

ARCHAEOLOGIA BULGARICA



2016 3

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On the cover: a golden Early Hellenistic bridle frontlet found in the Great Sveshtari tumulus, NE Bulgaria; see the paper of Todorov et al. in this issue; National Archaeological Institute with Museum at Sofia, inv. # 9204, photo by Krasimir Georgiev.

The Results of XRF Analysis of the Early Hellenistic Gold Treasure From the Royal Necropolis of *Dausdava/Helis* (NE Bulgaria)

ARCHAEOLOGIA BULGARICA
XX, 3 (2016), 1-15

Boyan TODOROV / Veronika MIHAYLOVA /
Diana GERGOVA / Ivelin KULEFF

Abstract: The chemical composition of the gold objects, found in an oak chest in the embankment of the Great Sveshtari tumulus in Sboryanovo, from the last decades of the 4th century BC are analyzed by a handheld ED-XRF instrument – Bruker model Tracer III–V. The aim is to determine the concentration of gold (Au), silver (Ag), and copper (Cu). The results show that some of the objects were produced from high purity gold. The lowest value for concentration of gold is 93.5% and the highest one – 99.3%. However, such results on this stage of investigation do not allow any provenance studies for the determination of the sources of the gold.

Key words: treasure, gold, silver, copper, ED-XRF, Thracians, Getae, tumuli, Sboryanovo, Bulgaria.

INTRODUCTION

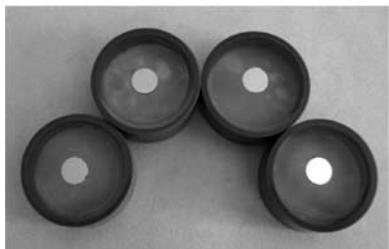
The number of archaeometric investigations of gold objects in general is relatively small; nevertheless some publications and books have been recently published (see e.g. Meller et al. 2014). The same could be said about the rarity of publications on investigations of gold finds from ancient Thrace (7th – 2nd century BC) (see e.g. Kuleff et al. 2009a; 2009b; Lesigyerski et al. 2015), although Bulgaria is one of the richest countries of ancient and mainly Thracian gold artefacts. The most recent Thracian gold treasure in Bulgaria was found during excavations of the Great Sveshtari tumulus at the Getic royal necropolis of *Dausdava/Helis*, in the Sboryanovo National reserve in 2012. It is dated to the end of 4th – beginning of 3rd century BC (Gergova 2013; 2015a).

Using handheld energy dispersive X-ray fluorescent analysis (pXRF) we determined the basic chemical composition of the objects – the concentrations of gold (Au), silver (Ag), and copper (Cu). The present paper is the first publication of an archaeometric analysis of the gold treasure from the Sboryanovo National Reserve district of Razgrad, Northeastern Bulgaria (**fig. 1**).

The Great Sveshtari tumulus belongs to the Southern group of tumuli of the Eastern royal Hellenistic necropolis of the Getic religious and political centre *Dausdava/Helis* (**fig. 1**). Earlier excavations of the tumulus in the 1990s, and in 2004, revealed a monumental Thracian tomb with semi-cylindrical vault and Doric columns in the main chamber in the South-eastern periphery of the tumulus, dated to the end of 4th – beginning of 3rd century BC. In a ritual pit horse and dog's sacrifices were found in front of the tomb and in the tumulus embankment. Paleo-seismic investigations showed that the tomb was destroyed by a strong earthquake in the beginning of the 3rd century BC (Gergova et al. 1995a; 1995b).



1



2

Fig. 2.1. Picture of the standards of Au, Ag, and Cu prepared with the support of IAEA, Vienna. View from outside

Fig. 2.2. View from inside



Fig. 4. Appliqué with the head of goddess (inv. # 9205)



Fig. 3. The gold diadem (inv. # 9200) and points of analyzes



Fig. 5. Two type of bracelets (inv. # 9202) and points of analyzes

the Scythians. Subsequently his daughter Meda became the next wife of Phillip II after the mother of Alexander the Great, and according to some authors she was the woman buried with the Macedonian king in his tomb in Vergina (Carney 2000, 68, 236-237).

