

# ARCHAEOLOGIA BULGARICA



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On the cover: Gold pendant from Pliska, 10<sup>th</sup> c. AD; see the paper of M. Inkova in this issue; photo by Ivaylo Levicharov.

# The Early Bronze Age Rings of Type Leukas – New Considerations Regarding Their Origin, Distribution and Function

Archaeologia Bulgarica  
I, 1 (2017), 1-13

Zheni VASILEVA

**Abstract:** The present paper is focusing attention on the Early Bronze Age rings of type Leukas and aims to study their origin, spatial and chronological distribution. The period under discussion is the Early Bronze Age – time of intensive circulation of goods, ideas and fashion all over the Aegean and the Eastern Mediterranean. Special attention is given to the distribution, the context and the function of the ornaments, type Leukas. Indeed, new find spots from the Balkans and the Carpathian Basin are added to the distribution map of Leukas-type rings. The relevant archaeological materials give us a new opportunity to examine the fashion and the directions of influences in Early Bronze Age jewellery production. The research demonstrates the idea for a Balkan origin for the Leukas-type rings and reflects some new accents of the relations between the Aegean, the Balkans and the Carpathian Basin.

**Key words:** Early Bronze Age, gold, rings, Leukas, Balkans, Carpathian Basin, luxurious objects, jewellery.

## Introduction

The archaeological record indicates that the Early Bronze Age (henceforth EBA) was a period of constant change, the most important of which was undoubtedly the spread of metalworking techniques. Third millennium BC had been an era of economic development in the areas around the Aegean Sea. The increased commercial contacts during the EBA greatly influenced the style and technique of the jewellery fashion. Studies in the recent years significantly enlarged our knowledge about the EBA jewellery production on the Balkans and allow us to re-examine and discuss again the interpretation of certain types of ornaments.

Well known benchmarks of the third millennium BC are the items of jewellery production. Gold and silver jewellery has been one of the most vivid expressions of this dynamic period. They have yielded important information about the technical skills of the masters, but also for the aesthetic necessities, the creativity and the innovative potential of the EBA communities. The metal ornaments also shed light on the cultural and trade contacts, and the exchange of fashion ideas and technological skills between distant regions.

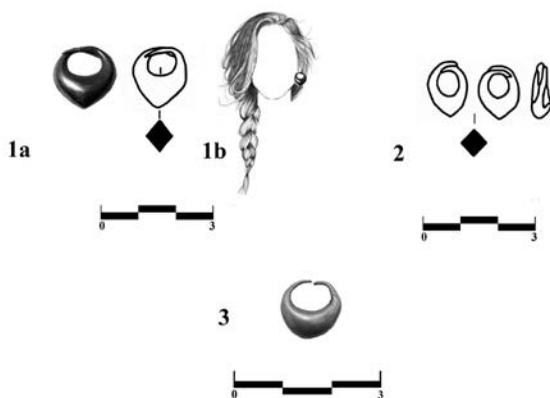
The close affinities in the jewellery production in the Aegean world give evidence for the existence of a jewellery *koine*. Most spectacular was the rise of Troy, but it is not the only case in question (Laffineur 2008, 323; Vasileva 2016). The rich grave assemblages and treasures found in the zones between Adriatic and the Near East demonstrate the rise of elite groups and a consumption of luxury goods. These rich grave assemblages have been analyzed and discussed by many scientists. They emphasized that there are supra-regional similarities in the way social status was evaluated. The luxury and exotic burial gifts found in these

in rich burial complexes with distinctive burial gifts like the cemeteries at Leukas, Velika Gruda, Mala Gruda, etc. Nevertheless the presence of ornaments made of precious metals in the EBA Thracian barrow graves is accepted as symbol of prestige and probably higher status of the owner (Primas 2016). Anyhow the rings from Yunatsite and the barrow grave at Venets shed new light on the distribution and the presence of rings of type Leukas in EBA Thrace. It is quite probable the number of the rings of type Leukas in present-day Bulgaria is to increase as a result from the intensive archaeological excavations and the publication of unpublished artefacts.

