe pious Jews as Marianne Palmer Bonz argues?[22] In this part of the paper, I will try and border these titles in relationship to one another by comparing in which contexts they were used in the LXX, the NT, and early Judaism before looking at more general uses of θεοσεβής in the following part.

2.1. προσήλυτος

The term προσήλυτος is attested only in Jewish and Christian writings. In other Greek texts, the titles ἔπηλυς and ἐπηλύτης (sometimes ἐπήλυτος) are used to render the same

[17] Reynolds, Tannenbaum 1987, 26-28.

[18] Williams 2013, 229. A more 'correct' translation would probably be 'give [food] to our plates'.

[19] WILLIAMS 2013, 228.

[20] WILLIAMS 2013, 218–230.

[21] See the LSJ, *s. v.* μνῆμα II: *mound* or *building* in honour of the dead, *monument*, *tomb*.

[22] See Reynolds,Tannenbaum 1987 48—67, esp. 55: 'It would appear likely then that the *theosebeis* are other than, and somehow less than, born Jews.' Further see: Bonz 1994, 298–299.

meaning, an outsider who is initiated into a religion. Philo and Josephus avoid using προσήλυτος and show preference for ἔπηλυς and ἐπηλύτης, most likely because these terms are more familiar to their readers.[23]

The LXX: In the Old Testament there are two classes of aliens, visitors (Dt 14:21) and residents, temporary and permanent (Ex 12:49).[24] An alien from this second group, called a גר (*gēr*), is much like a later proselyte in that they have to keep the festivals except for Passover if they are not circumcised. Of the 85 occurrences of the word προσήλυτος in the LXX, 77 are used to describe these resident aliens and are translations of גר (*gēr*).[25]

The NT: the first of four instances of the word προσήλυτος in the New Testament is in Matt 23:15. Jesus criticizes scribes and pharisees who travel sea and land to make a single proselyte even though they do not let people enter the kingdom of God (v. 13–14) so that they make of this proselyte a son of hell (ποιεῖτε αὐτὸν υἱὸν γεέννης).[26] The other three instances are all found in Acts. In Acts 2:11 Luke notes that there were proselytes among the many groups of people who traveled to Jerusalem, most likely for the Jewish Feast of Weeks.[27] In Acts 6:6 Nicolaus from Antioch is explicitly called proselyte (Νικόλαον προσήλυτον Ἀντιοχέα) whereas the other six men also mentioned were Jews.[28] In Acts 13:43 Luke lists 'many God-fearing proselytes' among those people who followed the apostles, πολλοί τῶν Ἰουδαίων καὶ τῶν σεβομένων προσηλύτων. The combination of these two terms is unique and only occurs in Acts and in later authors who cite this verse directly. Because the two groups addressed in Acts are normally Ἰουδαίων or Ἰσραηλῖται in combination with σεβόμενοι τὸν θεόν, the addition προσηλύτων in this verse is most likely an error.[29] The other three uses of προσήλυτος point to a use similar to that in Rabbinic Judaism, which means that the word is used to describe circumcised gentile converts to Judaism.

Early Judaism: The earlier OT term גר (*gēr*) is used in Rabbinic sources to denote full gentile converts to Judaism which means that they keep the whole law and not part of it as some gentile sympathizers chose to do. The rite to become an official proselyte consists of circumcision, baptism,[30] and a sacrifice. The *Mekhilta* distinguishes between full gentile converts, גרי צדק (*gerē tzedeq*) and God-fearers, יראי שמים (*yirēy šamayim*). This second group only has to keep the Noachic commands, a lighter version of the full law which proselytes, the *gerē tzedeq,* are obliged to keep.[31]

[23] KITTEL, FRIEDRICH 1985, 851.

[24] KITTEL, FRIEDRICH 1985, 851.

[25] KITTEL, FRIEDRICH 1985, 851.

[26] LUZ 2005, 115-116

[27] CONZELMANN 1987, 13.

[28] KITTEL, FRIEDRICH 1985, 742.

[29] KITTEL, FRIEDRICH 1985, 743.

[30] SÄNGER 2011, 291-334.

[31] SÄNGER 2011, 852; REYNOLDS, TANNENBAUM 1987, 48-49.

2.2. φοβούμενος/σεβόμενος τὸν θεόν, θεοσεβής

As I will show below, the phrases φοβούμενος τὸν θεόν and σεβόμενος τὸν θεόν are best understood as parallels in both the LXX and the NT. Θεοσεβής is first attested in the work of Sophocles, denoting true piety. It has close ties to the phrase σεβόμενος τὸν θεόν because both are derivatives from the verb σέβομαι, 'to worship.' It was used as a narrower concept in comparison to εὐσεβὴς. According to the Theological Dictionary of the New Testament, 'Θεοσέβεια denotes, not so much an inner attitude or disposition, but rather pious conduct in the form of religious exercise or achievement, or of worship.'[32]

The LXX: The verb φοβέομαι, to fear, in the LXX is often a translation of the Hebrew verb ירא. Combinations of this verb with either the tetragrammaton or אלהים are common and often rendered as the formula 'to fear the Lord God', translated in the LXX as φοβεῖσθαι κύριον τὸν θεόν, with a middle infinitive instead of a middle participle of the verb φοβέω. The formula φοβούμενος τὸν θεόν does appear a few times in the LXX Psalms where it is a translation for יראי אלהים (*yirēy elohim*) or יראי יהוה (*yirēy adonai*) denoting God-fearers who sacrifice in the temple (66:16) and have their hope in God (147:11). These people also are the righteous in the congregation (145:19, 115:11).[33] Because these people are the righteous in the congregation, it seems to me that in Psalms the formula φοβούμενος τὸν θεὸν is primarily used to describe devout Israelites and not gentile sympathizers. The formula σεβόμενος τὸν θεόν/κύριον is used in the same sense as the formula φοβούμενος τὸν θεόν and also used as translation of יראי אלהים (*yirēy elohim*) and יראי יהוה (*yirēy adonai*).[34] It is used less frequent than φοβούμενος τὸν θεὸν/κύριον.

