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ROMANIAN ARCHEOLOGICAL INSTITUTE IN ATHENS

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WHY A ROMANIAN ARCHAEOLOGICAL SCHOOL IN ATHENS?

*Vlad Nistor**

The main reasons for the creation of the Romanian Archaeological Institute in Athens (RAIA) are as follows:

1. The extremely important and long-standing relationship between the Romanian and Hellenic peoples, which encompasses various events of great significance in the history of the two countries between the 17th and 19th centuries. One such example is the start of the struggle for Greek independence in Iași, the capital of the Principality of Moldavia, in 1821, led by General Alexander Ypsilantis;
2. The multiple important links existing between the ancient societies of the Black Sea and Aegean regions, with the interdependency of these areas being attested as early as Pre- and Protohistory;
3. The fact that for Romanian classicists, immediately after 1990, when Romanian academic circles were freed from all political and ideological constraints as well, evidently, as the police-type control imposed by the communist state, Athens became a sort of ideal intellectual space. One of the reasons for this was that Athens (the closest large European city) boasted an impressive number of libraries and centres of scientific debate, as well as the presence there of foreign archaeological schools.

After 1990 there were several attempts to set up a Romanian school in Athens. The most important of these was undertaken by the Institute of Archaeology in Bucharest, albeit also involving other institutions, from the Museum of Brăila to the Museum of Tulcea. The initiators of this project combined the Romanian School in Athens with the Romanian Academy and tried to form a new institutional structure similar to the Accademia di Romania in Rome or the Romanian Institute of Humanistic Research in Venice. The project was very ambitious, requiring large financial resources and a coherent and costly structure, and was intended to be realised through a partnership between the Romanian and Greek states. At one point the project seemed close to implementation. The Ministry of Foreign Affairs in Bucharest and various institutions in the Hellenic Republic expressed a wish to become involved in the new institution, something which shortly afterwards led to the failure of the entire effort. When we embarked on our own initiative in Athens, many Greek colleagues in important positions in the Ministry of Culture recalled well the attempt to establish a School in the mid-1990s and regretted the failure of the project.

A separate attempt was seemingly also undertaken by a group of researchers at the Institute for South-Eastern European Studies in Bucharest. However, we have little information about this initiative.

The first project, based around the Institute of Archaeology in Bucharest and the Romanian Academy, not only envisaged the conducting of research on ancient history and archaeology; it also had an entirely different dimension even involving the Greek minority in Romania. Its failure is explicable in terms of its extreme complexity and high cost – even involving exchanges of property between the two states.

The history of the Romanian Archaeological Institute in Athens is far simpler and clearer. It all started with a discussion with the Rector of the University of Bucharest, Prof. Mircea Dumitru, whom I convinced to get involved and who went on to become the project's main advocate; and I then presented the idea at a meeting between the rectors and presidents of the senates of four of the five universities that make up the Universitaria Consortium (University of Bucharest, the Babeș-Bolyai University in Cluj, the Alexandru Ioan Cuza University in Iași and the Western University in Timișoara). The idea was well received, with the fifth member of the consortium, the Academy of Economic Sciences in Bucharest unable to participate as the subject matter was not part of its *curricula*.

The various stages in the creation of the Romanian Archaeological Institute in Athens were long and difficult to implement. The articles of association for the association were signed on 11 June 2014, with an addendum being added on 25 July 2014. The

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statute of the Association was also established and legalized that same month, allowing it to be recognized in court in September of the same year. It took three years and a lot of persuasive efforts for the Institute to be recognised as a Greek juridical entity.

To this end, the president of the Institute's scientific board, the director of the Institute and the rector who initiated the project, Professor Mircea Dumitru, held several meetings with their Greek colleagues at the Hellenic Ministry of Culture, as well as the directors of various foreign schools in Athens – first with James Wright, Director of the American School, and Catherine Morgan, Director of the British School at Athens. On one occasion, representatives from all four founding universities took part in the negotiations.

During his time as the Romanian Minister of Education, Professor Mircea Dumitru, along with the president of the scientific board and the director of the Institute, advocated in favour of the project during bilateral meetings with several members of the Hellenic government.

An essential role in the recognition of the Romanian Archaeological Institute in Athens was played by the Romanian Ambassador in the Hellenic Republic, HE Mihai Fătu, as well as the Romanian Cultural Attaché, Mrs Anca Chisăliță.

We must also not forget the significant and ongoing support offered by the Romanian Ministry of Foreign Affairs.

The inaugural conference of the Romanian Archaeological Institute in Athens was made possible courtesy of Professor Emanuele Papi, Director of the Italian Archaeological School in Athens, and took place between 19 and 20 October 2017 at the Italian School located at 14 Odos Parthenonos. The conference was attended by a large number of Romanian specialists, who took part in discussions on various subjects currently of interest to the Romanian archaeological and historical research community.

The Romanian Archaeological Institute in Athens intends to continue the prestigious tradition of the humanist study of Classical, Mediaeval and Early Modern Archaeology and History that for over a century has brought together the academic milieus of Greece and Romania.

The fundamental principles of the RAIA's activity in Greece and within the framework of its relationship with the Greek academic community are as follows:

1. The RAIA respects and contributes to the development of the common tradition and history that connect the two countries and their academic institutions;
2. Scientific collaboration with Greek academic institutions and researchers in terms of the conducting of archaeological excavations and the publication of the results thereof, and the organizing of scientific events in Greece and Romania as well as on an international level;
3. In the spirit of reciprocity that characterizes this collaboration, the RAIA actively supports Greek researchers and academic institutions that wish to participate in archaeological or history projects in Romania;
4. All research and scientific events organised by the RAIA are to be financed from a combination of Romanian public (according to law) and private funds;
5. The scientific activities organized by the RAIA are to be performed with the aim of encouraging the development of education and research programmes dedicated to Greek history and culture in Romanian universities, as well as facilitating a better understanding of the cultural-historical developments that have affected the two civilizational spaces.

The RAIA will continue to develop the already traditional collaborations existing between the Romanian and Hellenic academic milieus in the field of archaeology, as well as to assist in the training of young researchers, the organization of scientific events and publication of research results. The RAIA's founding universities have already begun efforts to identify Greek partners for future archaeological projects. One of these is the framework agreement between the University of Bucharest and the Institute for Balkan Studies in Thessaloniki. There exists a long-standing relationship between the Aristotle University and the Alexandru Ioan Cuza University in Iași. The University of Iași and the Western University of Timișoara have also signed academic collaboration agreements with the Ioannina University. To this series of close academic ties we can also add the agreement between the Western University and the Democritus University of Thrace. The University of Bucharest is also in the process of establishing collaborations with several other Greek scientific centres.

Given its status, the RAIA represents the entire Romanian scientific community involved in archaeological, classical and historical research and intends to support the Greek institutions and researchers interested in implementing research projects on the territory of Romania. The founding universities are therefore open to all suggestions put forward by our Greek partners concerning the integration of archaeological research teams. Moreover, the RAIA is able to support the projects of Greek specialists as far as field and archive research is concerned in fields such as history, ethnography and ethnology, linguistics etc., and agrees to support our Greek colleagues in their dealings with the relevant Romanian authorities.

Beyond this there also exist a serious interest in conducting research into Greek civilization. As well as archaeological research, Romania also boasts centres for research on the Neo-Hellenic culture and language, as well as an active presence of Greek university professors in Romanian academic space and a growing interest among the younger generation of researchers in the study of the cultural, social and political phenomena that marked South-Eastern Europe and provide it with identity and originality within the European construct.

The direct access of the younger generation to the research opportunities offered by Greece represents a very important step in developing a regional academic identity which, without contradicting a common European identity, nuances and enriches the latter.

In fact, the RAIA has already begun its activities through a collaboration with the Ephorate on the island of Chios that is already in its second year.

THE ROMANIAN ARCHAEOLOGICAL INSTITUTE IN ATHENS. A NEW BEGINNING FOR INTERNATIONALIZING THE ROMANIAN ARCHAEOLOGY

Mircea Dumitru*

Establishing the Romanian Archaeological Institute in Athens has been a momentous event for all the archaeologists in Romania and also for the three universities which are sponsoring this institution, viz. the University of Bucharest, the "Alexandru Ioan Cuza" University of Iasi, and the West University of Timisoara.

Today, the universities are competing for resources, for excellent instructors and scholars, and for students. And in this process, becoming part of international networks of universities is a key factor. Internationalization is vital for the development of our universities. From this vantage point, this Institute has had from its very inception the vocation of acting as an engine of internationalization.

However, it is not only the form of the activity which is of paramount importance for the Romanian universities and scholars, but also the contents of this international venture. For nowadays, archaeology has become a pivotal science, very complex and sophisticated in its doctrines, approaches and methodologies. Indeed, contemporary archaeology is done in international and interdisciplinary teams, and it has a lot to offer to many other sciences on a very broad spectrum, from the humanities and the social sciences and going to more technologically and experimentally based sciences.

Acknowledging the importance of all this, and moreover the connection between archaeology and national and world heritage, the European Parliament have made the decision to declare the year of 2018 the first European year of the cultural heritage. Of course, one may legitimately wonder what was the main reason for making this important decision? The answer that comes out quite naturally is that both the support and the promotion of the cultural heritage contribute to the reinforcement of the unity of Europe, since our common cultural heritage throughout Europe is not only a moral principle, but also an essential component part of the identity of Europe. There are at least three intertwined levels which archaeology converges upon: (i) archaeology and the problem of cultural and/or national identity; (ii) archaeology as a means of soft power, which is correlated to, but not reducible to or substitutable by, political diplomacy; and (iii) archaeology and the issue of globalization.

What makes archaeology very suitable for dealing with the problem of cultural identity is its seminal role in reinforcing the cultural memory of a society. The connection between memory and identity is very well documented in psychology, and there are strong grounds to believe that what works at an individual level also works for social groups and societies. The fabric of our own identities, both individual and social, are the stories or the narrative which give substance to our memories.

In addition to all this, archaeology forges the material connections with the past and with a territory. Archaeology gives us knowledge about the value and the role of the heritage. It helps us define and build our cultural and historic identity.

But then, it is not surprising at all that the ethnic wars that we have experienced lately in the Balkans and in many parts of Asia have also been wars against cultural and archaeological heritage. This shows that archeology is not primarily about stones, sites or even about artifacts, but about peoples who have manufactured those artifacts and about ways of administrating political power. Archaeology has always told us stories about populations who built those artifacts.

And this brings us further to another very important issue and characteristic of contemporary usage of archaeology. The strong connection between archaeology and other spheres of the society shows a profound connection between archaeology, science, and politics. Unfortunately, now and then, that kind of connection has triggered serious threats by the association between genuine or just illusory remnants of the past and the processes of building identities, which is also to say that archaeology and ideology can become a lethal combination.

To strike for a healthy balance between archaeology, ideology, and political intervention a cure that could be really helpful is a tolerant pluralistic philosophical vision about moral and humanistic values. In other words, an archaeological outlook infused by philosophical liberal and pluralistic norms and values could really help in this very demanding and very often traumatic period of our history.

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The advent of the Romanian Archaeological Institute in Athens is linked to those high and very reasonable hopes! Let us wish them a very long and very fruitful scientific and cultural achievements!

COMPOSITIONAL ANALYSIS OF FLINT INDUSTRY OF THE PALEOLITHIC SITE GIURGIU-MALU ROȘU, ROMANIA

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*I.-R. Stanculescu***
*I. Matei****

Abstract: The present work reports new mineralogical analysis of raw materials and tools that have been used in the Giurgiu-Malu Rosu Paleolithic settlement, as well as observations on the settlement's flint industry. Previous investigations in Giurgiu have found a large number of raw lithic materials but a very small number of tools. Despite this, the tools have been obtained by a good Aurignacian technique and the vast quantity of rests is related to the quality of the used raw material. Using vibrational spectroscopy methods the compositional analysis of the archaeological material was described in order to determine, on one hand, the source of the raw material and, on the other hand, the relation between the physicochemical properties of the flint and the technique used by the Paleolithic populations.
The wide heterogeneity of raw material and high percentage of "lower quality" silex could explain the vast quantity of rests and thus the flint industry of Giurgiu-Malu Rosu belongs to an Upper Paleolithic facies characteristic for the Romanian Plain.

Introduction

The result of the first mineralogical analysis of Giurgiu-Malu Rosu archaeological artefacts yielded the following description of the flint raw material: light gray rock with blue shades and whitish specks, with spherulitic cryptocrystalline structure and compact texture, with angular conchoidal fracture and high hardness. The groundmass consists of cryptocrystalline silica, represented equally by crystalline quartz and fibrous or with fibro radial structure chalcedony. Many formations with opaque appearance with marginal gray tint, remnant calcite, calcareous organisms (boards of Echinoderms) partially or completely silicified and spicules of sponges preserved in silica (opal-filled axial channel) appear in the mass (Paunescu, 1970).

Visual identification of the flint industry excavated in 2004 pointed out two distinct classes of silicolites: **A** (bluish) and **M** (reddish). In the table 1 are given the total number of pieces and the percentages of **A** and **M** type silicolites (Alexandrescu, 2004; Alexandrescu, 2012).

Table 1. Number of pieces and percentages of **A** and **M** salicylates raw material

Level (m)	Number of pieces	Silicolite raw material number and percentages (%)	
		A	**M**
AII (1.35-1.55)	71	51 (72)	20 (28)
AIc (1.90-2.20)	3313	2240 (68)	1073 (32)
AIb (2.20-2.45)	5507	3808 (69)	1699 (31)
AIa (2.30-2.50)	80	44 (55)	36 (45)

More recent petrographic analysis and X-ray diffraction investigation of samples from Giurgiu-Malu Rosu provided information on the chemical and biotic structure and mineralogical composition of the silicolites (Soare, 2009). The following minerals were identified: quartz, moganite, chalcedony, carbonates (calcite, dolomite) and plagioclase feldspar (albite).

Ciornei proposed an exhaustive classification of silicolites from Giurgiu-Malu Rosu in three main categories, divided further in a total number of fifteen subcategories: **A** (silicolites made of a siliceous mass impregnated with micrite and widespread fossils), **B** (silicolites with biocarbonatic bioclasts in micritic matrix) and **C** (bio-peloids silicolites) (Ciornei, 2013a; b).

Using Infrared (IR) and Raman vibrational spectroscopy, selective methods, the compositional analysis of archaeological materials can be described (Cinta Pinzaru, 2008; Hernandez, 2012; Long, 2001; Vahur, 2011). IR and Raman spectral methods

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are used complementarily to identify the structure of pure compounds or components of a mixture by comparison with spectra of reference materials or from spectral databases: irug.org, rruff.info, http://www.ehu.es/udps/database/database1.html. There are several macro and microscopic vibrational spectroscopy techniques, and they can be further classified after the spectrometer type, *e.g.* dispersive or with interferometer (Fourier Transform (FT)), and after the radiation detected, *e.g.* transmitted, reflected (specular, diffuse (DRIFT)), attenuated totally reflected (ATR) and scattered (Raman). Some of these techniques are nondestructive and most of them do not require sample preparation. Also, compared to petrographic analysis of thin sections, Instrumental Neutron Activation Analysis (INAA), X-ray fluorescence (XRF) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS), these low cost analysis techniques are fast and may be performed *in situ* by portable instruments.

Given the complex structure and composition of the silicolites, our preliminary investigation aims at the identification of characteristic bands in the Raman spectrum of Giurgiu-Malu Rosu flint industry, in order to determine both the source of the raw material and the relation between the physicochemical properties of the flint and the technique used by the Paleolithic populations.

Giurgiu-Malu Roșu, Upper Paleolithic tools

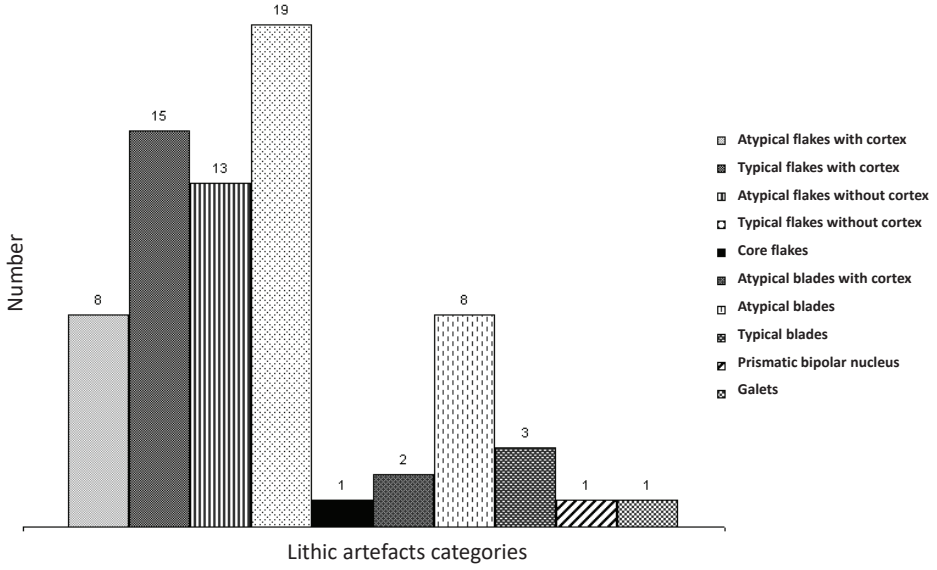
Probable chronology of the Upper Paleolithic technocomplex specific of Romanian Plain in context with the neighboring regions

Age	Period	Romanian Plain	Moldova	Dobrogea	Northern Bulgaria	Banat	Hungary	Former Yugoslavia	Southern Carpathians	Czechoslovakia
10 000		Gravettian does not exist		Epigravettian						
16 000	Tardiglaciar	Slobozia-Giurgiu, „Râpa Fagarului”, Giurgiu-Malu Roșu, niv. II				Romanesti VI	Arka			Moravia Area
17 000										
18 000										
19 000		Giurgiu-Malu Roșu, NIV. Alc, Alb, Lapo?u, niv. II, Ciuperceni „La Vii”, niv. II	Gravettian final							
20 000						Gravetian				
21 000		Lapo?u, niv. I, Ciuperceni „La Vii”, niv. II, Giurgiu-Malu Roșu, niv. Ala	Gravetian	Gravetian		Co ava III Românesti III-V		Gravetian	Gravetian Cave	
22 000										
23 000										
24 000										
25 000	Würm 3							Gravetian	Moieciu Gura-Cheii Râ?nov	
26 000			Aurignacian settlements from Ceahlau		Gravetian		Gravetian			
27 000		Ciuperceni „La Tir”		„La Izvor”		Cosava I		Kadar		
28 000						Gravettian		Gravetian		
29 000	Würm 2-3	Vadastra		„La Adam”		Românesti I-II		Velika Pecina		
30 000			Ripiceni-Izvor Mitoc-Malu Galben		Devetashkata Temnata Dupka Bacho-Kiro	Tincova Gornea		Luscic	Cioclovina Muierii Cave	Straska Skala Dolni Vestonice
31 000										
32 000							Pesko Istallosko			
33 000										
34 000	Würm 2									