We do not know the exact date of Kotelas' death, but we know the names of the rulers in the Getic-Macedonian conflict in 294-292 BC – Dromichaïtes and Lysimachus. It is logical to suggest that the death of Kotelas, who had played an important political and diplomatic role in the Thraco-Scytho-Macedonian relations in the last four decennia of the 4th century BC, should have preceded this conflict (Gergova 2013; 2015a; 2015b).

Thus the cultural and historical context of the treasure raises a series of questions concerning their close similarity to similar objects from Crimea and Macedonia as well as their origin, part of which could be clarified by complex archaeometric studies.

The short description of the analyzed samples of the golden treasure from Sbornyanovo is presented in **table 1**.

METHOD OF ANALYSES

A handheld ED-XRF instrument – Bruker model Tracer III-V with anode of rhodium, tube power of 40 kV, current of 3 μ A, and Ti/Al filter was used for the analysis. The standards used for the analysis were prepared by us with financial support by IAEA, Vienna (IAEA-project

The Roman Bronze Vessels from the Dacian Fortress at Ardeu (Hunedoara County, Romania)¹

ARCHAEOLOGIA BULGARICA
XX, 3 (2016), 17-31

Silvia MUSTAȚĂ / Iosif Vasile FERENCZ

Abstract: The article analyzes a series of eleven artefacts determined as parts or possible fragments belonging to Roman bronze vessels discovered on the perimeter of the archaeological site at Ardeu-Cetățuie. The objects were discovered during systematic archaeological excavations undertaken in the Dacian fortress or represent stray finds identified on the slopes of the hill or during stone quarry works carried out in the area. The chronology of the imported items stretches from the Late Republican/Augustan period to the 1st century AD. Even if it was based on a small number of discoveries, the analysis of the bronze vessels from Ardeu is important for understanding the dynamic of this type of Roman import in pre-Roman Dacia. Their presence at Ardeu suggests the existence of a community which desired and could afford to acquire such goods. In general, the finds show traces of intense/prolonged use or reuse (not only in the context of the workshop which functioned inside the fortress) – a fact which indicates their value for the local community.

Key words: pre-Roman Dacia, Ardeu, Roman bronze vessels, imports, reuse.

THE SITE

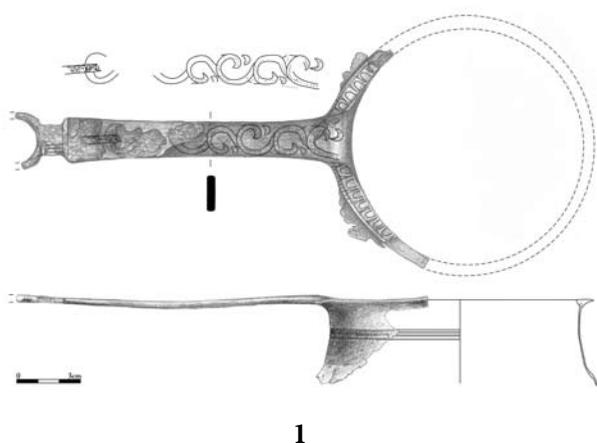
The archaeological site at Ardeu-Cetățuie is located on the territory of Ardeu village, Balșa commune, Hunedoara County (**fig. 1/1**). It comprises of a hill with the same name (maximum altitude from the Black Sea level 455 m), an eastern plateau, foothills, southern terraces, and the “Gura Cheilor”, at the base of the hill towards south-west (**fig. 1/2**). The hill with steep slopes is surrounded by Ardeu Valley and the watercourse on the northern and western part forms a short sector of gorges. Though most of the published information refers to the Late Iron Age, the different areas of the site have been inhabited during several historical periods (Ferencz / Roman 2010, 173).

The end of the 19th century marked the beginning of the archaeological research at Ardeu, carried out under the supervision of Téglás Gábor (Téglás 1885, 299-307; 1888, 134-138). Additionally, the opening of a stone quarry in the area, leading to the identification of various metallic artefacts, determined further research on the site in the form of small scale excavations undertaken by the Museum from Deva together with the National History Museum of Romania from Bucharest (Nemoianu / Andrițoiu 1975).