The word θεοσεβής occurs seven times in the LXX, four of which in canonical books, once in Exodus and three times in Job. All four occurrences of θεοσεβής are translations of the Hebrew יראי אלהים (*yirēy elohim*). In Exodus 18:21 Moses is ordered by his father-in-law Jethro to find powerful men who fear God, אנשי חיל יראי אלהים (*anšēy ḥayil yirēy elohim*). The LXX renders this as ἄνδρας δυνατοὺς θεοσεβεῖς, 'powerful, God-worshiping men'. θεοσεβεῖς in LXX Exodus 18:21 is used to denote God-worshiping Israelite men because Moses' father-in-law Jethro orders him to choose judges for Israel who must have been Israelites themselves. In LXX Job, he himself is called θεοσεβής, once by the author in 1:1 and twice by God, in 1:8 and 2:2. Because it is unclear if Job was a Israelite or a Gentile man, it is not clear how θεοσεβής should be interpreted, i.e. if it should be understood as a title for a God-fearing gentile or an exceptionally pious Israelite.[35]

[32] KITTEL, FRIEDRICH 1965.

[33] KITTEL, FRIEDRICH 1965, 1157.

[34] REYNOLDS, TANNENBAUM 1987, 49.

[35] On the unclarity of Job's name and the land of Uz where he lived, see e.g. HARTLEY 1988, 65-67.

The NT: In the New Testament both formulae are only used in Acts, φοβούμενος τὸν θεόν in the first section, σεβόμενος τὸν θεόν in the second. The phrase φοβούμενος τὸν θεόν occurs five times in Acts (10:2, 22, 35, 13:16, 26). In Acts 10, Peter visits Cornelius the centurion. Cornelius, a non-Jewish man, is called God-fearer three times in this chapter.[36] The other two occurrences of the formula in Acts show more clearly that only non-Jews are called God-fearer; in Acts 13 Paul addresses the people gathered at the synagogue in Pisidian Antioch where he distinguishes twice between two groups of men. First in v. 16: Ἄνδρες Ἰσραηλῖται καὶ οἱ φοβούμενοι τὸν θεόν. The plural article οἱ makes clear that there is no hendiadys intended and that Paul addresses two separate groups, so not 'Israelite and God-fearing men' but 'Israelite men and the God-fearers'. This use of the plural article is repeated in v. 26: Ἄνδρες ἀδελφοί, υἱοὶ γένους Ἀβραὰμ καὶ οἱ ἐν ὑμῖν φοβούμενοι τὸν θεόν, 'Men, brothers, sons of Abraham's generation and those with you (who are) God-fearers'.

Luke uses the phrase σεβόμενος τὸν θεόν twice, also exclusively in Acts (16:14, 18:7). In Acts 16:14 Lydia, a woman from Thyatira, is called σεβομένη τὸν θεόν. It is not directly clear if Lydia was a Jewish woman or a gentile God-fearer as Cornelius the centurion was. For that, we have to shift our attention to Acts 18:7 and its context. In Acts 18:1–4, Luke describes that Paul went to Corinth to preach there among Jews and Greeks. When he tried to convince Jews that Jesus was the messiah in Acts 18:6, they attacked him, so Paul decided to focus his mission on gentiles: τὸ αἷμα ὑμῶν ἐπὶ τὴν κεφαλὴν ὑμῶν, καθαρὸς ἐγὼ ἀπὸ τοῦ νῦν εἰς τὰ ἔθην πορεύσομαι, 'your blood be on your own head, I am clear of it. From now on I will go to the nations.' Paul goes to the house of Titus Justus the God-worshiper directly after this confrontation. He lived next to the synagogue. It seems to me that Titus Justus was not a Jew because it would be highly unlikely that Paul would go to the house of a Jew moments after he said he would stop preaching among Jews. To return to the case of Lydia, I think it is safe to assume that she was also a gentile involved in Judaism because just as Titus Justus, she is called a God-worshipper and not a Jew. Compare to this for example the story in Acts 18:24–28, where the conversion story of the Jew Apollos is mentioned. Luke had no problems with telling stories of Jewish converts, so why would he not call Lydia and Titus Justus Jews if they in fact were? Luke thus clearly differentiates between Jews on the one hand and people interested in and sympathizing with Judaism on the other hand, whom he calls either φοβούμενοι or σεβόμενοι τὸν θεόν.