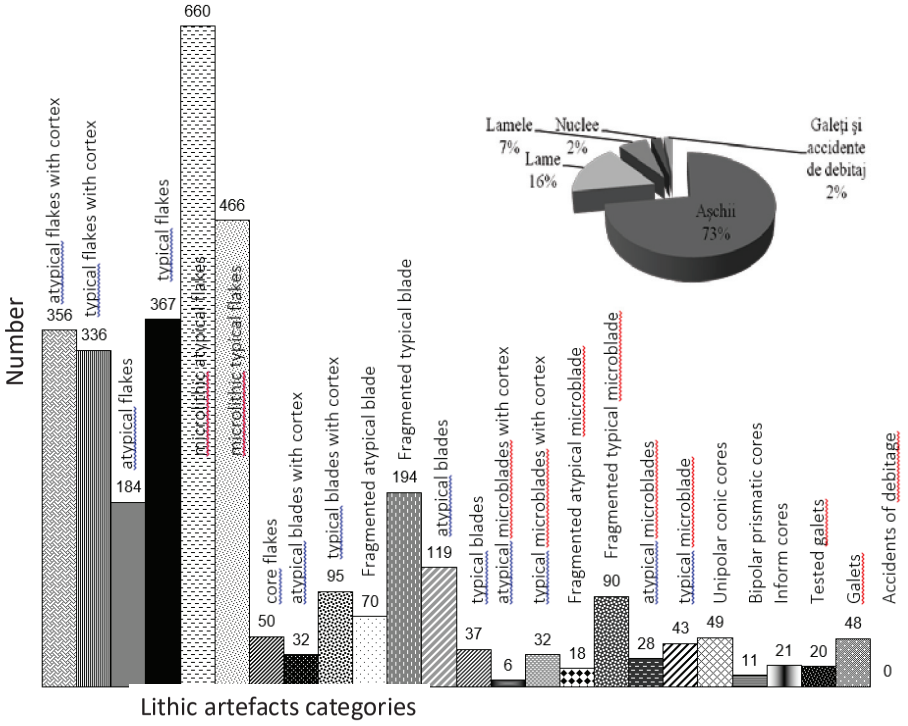
Upper Paleolithic of Romanian Plain with specific facies

Technotypological analysis of lithic industry of Palaeolithical levels shows that the site is a flint workshop and the source of raw material is the Danube Valley

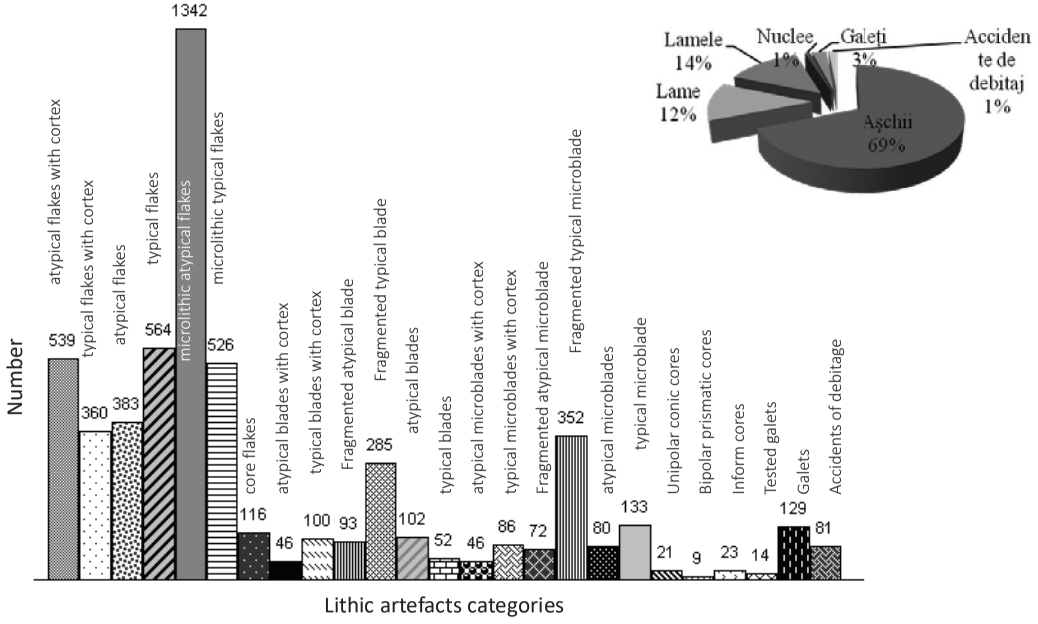
GMR 2004, SIX/2004,level AII

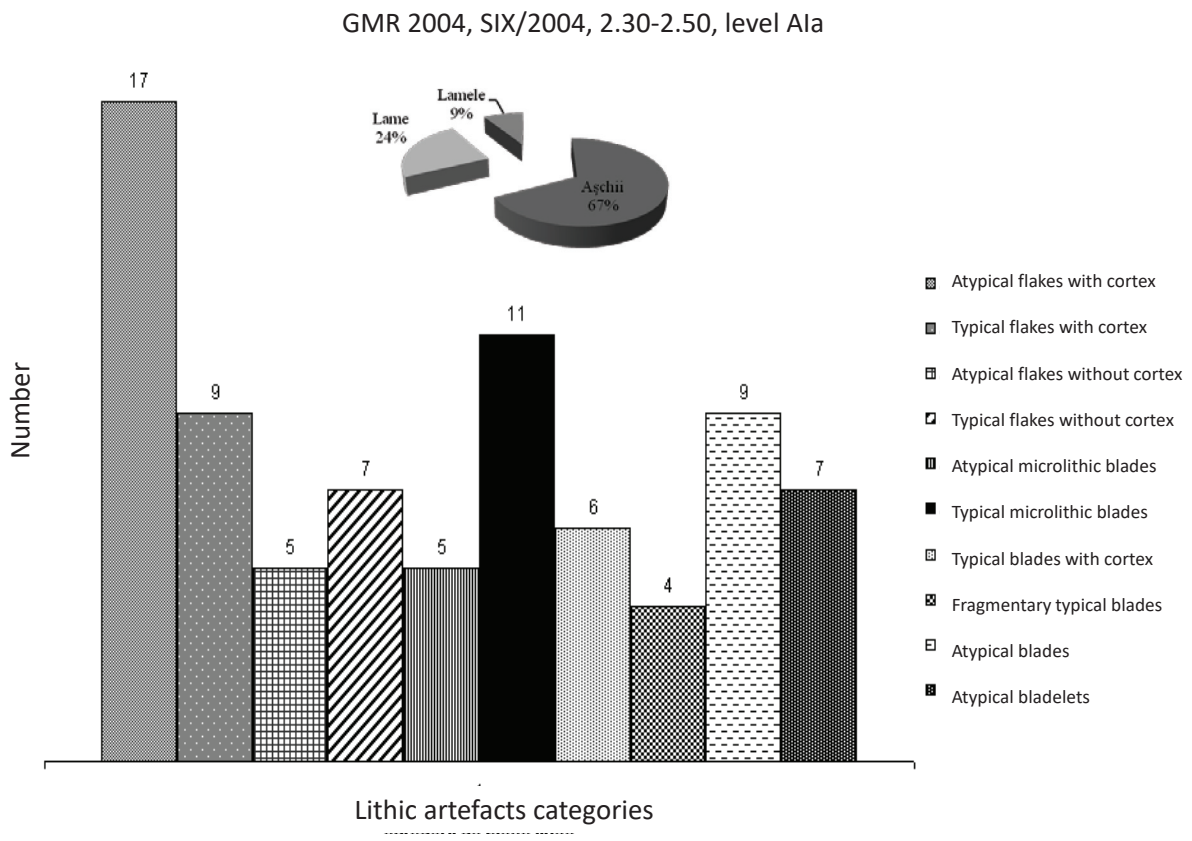


GMR 2004, SIX/2004, 1,90-2,20 m, lev. AIc



GMR 2004, SIX/2004, Workshop and fireplace no. 2/2004, 2.20 -2.45m, lev. AIb





Experimental

Several stone artefacts, raw material, flakes and tools were analyzed in a completely non destructive way by means of vibrational spectroscopy, some typical samples are shown in Fig. 1.

Fig. 1. Flint artefacts from left to right: blade (level AIc), tablet of ravivage (level AIb), flake (level AIb) and galet of Fratesti Formation.

The silicolites have massive appearance and wide macroscopic heterogeneity (colour and transparency). Remains of flint cortex can be seen in some specimens. The compositional features of artefacts depend on the composition of the raw materials and the environmental physicochemical factors to which they have been subjected during transport, sedimentation or burial (Hernandez, 2012).

The Raman dispersive spectra were recorded with a Jasco NRS-3100 micro Raman spectrometer. A laser operating at 785 nm was employed for excitation, the resolution was 1 cm^{-1} and 5 to 10 accumulations were used.

Attenuated Total Reflectance (**ATR**) spectra as well as micro **ATR** spectra, micro Diffuse Reflectance Fourier Transform Infrared (micro **DRIFT**) and FT-Raman spectra were acquired with Bruker Vertex 70 spectrometer equipped with diamond crystal ATR unit, Helios Micro DRIFT and ATR accessory and RamII module. Spectral resolution was 4 cm^{-1}, the number of scans varied from 64 to 512, laser power varied between 1 to 500 mW and the laser wavelength was 1064 nm.

Results and discussion

Fig. 2 displays micro Raman spectra of typical **A** and **M** type silicolites and the corresponding analyzed spots.

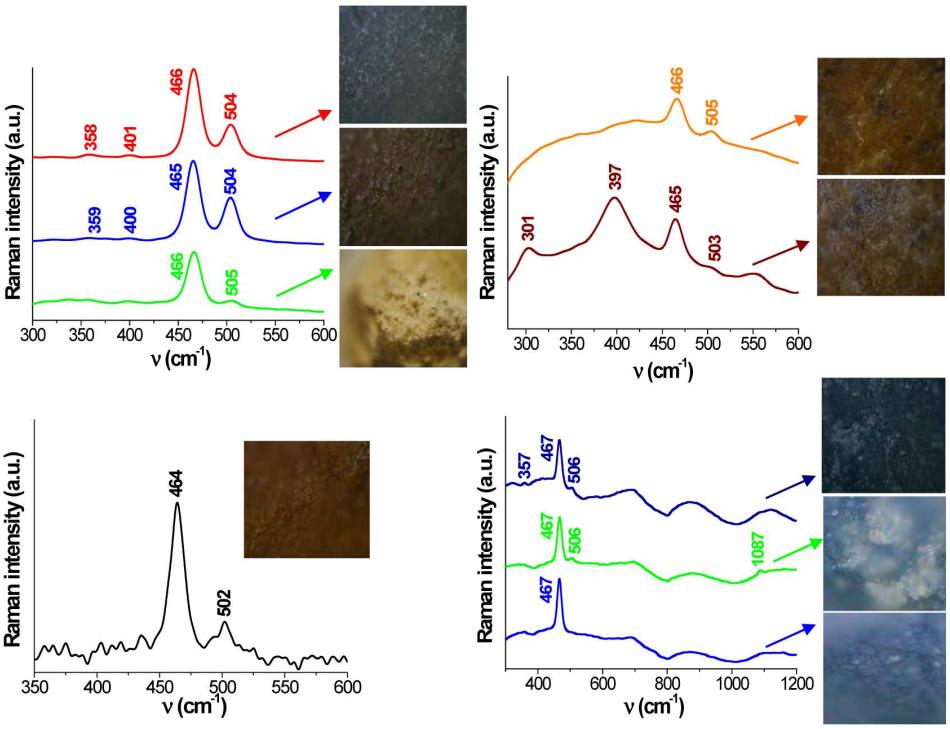


Fig. 2. Raman spectra of: remounted lithic tool (level AIc – **A** type silicolite) top left, flake (level AIb – **M** type silicolite) top right, galet (Fratesti Formation) bottom left and blade (level AIc – **A** type silicolite) bottom right

The vibration frequencies reported in the literature for various minerals such as α-quartz (465, 206 and 128 cm^{-1}), moganite (502 cm^{-1}), calcite (713, 1086 and 281 cm^{-1}), anatase (397 and 515 cm^{-1}) and aragonite (1086, 706 and 155 cm^{-1}) have been used for the assignment of the Raman bands of our samples (Cinta Pinzaru, 2008; Hernandez, 2012; Long, 2001; Vahur, 2011). It was observed that the ratio α-quartz:moganite varies for different flint artefacts and for different analyzed spots of a sample. The **A** type silicolites have the highest concentration of moganite but there are also areas of **A** type silicolites were moganite could not be found. Characteristic fluorescence is emphasized only in the type **M** silicolite. The **A** type silicolite shows the greatest wavenumber for the α-quartz vibration peak, 467 cm^{-1}. Taking into account this observation and comparing the Raman spectra of **M** type silicolites with the spectrum of the Fratesti Formation galet it can be concluded that the source of **M** type silicolites were the rocks of Fratesti Formation.

Anatase, also known as a "heavy mineral", is usually making up less than 1% of the sedimentary rocks and may be used for provenance studies (Simpson, 1983). Unfortunately the anatase peak was not identified yet in the Raman spectra of the Fratesti Formation galet. The presence of the peak of anatase titanium dioxide at 396 cm^{-1} in the Raman spectra of type **M** silicolite may indicate a raw material of higher quality. The **M** type silicolite is found in greatest percentage in the 2004 excavation in the AIa level (Alexandrescu, 2004). In the superior levels the percentage of **A** type silicolite increases and this may indicate that the source of **M** type raw material depleted. The possible sources of raw material, established previously, the Frăteşti Formation and Danube's terrace deposits, can only be attributed after more thorough investigation of the Giurgiu-Malu Rosu flint industry.

Vibrational spectra of selected silicolites are given in the Fig. 3-7.

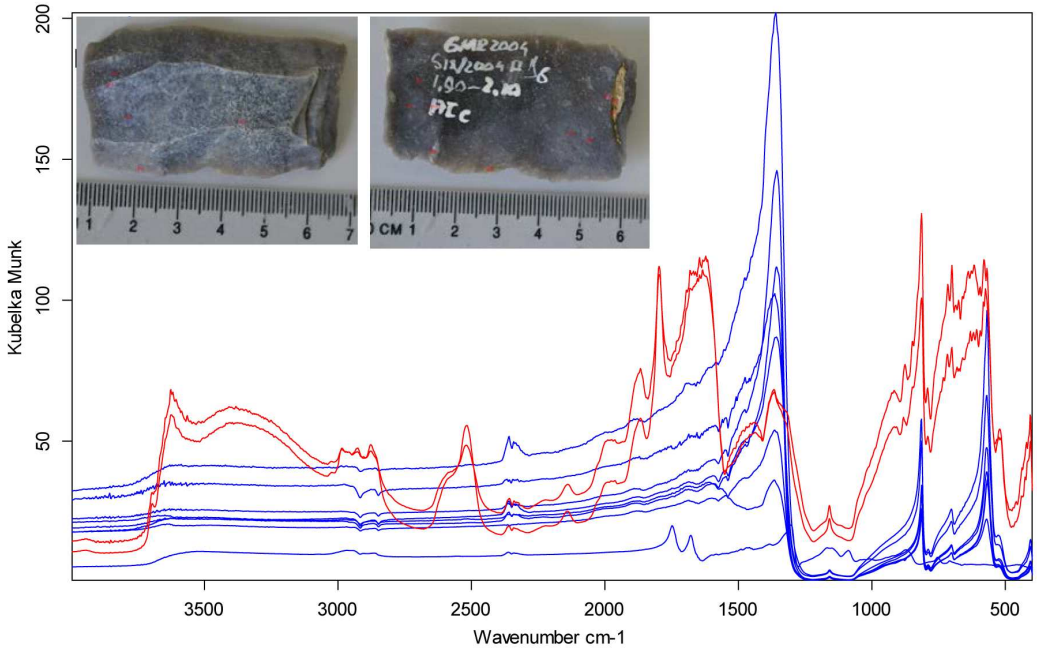


Fig. 3. Atypical blade from GMR 2004 level AIc P1-P10, microzones marked in red were analyzed with micro DRIFT technique

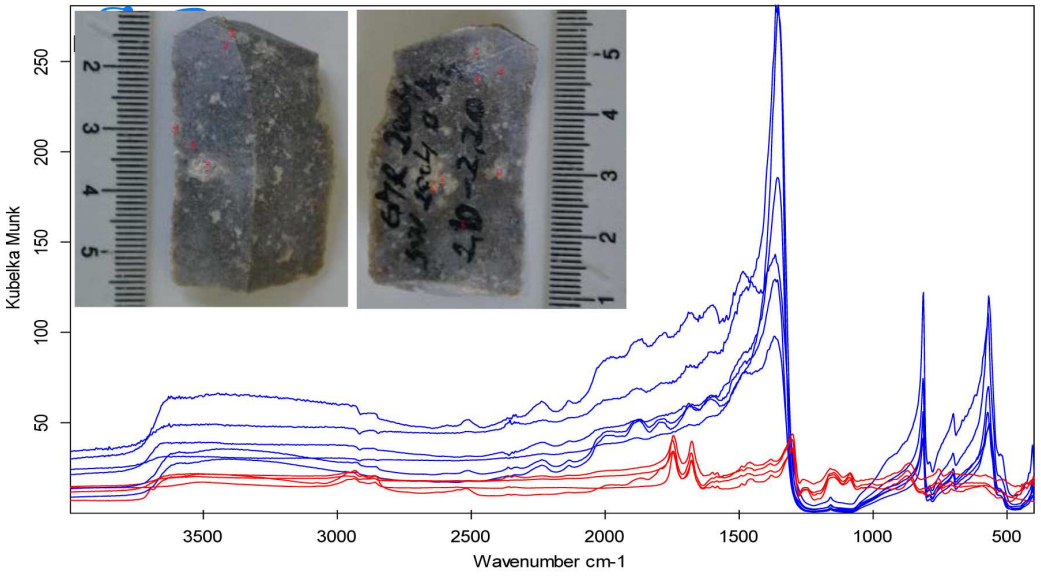


Fig. 4. Atypical blade from GMR 2004 level AIc P1-P10; microzones marked in red were analyzed with the micro DRIFT technique

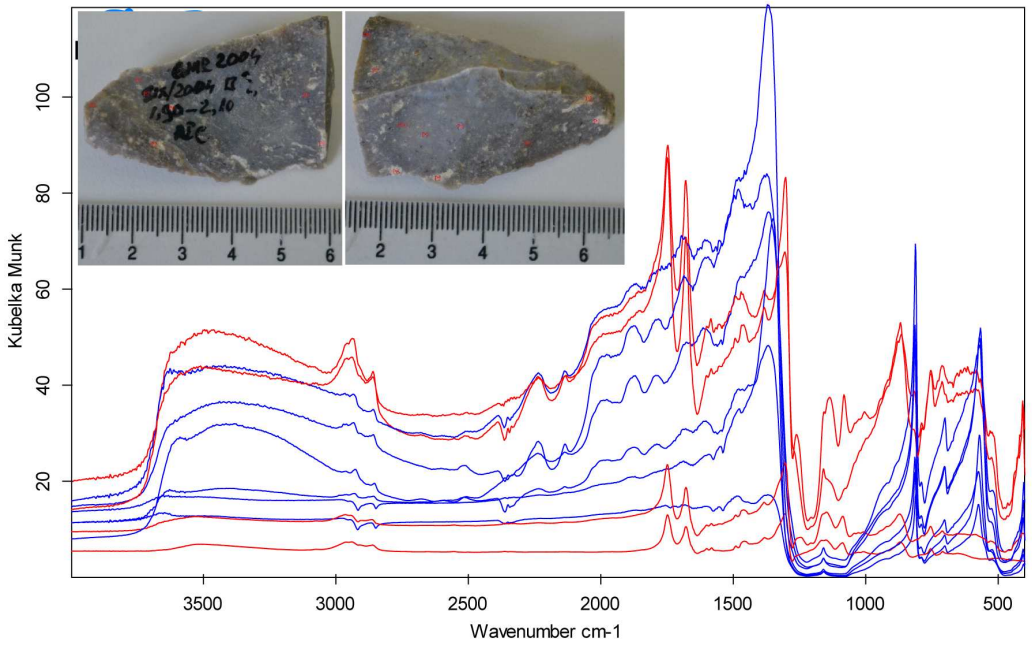


Fig. 5. Atypical blade from GMR 2004 level AIc P1-P10; microzones marked in red were analyzed with micro DRIFT technique