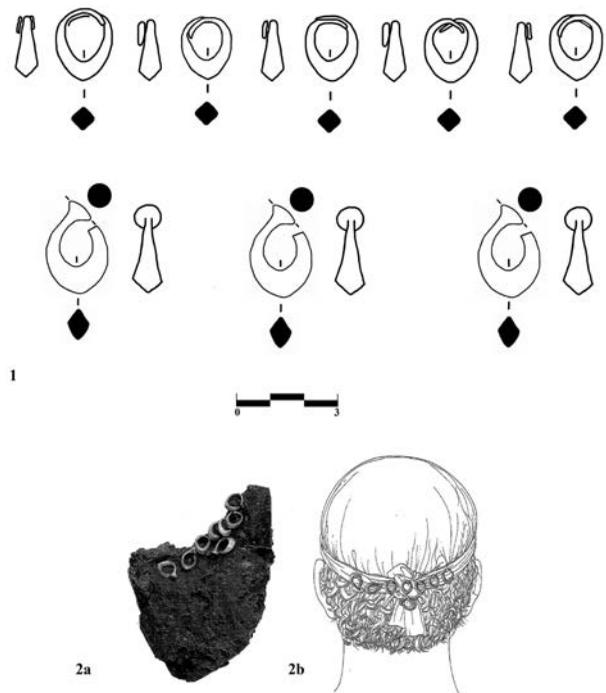
Similar ornaments have been found also at the rich EBA grave assemblages in present-day Montenegro. The group includes the so-called “princely” tumuli at Velika Gruda, Mala Gruda and Gruda Boljevi a located at the Adriatic shore (Ciugudean 2011, 27). The main characteristics of this group of barrows include monumental mounds and rich central graves. The monumentality of the barrows, as well as the richness of the graves reflects social stratification in the local society. Among the burial inventory are found metal weapons (gold and silver daggers) and metal ornaments. Special attention is paid to the elaborated gold rings found in the central graves. M. Primas has recognized two distinctive types:

- the first type (type Leukas) has drop-shaped form with a rhomboid cross-section, the ends of the ornaments are narrow, pointed and overlapping;

- the second type (type Mala Gruda) has drop-shaped form with a rhomboid cross-section with one narrow, pointed end and one broader conical end.



**Fig. 3.** Ornaments, type Leukas: **1a** The gold ornament from cemetery Turnava, Northwest Bulgaria (photo by Regional Historical Museum Vratsa), **1b** Reconstruction of the ornament as earring (after Zh. Vasileva), **2** The gold ring from Tell Yunatsite, Upper Thrace (after Mitkova 2011, fig. 1), **3** The gold ring from Tonchova mogila, Venets (after Primas 2016, in press)



**Fig. 4.** The cemetery Velika Gruda: **1** The ornaments type Leukas and Mala Gruda from grave 1, Velika Gruda (after Primas 1996, Abb. 6/4), **2a** The ornaments from Velika Gruda *in situ* (after Primas 1996, Abb. 6/2), **2b** Reconstruction of the ornaments from Velika Gruda as hair-rings (after Primas 1996, Abb. 6/3)

# A Verse Epitaph and Other Unpublished Inscriptions from *Heraclea Sintica*

ARCHAEOLOGIA BULGARICA  
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Nicolay SHARANKOV

**Abstract:** The paper publishes recently found Greek inscriptions from *Heraclea Sintica* (near the village of Rupite, south-western Bulgaria). A second-century AD funerary monument with verse epitaph recounts the story of the deceased Kasandros who was killed on the road; his dead body was found by his brother Pyrrhias, who erected the monument. The author of the text was influenced by Homer and Attic tragedy. Six Hellenistic funerary stelae contain several rare or previously unattested names. A statue-base from the mid-second century AD, found on the *agora* of the city, honours posthumously a citizen whose names present a peculiar combination of the local and Roman onomastic patterns.

**Key words:** verse inscription; Greek literacy; *Heraclea Sintica*; Hellenistic and Roman Macedonia; funerary stelae; ancient onomastics.

## I. VERSE EPITAPH OF KASANDROS

The funerary monument was found in 2016 during illegal digging at the locality of Aydaritsa (belonging to the village of Mitino), close to the bank of the river Strumeshnitsa/Strumitsa; it was afterwards entered into the collection of the History Museum in Petrich. The site at Aydaritsa (Домарадски et al. 2001, 38-43, 186-195, обр. 32-44) is connected with the city of *Heraclea Sintica* which is located at a distance of less than 1 km to the north<sup>1</sup>. For many centuries it was one of the main necropolises of the city, as evidenced by the presence of numerous grave monuments<sup>2</sup>.