Both θεοσεβής and θεοσέβεια are attested only once in the NT. In John 9:31 Jesus heals a blind man who says the following: οἴδαμεν ὅτι ἁμαρτωλῶν ὁ θεὸς οὐκ ἀκούει, ἀλλ' ἐάν τις θεοσεβὴς ᾖ καὶ τὸ θέλημα αὐτοῦ ποιῇ τούτου ἀκούει, 'We know that God does not hear sinners, but when someone is a God-worshiper and does His will, He hears him.' The only occurrence of

[36] Acts 10: 2: εὐσεβὴς καὶ φοβούμενος τὸν θεὸν σὺν παντὶ τῷ οἴκῳ αὐτοῦ, 22: εὐσεβὴς καὶ φοβούμενος τὸν θεὸν σὺν παντὶ τῷ οἴκῳ αὐτοῦ, 34–35: Ἐπ' ἀληθείας καταλαμβάνομαι ὅτι οὐκ ἔστιν προσωπολήμπτης ὁ θεός, ἀλλ' ἐν παντὶ ἔθνει ὁ φοβούμενος αὐτὸν καὶ ἐργαζόμενος δικαιοσύνην δεκτὸς αὐτῷ ἐστιν.

θεοσέβεια is found in I Tim 2:10 where it denotes true religion. Christian women are expected to do good works, not in the sense that it is a prerequisite of faith but rather that it is a logical consequence of true religion, of θεοσέβειας.

Rabbinic Judaism: Rabbinic Judaism uses the phrase יראי שמים (*yirēy šamayim*), fearer of the heavens, to speak about God-fearers as I indicated above. Because of the holiness of God they avoid writing His name which was a common practice. Instead they referred to God by the use of this metonymy.[37] Some Rabbinic sources chose the more traditional description גר תושב (*gēr tošaḇ*). While these definitions are not consistently used, both phrases were applied to gentiles who followed part of the Mosaic law.[38]

3. θεοσεβής in the Late-Antique Greco-Roman world

Before the discovery of the stone in Aphrodisias, there were many debates on what the role of θεοσεβεῖς in Jewish communities could be. There was some evidence of people called θεοσεβεῖς on several inscriptions, most notably in Sardis. Because these inscriptions are short and lacunous, they provide almost no context and it is therefore unclear how they should be interpreted. Scholars argued that θεοσεβής was best understood as a variant of φοβούμενος τὸν θεόν and σεβόμενος τὸν θεόν in Acts.[39] In the preceding section of this paper I have shown that it is not as clear as they presented it. The times the word θεοσεβής is used in the LXX and NT, its meaning is not consistent nor clear. In the LXX it is used to describe either Israelites or Job, and in John it concerns someone in general who worships God: ἐάν τις θεοσεβὴς. It does not say anything about people who felt attracted to Judaism.

Kraabel is one of the scholars who seriously attacked the existence of God-fearers in the sense of gentile sympathizers in his 1981 article *The Disappearance of the 'God-Fearers'*. He argues that the φοβούμενος τὸν θεόν and σεβόμενος τὸν θεόν in Acts are merely used as rhetorical, invented groups employed by Luke in order to show the success of early Christianity. Since these two phrases also only occur in Acts in the NT, Luke let the two groups disappear again after they served their purpose.[40] If we accept this standpoint, it is then of course of no use to connect these imaginary groups with the θεοσεβεῖς found on inscriptions. There is one major flaw to his article, however. Although he wrote his article in 1981 and the stone in Aphrodisias was unearthed five years prior, he was not aware of its discovery. As a result, he was heavily criticized because the Aphrodisian stone clearly distinguishes between Jews, proselytes, and θεοσεβεῖς, so others argued. One of them is Levinskaya: 'The importance of this [Aphrodisian] inscription (...) lies in the fact that, once and for all, it has tipped the

[37] Acts 48–49.

[38] Sim 2013, 9-27, here 16.

[39] Kraabel 1981, 113-126, 114-115.

[40] Kraabel 1981., 114.

balance and shifted the onus of proof from those who believe in the existence of Luke's God-fearers to those who have either denied or had doubts about it.'[41]

The Aphrodisian stone has so far not been able to settle the debate on the nature of the θεοσεβεῖς as can be seen in Kraemer's 2016 article, which renews the criticism of Kraabel: 'In my judgement, even the Aphrodisias inscriptions (...) do not resolve the larger problem. Regardless of the inscriptions Kraabel knew by 1981, none of the inscriptions extant and published as of now constitute unambiguous evidence. All these inscriptions do is characterize either donors or deceased individuals as "theosebes": the argument that they thereby designate Gentile practitioners is either circular, or at best, derived from highly ambiguous clues, such as nomenclature.'[42]

Kraemer's argument here is that the θεοσεβεῖς do not prove that they are the group so many scholars want them to be, e.g. the God-fearers as portrayed in Luke. To understand this argument, we need to take a step back to evaluate the use of the word θεοσεβὴς once more. This time through the broader lens of late Antiquity as a whole, because according to Kraemer '[t]here is as least as much, if not more, evidence for the use of *theosebes*, especially, in ways that are demonstrably *not* indications of Gentile practice of limited aspects of Judean/Jewish piety' (italics original).[43] He gives several examples of the word θεοσεβὴς being used to denote piety in broader and different senses. Herodotus uses the word to describe the piety of the Egyptians (1.86, 2.37), Josephus uses it several times to describe several people,[44] most notably Nero's wife Poppaea which generated much debate.[45] Furthermore, the use of the word in John 9:31 is also of a general nature as I already indicated.[46] Θεοσεβής and cognates in early Christian texts are especially used by apologists to describe the true Christian religion – true piety – in contrast to Greek-Roman paganism.[47] Kraemer also notes that 'after the first half of the second century, there is no substantial *literal* evidence for *theosebes* and other terminology of pious fear as a designation for Gentile adherents to Judean practices and beliefs' (italics original).[48] What we are left with are eighteen occurrences of the word in epigraphic material, practically all without enough context to conclude the consensus that it was used to denote gentiles involved in Judaism.[49] Kraemer thus comes down on harshly on any scholar who is convinced that the God-worshipers in Aphrodisias are proof of Luke's.