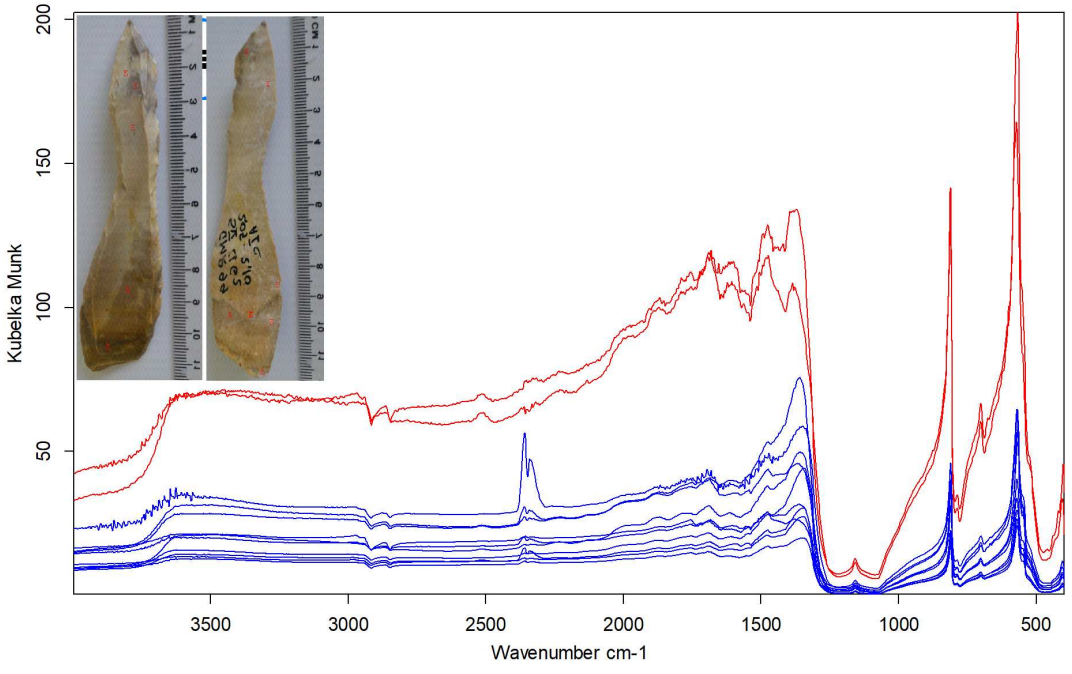


Fig. 6. "Etranglée" blade from GMR 1999 level Aic P1-P10; microzones in red were analyzed with micro DRIFT technique

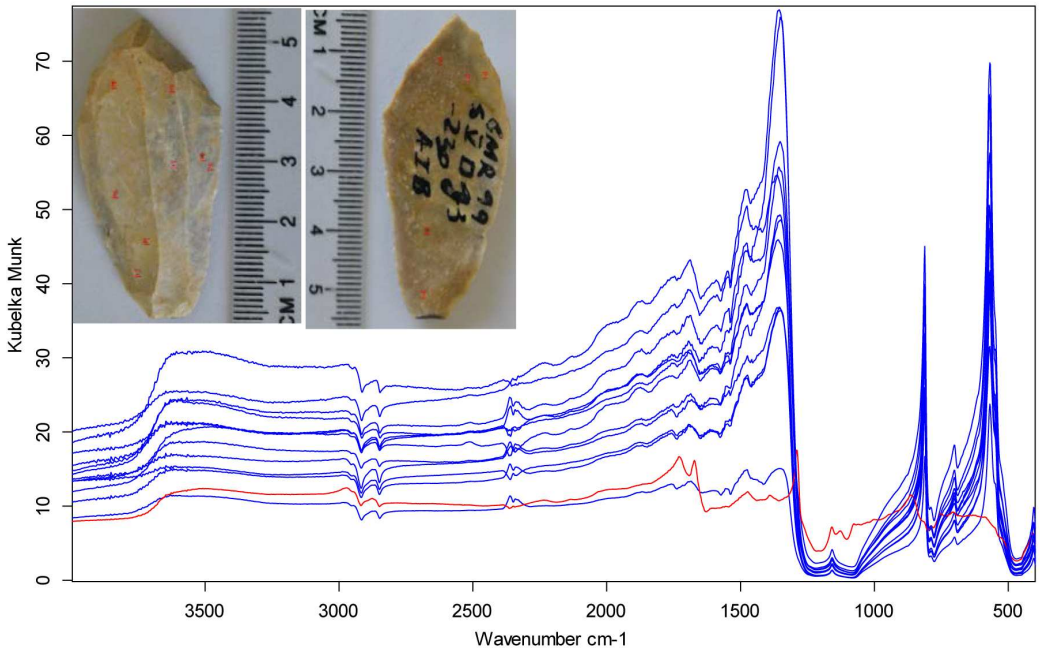


Fig. 7. Endscraper from GMR 1999 level AIb P1-P10; microzones marked in red were analyzed with micro DRIFT technique

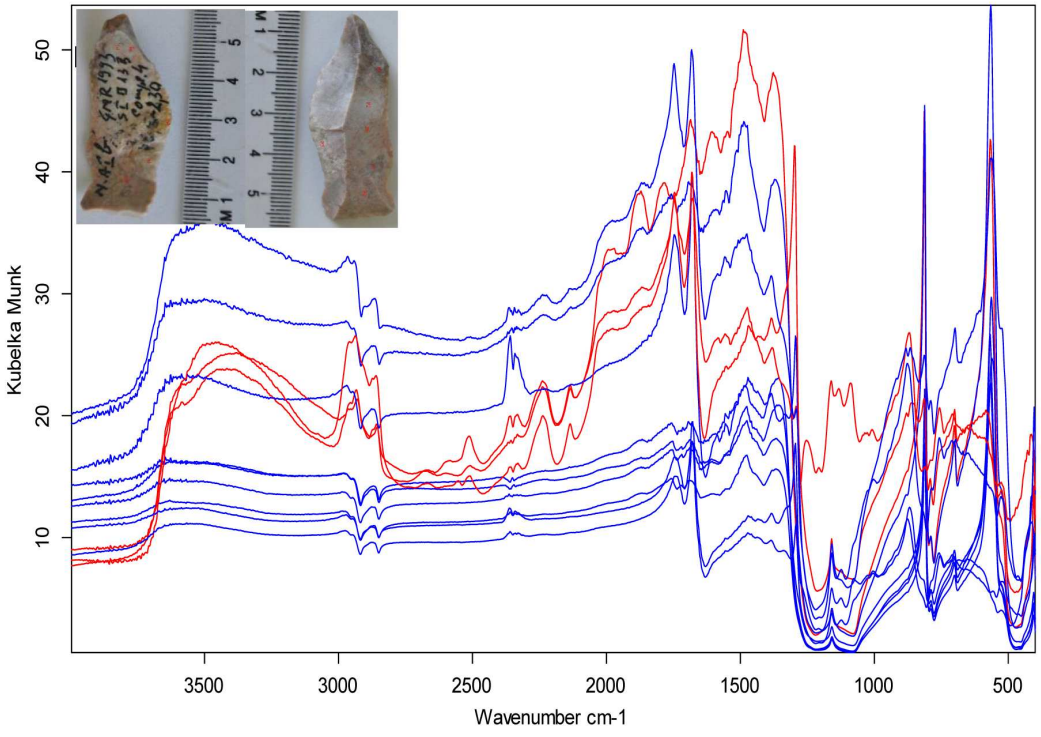


Fig. 8. Burin from GMR 1993 level AIb P1-P10; microzones in red were analyzed with micro DRIFT technique

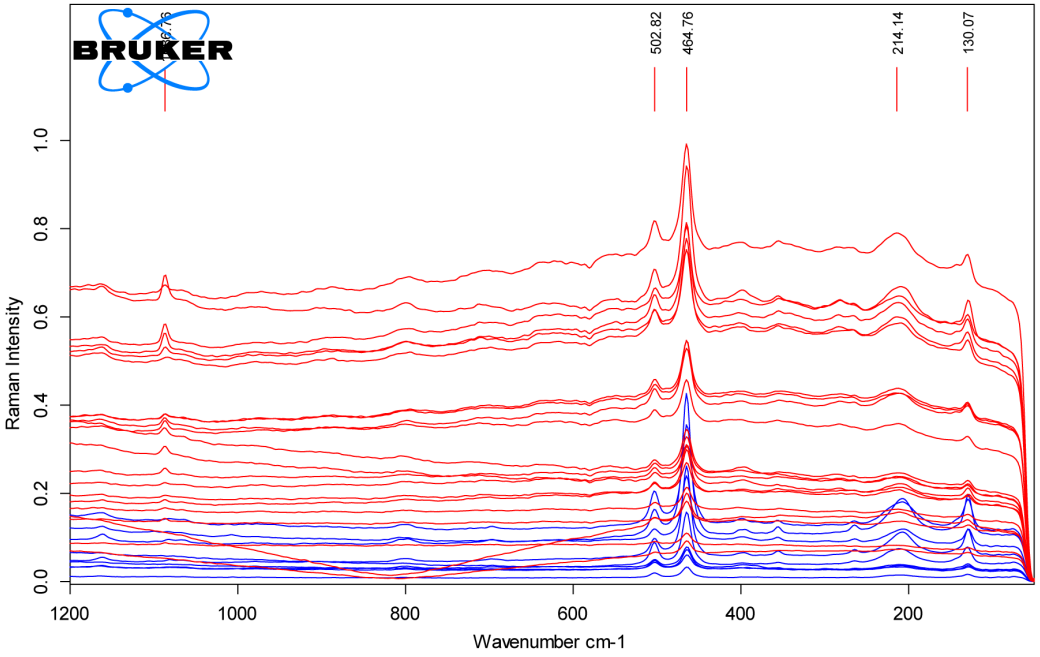


Fig. 9. Examples of FT-Raman spectra of M (red lines) and A (blue lines) type silicolites

Both macro and micro **ATR** techniques of analysis had the lowest sensitivity of analysis probably due to the poor contact with the samples surface. In the case of M type silicolites FT-Raman spectra emphasized a higher concentration of calcium carbonate.

DRIFT spectra showed that the M type silicolites have a more homogeneous composition and lower content of organic content than the A type silicolites, indicating a higher quality material for the flint technology.

Conclusions

Vibrational spectroscopy analysis shows a heterogeneous composition of Giurgiu-Malu Rosu flint industry and differences between **A** and **M** major types of silicolites. The ratio between the different minerals present and the small shifts in band position may be used for compositional analysis and provenance studies. From the micro DRIFT spectra resulted that the M type silicolites have a more homogeneous composition and lower content of organic content than the A type silicolites, indicating a higher quality material for flint production.

Advanced data interpretation by multivariate analysis (Principal Components Analysis) complemented with vibrational multi-techniques (ATR, micro-ATR, DRIFT and FT-Raman) investigations of silicolites are in progress in our laboratories. Fine compositional analysis of silicolites of different provenance will permit the description of superior Paleolithic population from Romanian Plain concerning the areal techniques and predominant raw material exploitation. The wide heterogeneity of raw material and high percentage of "lower quality" silex could explain the vast quantity of rests and thus the flint industry of Giurgiu-Malu Rosu belongs to an Upper Paleolithic facies characteristic for the Romanian Plain.

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TRANSITIONAL PHENOMENA IN THE SPACE BETWEEN THE DANUBE AND THE BLACK SEA AT THE END OF PREHISTORY

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Abstract: The phenomena related to processes of transition are among the more significant foci of interest for prehistoric archaeology. The various stages of transition allow a better insight in the way in which human communities interacted with the environment, with technology, and with each other. The issue is even more of interesting when approaching the issue of the transition during the 1st millennium BC. In the space under scrutiny, the period is characterized by significant changes in population and cultural outlook, and also by the contact between locally evolved societies and developed, Mediterranean-styled, cultures. Since transitions – changes in the archaeological (i.e. material) outlook of past communities – are at first cultural responses to factors outside the aggregation of individuals, the paper will focus on the factors that influenced local communities over the period, and if the term „transition" is appropriate in this case or misleading. Including older and newer research, a conceptual framework for possible approaches of this topic will be drawn.

Abbreviations:

APV – Asia Pacific Viewpoint
ASUAIC – Analele Științifice ale Universității „Al. I. Cuza" Iași
BAM – Brvckenthal. Acta Musei
IANSA – Interdisciplinaria archaeologica. Natural Sciences in Archaeology
JAA – Journal of Anthropological Archaeology
JAMT – Journal of Archaeological Method and Theory
JEA – Journal of European Archaeology
QSR – Quaternary Science Reviews
QI – Quaternary International
SAA – Studia Antiqua et Archaeologica

Introduction

The aim of my short presentation is to see if a changed focus on the cultural processes that mark the second half of the first millennium BC might be of help in interpreting the development of the local communities. Unlike the more common approach of starting with the archaeological data, we shall first establish a theoretical framework of the discussion, and then see if it matches the recorded situation.

In a recent debate on change in the Aegean, Wiersma and Voutsaki[1] (2017) posited that the topic is concentrated on two main questions: why did change took place, and how did it happen? The elements taken into consideration are the external influences, agricultural surplus and intensification, the physical environment, and interaction and conspicuous consumption. Indeed, all these factors have a role to play, and it would be difficult, I think, to try to establish a hierarchy among these factors. Nevertheless, a certain relation – a prime mover, if you will, might be of significance to be established. Also, a bird's eye view on the issues could prove to be helpful when one tries to investigate the mechanics of change.

Possible factors that influence local communities

The physical environment is, indeed, significant, and it has been argued that the physical environment in Europe has, at least in its temperate regions, a series of advantages, given the characteristic ecological diversity[2]. The point is important, since most of the theoretical models developed in the last half a century have focused on regions in which biodiversity was reduced or cash-crops were introduced quite early. The physical environment is also important since it constitutes the benchmark for available resources, both in terms of possible calories intake and sources of energy, and transportation. The period under scrutiny seems to have seen a series of significant changes. There are changes in the coastline: the lowering of the Black Sea level with 5 to 8 m at around the date of the first Greek colonies, then a rise with 1 to 3 m[3] and the build-up of the Danube Delta;[4] these changes

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[1] Wiersma, Voutsaki 2017.

[2] Burroughs 2005.

[3] Panin & Popescu 2007.

[4] Giosan *et alii* 2005; 2006 with the opportunity to settle more land – Micu *et alii* 2012.

are related to an increase in seasonality (with warmer summers and cooler winters) and changes in the amount of snow and rain throughout the Eastern Mediterranean, but with an influence in the Black Sea basin[5]. One of the results is the change in the local ecology (mainly deforestation) with a change in available vegetal and animal resources[6]. The bottom line is that the ecological context is in rapid change, offering opportunities to settle new land, but also with an increased stress laid upon the communities to supplement traditional activities with new ones or to rediscover old ways to provide food. The key element is not the amplitude of the climatic change, but the frequency and intensity of climatic fluctuations.

The agricultural surplus and intensification are a more delicate issue. While the existence of domesticated cattle and crop is widely known and analysed, the contribution of persistent foraging and hunting is less taken into consideration.[7] First, the relative low yield of cash-crop cultures. In a recent experiment comparing primitive grain with modern variants (*Triticum dicocum* vs. *T. aestivum*), the yield was up to 1,7 tonnes per hectare, but the same author quotes similar calculations that give a weight of 0,5 to 1,5 tonnes[8]. Also, the general stature of the cattle and pig was more gracile than the more robust species introduced after the Roman conquest. Therefore, alternative mechanisms to supplement staple food are imaginable. The intensification is also a matter of debate, since it is linked directly with outside influences, mostly Greek and (later) Roman and might concern mostly staple crops. One or two examples are interesting. At Rasova – Malu Roșu, the palaeonthological materials seem to demonstrate the fact that during the Iron Age the number of wild animals was significant, especially when one considers the size of the animals involved[9]. At a larger scale, the presence of the *Bos taurus* in the local sites indicates a significant fluctuation. On the one hand, the number of fragments of cattle dominates the bone inventory[10]; on the other hand, the overall picture is of a lesser percentage for the cattle during the first millenium BC in relation to other domesticated species (the pig seems to become more important), while fishing remains rather constant[11]. Several points should be made here. First, the situation in Dobrudja seems to be in accordance with the rest of the Romanian territory: there is a sharp decrease in the number of cattle in relation to the Neolithic, and the resurgence in the post 1st c. AD is less significant. Second, there is a sharp decrease in the number of wild mammals. This situation requires an explanation. There is a preference for large game[12], probably also because they are a resource of raw materials. But the main issue is the fact that reliability of the crops and of the cattle[13] is less than ideal. The increase in differences between the seasons, and the process of deforestation mean that game is not so readily available, and that the risk of food shortages is increased. One of the solutions possible was to diversify activities – such as trade – but also a change in social and political organisation. For other parts of the world, ecologic stress was counterbalanced by diversification and/or an increased social complexity[14]. For the period at hand, there are several elements to be taken into consideration[15]: calculation of local production shows it exceeds local consumption, orientation towards one staple product, excessive storage hints at „connections with surpluses", presence of imported goods implies the production of a surplus elsewhere. The data used by Bakels for the Celtic world and the Roman Empire seem to imply that the surplus – when existent – is fragile and prone to dissolve rapidly. Secondly, the surface needed might vary in relation to the technology and the existing manpower[16]. Also, the surface of

[5] Brayshaw *et alii* 2011.

[6] Kaplan *et alii* 2009. A similar phenomenon seems to be registered on the other side of the Back Sea, in Georgia (Connor *et alii* 2007).

[7] The arguments in favour of alternative economic structures are numerous. For one thing, it is part of complex societies (see the debate concerning wild olives, as well as the debate on rations given to workers in palatial economies); second, it is a pattern of consumption until very late in Europe, as demonstrated by the frequent royal orders against poachers and other ways of using secondary and fallow land.

[8] Hejcman & Hejcmanovà 2015.

[9] Vasilescu Ureche and Haimovici 1976. There is also an influence of the landscape. For the final period – 1stC. BC – 1stC. AD – the percentage of wild game seems to be between 5% to 14%, with some regional exceptions that reach 30 % (Ferencz & Barbu 2012). For a general perspective on the rest of the Romanian territory in the second half of the first millennium BC, see Tarcan & Bejenaru 2001.