Starting with 2001 the Museum of Dacian and Roman Civilisation from Deva resumed the field research from Ardeu together with various partners: the 1 Decembrie 1918 University (Alba Iulia), the National History Museum of Transylvania (Cluj-Napoca), and the Corvin Castle Museum (Hunedoara) (Ferencz et al. 2011; 2010; 2005; 2004; 2003; Pescaru et al. 2002).

The field research determined the identification of the precinct wall made of local stone bound together with clay and completed with timber structures which surrounded the hilltop. The space inside the fortress seems to have been divided in two distinct areas: to the north

¹ This work was supported by a grant of the Ministry of National Education, CNCS-UEFISCDI, # PN-II-ID-PCE-2012-4-0618.

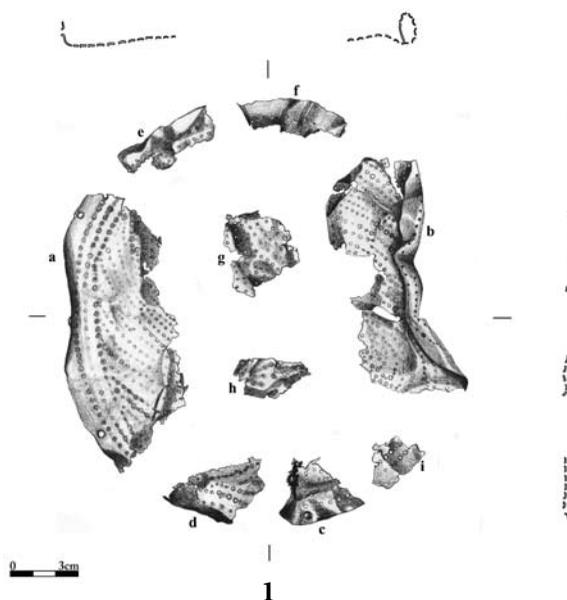


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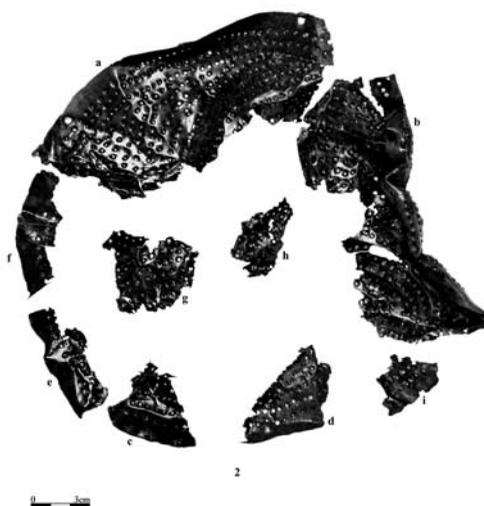


2

Fig. 2. Bronze saucepan from Ardeu: 1 Drawing (drawn by O. Bocănciu); 2 Photo (by S. Mustăță) (after Mustăță et al. 2014, 47-48, fig. 2-3)



1



2

Fig. 3. Strainer from Ardeu: 1 Drawing (drawn by O. Bocănciu); 2 Photo (by S. Mustăță)

the straining area was still in good shape, so it could be reused for the same activity on a different setting.

The bronze foot belonging to a Tassinari S1100 basin (Tassinari 1993, I/ 93, II/ 200-201, S1100) discovered at Ardeu (catalogue # 3; **fig. 4/1-2**) has long been known in the archaeological literature (Mărghitan 1976, 17-18, fig. 2; Medeleț 1995, 95, fig. 1/2a-b; Rustoiu 1996, 70, 256, fig. 20/7; Iaroslavschi 1997, 68-69, 194, Pl. XLII/3; Božič 2002, 419-421, fig. 2/1; Gheorghiu 2005, 156, 471, fig. 197/18; Ignjatović 2005, 13-16, fig. 3/1; Rustoiu 2005, 80, 117, fig. 24/1; Moga / Plantos 2007, 15, # 12). Its initial interpretation as a goldsmith's anvil, together with other similar discoveries, was revised by Dragan Božič who identified their functionality as feet belonging to Tassinari S1100 basins (Božič 2002, 419-421). Similar objects have been identified at Sarmizegetusa Regia (1), Costești-Cețățuie (1), Divici (1), Belgrade-Karaburma: grave

An Overlooked Inscription of *Ala I Aetectorigiana* from *Appiaria*

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XX, 3 (2016), 33-40

Nicolay SHARANKOV

Abstract: The paper publishes a Latin inscription from the Roman fortress of *Appiaria* (near modern Ryahovo, Northern Bulgaria) on the Lower Danube *limes*. It was copied in 1883, but the copy, although quoted in a scholarly publication, was incorrectly considered too bad. Thus no attempt to read the text was made. Actually, the copy is rather good and allows an almost complete restoration of the text. It is a dedication to Mars erected by *ala I Aetectorigiana* and provides definitive proof that this auxiliary unit was stationed in *Appiaria*.