[41] Levinskaya 1996, 80.

[42] Kraemer 2016, 169-199, 174.

[43] KRAEMER, 175.

[44] See e.g. Josephus, *Antiquities* 12.284; 14.308, *Against Apion* 2.140.

[45] Kraemer 1988, 97-111.

[46] KRAEMER 1988, 175–176.

[47] KittelL, Friedrich 1965.

[48] Kraemer 1988, 180.

[49] KRAEMER 1988, 180–194.

4. The God-worshipers, a possible solution?

All this does not mean that all is lost for those who argue *contra* Kraabel and Kraemer. A problem in both Kraabel's and Kraemer's articles is the existence of the so-called יראי שמים (*yirēy šamayim*), the fearers of heaven, in Rabbinical sources as I indicated in part 2 of this paper. Kraabel and Kraemer only assess Greek and Latin inscriptions and base themselves on them in their claims that there is not enough evidence to speak of god-worshipers as a technical term, a separate group. I agree with them that it indeed does not have to be exactly the case that the word θεοσεβής on an inscription is used to describe god-worshipers in the 'traditional' sense. However, I think they are ignoring a broader trend in Judaism as a whole by not looking at Rabbinical evidence; there are clear instances of gentile people interested enough in Rabbinic sources to follow the Noachic law, but not interested enough to turn it into a full proselytization as I pointed out above. And of course, we could employ Kraemer's argument here again, because that these heaven-fearers existed does not prove that θεοσεβής was a translation of יראי שמים and I would agree. But that is not all.

An interesting parallel to the Rabbinical יראי שמים is found in several 5th century Roman imperial edicts as Kraemer himself points out. These edicts legislate against people that are called *caelicoli*, heaven-fearers. The *Codex Justinianus* seems to imply that they are Christians who need 'to *return* to God's law and Christian veneration' (italics original).[50] This leads Kraemer to conclude rather carefully that the θεοσεβεῖς in Aphrodisias might have been these Christian *caelicoli* as described in the legislations.[51] If we follow him here, and say that there might be some connection between the θεοσεβεῖς and the *caelicoli*, I dare to suggest that it is hardly coincidental that *caelicoli* is a literal translation of the Rabbinical Hebrew phrase יראי שמים, those people interested in Judaism and who were only obliged to follow part of the Jewish law. Linder, in his book *The Jews in Roman Imperial Legislation*, defines the *caelicoli* in similar terms, they are 'semi-converts who observed only a part of the halachic rules.'[52] Furthermore, we know that the Church Fathers often warned Christians to not visit synagogues. When we take all these points into account, I think it is reasonably plausible that the people called θεοσεβεῖς in Aphrodisias can be identified with the Christian *caelicoli*, who possibly took their name from the Hebrew equivalent. At the very least, the existence of *caelicoli* proves more definitely that there were people who affiliated with Judaism which makes similar assumptions surrounding θεοσεβεῖς more plausible. There were non-Jewish sympathizers of Judaism who called themselves *caelicoli* in Latin, and who possibly called themselves θεοσεβεῖς in Greek.

[50] KRAEMER 1988, 194.

[51] KRAEMER 1988, 194. See e.g. Codex Justinianus 1:9:12: *Caelicolarum nomen inauditum quodammodo novum crimen superstitionis vindicavit*, 'A new crime of superstition claimed somehow the unheard name of heavenfearers.'

[52] LINDER 1987, 81.

This could then also be the connection with Luke's φοβούμενοι τὸν θεὸν and σεβόμενος τὸν θεόν in the Acts of the Apostles because the use of 'heaven' in Rabbinical sources is a metonymy, just as it seems to be the case for the *caelicoli*. In reality it is not the heaven but God that these people fear, just as the φοβούμενοι τὸν θεὸν and σεβόμενος τὸν θεόν do in Acts.

5. Conclusion: God-fearers, heaven-fearers?

In this paper I hope I have shown several matters, some more direct, other perhaps more indirect. As a way of concluding the paper, I briefly summarize my findings to then give my final thoughts and some points of further research.

(1) In the first part of this paper I briefly introduced Aphrodisias and its ancient context. I also gave an overview of the stone and some of the interpretive discussions. I also noted that one of the groups of people on this stone are called θεοσεβεῖς. This has generated much interest because of a possible connection with the Biblical book of Acts and because it is thought that Paul's mission was most successful under these God-fearers and God-worshipers.

(2) In the second part, I have compared the use of θεοσεβής with the terms φοβούμενος τὸν θεὸν, σεβόμενος τὸν θεόν and προσήλυτος. Whereas it is clear that προσήλυτοι are people committed to Judaism, who convert fully and are initiated into Judaism by circumcision, a sacrifice, and baptism. Less clarity surrounds the terms φοβούμενος τὸν θεὸν, σεβόμενος τὸν θεόν and θεοσεβής because of the lack of occurrences and relative unclear context.

(3) To get a clearer idea on the θεοσεβεῖς, I evaluated some critical scholars and their interpretations of the use of the word in part three. I gave special attention to Kraemer who argued that the use of θεοσεβής was used to denote piety in more general terms, and that even the epigraphic material in Aphrodisias is not sufficient to prove that we can interpret the word θεοσεβής to denote gentile sympathizers with Judaism.