[10] Stanc *et alii* 2009; Stanc *et alii* 2014.

[11] Stanc, Radu and Bejenaru 2009; Stanc, Radu and Luca 2014.

[12] Ferencz & Barbu 2012.

[13] Details are, in this case, of significance. Cattle are also the main source for manure and, as such, have an influence in the agricultural output. While the possible use of manure is probable since the Neolithic in Western Europe, the data for Eastern Europe is missing even for more recent periods.

[14] Brooks 2006; Brookfield 2001.

[15] Bakels 1996.

[16] Bakels offers a significant example, albeit not for the 1st c. AD. For the Roman military units located at Wetterau region, Germany, at around AD 165, and that had 8,312 men, 2,121 horses and 976 pack animals, the total arable land needed for growing food was – including the food for the labour force – 91 km^2, to which another 52 km^2 for fodder had to be taken into account. We might add that the actual surface might

the storage facilities should be taken into consideration with caution, since the actual way of storing the food is important (with or without chaff, for example). In what concerns the imports (of cereals), Bakels considers that it was not a large-scale affair. To be fair, storage is usually evaluated in relation to archaeologically visible elements, but that ignores less visible elements (from storage in organic containers to storage outside the local community or spread in the territory).

This brings us to the issue of external influences. The foundation of the Greek colonies, the influence of the Thracian elites and, much later, of the Roman Empire are as many factors that explain the surge in social and political complexity in the latter part of the first millennium BC. Objects and ideas were assimilated, and – at least in some cases – habitats were changed. The influence of external factors remains a major point of interest. It enables a finer chronology, and establishes correlations with a larger picture, either the Greek world or the Roman Empire. But these influences, putting aside the direct political influence, are – to judge from the archaeological record – quite specific: pottery, tools, coinage, rarely elements of jewellery and luxury ceramics. However, the influence is significant and cannot be over-stressed. The establishment of farms and *emporia*, the large distribution of local (colonial) coinage and the local made copies of pottery and tools, the spread of amphorae in basically all sites are strong arguments that can point to an affluence that is related to the contacts between the local communities and the Greek colonies,[17] either directly or through the mediation of local (and/or Thracian) elites. As pointed out, these visible articles of trade and influence must have been associated with archaeologically „invisible" goods that might have had a similarly significant influence[18]. Also, the objects are also conveyors of ideas and increased economic and social output. The change (the word increase is a qualitative term that might not be reflected properly in the archaeological record) in things and social skills and mechanisms to deal with it are a second-tier level of change, visible more indirectly than the imports.

But there is also another aspect. Traditional analyses of exchange have focused on prestige goods, on luxury items, and on the social and political underpinning. It has been correctly pointed out[19] that there are two assumptions involved: that the trade in luxury goods somehow expands to accommodate the needs of whole communities, and that the trade in „down-to-earth", common goods is the result of self-sufficiency and do not have a significant influence on social and political developments. These assumptions might prove to be difficult to defend. For one thing, the distinction between luxury and utilitarian goods is contextual (either in terms of space or in terms of time).[20] Second, it evolves in time. Third, all objects are social (thus, political) markers. We might also add that the value of objects is not only a matter of context, but it also represents a specific discourse on any given society and/or community. It is, as Hodder puts it (1988),[21] situated communication in which the act of reading gives and nuances the significance of the material world. But the issue, observed by Hodder, is that unlike texts, there is no linear narrative for the material world. There is no beginning and no end chapter for, say, a room full of objects. Each „reader" has his own starting point. We might add another caveat that seems to be largely ignored. That is, this discourse is not intended for the archaeologist, but for the individual and/or community in which this „text" was produced. That means that the author of the discourse has a specific message in mind, that he has the same cultural, social, political conventions with the intended public and is therefore pretty much sure that he will be understood as intended. The archaeologist is, at best, able to eavesdrop the dialogue. If this is the case, then, we might ask ourselves what are the meanings given to objects by the parties involved. It is by no means

be even greater, since even for *villae* specialising in staple food, the diversity of crops was important; adding the fallow land, the actual needed usable surface must have been significantly larger. What the author does not cite is the fact that, after a certain point, distances from the habitat to the land plots have an influence. For the first millennium BC Dobrudja, the yields must have been significant lower, even with the changes in technology due to the influence of the Greek colonies.

[17] Buzoianu 2001.

[18] Greaves 2007. We should keep in mind the fact that these goods are mostly organic. A good example is food and beverages – their significance is even greater when we consider that these influence commensality and social intercourse, which are at the hearth of social, therefore cultural structures. Even more so when we take into consideration the association between food and drink, a pair that seems to change patterns of social life (Zubaida 2014).

[19] Smith 1999.

[20] Indeed, scarcity is one of the few stable things that define luxury, but this aspect is strongly linked to technology, local resources for social investment, and the pre-existing patterns of social mobility. The fact that this might be the case throughout history is, in this author's opinion, demonstrated by post-communist developments and object histories in many parts of Eastern Europe.

[21] *"The notion that material culture meanings partly come about through use can also be examined in relation to social processes [...] The associations in practical activity can become codified into abstract conceptions. These structured systems of meaning affect the uses to which objects are put [...]In addition, many material culture signs are "indices". They contain some association with that which is signified [...] To some extent then, material culture meanings come about through use rather than from an abstract linguistic code"* (Hodder 1988, 259-260).

assured that the same item, even with an unambiguous practical use, is culturally the same. The point made by Appadurai and Kopytoff (1986) concerning the social trajectory of objects (their history, if you will) explains both the interest in specific items of trade, their long survival within the local communities, and the local copies of imported objects. It also supports Hodder's theory that the meaning of objects is transactional. This perspective supports the viewpoint that these goods are the result of an elite-dominated trade. The first question is why elite goods (or luxury items or scarce items) seem to be interesting to a larger audience than the actual holder and his/her counterparts. To be acquired, such goods must fulfil several criteria: to be known, to be accessible in terms of purchase power and opportunity, and to be polysemic (i.e., readable in a social way). The first seems a ridiculous condition, but it just points at the fact that the exotic character can be material or geographical (exotic in its traditional sense, from outside). This outsideness is important; it represents the motif for internal mobilisation, and is polysemic (some people know only of its strangeness, others can interpret that quality). It follows that these objects can mobilise resources on the vertical vector of the society, but also on the horizontal[22].

Second, the question is: what were the instruments used by local elites to elicit such a response. These questions have, we think, a direct relation with the issues of external influences, of interaction and conspicuous consumption, and of social complexity.

The way to deal with change

The entire period is marked by a certain climatic variability, and the increase in seasonality raises the level of social stress. The preference for cattle and big game indicates a more thoughtful approach to resources, one that favours a long-term perspective (the life span of cattle is significant bigger than that of other domesticated animals), and the secondary use of cattle as a source of energy (hence, transportation) and raw materials. These solutions are important also for the demographics of the region, seen also by the increase in the number of tumuli[23] and their strategic positioning along sources of water[24], or in symbolic points of the landscape[25]. The result is a scalar stress that determines the change in elite behaviour and decision making. It means also a renegotiation between local elites and the communities in what concerns the type of relation is established between forms of authority and forms of power. The major point would be that one of the elements structural to the new balance between authority and power is to have not only the force at your disposal, but also the incentive. The incentive is given by the interest (and the capacity) of the local elites to mobilise the available resources for enhancing the survival rate of its inhabitants, and to demonstrate the skills to provide good management and specialised knowledge. A significant type of specialised knowledge is related to the world outside the community and local horizon, and the access (and socially and ideologically competent use) of it is one of the key features of elites[26]. The imports demonstrate such competent use (in fact, they are the demonstration of a specific type of expert knowledge put into practice), while the distribution might also indicate the changes induced by the scalar stress. The difference with other comparable situations is that, instead of the locals taking it to the sea, the outside world came to Dobrudja. The most significant impact was, in our opinion, the change from simple power to authority. The distribution of goods and the diversity of the items that circulate seem to indicate a trickle-down mechanism that is hidden by some exceptional finds, a phenomenon that defines the period much better than the princely graves. One model that might suggest this process is that of an increased significance of commensality[27], which highlights and give visible social meaning to a steady and long-term increased influence of elites on the local economic structures. The result of the management of both material and symbolic resources has to be shared – notwithstanding hierarchy, the principle of solidarity is more significant than simple and visible power. Solidarity has to be maintained precisely because not the limited availability of resources is the issue, but the lack of predictability. The scalar stress is the result of this unpredictability. Intensification of food production (with a new focus on staple foods), the development of new trade routes, and finding new symbolic forms of manifestation for the authority seem to indicate the fact that the strategies employed by the local elites are more complex and refined than usually considered. This ability to put together local developments (and crises) and regional opportunities establish the elites' role as an interface between the local communities and the broader, regional (European?) context.

[22] Turner 2003.

[23] Even if the majority of these tumuli are of a later period, the increase in number by comparison with the bronze age is visible (Oltean 2013).

[24] Oltean 2013.

[25] Topoleanu *et alii* 2008.

[26] Helms 1988, in particular chapter 4.

[27] Dietler 1999, especially pages 142-145.

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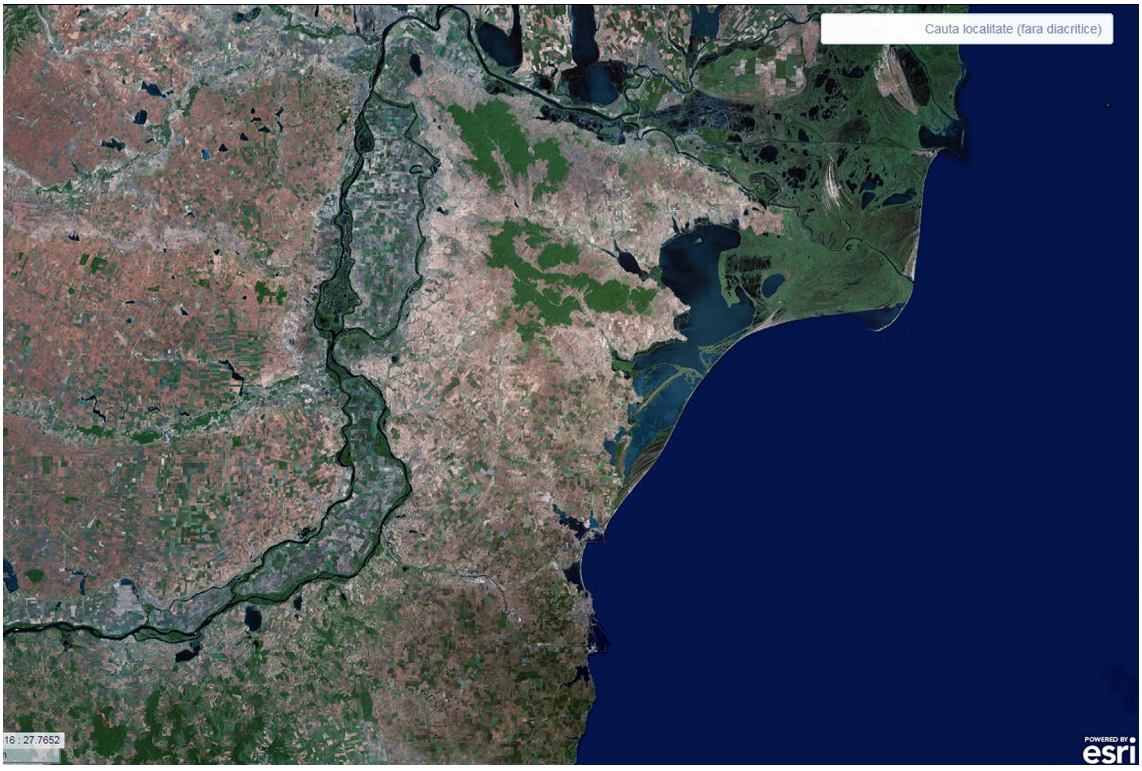

Fig. 1. Physical map of the region (available at http://map.cimec.ro/Mapserver/?layer=ran&cod=9315.08#)

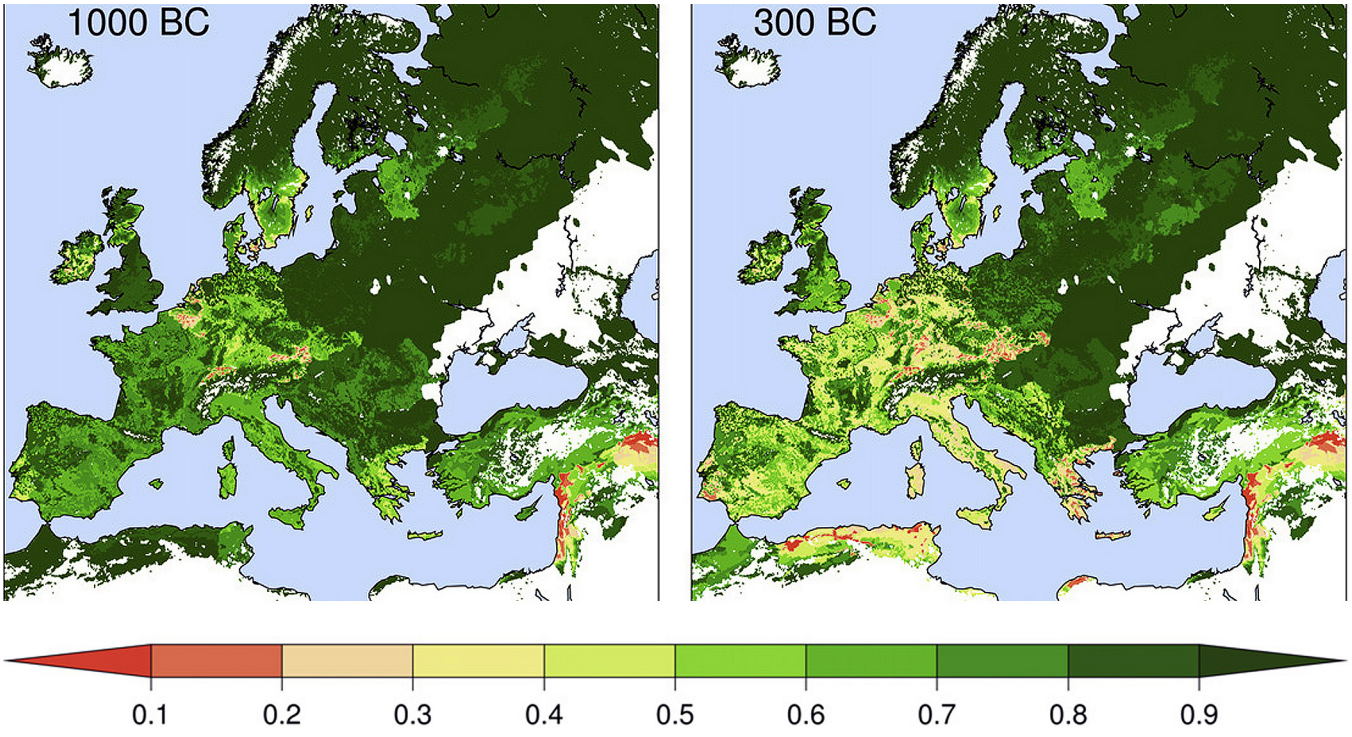

Fig. 2. Changes in the vegetation of Europe between 1000 and 300 BC (Kaplan *et alii* 2009)

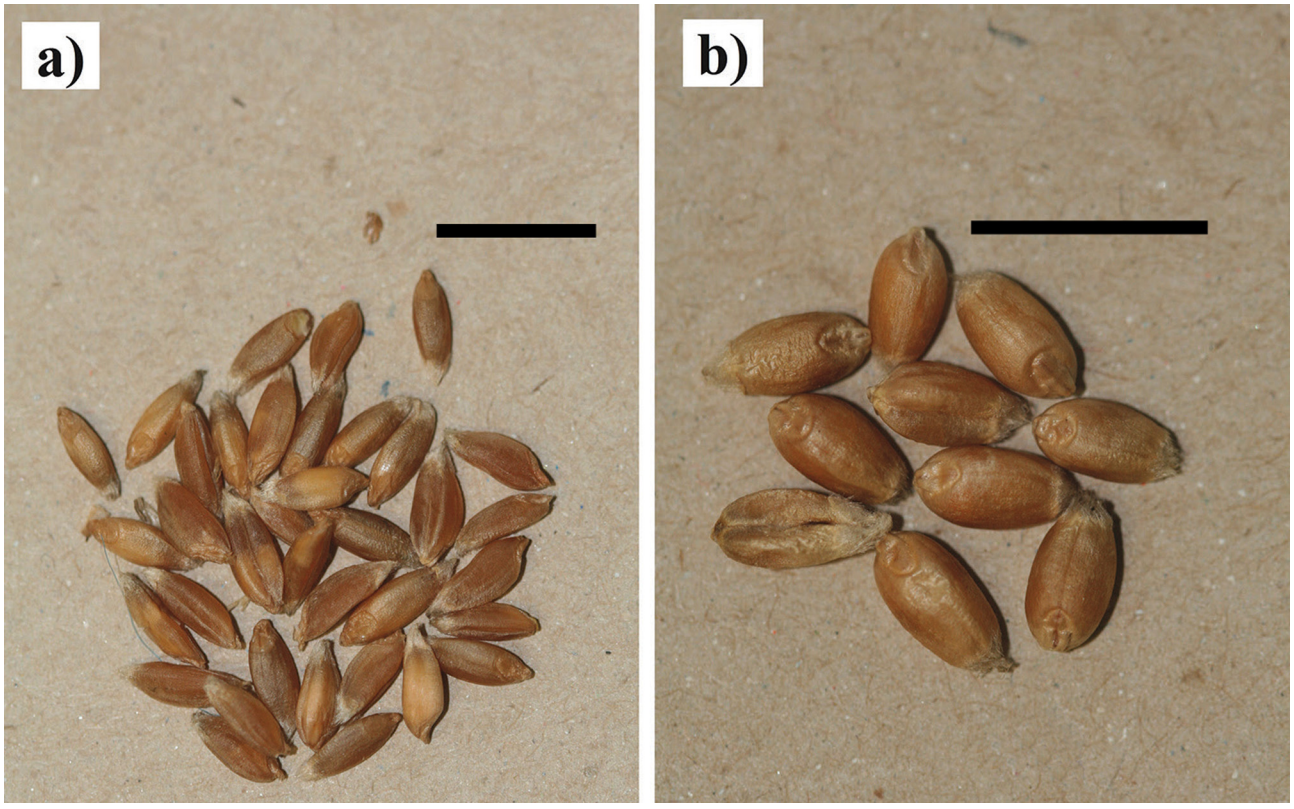

Fig. 3. Differences in size of wheat grains: a) T. dicoccum, b) T. aestivum (Hejcman, Hejcmanovà 2015)