Key words: *Ala I Aetectorigiana*, *Appiaria*, Roman auxiliary units, Lower Danube *limes*.

VELIKO TONCHEV'S LETTER OF 1883

In September 1883, Veliko Tonchev, a teacher in the village of Oryahovo (now Ryahovo), district of Ruse, sent copies of three Latin inscriptions to the editor of *Periodichesko spisanie* ('Periodical Review', journal of the Bulgarian Learned Society). The inscriptions were found in the ancient fortress placed about 1½ hours to the east of the village, i.e. in Roman *Appiaria*¹.

Of these three inscriptions only the third one survives (**fig. 1**) and has been published many times (Škorpil 1894, 193, # 55; *AE* 1895, 50; *CIL* III 12452 and p. 2316⁴⁸; Kalinka 1906, 293, # 373; Гергов 1953, 308, 362, # 87; Conrad 2004, 224, # 363; etc.; a revised reading is proposed below). In the early 1890s it was built into the house of Veliko Raykov in Ryahovo, and then entered the collection of the National Archaeological Museum in Sofia².

In 1952 V. Beševliev published his book, *Epigrafski prinosi* ('Epigraphic Contributions'), where he mentioned V. Tonchev's letter and used the teacher's copies of the other two inscriptions. However, Beševliev proposed a reading and commentary only for the first inscription, while for the second he considered the copy inadequate ('незадоволителен') and was able to recognize only the name *Rufinus* and the word *praef(ectus)* or *praes(es)* at the end of the text (Бешевлиев 1952, 71-72, # 122). Actually, the copy is rather good and enables us to read the inscription, a dedication by an auxiliary unit stationed in *Appiaria*.

V. Tonchev's letter of 1883 is kept at the Scholarly Archive of the Bulgarian Academy of Sciences: fund 1, inventory 2, archival unit 19 (Bulgarian Learned Society: Letters and Reviews, 12.02.1883 – 30.12.1883), document 39. Its text has not been published, so it appears useful to quote it *in extenso* (original orthography preserved):

¹ On the history of *Appiaria* and the archaeological remains there, see Иванов 2003.

² It is now exhibited in front of the National Historical Museum in Sofia.

До Господина Редактора на „Периодическо списание“,
Въ гр. София

Честъ имамъ Господине да Ви донеса надписы, отъ три камацы,
изровени отъ калето, което ся намира на вѣсточната странж отъ селото ни на



Fig. 1. Funerary inscription, set up by a commander of *ala Atectorigiana* in *Appiaria*: a) photograph; b) drawing on the photograph

above) have omitted some of the letters in the complicated ligatures. I therefore propose a revised reading, having taken into consideration all the ligatures:

D(is) M(anibus)
Cornel(iae) Alexandrae,
q(uae) vix(it) an(nos) XXIII, m(enses) III, d(ies) X,
T(itus) Fl(avius) Marcianus,
praef(ectus) eq(uitum) al(a)e Atect(origianae), 5
uxori piissimae p(ecunia) s(ua)⁶.

Ligatures (those noted in Tonchev's copy are underlined): l. 2: CO, NE, ALE, XA, ND, RAE; l. 3: AN, XX, MIIDX; l. 4: FL, MAR, CI, AN; l. 5: RA, EF, ALE, ATE; l. 6: VX, IP, IS, SI, MAE. I would add that Tonchev's copy also gives correctly the places and shapes of the interpuncts. This attests to his carefulness and confirms his words that he copied all the letters 'as they are on the stones'.