(4) It was he himself, however, who offered a plausible solution to the problem; the existence of people called *caelicoli*, people who feared heaven. Kraemer thought that there might be a connection with these people and the Aphrodisian θεοσεβεῖς. I agree that this is an interesting train of thought that is worth it discovering further, especially when we know that Rabbinic sources speak of heaven-fearers also, which Kraemer failed to mention.

It is true that I am careful with my conclusion because research on this subject is vast, the argumentations are often dense, and this paper is limited in its scope. It is therefore not my intention to give a concluding answer to tie all the loose ends to one another, but a connection between יראי שמים, θεοσεβεῖς, and *caelicoli* could help us give insight into the people who were most likely to convert to Christianity during Paul's mission effort.

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Studia Antiqua et Archaeologica 29(2):347-356
DOI: 10.47743/saa-2023-29-2-9

The Study of Fish Remains from the Late Roman Era from Argamum, Tulcea County

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Abstract. *The studied fish remains come from the excavations carried out by the Ștefan Honcu archaeologist between 2017 and 2020 within the Argamum archaeological site. The study methodology consisted mainly of anatomical and taxonomic identifications based on archaeozoological atlases, quantification of the data, taphonomical evaluation, osteometry, size and weight estimation, and energy yield estimation. The archaeozoological material represents food waste. The only osteological remains registered with butchering marks was a fragment of a caudal vertebra from Silurus glanis (catfish). The studied material consists of 72 fish remains coming from carp – 28 fragments, catfish – 19 remains and the rest of 25 fragments couldn`t be identified up to species level. The faunal material is dated as follows: second half of the V century level – 9 remains, 4 remains from carp, a fragment from catfish and 4 fragments from unidentifiable fish; first half of the VI century - 17 osteological remains coming from carp – 7 remains, catfish – 8 remains and two unidentified fragments; second half of the VI century were discovered the most fish remains – 41 osteological fragments; late VI – early VII century - 5 fragments, 2 remains coming from carp and 3 remains from catfish. Most of the carp individuals range between 60-80 cm and 80-100 cm. For catfish, most of the individuals have sizes between 220 -240 cm. Based on the estimated amount of meat for each species, the energy yield (kcal) was calculated, the assemblages dated to the VI century being the richest.*

Rezumat. *Resturile de pește studiate provin din săpăturile efectuate de arheologul Ștefan Honcu între anii 2017 și 2020 în cadrul sitului arheologic Argamum. Metodologia de studiu a constat în principal în identificări anatomice și taxonomice bazate pe atlase arheozoologice de specialitate, cuantificarea datelor, evaluarea tafonomică, osteometrie, estimare a taliei și greutății indivizilor de pește și estimarea puterii energetice. Materialul arheozoologic reprezintă deșeuri alimentare. Singurele rămășițe osteologice înregistrate cu semne de tranșare a fost un fragment de vertebră caudală provenită de la Silurus glanis (somn). Materialul studiat este alcătuit din 72 de resturi de pește provenind de la crap – 28 fragmente, somn – 19 fragmente, iar restul de 25 de fragmente nu au putut fi identificate până la nivel specific. Materialul faunistic este datat după cum urmează: a doua jumătate a secolului V – 9 resturi, 4 resturi de crap, un fragment de somn și 4 fragmente de pește neidentificabili; prima jumătate a secolului VI - 17 resturi osteologice provenite de la crap – 7 resturi, somn – 8 resturi și două fragmente neidentificate specific; a doua jumătate a secolului VI au fost descoperite cele mai multe resturi de pește – 41 de fragmente osteologice; sfârșitul secolului VI – începutul secolului VII - 5 fragmente, 2 resturi provenite de la crap și 3 resturi de la somn. Majoritatea indivizilor crap variază între 60-80 cm și 80-100 cm. Pentru somn, majoritatea indivizilor au dimensiuni cuprinse între 220 -240 cm. Pe baza cantității estimate de carne pentru fiecare specie s-a calculat randamentul energetic (kcal), eșantioanele datate în secolul VI fiind cele mai bogate.*

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Keywords: Zooarchaeology, Argamum fortress, Late Roman, Fish remains, Fish osteometry.

Introduction

The fortification of Argamum is located at Cape Dolojman, on a rocky promontory on the shores of Lake Razelm, Jurilovca commune, Tulcea County (Figure 1). In ancient times the settlement had direct access to the Black Sea, because the current lagoon was a former golf. The urban settlement was founded by Greek colonists from Miletus, the toponym associated with it being Orgame, which in Roman times is Latinised into Argamum[2].