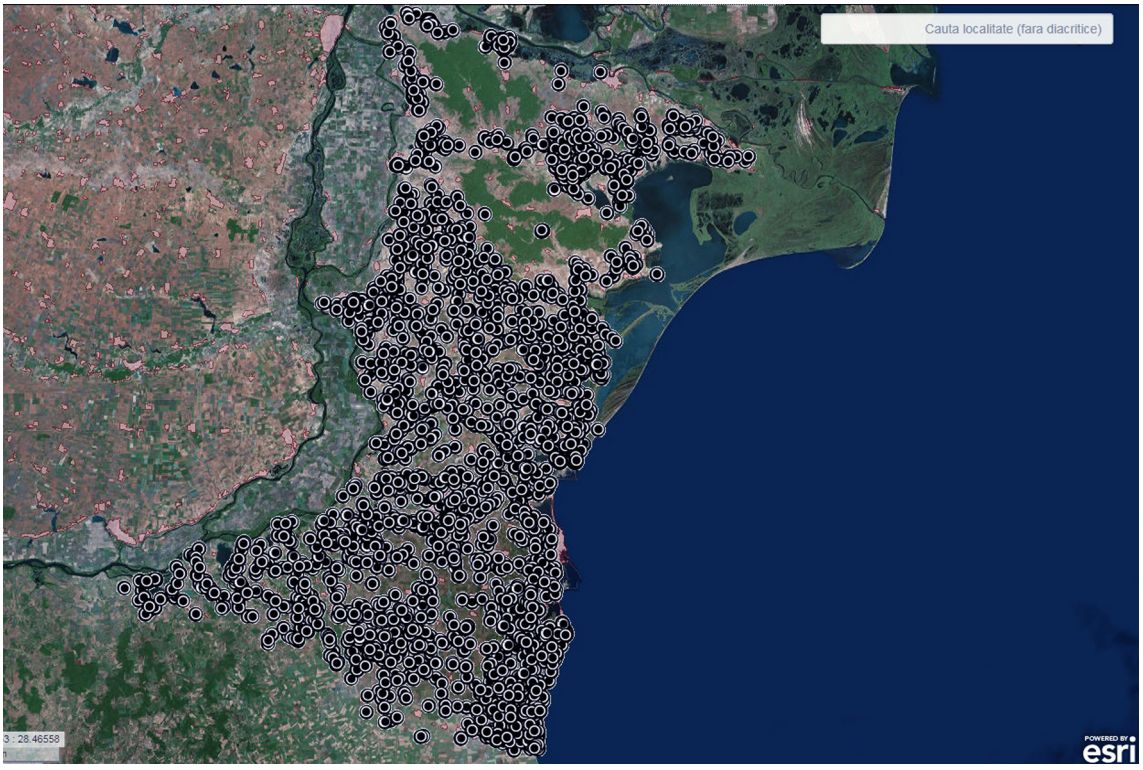

Fig. 4. Distribution of tumuli in Dobrudja for all periods (accessible at http://map.cimec.ro/Mapserver/?layer=ran&cod=63063.01#)

FROM THE SNOWY MOUNTAINS (HAVASOK=CARPATHIANS) TO THE WINTRY DODONA (HOMER, ILIAD, 16.234). THE CASE OF A UNIQUE LATE BRONZE AGE DISC-BUTTED AXE FROM EPIRUS, NW GREECE

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Abstract: Ancient Dodona is located on the outskirts of the Greek world as Pan-Hellenic sanctuary and oracle of the Dodonaean Zeus at least from the eighth century BC onwards. However, it has a remarkable prehistoric phase during the Late Bronze Age, while impressive is the preservation through time of many bronze objects such as sacred heirlooms or recyclable raw material. In the above framework, a bronze disc-butted axe was found there, the type of which is spreading over the Carpathians' region (mainly Romania). The artefact from Dodona has some unique characteristics, to be considered by research as a local hybrid imitation, although it is the only known example in Greece. Its presence at Dodona as an 'exotic' artefact is explored, which, combined with other traces and finds, render possible the practice of prehistoric cult at Dodona. Particularly at a time, when the material culture of the region was oriented toward the 'markets' of the Mycenaean world.

Introduction

Dodona (Fig. 1) lies in the heart of the hinterland of Epirus on a semi-mountainous ridge at an elevation of 620-650 m.a.s.l. The region is bordered by the mountainous masses of Olytsika (ancient Tomaros) to the southwest, Kourenta mountains to the northwest, Megali Tsouka to the north and Prophitis Elias to the southeast. Natural corridors disrupt the harsh geomorphologic terrain and provide quick passageways to the sea. The rivers Tyrias and Smolitsas to the northwest merge together with the Kalamas river and flow into the Ionian sea along with the Acheron river to the southwest. By contrast, the Louros river to the south empties into the Ambracian gulf, while the modern Egnatia road, passing through the region to the northeast, enables bidirectional movement to and from the basin of Ioannina.

From the eighth century BC Dodona is continually cited in the texts of many authors of the ancient world (Homer, Hesiod, Herodotus, Aristotle, Plutarch, Apollonius the Rhodian, Pausanias *et alii*). In the writings, apart from anything else, the oldness of the region is mentioned, as well as the antiquity of the cult, attested already in prehistoric times. The uninterrupted presence of Dodona in the ancient Greek philological tradition and its involvement in primitive myths, related to the heroic past of the Greeks, cannot be accidental. It has been argued for the region that it was home to the syncretism between the Palaeo-European cults of Mother Earth or Great Goddess and the Indo-European cult of Zeus. His cult is indicated by bronze finds of the prehistoric period, as we will see further below.

After about 2000 years (1600 BC to 400 AD) of Dodona's ceaseless activity, mainly as sanctuary and oracle of the Dodonaean Zeus, the place fades into oblivion, buried under the deep colluvial deposits of ancient Tomaros for approximately another 1500 years. The archaeological site of Dodona remerges into light during the Ottoman dominance in the region. The Epirote banker and politician Konstantinos Karapanos[1] (1840-1914) carried out 'sweeping excavations' over the years 1875-1876, to publish in 1878 in Paris his two-volume work *Dodone et ses ruines*. It is in this time that many bronze artefacts from Dodona were dispersed to collections and museums abroad (Berlin, Paris, London, Constantinople, etc.). In 1902, Karapanos donated his collection to the National Archaeological Museum in Athens.

The disc-butted axe from Dodona

From the first 'excavations' of Karapanos at Dodona comes the object[2] (Fig. 2) of our study. Today, it is stored in the National Archaeological Museum as part of the Karapanos Collection, inventory number Kar 278. Its preserved length is 11.0

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[1] For his life and activity: Papaioannou 2007, 381-426. Manopoulos 2015, 593-613. Soueref 2015, 581-591.

[2] Carapanos 1878, 97, pl. 53,4. The circumstances of its recovery and find spot are not known.

cm, height 7.1 cm, thickness of blade stem 1.5-2.0 cm and of disc stem 1.8-2.2 cm, disc diameter 5.1-5.3 cm, outer shaft-hole diameter 2.8-3.1 cm and corresponding inner one 2.0-2.2 cm, weight 328 g. It is a bronze single-edged axe[3] (Figs. 3-5), missing part of the body and the entire blade. The body takes the shape of a long stem, rhomboid/rectangular in section, on the complete side ending in a curved discoid butt end (*Nackenscheibenaxt*). On the whole, it is straight except for a slight curving that appears on the broken off section just before the missing blade. Perpendicular to the middle of the preserved body rises a tubular elevated socket, cylindrical in cross-section for the attachment of a shaft, made out of organic material (probably wood), not preserved anymore. The collar bears at both ends embossed rings. The axe shows a blue-green patina, characteristic for the bronze artefacts of Dodona, which the characteristic for the bronze artefacts of Dodona blue-green patina, which is due to local ground, as well as climatic conditions of the region. On the surface several small chips and signs of wear from corrosion or probable use of the object can be seen along with several small dirt inclusions. Across the entire surface there are many small shrinkage cavities. The biggest one lies almost in the middle of the external surface of the disc, while it looks like it has been mended with a 'patch' (Fig. 6) right after extraction from the mould. This was probably the point, from which the molten metal was poured into the double or tripartite mould and consequently the last one to be solidified, indicating insufficient filling of the mould. Finally, the axe was annealed and hammered and its surface was adequately polished.

In A. Vulpe's fundamental classification[4] (Fig. 7), the axe from Dodona comes closer to the *Drajna* type (*Nackenknaufaxt*), named after the find spot of a hoard (found in the site at Drajna de Jos), which contains two axes of the type. This region is situated in central-southeast Romania on the southern foothills of the Carpathian mountain range, marking the southernmost distribution point of the type within the country, since the remaining examples have mainly been located in the northern part of Romania. Axes of the *Drajna* type usually have a compact, rectangular section body that and rectangular in section body that ends in a curved discoid butt and a long straight or slightly curved blade of hexahedral section. The elevated tubular hafting socket is cylindrical in cross-section and ends in plastic protuberant rings. Simple incised decoration appears occasionally on the upper curved surface of the butt or on the plastic rings of the shaft hole, or else there is no decoration at all. Characteristic for all axes of the type is the perpendicular rib with lateral projections at that point of the body, which crosses vertically the tubular hafting socket. In all probability, these artefacts were used as offensive weapons and are generally placed in the chronological

[3] Hammond 1967, 331-332: *From Dodona a bronze axe with high socket (measuring 11 cm) and with a disc-shaped butt. This belongs to a distinctive type of axe, which is believed to have originated during the Bronze Age period V in the Urnfield culture of Hungary; thence it spread west into Bavaria and Denmark, and south-east into Serbia; the axe at Dodona is the only example known in the central Balkans. The Urnfield culture can be broadly dated by its contacts with Macedonia and with the Aegean to the Late Helladic III period; furthermore, the early type of this axe is found at Vattina in a tomb containing examples of the early northern sword, which originates in period V phase C (= LH IIIA, i.e. about 1350 BC). The axes which spread from Hungary belong to a later type than the Hungarian axe at Vattina; they can be dated according to type to period V and the beginning of period VI phase D (the line of division between the two periods being about 1300 BC). The axe at Dodona is intermediate between A2 and A3, which occur in phase D; its arrival in Epirus may then be dated to the same period as that in which the northern type of sword entered Greece (i.e. after 1250 BC and so between 1250 and 1150 BC)*. Harding 1975, 188-190, fig. 4.4: *The 'Nackenscheibenaxt' from Dodona, though not a true representative of that class of object, bears an undoubted similarity to Hungarian axes. It is hard to know how to interpret this piece. The shaft is almost square in section, there is no decoration, and its general appearance is 'degenerate'; nor is its context known. It is tempting to see a general connection between the two areas, but there can be no question of importation: this must, if anything, be a copy*. Sandars 1983, 53, 55-56, fig. 12b: *A similar battle-axe from Dodona has been republished by Anthony Harding, who takes it for a local copy rather than an import, but in any case its relationship is obvious*. Harding 1984, 130: *In this connection an extraordinary piece from Dodona, without context, must be mentioned: it looks like a version of a disc-butted axe of Hungarian type (Nackenscheibenaxt). It is not, however, a true representative of that class of object, nor are other pieces of this form known in the region. If it has any significance at all, it must be of the most general kind*. Bouzek 1985, 142, fig. 70.1: *I know of only one example from Greece. All Nestor's types are different, and even the latest of his series have a spike on the butt; they date from Br C-D. There are, however, several Br D examples from Hungary and Rumania with rounded butt; they are far from identical, but not altogether unlike the Dodona piece. It seems, therefore, that the axe from Dodona is a local copy of a Br D Balkan battle-axe and can be connected with the first wave of European type weapons in the Aegean*. Dieterle 2007, 246, fig. 125. Kacsó 2007, 38-40, 152-154. Suchowska-Ducke 2015, 14, 16.

[4] Vulpe 1970, 99-100, pls 41, 53B, 67,2-4, 79,9, 85,11, 89,1. He includes two axes from the hoard at the site of Drajna de Jos and one (mainly from hoards) at each of the following sites: Lăpuş, Tîrgu-Lăpuş, Şanţ, Someş, Ciceu-Corabia and Marmoroškaja Župa. Outside Romania a single occurrence (in hoards) is reported from each of the following sites: Penészlek and Gemzse in Hungary, Prelipce/Prylypche in Ukraine. Vulpe distinguishes two groups based on the form of the butt (hemispherical or elliptical) or on decoration. For axes of Hungary: Mozsolics 1973, 18 (type D-variety c).

horizon defined by the Uriu-Dragomireşti hoards of the Romanian Suciu culture. E. Kroeger-Michel in his comprehensive study[5] encompasses 25 objects (Romania: 12, Hungary: 5, Ukraine: 3, Slovakia: 1 and unknown site of provenance: 4) into the axes with spherical head and recognises two types (*Oarţa de Sus* and *Ciceu-Corabia*). It is then obvious that the main distribution of the type is encountered in northern Romania, the adjacent areas of eastern Hungary and southwestern Ukraine, or else in the regions of the central Carpathian mountain range. This area demonstrates an almost industrial metallurgical activity and production during prehistoric times and later on.

The Dodona axe stands out among all the aforementioned specimens of the type, as it displays a rhomboid/rectangular section at both stems of the body that end in the butt and the blade, respectively; a unique feature not seen on any other axe with discoid butt. On the other hand, the axe from Dodona does not possess the characteristic for all other axes of the type perpendicular rib with lateral projections at the point, adjoining vertically the tubular hafting socket. A structural element that most probably enhances this distinct concave-weak point of the body, to which the highest degree of pressure was applied. The slight curving of the body and the peculiar rhomboid section do not exclude the possibility of the axe not ending in a blade but in a spiral component, something that renders the artefact a symbol of power and authority (*insignium dignitatis*) in the form of a sceptre.

The unique traits of the object may be sufficient enough to ascribe it to a specific category of artefacts of sparse distribution but of apparent symbolism. Two bronze sceptres with spiral finial in place of the blade come from the hoards at the sites Drajna de Jos in Romania and Lozova in neighbouring Moldavia, while a similar stone one was found in the shipwreck of Uluburun[6] on the coast of southwestern Turkey. Two stone bivalve moulds for the production of metal artefacts of this type were unearthed in a tomb at the site Pobit Kamak in northeastern Bulgaria, just south of the river Danube on the border with Romania. The rarity of these specific symbolic objects could justify the trend of originality in their manufacture. In any case, the fragmentary preservation of the Dodona artefact does not allow the formulation of definite conclusions about its initial appearance (probably axe or sceptre).

Preservation or recycling of dedications in their capacity as heirlooms[7] is not a practice unknown in sanctuaries and tombs of the ancient world. Characteristic of Dodona is the 'magical' inscription of 400 BC on a bronze double-edged axe[8] (Fig. 8) of the Late Bronze Age, as well as a bronze griffin protome of 670 BC from the area of the prytaneion (second century BC). Quite a few prehistoric objects from Dodona have been found in fragmentary state, in the context probably of their ritual 'death' or posterior systematic recycling to economise in raw material, a phenomenon also commonly met with in temples and sanctuaries of the Helladic area. The bronze artefact under examination was probably kept as an heirloom and 'magical' object[9], while it is one of three in all prehistoric 'exotic' bronze objects to be found in the sanctuary of Dodona, as we will see later on. We rule out the possibility that it is a local copy, a view prevailing in research, since this particular type of bronze axe with discoid butt or sceptre with spiral finial has not been encountered to date in any other known example from the Helladic area. Therefore, there is

[5] Kroeger-Michel 1983, 76-78, 153, 203, figs 7, 124-129, 134, 198e. Romania: Oarţa de Sus, Perişor, Someş (two), Ciceu-Corabia, Ungureni, Bicaz (two), Tîrgu-Lăpuş, Drajna de Jos (two), Jabeniţa. Hungary: Kispalád, Gemzse, Csongrád, Penészlek, Hajdúhadház. Ukraine: Lohovo, 'Maramureş', Prelipče. Slovakia: Banská Štiavnica.

[6] Buchholz 1999, 68-78. Buchholz and Weisgerber 2005, 149-153. Hansen 2005, 93-94. They include and discuss both bronze specimens from Romania and Moldavia, as well as the two stone bivalve moulds from Bulgaria. Earlier examples from Iran are not integrally connected to this particular typological group.

[7] Lillios 1999, 235-262: for a theoretical approach to the phenomenon of preserving heirlooms. Krapf 2016, 531-534: for instructive examples from the area of Euboea that ascertain the great extent of the phenomenon.

[8] Kalligas 1980, 353-354, pl. 157: the axe was purchased by the Benaki Museum in 1932, where it is currently on display. There are also included two prehistoric bronze axes, a chisel and two swords with inscriptions of historic times. Vlachopoulou-Oikonomou 1994, 47-58: it was common practice to preserve archives and heirlooms in the prytaneia.

[9] Pliny the Elder, The Natural History, 37.51.135 (English translation): *Sotacus mentions also two other varieties of ceraunia, one black and the other red; and he says that they resemble axes in shape. Those which are black and round, he says, are looked upon as sacred and by their assistance cities and fleets are attacked and taken; the name given to them is 'baetyli', those of an elongated form being known as 'ceraunіae'. They make out also that there is another kind, rarely to be met with and much in request for the practices of magic, it never being found in any place, but one that has been struck by lightning*. Despite the fact that the discussion revolves around stones, the artefact from Dodona comes close to the descriptions (*astropeleki*, a Greek word literally meaning star-axe, that is, lightning). Dodona and the overhanging mountain Tomaros are spots that attract a great deal of lightning activity. This is one of the main factors that determined the founding of ancient Dodona at that specific point, as the phenomenon was considered to be an indication of the presence and divine epiphany of Zeus.

no established tradition of its production, consumption or use, which would have generated local experimentations in the wider region. However, we are still of the opinion that its specific features should not be irrelevant to the place it was found or even dedicated.

Dodona in the Late Bronze Age

As early as the thirteenth century BC there are partially-preserved buildings at Dodona[10] that, pieced together, compose the picture of a hinterland settlement of the prehistoric or-and protohistoric periods. Underneath the Hellenistic portico of the bouleuterion, five stone-lined postholes came to light in 1967, which define the outline of a rectangular hut. Furthermore, there were found at least six storage pits and an eight-shaped dugout structure, which corresponds to an underground space, covered both by a clay slab and the upper part of a large two-handled pithos, recalling a chimney. This particular construction, having until recently been interpreted as the thermal structure of a kiln or oven, contained no traces of fire on the interior. The clay slab was compact, having no air-hole, while the pithos preserved no traces of smoke. Inside the bouleuterion, in 1969, a section of a large curvilinear edifice was uncovered at foundation level. In 1971, outside the prytaneion at its northeastern corner, a small circular hut was identified, again at the foundation level located again at foundation level. Finally, in 1953, inside Zeus' sacred house a large part of a curvilinear building was revealed at foundation level, similar to that inside the bouleuterion. In the northwestern corner of the same building, there was an irregularly-shaped clay platform, on top of and around which traces of fire were located, as well as a multitude of clay drop- or fruit-shaped beads[11] and local handmade pottery.

At Dodona all categories of the local handmade pottery[12] of Epirus are present. The prevailing one is handmade pottery with plastic impressed or applied decoration and handmade monochrome burnished or polished ware. These are coarse and semi-coarse vases for the storage, preparation and consumption of food. From the twelfth century BC onwards matt-painted pottery makes its appearance, which was already known in the neighbouring areas of Albania and Macedonia. Orange-red ware comes next in popularity, high-stemmed kylikes being its hallmark. As it has recently been convincingly argued, a kind of slow potter's wheel was used for the manufacture of these kylikes. Moreover, imported wheel-made Mycenaean pottery, originating in workshops of the Mycenaean periphery, exhibits a remarkably high frequency of occurrence for an inland settlement of Epirus. Finally, there is an interesting group of handmade miniature vases for offerings, the shape of which matches that of domestic vessels, at least as early as the Late Bronze Age and Early Iron Age. With regard to the pottery of Dodona, the miniature vases, the conspicuous Mycenaean elements and two or three ritual vessels (with breast-like pellets and plastic snakes) may indicate the existence of a prehistoric cult at the site, a piece of evidence that is reinforced by the prominent presence of bronze weapons or tools, as we will subsequently see.