### The Monument

It is a pedestal made of the local yellowish limestone, narrowing towards the top and moulded on top and base (**fig. 1**). It is 176 cm high, 76 wide and 69 thick at the upper moulding; the body is wide from 56 (top) to 65 cm (bottom), and from 60 to 62 cm thick. The upper moulding, damaged on the front and right side, has been adorned with pediments and acroteria, as seen on the preserved left side (**fig. 2**); similar decoration is present on other funerary monuments from *Heraclea* (**fig. 3**). The preserved part of the upper surface is flat; part of the stone probably broke (apparently still during the production of the monument) and was repaired, as evidenced by four slots and grooves for metal clamps to the top right (**fig. 4**): the slots are rectangular and with different dimensions and depth<sup>3</sup>; the clamps, as the grooves show, were about 2.5 cm wide. On the front, left, and right sides of the main body, there are profiled rectangular/trapezoid frames (**fig. 5**), with dimensions (from the outside): 75 x 45/52 cm (front), 75 x 40/40 (left), and 74 x 40/41 (right); the back of the monument is flat.

### The Inscription

The epigraphic field is 63.5 cm high and 34 (top) to 40 cm (bottom)

<sup>1</sup> The two sites are now divided by the river Strumeshnitsa, but this is due to the moving of the river bed to the north in the 1930s.

<sup>2</sup> Cf. Домарадски et al. 2001, 39, 40-41, 187, обр. 33, 190, обр. 34/а-в; Митрев 2011, 34, # 4. See, in the second part of the present article, six Hellenistic funerary inscriptions from the Aydaritsa necropolis, as well as the revised reading of a list of names found there (Зарева 1983, 29-31, #1, обр. 2 = *IGBulg* V 5922 = Манов 2008, 117, # 141).

<sup>3</sup> 2.5 x 2.5, 2 cm deep; 4 x 2.5, 4.5 cm d.; 3 x 4, 2.5 cm d.; 5 x 5 cm, unknown depth (there is still lead in the slot).



**Fig. 3.** Funerary altar with verse inscription from *Heraclea* (IGBulg IV 2326), re-used in the church in the village of Rupite



**Fig. 4.** Funerary monument of Kasandros: 1-2 slots for metal clamps



**Fig. 5.** Funerary monument of Kasandros: 1 left side; 2 right side



**Fig. 6.** Funerary monument of Kasandros: inscription on the front

**Commentary**

L. 4 ἐς Σαρμέαν: this toponym is unattested before; its nominative should be Σαρμέα (or \*Σαρμαία, here written phonetically with E instead of AI?)<sup>5</sup>.

L. 7 Λαέρτου γόνος: the ‘son of Laertes’ is Odysseus, here adduced as an example of a trickster and deceiver betraying his friends (see below for the possible sources for the motive).

L. 8 εἶτ’ ἐπανελθών: the first letter has been corrected; originally, it was apparently I, which was then corrected into E, or rather into EI, since εἶτ’ ἐπανελθών would fit better the logic of the passage than ἔτ’ ἐπανελθών; the initial ΙΤΕΠΑΝΕΛΘΩΝ (i.e. ἴτ’ ἐπανελθών) would have been a phonetic spelling with I for EI.

L. 10-11 δε|δ<μ>ημένον: the reading on the stone is ΔΕ|ΔΑΗΜΕΝΟΝ, but δεδαημένον ‘skilled, learned’ here makes little sense, so I emended it to δεδημημένον ‘killed, murdered’. Both perfect participles δεδημημένον (from δάμνημι/δαμάζω ‘to subdue, to kill’) and

<sup>5</sup> The possible meaning and location of *Sarmea* are discussed below.