The examination of the original copy of the first inscription allows a few corrections to the restoration proposed by V. Beševliev (Бешевлев 1952, 71-72, # 122 = AE 1957, 307):

[Imp(erator)] C<a>esar Vespasian[us Aug(ustus), pont(ifex) max(imus), trib(unicia) pot(estate) | VII, im]<p>(erator) XV, co(n)s(ul) VII, p(ater) p(atriciae), p[er Sex(tum) Vettulenum Ceri]alem} {G} (?) <l>eg(atum) Aug(usti) pr(o) pr(aetore), coh(ortibus) [- - - et - | - -]orum, qu<i>bus prae[sunt] - - - | et] Q(uintus) Varius Secundus [- - -?].

If the restoration is correct the date of this building inscription is AD 76; however, if the emperor was not Vespasian, but Titus⁷, then the text belongs to the second half of AD 79.

On two occasions V. Beševliev set incorrectly the line division, without noticing that Tonchev split the lines in his copy only because lack of place, but duly noted this through hyphens: *Cel.... | [le]g. Aug.* (Beševliev) against *GEE-|G AVG* in Tonchev's copy (i.e. there was no line division between E and G on the stone, and therefore the letters *EE* are not part of

⁶ Or *p<o>s(uit)* with an omitted O, cf. the blank space between P and S on the stone.

Some Metric Observations of the St. Sophia Church in Sofia

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XX, 3 (2016), 41-50

Todor CHOBANOV

Abstract: The present article analyzes the fifth and presently existing building period of the St. Sophia church in Sofia, Bulgaria. The analysis begins with an overview of the temple's significance for the present day Bulgarian capital that owns its name to the very same church. A brief information about the excavations carried during different periods is presented, emphasizing on the latest research period (1997-2008). Information about the different mosaic floors/floor levels is discussed and the chronology of the periods is established. The main part of the research is focused on the fifth building period church, roughly dated in the mid-6th century and belonging to Justinian the Great's building program. A metric study of this structure is presented, leading to conclusion that key similarities are evident with the contemporary structures in Constantinople. The metric features of the capital building program are evident strengthening the conclusion of Justinian's role for the construction of the fifth period church.

Key words: metric study, Justinian, basilica.

The "St. Sophia" church situated in the Bulgarian capital bearing the same name is one of the most intriguing Byzantine monuments of the Early middle ages. It has a spectacular history that is entering now into its newest stage – the construction of an underground museum, devoted to the Christian tradition of modern Sofia. The archaeological excavations and architectural works related to the preparation of the museum have revealed new data (Шалганов 2002, Мешков 2010) that helps to establish the facts that remained obscure during previous research. However there are still questions to be answered, some of which this article is trying answer.

Being one of the landmarks of Sofia and giving the name of the modern city (after *Serdica* and *Sredets*) the church has always been very popular amongst the local population and the guests of the city. In the beginning of the 20th century it became subject of renewed interest, systematic excavations were carried in 1910 and 1911, and in 1913 a key monograph was published by the researcher and lead Bulgarian archaeologist at the time, Bogdan Filov (Филов 1913). This work was and still is characterized as "Standardwerk" due to its depth of analysis and clarity of style, combined with magnificent pictures and schematics; it was recently republished (Филов 2004). Other Bulgarian scholars have also published articles on St. Sophia (Протич 1912) around the time of the excavations and later, but after Filov's capital work no one to date has been able to achieve such significant progress.

Immediately after the 1910-1911 excavations restoration works began that led, after several stages of work, to the well-known present condition of the church. In the last two decades a continuous effort has been carried out to restore the underground levels and prepare for the future museum. This process, aimed at the careful restoration of the multiple tombs and the preservation of the structure above, enabled

the scientific community to re-check Filov's analysis and collect additional data. **Figure 1**, a diagram, designed by the senior developer of the project, architect Kitov, shows an isometric view of the underground levels. The construction periods are shown in different patterns; the presently existing structure should be considered the fifth and final period of existence.