Natural sounds (rustling of the sacred-oracular oak tree leaves, flight of the pigeons nesting in its branches, trickling of spring water in the locality) played an important role in the creation of a 'magical' or mystical atmosphere. All this was made good use of during prophecy-giving sessions, at least since historic times. Equally decisive in this process was the contribution of artificial sounds, as are by far the sounds of bronze ritual vessels and objects. Bronze had been of immense significance in the cultic and ritual enactments at the sanctuary and oracle of Dodonaean Zeus in prehistoric or mainly in historic times, so much so that the characterisation 'the oracle of sounds'[13] is considered to be absolutely accurate. The name Dodona itself is probably derived from the root *dheu-dh-*[14] in an attempt to imitate the sound of the thunderbolt of the storm-god and later on Zeus, a common cult among many Indo-European tribes.

[10] Dakaris 1967, 39-43, 46-48, pls 26, 28-30, 32-34. Dakaris 1969, 30-31, pls 39-40. Dakaris 1971, 129.

[11] Evaggelidis and Dakaris 1959, 65-66, fig. 59. Similar finds come from a Middle Helladic building in the area of Grave Circle B of Mycenae: Mylonas 1973, 14-15, pls 8-9. Moreover, from Orchomenos: Fappas 2010, 713-719.

[12] Evaggelidis 1935, 193-212, pls 2-10: makes the distinction between handmade pottery with plastic decoration and handmade monochrome burnished ware. Wardle 1977, 176-187: publishes the first ever statistical analysis of prehistoric pottery from Dodona (handmade pottery with plastic decoration or burnished surface: 79%, orange-red pottery: 16%, Mycenaean pottery: 4%, matt-painted pottery: 1%). Tartaron 2004, 71-117: discusses a more general classification of prehistoric pottery from Epirus, as well as the Bronze Age pottery from the *Nikopolis Project*.

[13] From the 20th of June 2016 to the 31st of March 2017 the exhibition 'Dodona. The Oracle of Sounds' was hosted in the Acropolis Museum, in collaboration with the Archaeological Museum of Ioannina and the National Archaeological Museum. The exhibition attracted more than fifty thousand visitors and was accompanied by an elegant catalogue.

[14] Zolotnikova 2013, 14, 18, 47-48, 69-72. The initial thunderbolt god of storm at Dodona was replaced by Zeus (*di-we/di-wo*: Linear B srcipt) before the composition of the Homeric epics. The same comments (p. 48): *Unfortunately, any possible cult activity in the site at that phase is not indicated by the finds, and the Mycenaean Greeks' perception of the storm-deity, which would have been earlier associated with this place by its pre-Greek inhabitants, is not known*.

A multitude of bronze artefacts (tools and weapons) is to be found at the site already from the thirteenth century BC up until the early historic times. From the eighth century BC onwards an influx of southern Helladic dedications is noted, almost concurrently with the first references to Dodona in the earliest Greek texts (Homer and Hesiod). In the same period, it is convincingly suggested that the standing in open air sacred and oracular oak tree was surrounded by a 'sacred' circle of tripod cauldrons, as the recovery of many fragments from hammered and decorated sheets of bronze Geometric tripods indicates. The 'Dodonaean gong-chatterbox'[15] was replaced in the fourth century BC by the 'Corcyraean whip', a votive offering of the Corcyraeans to the Pan-Hellenic sanctuary and oracle of Dodonaean Zeus. It is also in the same period that the first building programme of Dodona was executed, which in the following century acquired a monumental form.

Bronze then was used at Dodona to create 'magical' sounds, which would help the priests or priestesses of Zeus in the giving of prophecies, as dictated by divine will. On the other hand, it constitutes the main raw material, used for the manufacture of most of the artefacts that occur at Dodona as dedications by worshippers, ritual objects or divine symbols. These objects form part of the sanctuary's assets, while they can be turned into recyclable material for obtaining metal in a period of crisis. Characteristic is the case of hammered sheets from Geometric tripods, the bulk of which show intentional breakage into smaller pieces. Unique, however, at least for the Helladic area is the accumulation at Dodona of many bronze artefacts of the prehistoric period, in the context either of an inland settlement or more probably of a far wider in scope sacred place, a more common habit for sanctuaries and cults of the historic times.

About forty bronze objects (tools and weapons) from Dodona[16] date toward the end of the Bronze Age. There are approximately twenty bronze small-sized, single- or double-edged knives of functional or/and votive purpose, some of which probably represent the oldest bronze objects in Dodona, dating back to the end of the Middle or beginning of the Late Bronze Age. There follow ten bronze double-edged axes primarily of Helladic types (Creto-Mycenaean and *Ermones-Kierio* or *Kilindir* types). Three bronze leaf-shaped spearheads, two bronze daggers with T-shaped hilt, a bronze horn-shaped sword and two bronze shield bosses have also been identified there. As 'exotic'[17] objects could be considered a bronze double-edged dagger of *Peschiera/Pertosa* type (Fig. 9) from the Po river valley in north Italy, a region with great tradition in metallurgy, the bronze double-edged axe of *Kilindir* type from the settlements of central Macedonia (moulds from Toumba and Assiros), as well as the bronze single-edged axe of *Drajna* type that we examine here. Moreover, there have been recognised about forty bronze trunnion axes[18] of a well-known type, its distribution ranging from Italy and Spain to the west, to Caucasus and Turkey to the east. The uniqueness of the Dodona bronze trunnion axes lies in the fact that in their majority are made out of a thin sheet with a hardly formed blade, a feature that makes impossible their functional use. The remainder were cast and used as axes, chisels or adzes, depending on the blade section and the hafting gradient. They probably date to the end of the Late Bronze Age or Early Iron Age (when iron examples appear elsewhere), while they clearly have a symbolic or votive character.

The concentration of all the above traits stands out as unique in the Helladic area for an archaeological site in the hinterland of the geographically rather isolated and economically self-sufficient Epirus. There, the occurrence of prehistoric cult at least from the thirteenth century BC is by now considered certain, despite the fact that it was strongly disputed by research in recent years. However, this was not acquainted with all of the archaeological evidence, on which the present plausible interpretive proposition is founded. The unique Dodonaean bronze disc-butted axe from Romania[19] published here fits into the interpretive framework that we have already proposed[20] and conforms to the approach put forward by the excavator of Dodona, late Professor

[15] Cook 1902, 5-28. Kalligas 1976, 61-68. See also, Harissis 2017, 365-380: for the case of a bronze jynx (?).

[16] Kleitsas 2014, 71-80. Kleitsas 2016, 23-24, 50-58 (entries 1-24), 68-72 (entries 47-58). Kleitsas 2017, 401-407.

[17] Dagger of *Peschiera/Pertosa*: Papadopoulos 1998, 29-30, pls 22, 27. Jung 2009, 137, fig. 4 (for revised distribution map). Axe of *Kilindir* type: Hammond 1967, 333-334. Donated by the same to Fitzwilliam Museum Cambridge.

[18] Kleitsas 2013, 116-120. The similarity to a bull's head has been denoted as epiphany of Zeus or remnant of sacrifice.

[19] The first contacts of Epirus with Romania appear in the Early Bronze Age, manifested in the EBA I-II pottery from the settlement (2920-2470 cal. BC) at the site Sevasto of Thesprotia: Forsén 2016, 194-200, 204-207. Also, in a group of twelve bronze single-edged axes from various sites in Epirus: Kleitsas 2013, 108-115. For the Late Bronze Age: Condurachi 1970, 236-237. While in the Early Bronze Age the region is oriented towards Balkan cultures further to the north, in the Late Bronze Age turns to the lying further to the south Mycenaean world.

[20] Kleitsas 2014, 71-80. Kleitsas 2017, 401-407. For some hasty doubts: Tartaron 2004, 20-23. Vasileiou 2008, 137-141. Zolotnikova 2013, 48.

Sotiris Dakaris. A great task still remains before us for the study as well as for the publication of this interesting and unique archaeological site in Ioannina, Epirus, NW Greece.

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Fig. 1. View from Dodona towards mountain Olytsika

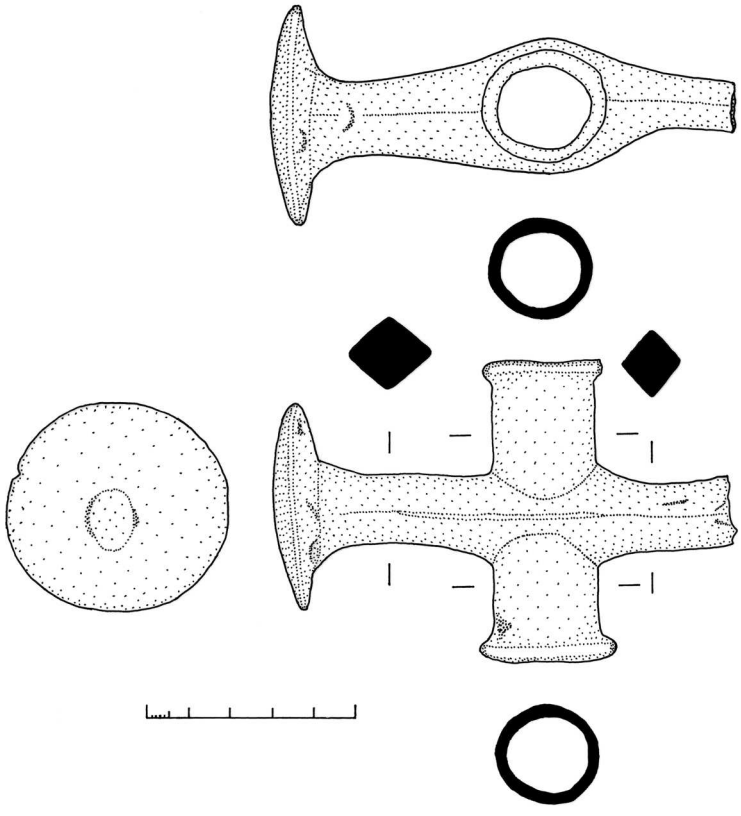

Fig. 2. Drawing of the bronze disc-butted axe from Dodona

Fig. 3. Three-dimensional view of the axe from Dodona

Fig. 6. Outer view of the disc with the 'patch' in the middle

Fig. 4. Front/Back view of the axe from Dodona

Fig. 5. Upper/Lower view of the axe from Dodona

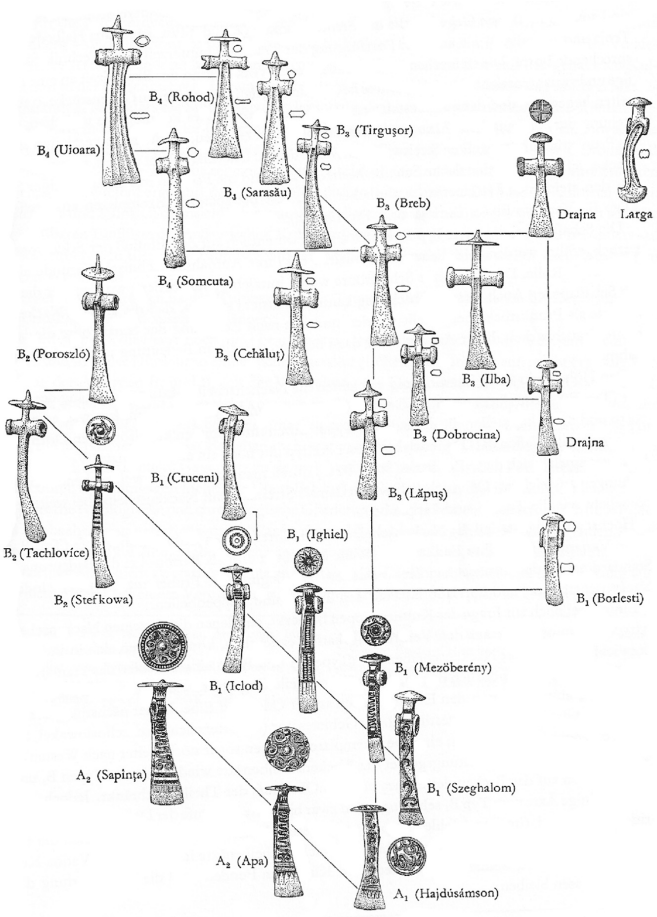

Fig. 7. Typological classification of bronze disc-butted axes (Vulpe 1970)

Fig. 8. Bronze double axe with inscription from Dodona (Benaki Museum, Athens)

Fig. 9. Bronze dagger of the *Peschiera/Pertosa* type from Dodona (National Museum of Bosnia and Herzegovina, Sarajevo)

INTERDISCIPLINARY ARCHAEOLOGICAL RESEARCH METHODS IN THE SITE OF *UNIP "DEALU CETĂŢUICA"*, *UNIP* VILLAGE, TIMIŞ COUNTY, ROMANIA

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Abstract: The archaeological site at Unip "Dealu Cetăţuica" (Small Fortress Hill) in Timiş County presents itself as a multi-layered *oppidum* type of fortification, and by the materials gathered from the soil surface, it is dated at the beginning of the First Iron Age (Ha A), overlapping with successive habitations during the Second Iron Age and the Middle Ages. The archaeological research began with systematic surface surveys, archaeological topography, digital cartography, geomorphometric and geomorphographic analyses, geophysical and pedological prospections. Our report presents the results obtained by means of all these methods in an interdisciplinary study of landscape archaeology, an obligatory preliminary phase before any systematic excavation.

Starting from the concept of *Landscape Archaeology* – defined as representing a set of techniques and methods used to study the material remains of people from the past, in the context of their interaction with the natural and social environment in which they lived –, our team's goal was to identify all of those visible "marks" on the terrain at soil surface over the whole area of the biotic and abiotic habitat, which is considerably larger than that of a proper archaeological excavation. Practically, we undertook the following field works:

1. Geomorphometric and geomorphographic analyses of the landscape
2. Pedological prospection and sampling
3. Geophysical prospections
   a. Electric tomography
   b. Magnetometry. The *Fluxgate* method

The corroboration of the four methods indicated the precise area of the site and its main defensive features.

All the data reveals an intense habitation spanning a long period of time (from Prehistory to the Middle Ages), including fortification rebuilding.

At the same time, it proves the fact that the inhabitants of this archaeological site carefully used the geo-strategic advantages provided by the natural surroundings where they established their fortification, on a hillock surrounded by an active river branch of the prehistoric Timiş River, its location (south of the main river course) having been probably less affected by periodic floods.

Initially, the hillock chosen for habitation was larger but the inhabitants of the fortification dug out a moat on the eastern side in order to delimit and secure the western part of the hillock that offered great geo-strategic advantages, as it was surrounded by water on three parts – north, west and south. Following the topometric measurements carried out on site, we observed that this is the highest elevation in the area, while the fortification lies at the highest point on the sand bank.

The geomorphometric and geomorphographic data of the fortification indicate that the inhabitants had good knowledge of geography, pedology, climate and hydrography; they found the highest and most favourable spot in an area of very low elevation, which was also the most favourable place to practice subsistence agriculture (the unfortified part of the bank is suitable for crops).

Geophysical prospections indicate strong anthropic activities in terms of fortification construction works, but also an intense habitation of the fortification, while pedological data (mostly the phosphor levels) indicate multiple fires and successive reconstructions, most likely as result of conflicts.

1. Introduction

The archaeological site was discovered in August 2007, during the systematic field research in the context of the project *eGISpat Timiş 2007. Topographical index of archaeological sites in the List of Historical Monuments of Timiş County*. On this list of LHI Timiş the site is registered at no. 51, with the code TM-I-s-B-06089. The only bibliographic record of this archaeological spot comes from the work of Medeleţ and Bugilan (Fl. Medeleţ, I. Bugilan, "Contribuţii la problema şi la repertoriul movilelor de pământ din Banat", *Banatica* 9, 1987, 175). The survey and investigations carried out in the field considerably reduced the area of research so that on 28.08.2007 the archaeological site was identified. The fact that no modern human activities (e.g. agriculture, embankment, drainage, construction works, etc.) had been performed on the site area led to its remaining in a very good state of preservation. As much as 70% of the fortified settlement area is now covered by the north-eastern part of the Unip Forest, while the rest of the site is represented by wild pasture, ravaged by boars.

2. Site description

The archaeological site at Unip "Dealu Cetăţuica", Timiş County, qualifies as a multi-layered fortified *oppidum*, which, according to the material collected from the soil surface, dates back to the end of the Bronze Age (Bz D) and the beginning of the first Iron Age (Ha A), overlapping with successive habitations during the second Iron Age, the post-Roman age, and the Middle Ages (Fig. 1). Archaeological research began with systematic surface surveying, archaeological topography, digital mapping, geomorphometric and geomorphographic analyses, geophysical prospections and pedological prospections. Successive archaeological research in subsequent years focused on systematic excavations, overlapping in part with the areas previously investigated by non-invasive methods, including geophysical prospecting.

The archaeological site is situated on a morphological terrace, covering an area of 6.3 hectares and a perimeter of 986 meters, delimited on three sides by a fossil meander of the Timiş River; it lies 50 meters south of the left bank protection dam of the river. Numerous archaeological surface surveys (over 20) undertaken during 2006-2008, on the occasion of compiling the topographical documentation for archaeological sites in the List of Historical Monuments of Timiş County, revealed in the Timiş River floodplain area dozens of major archaeological sites dating from the Neolithic Age to the late Middle Ages.

Landmark: 3.38 km NW of the Unip church and 50 meters south of the left bank dam of the Timiş River, in the NE part of the Unip Forest (GPS coordinates 45.40.09.96 N; 21.17.59.07 E; Stereo 70 coordinates Piscului Hill 469944, 211782; absolute elevation 90 m).

Stage I. Geomorphometric and geomorphographic analyses of the landscape

Starting from the topographic measurements made in 2007 and recalibrated in 2009 with a Leica 407 Total Station, the data was processed in ArcGIS 9.2 in order to perform the geomorphometric and geomorphographic analyses of the landscape (Fig. 2). Altitude indicators as well as the values resulted from their processing represent the foundation of morphometric methods. Establishing different altitudes directly (on the field) or indirectly (with the help of maps) by means of classical topographic elements allows for the specification of some relief features such as: elevation steps, density and depth of fragmentation, various critical points in morphological evolution, etc. They are all shown in special *graphs* and *maps*. It is thus useful to specify within a depression area, the position of component levels: floodplain, terraces, accumulative foothills, erosive foothills, levelling areas.