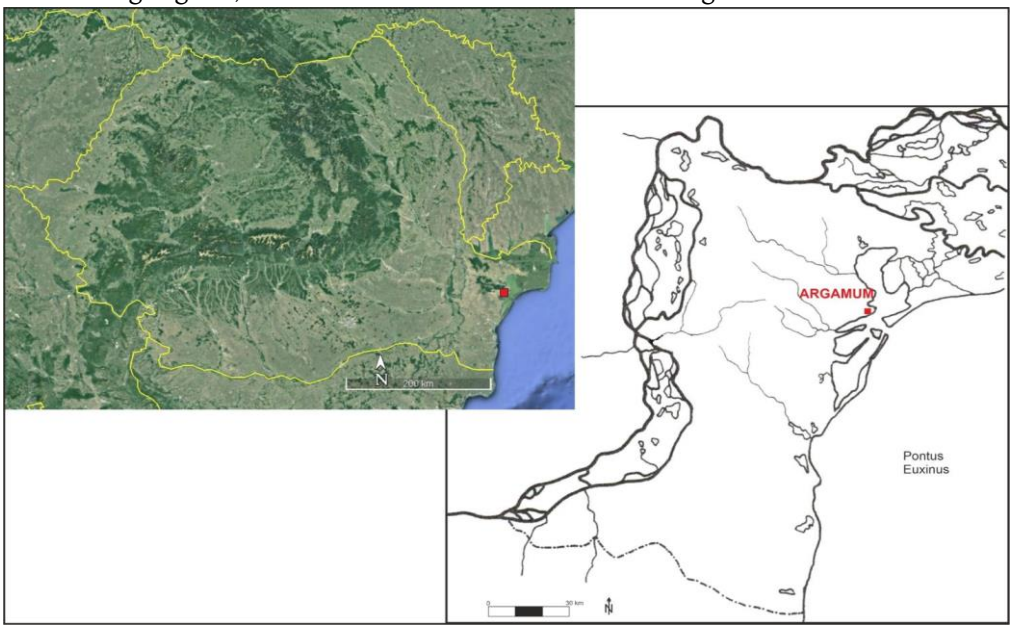

Figure 1. Localization of the Argamum archaeological site. Source: HONCU, 2023.

The studied fish remains come from the excavations carried out by the Ștefan Honcu archaeologist between 2017 and 2020 within the Argamum archaeological site. The remains are dated to the Late Roman Era as follows: second half of the V century, first half of the VI century, second half of the VI century and late VI century – early VII century[3]. The archaeozoological material represents food waste. The only osteological remains registered with butchering marks was a fragment of a caudal vertebra from *Silurus glanis* (catfish) (Figure 2). In the second half of the VI century level was discovered an edifice (noted E1), from which were identified 7 remains coming from carp (*Cyprinus carpio*), one fragment of a posttemporal of catfish and 11 remains from Teleostei fish.

[2] MĂNUCU-ADAMEȘTEANU 1992, 2001; HONCU 2023.

[3] HONCU 2016, 2023; HONCU *et al.*.,2021.

Figure 2. Catfish vertebra with butchering mark.

Figure 3. Common carp skeletal remains (from left to right: vertebra, ossa pharyngea and dentale).

Methods

The study methodology consisted mainly of anatomical and taxonomic identifications based on archaeozoological atlases[4], quantification of the data (NISP – number of identified specimens and MNI – minimum number of individuals), taphonomical evaluation, osteometry, size and weight estimation[5], estimation of energy yield[6] and statistical analysis.

Results and discussion

The studied material consists of 72 fish remains coming from carp – 28 fragments, catfish – 19 remains and the rest of 25 fragments couldn`t be identified up to species level (Figure 4). Regarding the minimum number of individuals (MNI), the carp sums up a minimum of 14 individuals and the catfish adds up to 11 individuals. Starting in chronological order with the second half of the V century level, the fish remains counts to 9, 4 remains from carp, a fragment of cleithrum from catfish and 4 fragments from unidentifiable fish. As MNI, for carp was estimated to have a minimum of three individuals and one individual for catfish. From the first half of the VI century were discovered 17 osteological remains coming from carp – 7 remains, catfish – 8 remains and two unidentified fragments. For both, carp, and catfish, were identified two minimum individuals each. In the second half of the VI century were discovered the most fish remains – 41 osteological fragments. The unidentifiable remains are prevalent in this assemblage – 19 remains, being followed by the carp remains – 15 and catfish remains – 7 fragments. Carp presents a minimum number of 5 individuals and catfish presents only 3 estimated individuals. Lastly, in the late VI – early VII century were excavated only 5 fragments, 2 remains coming from carp and 3 remains from catfish. Catfish are more numerous as MNI too, being estimated 3 individuals, while for carp were estimated 2 individuals (Table 1).

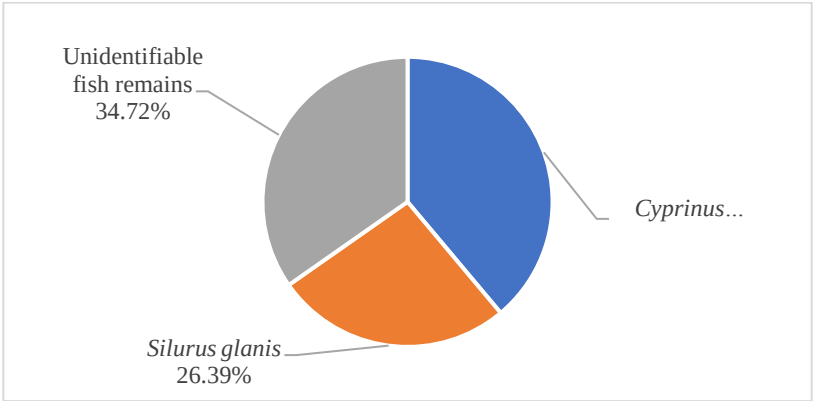

Figure 4. Proportions of fish remains from the Argamum archaeological site.

[4] RADU 2005.

[5] RADU 2011.

[6] BĂLĂȘESCU *et al.*. 2005

Table 1. Quantification of fish remains from the studied archaeological levels from Argamum site.