Multiple construction periods were evident to Filov during the 1910-1911 excavations. He started excavating at what was back then the floor of the mosque that St. Sophia became during the Ottoman period. Under that mosque floor he easily traced the floor of the latest church which he referred to as "original church floor" (floor of period five church). Under that he discovered two older floor levels with mosaics, one was found at a depth of 0.6 m under the latest (original) church floor, and the other was at about one meter under (-1.10 m). The excavations also brought to light many artifacts. For instance Filov discovered multiple copper coins in-between the two mosaic floors; the oldest are dated in the time of emperor Licinius (308-324) and the latest are from the times of Arcadius (395-408). This allowed Filov to attribute the oldest church (period one) to early 4th century and the one with the upper mosaic floor to early 5th century (period four church). He used the floor levels of those older church buildings to distinguish between them and was able to conclude that at least two older church buildings existed before the latest one plus traces of more, even older buildings could be witnessed in the area of St. Sophia's apse (Филов 2004, 92-93). Using the characteristics and composition of mosaics on those two lower floor levels he was able to distinguish between different sub-stages of existence of the older churches. For example it was evident that the extension of mosaics of the so called "lower mosaic floor" church could be marking the extension of the building which they belonged to.

Presently we still could generally assign the lower mosaic floor to building periods one and two (with AD 311 as initial date for period one). However it appears, after the latest excavations, that the initial covering layer (depth -1.35 m from the present floor) was implemented in *opus signinum* and the mosaics were added over the existing floor

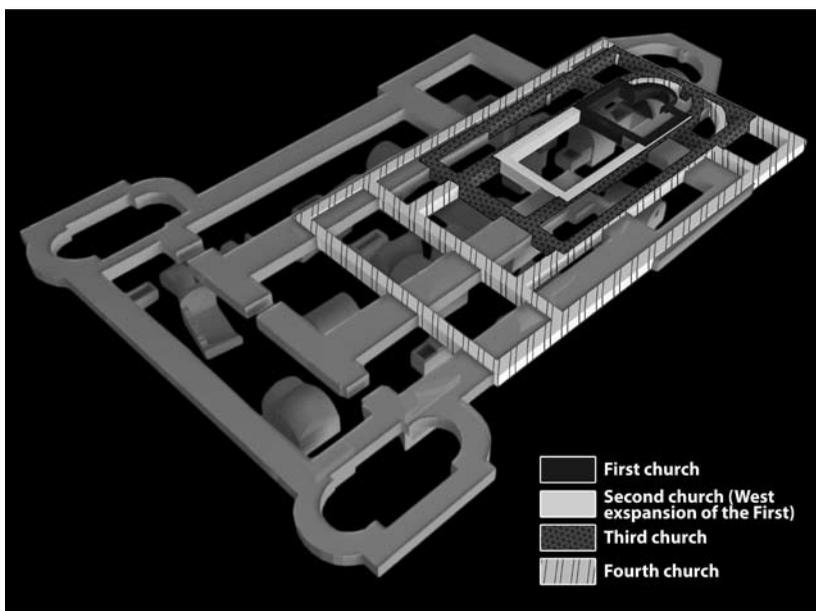


Fig. 1. Isometric diagram of the church of St. Sophia with the five building periods (design V. Kitov)

Shedding Light on a Murky Matter: Remarks on 6th to Early 7th Century Clay Lamps in the Balkans

ARCHAEOLOGIA BULGARICA
XX, 3 (2016), 51-116

Florin CURTA

“Is a lamp brought to be put under a basket or under a bed? Is it not to be set on a lampstand? For there is nothing hidden which will not be revealed, nor has anything been kept secret but that it should come to light.” (Mark 4:21-22)