The spatial data collection in the field by using the Total Station, in a dense network of points, allows us to define the form of relief, while also emphasising its evolution in time, which presupposes a detailed analysis of various topographic maps. From these evaluations derived indicators can be drawn, such as tortuosity coefficient, irregularity coefficient for interfluve line, etc. All direct or derived morphological evaluations are presented as classic graphs and maps.

a. The first important indicator in the geomorphologic analysis is the *slope*. The selection of slope categories is done according to the research topic and the form of relief subject to investigation. Since, in most cases, human settlements are situated on river banks or in the interfluves they create, identifying the optimum slope angle is one of the criteria that may explain the choice of a particular sector and slope. Slopes which are the too severe and difficult to climb were preferred for fortification building, while unfortified civilian settlements chose gentle slopes that allowed inhabitants easy access for transportation, subsistence agriculture and the building of houses and annexes. Severe slopes are often subject to erosion processes, and water torrents may segment and even destroy terraces that are good for living. Rain water drainage is determined, among other things, by the slope angle; it is common knowledge that one of the most widespread forms of housing was the hut or the semi-hut, so water could easily infiltrate or even flood such homes in the rainy season. In the case of the fortification at Unip "Dealu Cetăţuica" it can easily be observed that the slopes are more pronounced where human activity and not the natural process occurred. Anthropic intervention thus occurred on the east side, where a defensive moat was excavated, which made the fortification stand out from the rest of the sand bank on which it lies; even nowadays the moat still measures 2 m in depth, having probably been flooded by river water (Fig. 2). Moreover, the slope on the west bank of the river points to an active meander of the Timiş River, which proves that at the time the fortress was in use it lay on the river bank and not an a fossil branch, as it does today.

b. Another indicator is the *slope direction relative to the sun*. Solar irradiance is the primary source of all processes taking place at ground level. The direction of sloping areas in relation to solar heat determines the distribution of temperature range, atmospheric precipitation, air humidity and soil moisture, influencing differently the morphodynamic processes, the distribution of soil types and vegetation. The direction of slopes, together with the succession of seasons, is an important factor in determining the degree of irradiance. The factor creating inconsistencies in meteorological parameters is primarily the altitude, which

accentuates caloric and moisture differences on opposing slopes. At the same time, direct sunlight, responsible for the contrasts imposed by orientation, increases with elevation as a result of atmosphere purification, while diffuse sunlight decreases.

The most important role in determining the amount of solar radiation received by the topographic area, and implicitly the degree of irradiance, is represented by the evolution stage of the hydrographic network through the types of watercourses it generates. Most human settlements are to be found on northern slopes, with a southern exposure to the sun. At a time when the sun was the only source of light and heat requiring no effort, people paid great attention to it; therefore, correct identification of slope exposure offers the archaeologist a very good criterion to interpret and analyse the archaeological landscape. At Unip "Dealu Cetăţuica" one can observe the advantage provided by the heightened area of the natural hillock on which lies the fortress; this advantage is reflected by a favourable exposure to the sun (SE, S, SW) with a high caloric index, i.e. exposed to light and heat practically all day long (Fig. 3). Light and heat were thus obtained naturally, the direction of slopes indicating that from Prehistory until the Middle Ages "Dealu Cetăţuica" represented the ideal location for living.

c. A third element of the basic criteria in the identification and historical and archaeological interpretation of human settlements is *altitude*. Closely connected to climate, altitude can tell us about the occupations of the inhabitants who settled at a certain elevation. Considering the fact that economy was founded on growing plants (subsistence agriculture), animal farming and shepherding (in almost all historical ages), it can easily be observed that a trophic determination chain was created: *altitude – climate – plant species – animal species – typical human occupations*. The low plain areas (70-95 m elevation) and the high plain areas (100-130 m elevation) provided favourable conditions for practising agriculture. Altitude is also a geo-strategic criterion, as the highest points are suitable for military observation, fortresses and linear fortification systems, or ridge paths. The fortification at Unip "Dealu Cetăţuica" shows the typical features of such construction in the plain area. Situated in the floodplain of the Timiş River, which overflowed periodically in the spring, the natural sand bank on which lies the fortification is 2 m higher than the surrounding terrain; the lowest elevation of the surrounding plain is 86 m, while the bank has an elevation of 89 m. However, probably due to successive occupations over time and the process of man-made storage and backfilling, the fortification lies at an elevation of 91 m, approximately 4 m above the floodplain and approximately 5 m above the river course (Fig. 4).

The favourable geo-strategic position and anthropic activities carried out to reinforce "Dealu Cetăţuica" can easily be observed by means of longitudinal and transverse profiles plotted on the *Digital Terrain Model*, according to the topographic survey performed by means of the Total Station (Fig. 5).

The NS profile (Fig. 6), a longitudinal profile on the main axis of the site, indicates anthropic activity in the south, where the observed slope angle of the rampart is 50º and where there is a ditch, slightly clogged nowadays; to the N the fortification was affected by subsequent human intervention, shown by the creation of a levelling microterrace as a result of modern farming works (the land was ploughed and cultivated until 1989, after which it was left to reforest because wild boars often destroyed the crops).

The transverse profiles on the W-E axis (Fig. 7) and the NW-E (Fig. 8) best reveal the difference between human activities and natural processes: the western side of the fortification at Unip "Dealu Cetăţuica", which used to lie on the active river bank, has the typical slope of a water-washed bank, well-shaped enough though to prevent a possible attack; furthermore, there is no moat, which, in this case, was replaced by the river itself. On the eastern side the slope angle observable from the fortification is approximately 70º, the moat profile has an angle of 25º to the outside, while its depth, even though the moat is now clogged, still retains a difference in level of about 0.5-1.5m in certain sectors. Last but not least, there is an external rampart, which, although now strongly flattened, can easily be observed to have an approximately 30m wide basis.

Stage II. Pedological prospecting and sampling

To scientifically determine anthropic presence and activity in the fortified enclosure at Unip "Dealu Cetăţuica", our team has performed a pedological prospection in order to capture anthropic changes that had occurred at soil level.

Phosphorus values (P)

All samples from points 1-9 were extracted at a depth of 0-20 cm.

Points 1, 2, 4, 6 and 8 within the site display very high values.

Point 7, located outside the archaeological site, is at the upper limit of the median values.

Point 3, located inside the archaeological site, can be ignored, as its small value can be the result of a random occurrence, or of possible damage to the sample.

The values measured within the archaeological site show a high concentration of phosphor distributed rather evenly over the entire site area.

In point 9 we carried out a pedological survey applied down to the sterile soil. Geological stratigraphy shows the following characteristics for phosphor (Fig. 9):

▼ 0-25 cm **P** has a high value
▼ 25-100 cm **P** has an excessively high value

These values can only be explained by massive human activity, as a result of massive fire (burning of wood or organic matter). Natural fire is ruled out because the off-site evidence does not indicate the same phosphor values. In Romanian mineral soils, such values range between 30-70 ppm, while in the area of the archaeological site they are triple, especially in depth, probably also because the soil surface was washed by rainwater.

The soil pH values and potassium (K) levels fit within normal limits and have no scientific relevance for the analysis of the archaeological site area.

Stage III. Geophysical prospecting

a. Electrical tomography

The instrument used was PASIGS24N with 32 electrodes arranged at a distance of 3 meters; overall length – 96 meters. (Maximum distance was 5 m, covering 160 m).

The geophysical method used was Dipole-Dipole, which generally gives the best results for the analysis of superficial deposits, with the added advantage that it does not bite too much into the sides.

The electrical tomography was performed on the E–W axis of the archaeological site's middle part, where the team assumed to find the highest density of habitation and where defensive elements of the fortification were also well preserved (Fig. 10).

The values obtained are *apparent resistivity* values, which are actually relative; to obtain absolute resistivity values more information is required, including topography, and the conversion process, called geo-electric inversion, is useful when investigating primarily the arrangement of layers. Inversion cancels differences in favour of horizontal homogenization of values.

In the case of electrical tomography, values (classes appear in the legend) are arranged according to certain alignments. From an archaeological point of view, we are interested more in the upper part, which is observed to have a more heterogeneous distribution of values (Fig. 11).

First of all, it is easy to observe the horizontal line at a depth of approximately 4.4 m, with very high values, which continues eastward albeit interruptedly. We believe that instead of rock, in this case, there are some quite compact clays. Above this, there is another layer with very low values (coloured blue), which could most likely be the phreatic layer. Usually, below the phreatic layer there is rock, so the analogy seems to be correct. The horizontal line seems to be between 2.5 and 3.5 m.

Above 2.5 m there are several blocks with relatively high resistivity values (coloured red). It is quite difficult to interpret them because values at the surface are generally lower, as there is a lower degree of compaction of deposits and implicitly higher moisture; even so, it is obvious that deposits with high values are materials of higher relative resistivity. They could be more cemented (perhaps gravel) deposits, although they are not typical at this depth; or, they might as well be traces of dwellings, if they burnt and formed vitreous floorings. Whatever the case may be, they seem to have a higher density on the left side (east), where, after the first 4-5 electrodes, the slope of the defensive ditch (in brown and yellow) may be seen going down to about 3 meters.

Otherwise, in the lower part of the tomography we have the typical picture of riverbed deposits with alternations of sand and gravel, and even somewhat bigger blocks.

*b. Magnetometry. The **fluxgate** method*

Magnetometry is one of the most effective prospection methods used in non-invasive archaeological research. It is a method that helps in the archaeological investigation because it can detect a series of signals due to past natural and anthropic processes, which are then transformed into a "map" showing potential archaeological complexes underneath the earth's crust. The fast data acquisition rate of present-day instruments allows for the prospection of vast areas in a relatively short span of time. Another advantage is that data can be displayed at high density and resolution, which then enables a detailed analysis of possible structures located in the ground.

There are two ways to configure a magnetometer: either as a "total field", measuring the current magnitude of the magnetic field, or as a gradiometer, measuring the difference between what its two sensors record (the latter of which was used in prospecting the site at Unip "Dealu Cetăţuica").

If the case of the Unip "Dealu Cetăţuica" site, an area of 200 x 50 m was prospected with grids sized 20 x 20m by using a *fluxgate* magnetometer configured as a gradiometer, whose two sensors had a sensitivity of ± 1nT.

Geophysical research undertaken at Unip "Dealu Cetăţuica" brought to light the existence of a defence system consisting of a ditch and a rampart, the entire system amounting to approximately 10 m in width. The strong signal recorded by the gradiometer used for prospection revealed that the palisade rampart was destroyed by burning (Fig. 12). Also by means of magnetometry, we could identify an impressive density of complexes in the fortified enclosure, which are completely absent outside the fortifications (Fig. 13).

Stage IV. Archaeological excavation proper

Systematic archaeological excavations began with a master-section S_1, 2 x 40 m in size, on the E-W axis, in order to capture the defensive system of the fortification on the eastern side, in the area previously prospected by means of electrical tomography and magnetometry.

With no exception, all archaeological material found in S_1 comes from disturbed archaeological layers, which caused the mixture of the Hallstatt and Dacian inventories. Sporadically, the colluvium layer on the downward slope of the ditch on the eastern side revealed late-medieval (17^{th}-18^{th} c.) pottery fragments also in a secondary position. For these reasons, the archaeological material could not be used stratigraphically to formulate more precise chronologies.

The fortification system was clearly defined on this occasion as comprising a rampart and a moat. The rampart has two palisades, one made of wood right on the top edge, and the other made of wattle on the eastern slope, having the purpose of strengthening and reinforcing the sand and clay bank. The moat, approximately 12 m wide at the top, is 3.20 m deep from the current walking level and most likely used to be full of water (Fig. 14).

At m_{26}, at a depth of 3.20 m, on the very bottom of the moat were discovered brown brick-red ceramic fragments decorated with an alveolar girdle and three grey ceramic shards datable to the 1^{st} century AD They could help track the digging date for the moat back to the age of the Dacian kingdom or to its last period of use. From a technical viewpoint, archaeological excavations validated the accuracy of the data provided not only by the electrical tomography but particularly by magnetometry.

On the upper plateau of the fortification, in its northern half, were excavated several enclosures with 6 x 6 m sides, going from the west to the east in order to identify and systematically investigate magnetic marks revealed by the magnetometric prospection, which found in this particular sector a series of seemingly anthropic anomalies.

Archaeological excavations confirmed a complex stratigraphic situation, with overlapping periods of habitation in different historical ages. We thus identified dwellings such as huts dating back to the Iron Age, surface dwellings from the classic Dacian age (Fig. 15), ritual pits from the same age, as well as Slavic semi-buried dwellings from the 7^{th} century AD.

From a technical point of view, all anomalies revealed by magnetometry were confirmed archaeologically by systematic excavation. It should be pointed out that the reality in the field proves complicated because archaeological complexes of different ages overlap and are embedded with one another; therefore, in most cases, the magnetometry data was represented by the highest values read by the device but actually gathered from different layers. Thus, a strongly burnt hearth in the Hallstatt age showed the same nT value as a hearth from the 7^{th} century AD, while the remaining structure of the Hallstatt house was rendered invisible on the magnetogram because of higher values of subsequently built archaeological complexes. In conclusion, the exact shape of the archaeological structure, as well as the chronological dating, can be validated only by systematic archaeological excavation.

3. Conclusions

Corroborating the four methods showed us the exact area (surface) of the site and its main defensive features.

All data revealed an intense habitation spanning a long period of time (from prehistory to the Middle Ages), including the rebuilding of the fortress.

At the same time, all data proved that the inhabitants of this archaeological site had used very carefully the geo-strategic advantages provided by the natural environment in which they established the fortress: on a hillock surrounded by an active arm of the prehistoric Timiş River, as the location (south of the main course of the river) was probably less subject to periodic flooding.

Initially, the sand bank chosen for habitation was larger but the inhabitants of the fortress dug out a moat on the eastern side to delimit and secure the western area of the bank, which provided excellent geo-strategic advantages: it was surrounded by water on three sides (north, west and south). Following the topographic measurements in the field, it was noted that the sand bank was the highest elevation point in the area, while the fortress occupies the highest spot on the bank.

Geomorphometric and geomorphographic data for the fortification indicated the inhabitants' good knowledge in terms of geography, pedology, climate and hydrography, as they had managed to find in an area of very low elevation the highest and most favourable point for practising subsistence agriculture (the unfortified part of the bank was suitable for growing crops).

Geophysical prospections proved strong anthropic activities in terms of fortification construction works, as well as an intense habitation of fortress enclosure, whereas pedological data (particularly phosphor values) revealed the occurrence of multiple fires and successive reconstructions, most likely as result of conflicts.

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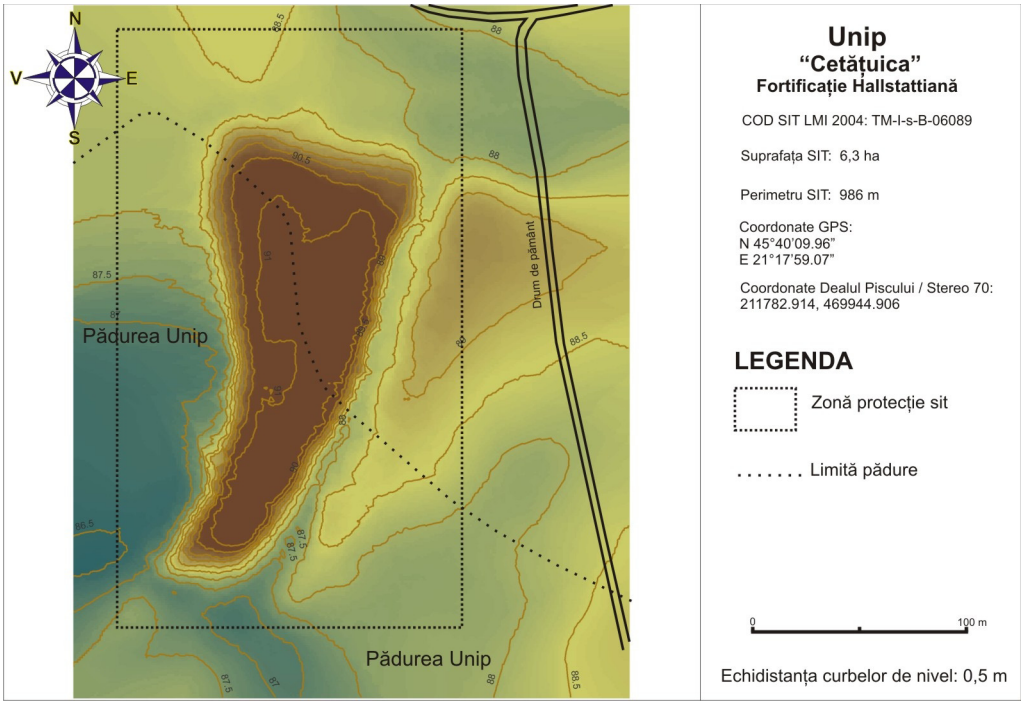