Era		Second half of the V century		First half of the VI century		Second half of the VI century		Late VI century-Early VII century	
Species		NISP	MNI	NISP	MNI	NISP	MNI	NISP	MNI
Cyprinus carpio	Common carp	4	3	7	4	15	5	2	2
Silurus glanis	Catfish	1	1	8	4	7	3	3	3
Unidentifiable fish remains		4		2		19			
Total sample		**9**	**4**	**17**	**8**	**41**	**8**	**5**	**5**

For some of the osteological remains the size and weight were calculated based on osteometry. Thus, for the second half of the V century were measured a hyomandibular, an opercular and a vertebra of carp and estimated sizes of 866.28 mm, 475.48 mm, 802.25 mm and weights of 9599 g, 1624,59 g, respectively 7648.88 g. For catfish was measured a cleithrum with M2 = 17.7 mm, being estimated a size of 1114.2 mm and a weight of 9329.83 g.

The estimated size of carp varies from 271.33 mm to 713.7 mm in the first half of the VI century and the weight varies from 310.24 g to 5416.74 g. For catfish, the size varies from 1216.2 mm to 2271.3 mm and the weight varies from 12122.7 g to 78557.6 g.

In the second half of the VI century were measured 8 fragments of carp and 4 fragments of catfish. Thus, the size of carp varies from 592.79 mm to 904.31 and the weight from 3126 g to 10900 g. For catfish, the calculated sizes are: 1132.5 mm, 1645.49 mm, 2335.42 mm and 2367.19 mm and the estimated weights are: 16561 g, 29951 g, 85381.23 g and 88903.83 g.

In the last studied level, the size and weight of carp were estimated to be 669.5 mm and 841.6 mm, respectively 4480 g and 8813.53 g based on two caudal vertebrae with M1 of 12 mm and 15.4 mm. Based on two precaudal vertebrae and a dentary bone, the size of catfish was calculated to 912.3 mm, 1095 mm and 630.75 mm. The weight was estimated to be 5130.12 g, 8855.88 g, and 1701.38 g respectively (Table 2).

Table 2. Carp and catfish estimated sizes and weights.

Species	Size	Weight
Second half of the V century		
Cyprinus carpio	866.28	9599.06
	802.25	7648.88

	475.18	1624.59
Silurus glanis	1114.24	9329.83
First half of the VI century		
Cyprinus carpio	271.33	310.24
	609.64	3407.87
	713.70	5416.74
	646.11	4037.59
Silurus glanis	1552.41	25162.00
	1216.17	12122.70
	2271.29	78557.62
	1818.64	40402.49
	1988.10	52742.75
Second half of the VI century		
Cyprinus carpio	779.56	7026.90
	899.84	10742.26
	592.79	3125.98
	856.81	9292.23
	904.31	10899.55
	664.44	4380.64
	643.48	3984.43
	679.63	4683.43
Silurus glanis	2335.42	85381.23
	2367.19	88903.83
	1645.49	29951.19
Late VI century-Early VII century		
Cyprinus carpio	841.63	8813.53
	669.51	4480.09
Silurus glanis	1094.99	8855.88
	912.34	5130.12
	630.75	1701.38

A size distribution was made for both carp and catfish to better see in which size classes most of the individuals are situated. Thus, most of the individuals of carp are situated between 60-80 cm and 80-100 cm (Figure 5). For catfish, most of the individuals have sizes between 220 -240 cm (three individuals) and between 100-120 cm and 180-200 cm (two individuals for each class) (Figure 6). The majority of large size individuals (adults) could indicate that most probably fishing took place during the spawning season, which occurs mainly between March and June[7].

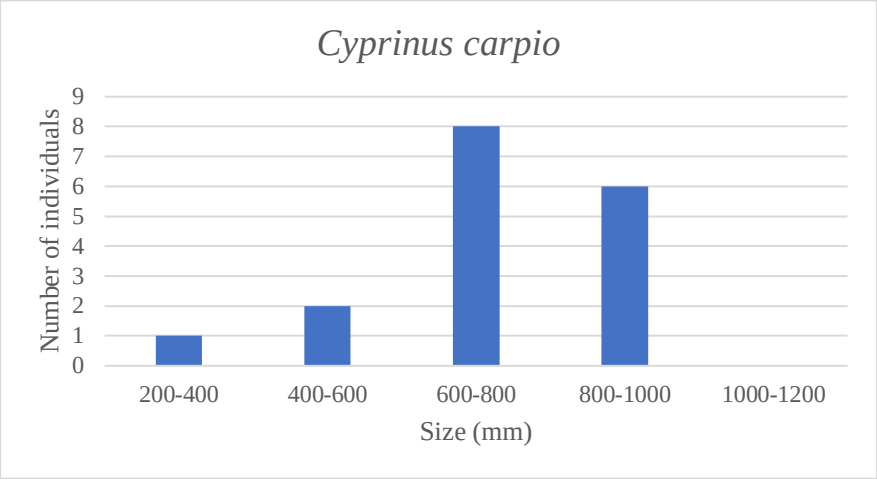

Figure 5. Carp size distribution in the Argamum archaeological site.

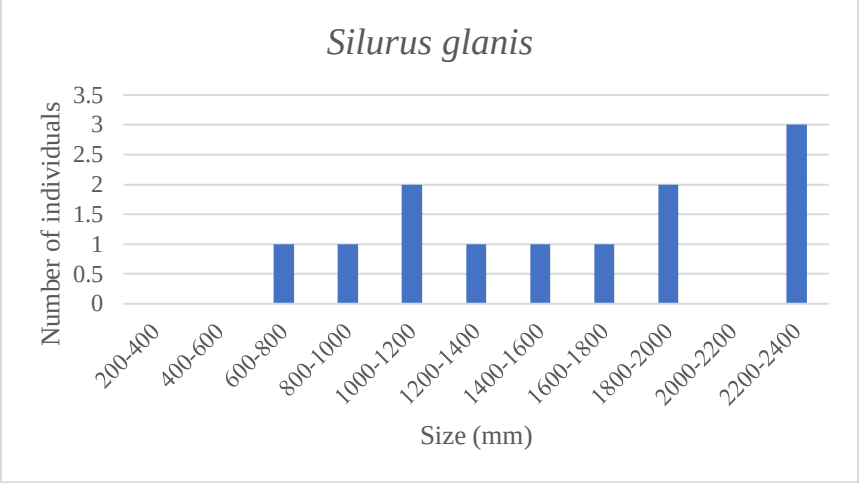

Figure 6. Catfish size distribution in the Argamum archaeological site.