Abstract: Despite a great number of typological studies, late antique lamps, particularly those dated to the 6th and 7th century, have been rarely used as evidence for discussion of economy in the Balkans. Finds from individual sites have been published, as well as museum collections, but without much concern for a comparative approach at the scale of the entire Peninsula, in order to identify patterns of distribution and thus to link them to trade or economic trends. Only rarely have lamps been studied in the archaeological context, in order to shed light on the way in which they were used, and the particular spaces inside settlements in which artificial light was needed. Early Byzantine lamps have now been found in significant numbers in the lands to the north from the river Danube, but with a few exceptions, there is no attempt at an archaeological interpretation of this phenomenon that would link finds in *barbaricum* with those in the Balkan provinces of the 6th- and early 7th-century Empire. This paper attempts to answer a number of key questions: why were some lamps imported into the Balkan provinces, while others were produced locally? Were there any lamps exported from the Balkans? What were the uses of those objects in the daily life of the hilltop military sites in the Peninsula, and how can the presence of lamps outside the Empire be explained? The paper seeks answers to those questions through the examination of 11 groups, 10 of which are based on well-defined types. Those types fall into 5 major categories—North African, Greek, Syro-Palestinian, Asia Minor, and Danube (or Balkan) lamps. North African lamps of the Atlante X type appear especially in the northeastern and eastern region of the Adriatic Sea, with the largest number of finds from the fortified site in the Madona Bay on the Brijuni Island. Such lamps have been found in churches, but also in secular buildings, as well as in caves. Corinthian imitations of North African lamps also appear in churches, but unlike North African lamps, they are often found in graves, most likely because of the symbolism attached to light in a mortuary context. That symbolism may also explain the deposition of lamps in wells—a phenomenon so far attested on only two sites in Greece, Corinth and Athens. In Corinth, lamps were deposited in very large numbers in a fountain, abandoned together with the bath complex on the western side of the gymnasium in Corinth. In Nea Anchialos, however, Corinthian imitations were associated with a large number of coins pointing to commercial exchanges. Only three Syro-Palestinian lamps are known—all from the lands north of the river Danube. One of them is particularly interesting: a Small Candlestick specimen found in an inhumation grave in Ploiești. Since there are no analogies known in the Balkans, the lamp may have come from Transylvania, to which North African lamps made their way as well from the Adriatic coast. Although believed to have been produced somewhere in what is now Turkey, Asia Minor lamps were definitely manufactured in the Balkans as well, as indicated by the mould found in Archar and the miscasts discovered next to a kiln in Murighiol. Such lamps appear in secular contexts—houses in Histria, Karasura, and Golemannovo kale. But they have also been found in burials, both in Greece and in Dobrudja (Piatra Frecăței). A local production is also documented archaeologically for the lamps of

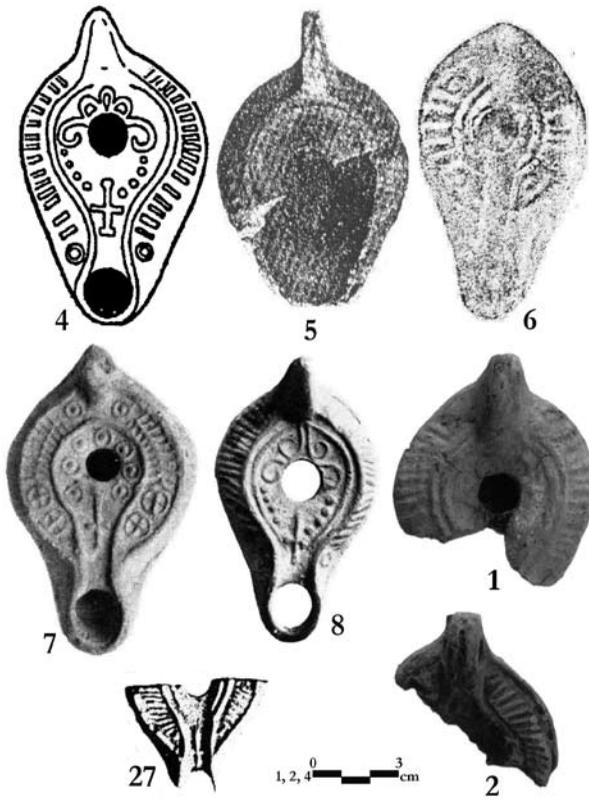


Fig. 32. Danube lamps with striations on the shoulder (Iconomu XXX) in the Balkans. Numbers refer to list 5.