# Contribution to the Study of Roman Architecture in *Viminacium*: Research of *Thermae* Masonry Techniques<sup>1</sup>

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Emilija NIKOLI / Bebina MILOVANOVI / Angelina  
RAI KOVI SAVI

**Abstract:** Previous archaeological excavations of *Viminacium*, the Roman city and military camp in the territory of today's Serbia, were mainly of a protective character and based on necropolises, while buildings on the site have been researched to a lesser extent. One of these buildings is the Roman baths, or *thermae*, which is located near the amphitheatre and the fortress. The theme of this paper is the architectural research of the building or, more precisely, a review of the masonry techniques and materials used in the building. In order to obtain relevant conclusions, it also includes a brief overview of the ceramic and numismatic material. This work shows that the results of architectural research are closely associated with the analysis of the movable material, and vice versa, and that conclusions regarding the history of a building can only be reached on the basis of multidisciplinary research.

**Key words:** *Viminacium*, Roman baths, *thermae*, Roman architecture, masonry technique, Roman coins, pottery, brick.

## Introduction

*Viminacium* was a Roman city, a military camp and the capital of the province of *Moesia Superior* (*Moesia Prima* in Late antiquity). The territory was occupied by the Romans in the 1<sup>st</sup> century AD. The settlements flourished during the following centuries, but also survived different historical destructions up until the 7<sup>th</sup> century, when they finally fell under the Slav attacks (Mirkovi 1968, 56, 63-73). The graves excavated in the necropolises, more than 13,500 to date, offer the most valuable data for reading and interpreting the history of this city (Golubovi / Kora 2013, 65). However, the buildings on the site have been researched to a much lesser extent. One of these buildings is the *Viminacium* baths, the *thermae* (fig. 1, 2), excavated under the direction of the Institute of Archaeology in Belgrade, from 1973 to 1974, and from 2004 to 2007.

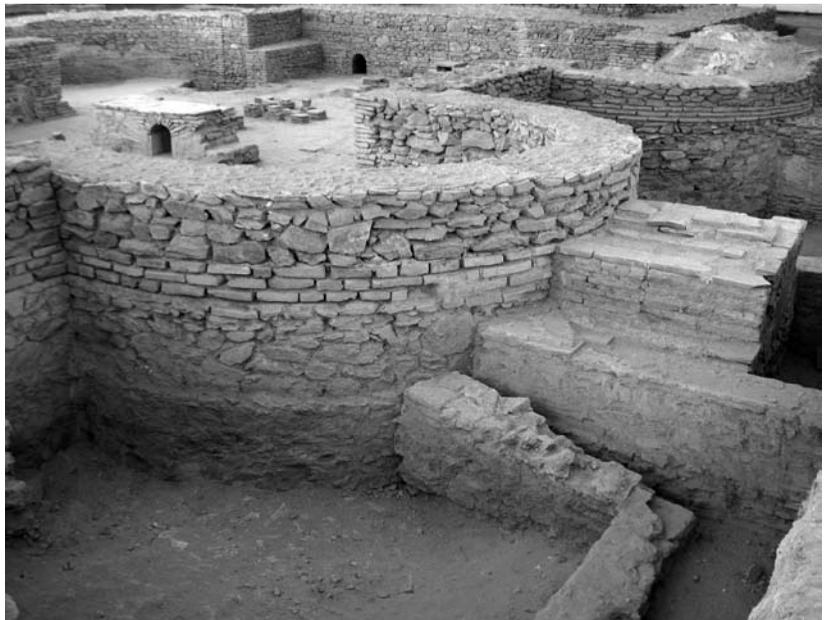
Archaeological excavations of *Viminacium* have confirmed the existence of several phases of Roman settlement (Zotovi 1973, 49-50; Kondic / Zotovi 1974, 96), which are visible in the baths building. Previous studies showed that there were three construction periods and that the building of each subsequent period was built on the ruins of the previous one. Based on the movable material that was found, the first building of the *Viminacium* baths was dated to the 1<sup>st</sup> and 2<sup>nd</sup> century, the middle phase belongs to the 3<sup>rd</sup> century, while the youngest phase of the building is dated to the 4<sup>th</sup> century (Kondic / Zotovi 1974, 97; 2008, 51-55). The reason for the cessation of life in the first phase of construction is unknown, while the baths