[7] BREHARD *et al.* 2014.

Based on the estimated amount of meat for each species, the energy yield (kcal) was calculated. Thus, catfish, due to its larger size and higher caloric yield (244 kcal/100 g) provided in all samples the largest part of the estimated calories (54% - second half of the V century; 97% - first half of the VI century; 91% - second half of the VI century; 73% - late VI century – early VII century). Compared to catfish, carp is a less fatty fish, with a caloric yield of 104 kcal/100 g. Energy yields for carp and catfish were taken from Mincu, 1985. In the second half of the V century, carp offered 1.962.743 kcal and catfish 2.276.478 kcal. Moving to the first half of the VI century total fish resources provided 52.362.898 kcal, of which 50.992.964 kcal came from catfish. In the second half of the VI century, catfish provided 53.874.575 kcal, and carp only 5.630.083 kcal. And in the late VI century – early VII century, carp offered 1.382.536 kcal, while catfish provided 3.827.720 kcal (Table 3).

Table 3. Energy yield estimated for the reconstituted fish weight.

Species	Total weight (g)	Energy yield (Kcal)	% Energy yield
Second half of the V century			
Cyprinus carpio	18872.53	1962743.12	46.30
Silurus glanis	9329.83	2276478.52	53.70
Total	28202.36	4239221.64	100
First half of the VI century			
Cyprinus carpio	13172.44	1369933.75	2.62
Silurus glanis	208987.56	50992964.64	97.38
Total	222160	52362898.39	100
Second half of the VI century			
Cyprinus carpio	54135.42	5630083.68	9.46
Silurus glanis	220797.44	53874575.36	90.54
Total	274932.86	59504659.04	100
Late VI century-Early VII century			
Cyprinus carpio	13293.62	1382536.48	26.53
Silurus glanis	15687.38	3827720.72	73.47
Total	28981	5210257.20	100

For a better understanding of the energy yield values we followed the theoretical model of Bălăşescu et al.[8] and we tried to estimate the number of inhabitants that could have been fed exclusively with these fish resources. We took the same mean value of the needed calorie intake of approximately 3000 kcal/day/individual depending on age, gender, weight, elders, adults, or children. Therefore, the fish resources from the second half of the V century could sustain 1413 inhabitants for a day, 47 for 30 days, 8 for 6 months and 4 for a year. In the VI century, the fish resources were richer, in the first half being fed 17454 inhabitants for a day, and up to 48 inhabitants for a year. In the second half, the amount of estimated calories could have sustained 19835 people for a day and 54 people for a year. In the late VI century – early VII century fish resources are similar to the V century and could`ve fed 1737 inhabitants for a day, 58 for 30 days, 10 for 6 months and 5 for a year (Table 4). According to the approximately half a century dating for each archaeological level, we tried to estimate how many people could sustain these fish resources, and only the resources coming from the VI century were rich enough to sustain two inhabitants (one for the first half and one for the second half of the century).

Table 4. The number of inhabitants sustained exclusively by the studied fish remains for each archaeological level.

	1 day	30 days	6 months	1 year	Half a century
Second half of the V century	1413	47	8	4	0.08
First half of the VI century	17454	582	96	48	1
Second half of the VI century	19835	661	109	54	1
Late VI century-Early VII century	1737	58	10	5	0.10

Conclusions

The studied archaeozoological remains, which represent food waste, come from the Argamum archaeological site from the 2017-2020 archaeological campaigns by Ştefan Honcu. The present study focuses only on the fish resources from the Late Roman Era from the Argamum fortress. In the aforementioned archaeological campaigns were discovered 72 fish fragments coming only from two species (common carp and catfish) and being dated to the second half of the V century – 9 remains, first and second half of the VI century – 17 remains, respectively 41 remains and to late VI century – early VII century – 5 remains. The carp is prevalent as NISP and MNI in almost all the studied assemblages.

Most of the measured fish fragments came from large-size specimens, between 40 – 100 cm for carp and between 100 – 240 cm for catfish. By size distribution, it seems that most of the captured fish were adults, and it is possible that fishing took place during the spawning

[8] BĂLĂŞESCU *et. al.* 2005.

season, between March and June. The energy yield was estimated based on the reconstituted weights. Thus, catfish, due to its larger size and higher caloric yield was the main energy source in all the studied assemblages. Also, a theoretical model was made to better understand how many individuals could sustain these fish resources. The assemblages from the VI century were the richest, being able to feed 17454 inhabitants for a day, 582 for 30 days, 48 for a year and one inhabitant for 50 years in the first half of the century and 19835 inhabitants for a day, 661 for 30 days, 54 for a year and one for 50 years in the second half.

Aknowledgement. This work was supported by a grant of the Ministry of Research, Innovation and Digitization, CNCS - UEFISCDI, project number PN-III-P1-1.1-TE-2021-0544, within PNCDI III.

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