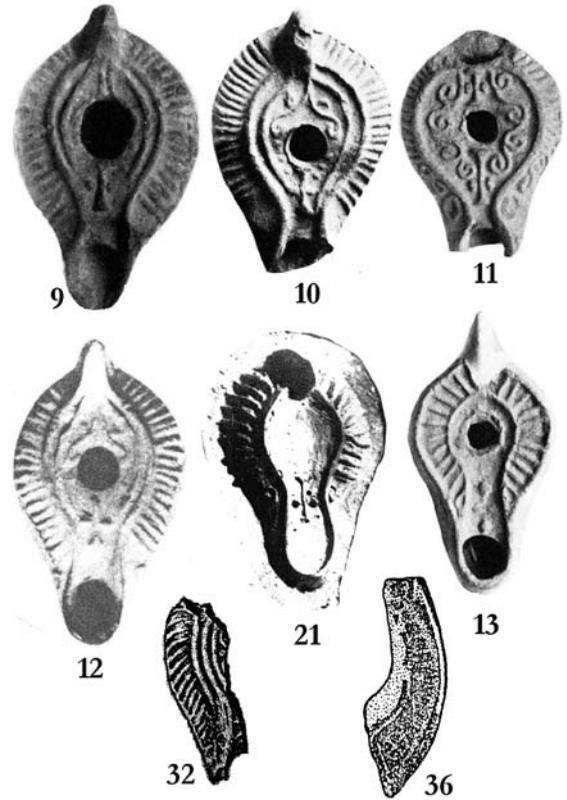


Fig. 33. Danube lamps with striations on the shoulder (Iconomu XXX) in the Balkans. Numbers refer to list 5.

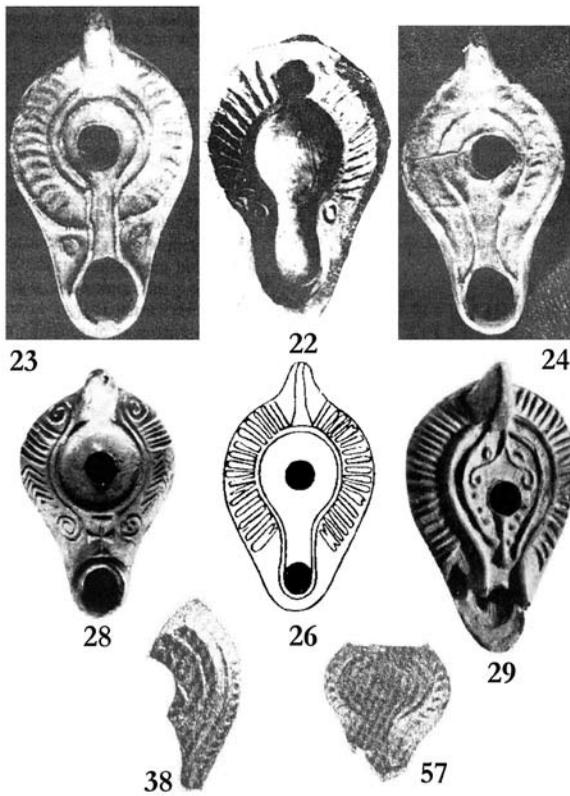


Fig. 34. Danube lamps with striations on the shoulder (Iconomu XXX) in the Balkans. Numbers refer to list 5.

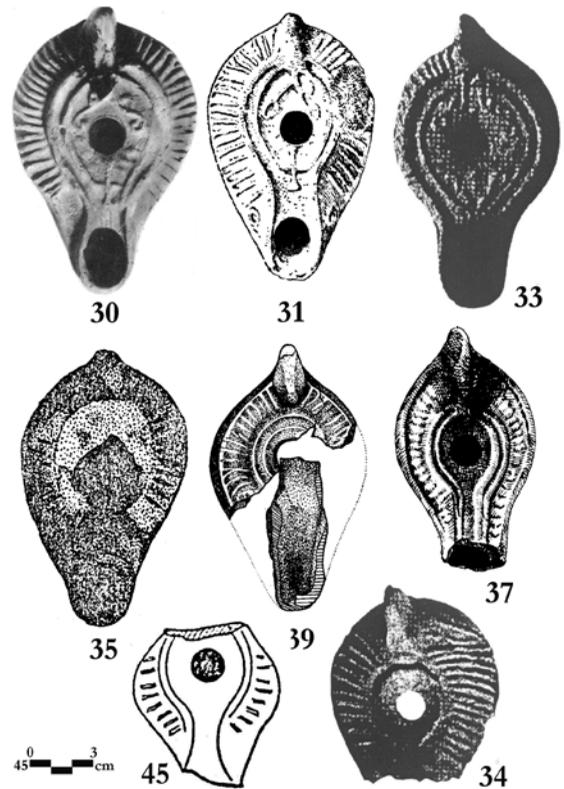


Fig. 35. Danube lamps with striations on the shoulder (Iconomu XXX) in the Balkans. Numbers refer to list 5.