<sup>1</sup> The article results from the project: IRS – *Viminacium*, Roman city and military camp – research of the material and non-material culture of inhabitants, using the modern technologies of remote detection, geophysics, GIS, digitalization and 3D visualization (# 47018), funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

**Fig. 1.** *Viminacium* baths today, after partial restoration: view from the southwest. Documentation of the Institute of Archaeology, Belgrade Documentation Centre of *Viminacium*



**Fig. 2.** *Viminacium* baths today, after partial restoration: view from the southeast. Documentation of the Institute of Archaeology, Belgrade Documentation Centre of *Viminacium*



(*horreum*), which dates from the late 2<sup>nd</sup> century and the beginning of the 3<sup>rd</sup> century. This was also built over an older building, of unknown function, dated to the 1<sup>st</sup> century AD. Part of the youngest building was turned into a cult object during the 4<sup>th</sup> century ( 1985, 76-78; 2002, 116, 118, 120). The thermal complex *Aquae Iasae*, in Varaždinske Toplice, in Croatia was built in the 1<sup>st</sup> century AD. With various additions and modifications, it lasted until the 4<sup>th</sup> century. The baths also went through several phases, whereby each one was built over the previous one, and all were subjected to fire resulting in destruction and looting (Viki -Belan i / Gorenc 1971, 121-157).

### Masonry Techniques

The different layers of the *Viminacium* baths building which lay one over the other and can be seen in the cross-section of floors in some rooms, are witness to the phases of its construction, and are certainly in accordance with the historical conditions, the ups and downs of *Viminacium*. After archaeological excavations in 1974, three explored floor surfaces were assigned to the youngest phase, two were assigned

# A Tenth Century Gold Pendant from the Inner City of Pliska

Archaeologia Bulgarica  
I, 1 (2017), 59-73

Mariela INKOVA

*In memory of the discoverer and first researcher  
of the Preslav Treasure Professor Totyu Totev*

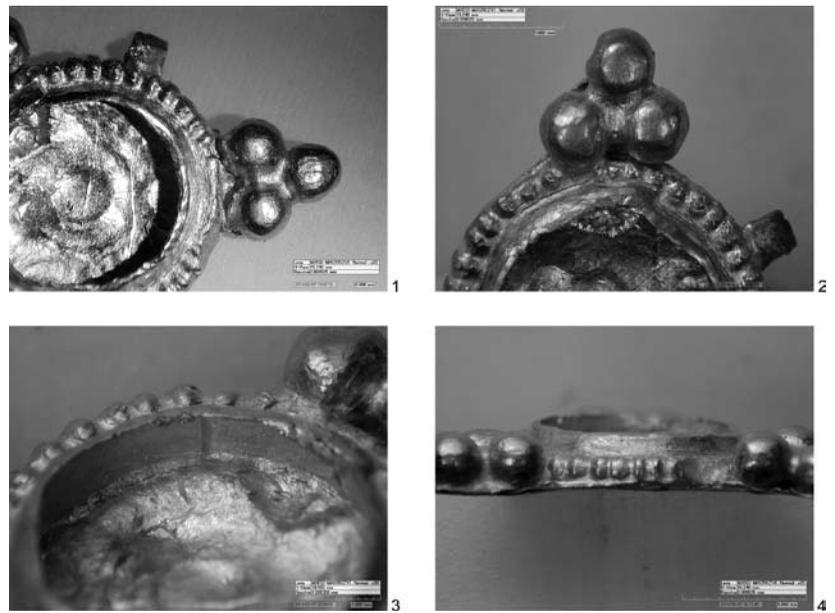
**Abstract:** The adornment was discovered in the Inner city of Pliska during regular archaeological excavations. It is a two-sided triangular shape, on one side decorated with a cabochon and triangles of three granules each, and on the other with three almond-shaped leaves, whose tips are pointing towards the periphery. It is made of high-grade gold. The presence of cracks between the side clusters of three granules and the main part, as well as the analysis of the connections between them, indicate a gradual construction. The almond motif dates the jewellery in the 10<sup>th</sup> century.

**Key words:** Old Bulgarian metalwork, Pliska, technology, gold, SEM-EDX, morphology, 10<sup>th</sup> century.

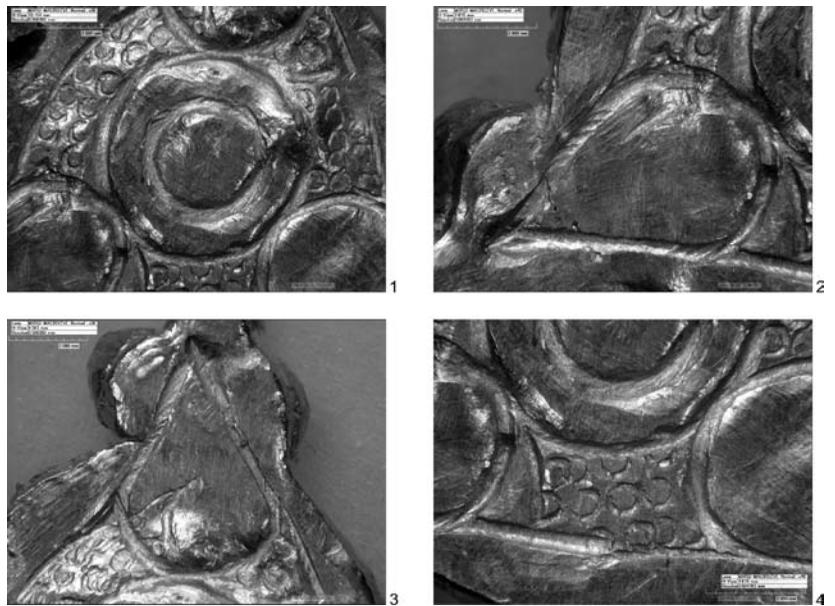
After more than a hundred years of researches in the first Bulgarian capital Pliska, the amount of luxury adornments of precious metal is still relatively small. Most of them come from the Outer City and its environs. The amount includes the so called Second Madara Belt Set ( [1934, 429-438](#)), the ring from Matnitsa (Mavrodinov 1943, 77-88, fig. 49), the gold ring with a Greek inscription ( [1992, 252, # 88](#)), the gold belt fittings from sarcophagus # 4 ( [1979, 51-59, . 29-38](#)) and the gold adornments from the necropolis at the Great basilica ( [1979, 76-80, fig. 13, 15, 18](#)). Against this background stand the separate finds from the Inner City of Pliska (Shumen region, NE Bulgaria; Pliska was the first capital until 893 AD of the First Bulgarian Kingdom, 681-1018 AD), all found in regular archeological excavations – a gold pectoral cross, found during the researches of the Western wall (Dontcheva 1976, 59-66) and the glass cabochons decorated with gold foil ( [et al. 2013, 358](#)). They come from a pit west of the Round Stone platform. It is the scanty amount of precious jewelry belonging to the Bulgarian nobility of Pliska that motivates me to publish a gold pendant - an excavated find from the archaeological research on the site to the north of the Citadel.

The gold adornment is triangular and bilaterally decorated. At the centre of the one side there is a round socket for a cabochon, framed by a pseudo-pearl wire (**fig. I-III**). A cluster of three large granules is set on each of the three corners and there is a suspension loop (?) attached in the middle of one side (**fig. III/1-4**). At the centre of the reverse side is a circle framed by a smooth edge (**IV/1**), and in the corners – plain almond-shaped leaves with tips pointing to the periphery (**IV/2-3**). The pattern is chiseled and the space between the leaves is interspersed with tiny impressed circles made with a punch (**fig. IV/4**). Dimensions: 1.45 x 1.53 x 0.24 cm<sup>1</sup>. The soldered granule clusters are sized 2.09 mm to 2.41 mm (fig. V, 1-3). The loop wire is 1.41 mm wide (**fig. V/4**). The size of the circlets, impressed with the punch

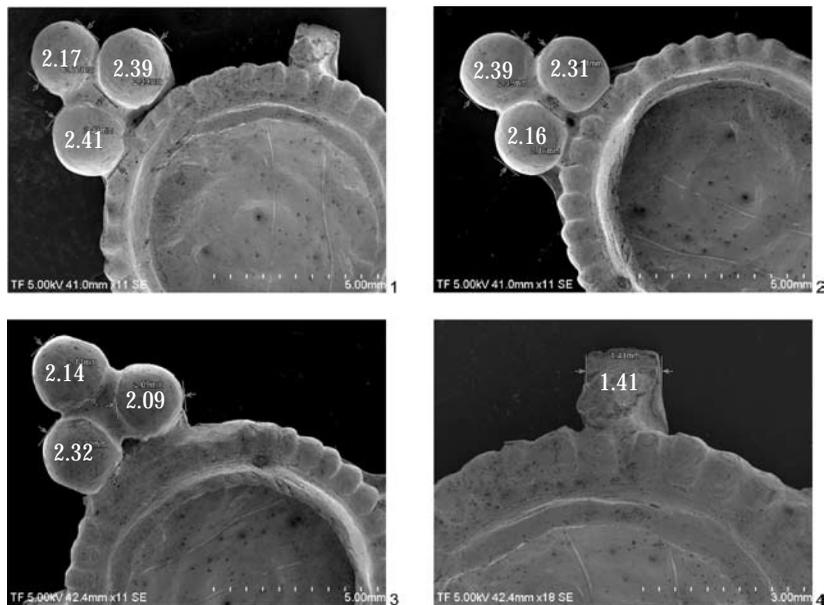
<sup>1</sup> Field inv. # 64 for 2013.



**Fig. III. 1-4.** Gold pendant from the Inner City of Pliska, details



**Fig. V.** Gold pendant from the Inner City of Pliska, chiseled motifs, details



**Fig. V.** Gold pendant from the Inner City of Pliska, dimensions of the soldered parts in mm







shapes in groups I and II was almost exclusively the result of continuous remodelling of damaged tools.

This typology is substantiated by the author through a very detailed representation of all dimensions of adzes (length, width of the cutting edge, thickness, weight) and their interrelations. The detailed analysis of all manners and cases of remodelling (recycling) damaged adzes and axes is rather impressive. A new tool could be made from every fragment sufficiently large to be remodelled into a group I tool – parietal part, distal part, longitudinally broken adzes etc. After this chapter, entitled *3.5 Recycling*, one can fully comprehend the author's typology of adzes and their classification into 3 basic groups according to their size. All diversity of shape noted not only on the site of MagurǳGorgana in Pietrele, but also across Europe is most likely the consequence of the maximal usage of stone raw material. Good raw material – hard and resilient stone, without cracks, which would not break after mere several strikes of the tool against the material one was working upon, was not easy to find. Such stone had to be used to the maximum, and that meant that every fragment which was large enough was shaped into a tool. The author of this review has had the opportunity to analyse a large number of stone adzes from the territory of the Central Balkans herself, but she linked the typological diversity among ground stone adzes and axes to the raw material type and the manner in which they were used. Reparations of damaged artefacts were also noted, but this manner of modelling adzes was not dominant enough to be taken into consideration as a basis for a typology. The size of adzes does have a certain bearing on the characteristics of cultures from different territories. The oldest ground stone adzes and axes from the territory of the Balkans, those from the late Mesolithic and early Neolithic, are massive, cylindrical, and their shape reminds us more of axes. Their size and massiveness were reduced in later periods, which is especially conspicuous in the Eastern Balkans, thus marking a notable difference between this territory and the rest of the Balkans. In his book, F. Klimscha provides a lot of space for thought and further researches. The question is asked whether there was a continuity in the production of ground stone adzes and axes, not only in the technology of production but also in the use of stone tools from previous cultures. A partial answer to this question could be given after more precise petrographic analyses, which were not performed on the material from Pietrele.

By examining use-wear traces on stone adzes and axes from Pietrele, the author reached interesting conclusions. There are visible traces of long-term work on them, and it can be deduced from their distribution whether the person handling them was left-handed or right-handed, so the author concludes that adzes and axes were quite certainly a part of a personal toolkit of one craftsman.

Adzes made of silex certainly represent one of the most interesting occurrences in the Neolithic and Eneolithic in Europe. These tools appear in large numbers in Northern Europe, on the British Isles, but also in Eastern Europe, especially within the Cucuteni-Tripolye culture. Those are all areas where flint was the dominant raw material for making stone adzes and axes and where mines of this raw material were discovered. The Eneolithic settlement in Pietrele was not in such an area, or, at least, no flint mines have been discovered in its wider