Fig. 1. Topographical plan of Unip "Dealu Cetăţuica" archeological site

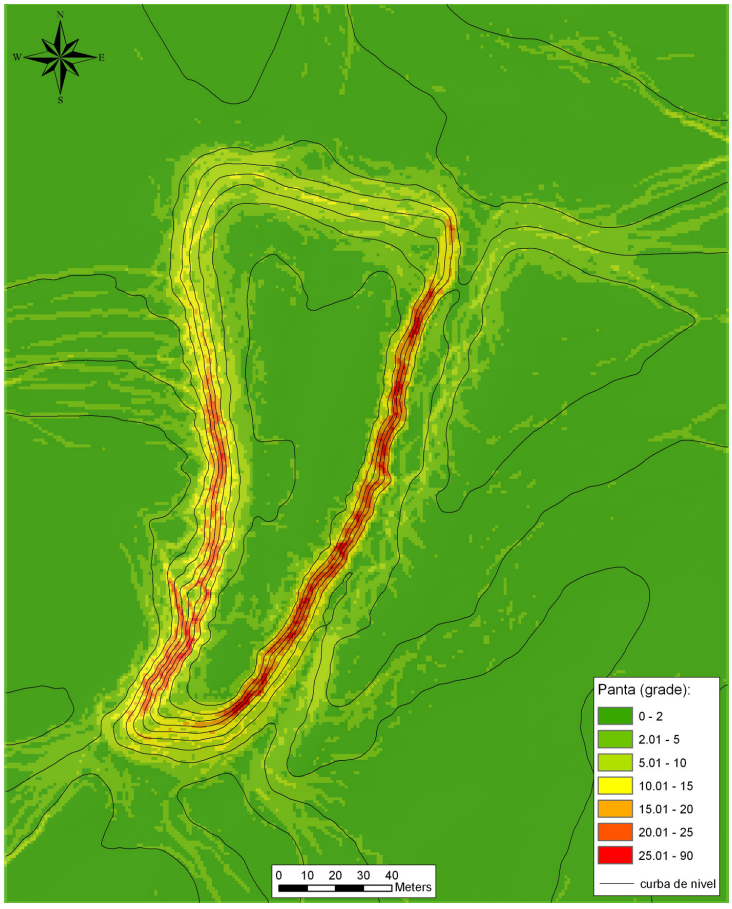

Fig. 2. Slope plan of Unip "Dealu Cetăţuica" archeological site

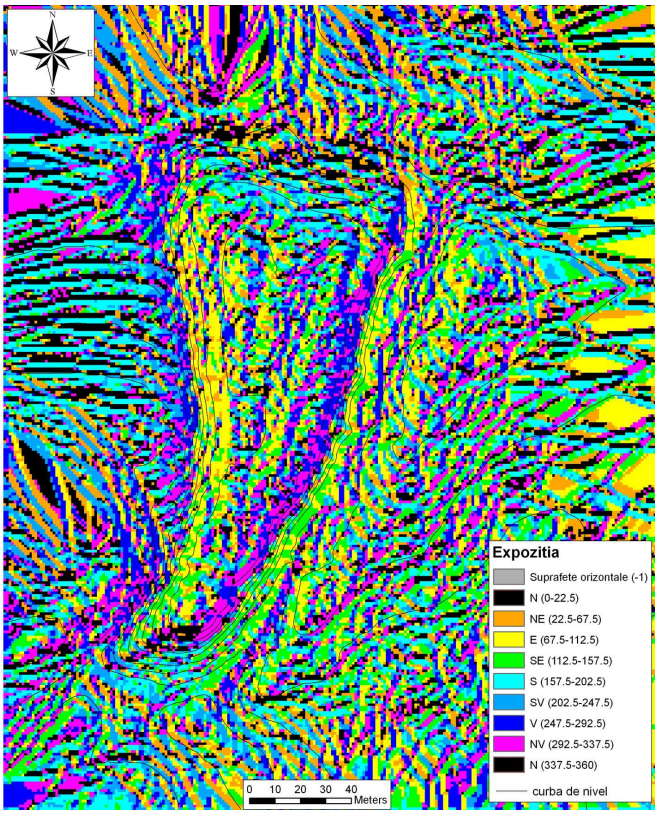

Fig. 3. Solar radiation plan of Unip "Dealu Cetăţuica" archeological site

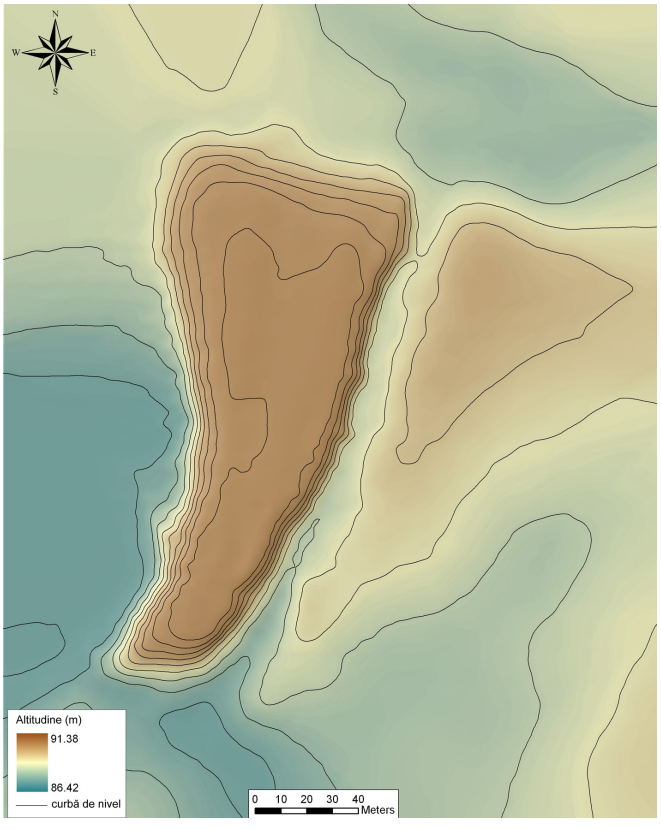

Fig. 4. Altitude plan of Unip "Dealu Cetăţuica" archeological site

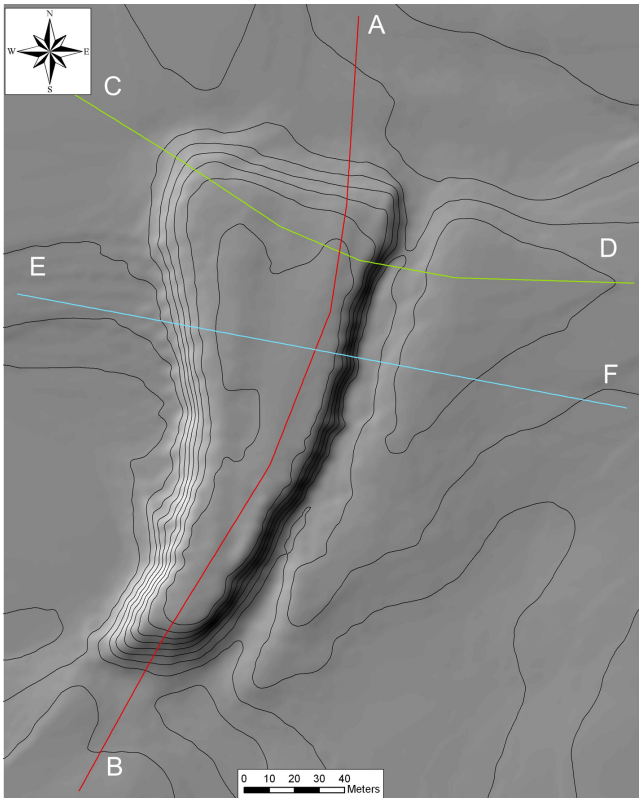

Fig. 5. Virtual sectionpaths through the Unip "Dealu Cetăţuica" archeological site

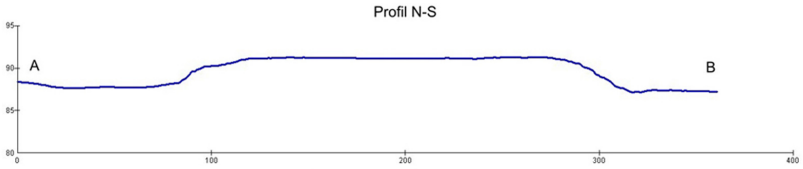

Fig. 6. Cross-section profile on the N-S axis

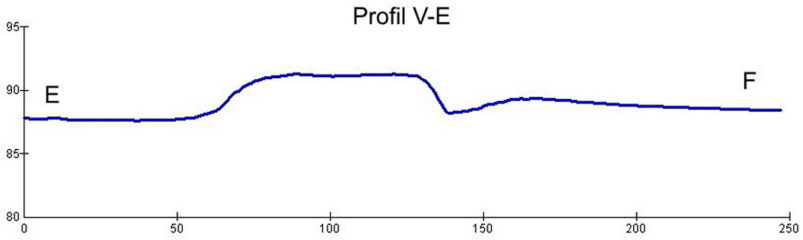

Fig. 7. Cross-section profile on the E-W axis

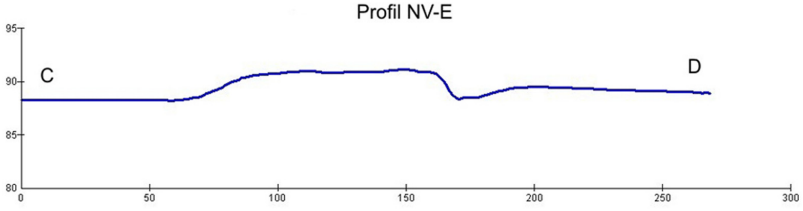

Fig. 8. Cross-section profile on the NW-E axis

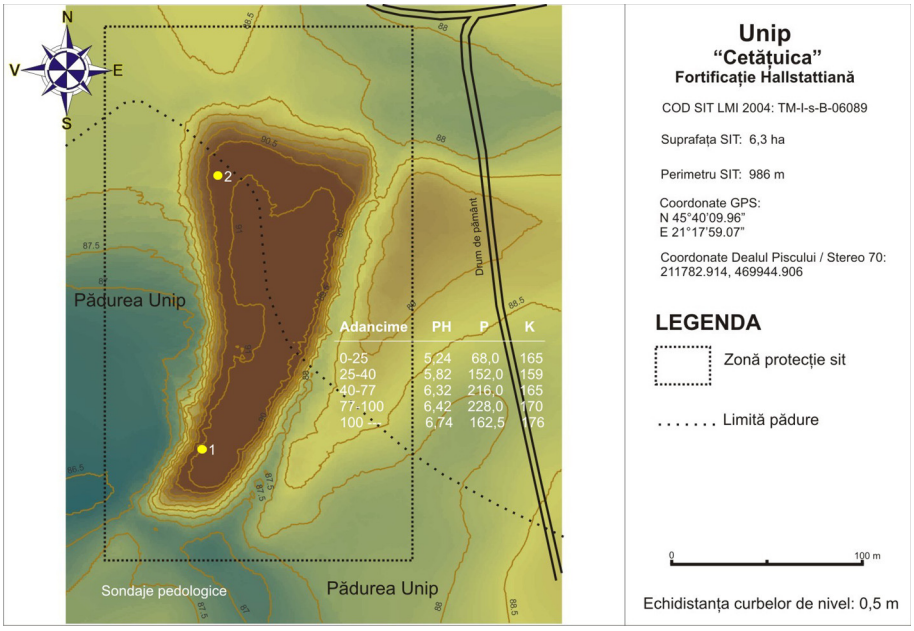

Fig. 9. Points of pedological prospection sampling

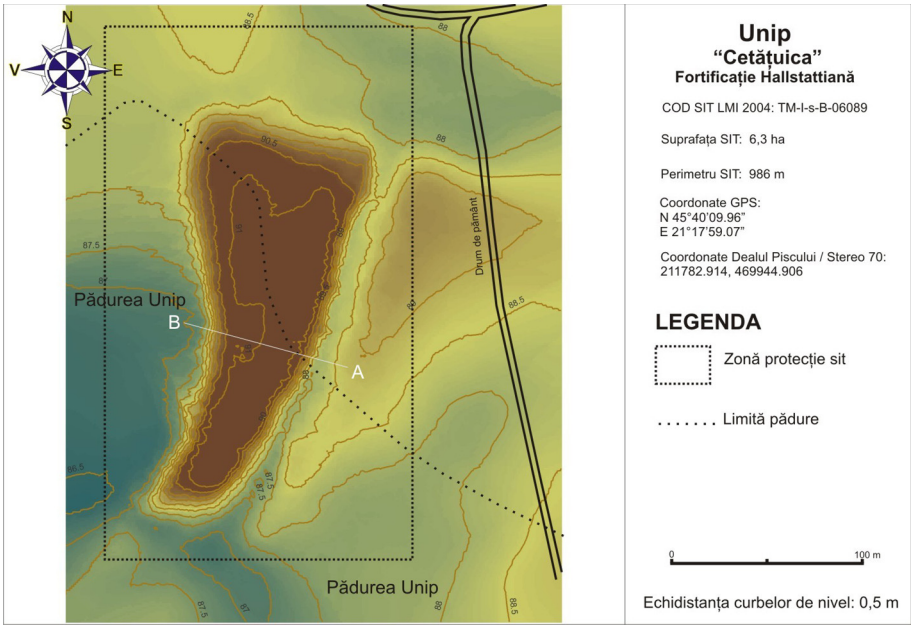

Fig. 10. Axis of electrical tomography

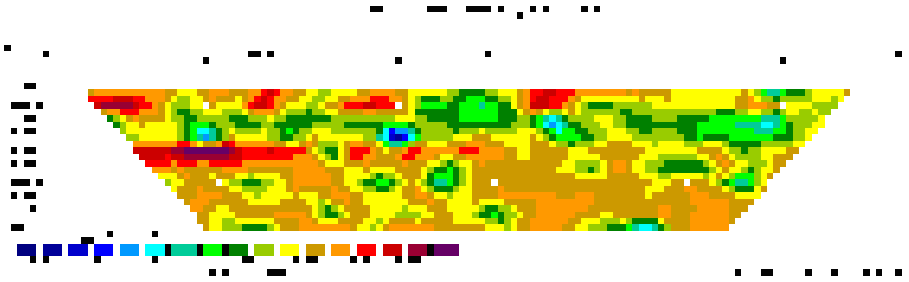

Fig. 11. Results of electrical tomography investigation

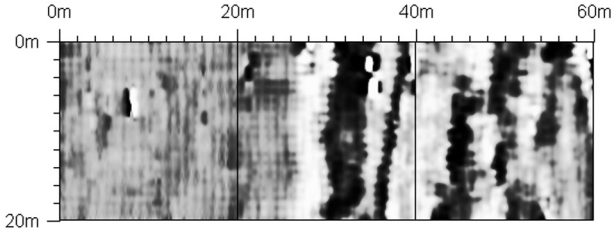

Fig. 12. Results of magnetometric investigation in the eastern sector of the archaeological site

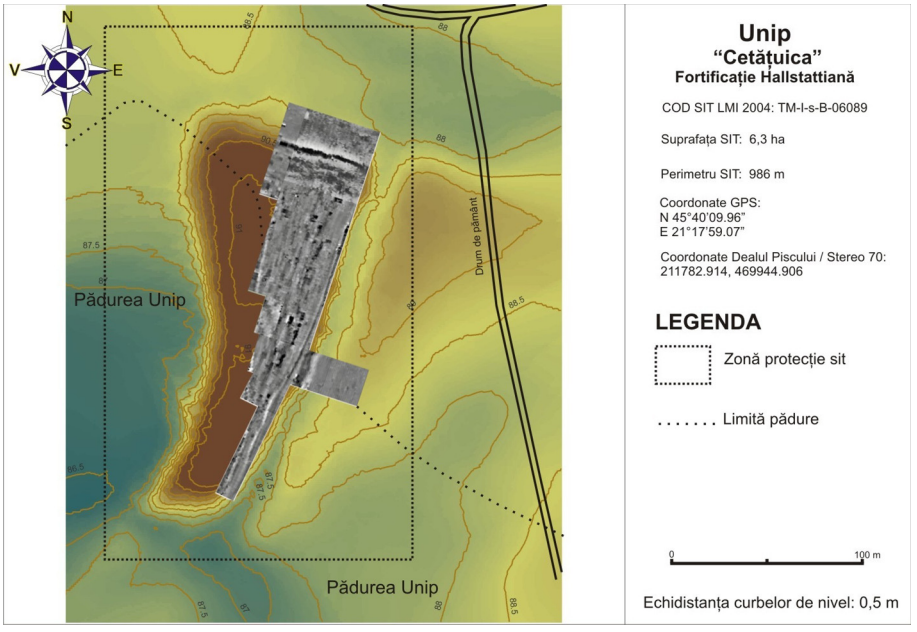

Fig. 13. Plan of density of archaeological complexes in the fortified enclosure

Fig. 14. The results of archaeological excavation in the eastern sector

Fig. 15. Dacian pottery fragments discovered in surface houses

GEOPHYSICAL PROSPECTIONS IN ACTION. AN EXAMPLE OF PREVENTIVE ARCHAEOLOGICAL RESEARCH FOR THE PRESERVATION OF HISTORICAL HERITAGE IN THE PERIURBAN AREA OF THE CITY OF TIMIŞOARA: THE MOŞNIŢA 16 ARCHAEOLOGICAL SITE, VILLAGE OF MOŞNIŢA VECHE, TIMIŞ COUNTY, ROMANIA

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Abstract: Nowadays, Romanian archaeology finds itself at the crossroads between the duty to practice exhaustive archaeological research and the need to contribute to the country's economic and social development. In the context of increasingly frequent excavation for preservation as a result of infrastructure works (motorways, national roads, gas pipes, etc.), the development of real estate or industrial sites (industrial parks, warehouses), the *County Directorate for Culture* (representing the Ministry of Culture in each county) is under continuous stress, on the one hand, from constructors, owners and beneficiaries, and on the other hand, from the Ministry of Culture, in an attempt to control, while also observing the laws, all the works that affect the already established or as yet unidentified archaeological sites. Practically, the *Directorate* should be a mediator between economic entrepreneurs in need of archaeological expertise and the institutions that can actually provide it.

One of the best practical methods of mapping and classifying the importance of archaeological sites by non-invasive methods is geophysical prospecting.

Our study brings to light some of the methods of geophysical prospecting used by the specialists of the West University of Timişoara, with examples of actual case studies conducted over the past years in the field.

1. Location and natural environment

The archaeological site Moşniţa Veche – Objective 16 (village of Moşniţa Veche, commune of Moşniţa Nouă, Timiş County) is located 1.9 km west of the Orthodox Church in Moşniţa Veche, 1.95 km north-west of the Orthodox Church in Moşniţa Nouă, and is accessible by a 1.5 km long gravel road, which connects the archaeological site to the county road DJ592.

The entire area which includes the archaeological site is part of the build-up area of the village of Moşniţa Veche. The area subject to preventive research lies in the central-northern part of the MV 16 site, covering an estimated area of about six hectares.

As a major geographical unit, our area of interest is situated in the Low Plain with proluvial-alluvial deposits of the Timiş, Bega and Bârzava rivers, and as a subunit, in the Interfluve Timiş-Bega, more exactly the Moşniţa Plain.

The relief of the area under discussion fits the description of low plains with fluvial deposits, presenting an uneven morphological aspect, with cenotes alternating with fluvial sand banks. This is also the case of the area we investigated, namely the Moşniţa Veche 16 archaeological site, which is located in the divagation area of the former secondary arms of the Bega and Timiş rivers, which used to flow across the area before being regulated and embanked in modern times. A vast fluvial sand bank was thus formed in the area, formed by silt brought in ancient times by an active creek that used to surround the fluvial sand bank; the archaeological site we investigated completely overlaps with this sand bank, which covers an area of about six hectares.

The plan obtained as a result of topographic measurements accurately illustrates the current shape of the land. The fluvial sand bank comes out strong and is easily noticeable against the former watercourse, which today is a fossil meander shaped like a snout ring (Fig. 1 and 3).

The arm of the former watercourse is better visible in the west and northwest part, but its erosion was also captured east and south of the hillock where the archaeological site is located. An interesting aspect captured by the topographic survey is the silt plug deposited north of the sand bank, a deposit which most likely caused the watercourse to stop flowing around the hillock.

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Plotting longitudinal and transversal profiles on the numerical model of the created terrain highlighted very well the differences in level and the above-mentioned aspects. It can thus be observed that the surface subject to preventive research lies in the immediate surroundings of the highest point on the sand bank's plateau (elevation 90 m), about 50 cm below, at a distance of 30 m (Fig. 2, a & b).

On the whole, it seems that the old creek that used to flow round the site of Moşniţa Veche – Objective 16 is nothing but a divagation arm of the Bega River, situated 2.2 km north-west of the site, which – previous to its being turned into a canal in the 18th century – used to flow across the whole area north and west of Moşniţa Veche, which is visible even today both in the field and on recent satellite images. The Şubuleasa creek, the active watercourse nearest to the area we investigated, which flows 1.2 km west of the site, is, in its turn, a divagation arm of the Bega River, turned into a canal.

In addition to the satellite images that capture important aspects of the whole region, our subject-area has benefited from precision topographic surveying, which graphically illustrates the current layout of the land, with the old river arm, now abandoned, still retaining its past form, an aspect that is still visible with the naked eye in the field (Fig. 3).

2. Topographic measurements

To perform the topographic survey, the instrument used was a TCR 1205 Smart Station. The positioning and direction were established according to the coordinates of the 1970 Stereographic projection system.

Although differences in elevation are very small and often irrelevant for the plain area, we could calculate, based on the registered points, the current inclination of slopes, which must have been more pronounced in older historical ages, such differences having been significantly attenuated in modern times not only by nature but especially by man.

3. Magnetometric prospection

The geophysical survey, consisting in a magnetometric prospection, represented in the case of Moşniţa Veche 16 a preliminary stage of documentation for the subsequent archaeological invasive research.

The magnetometric prospection focused on certain areas of interest (Fig. 4), which stood out as a result of previous research (field survey, fortuitous discoveries upon construction of houses), but taking into account the geomorphological realities (we aimed to investigate the upper plateau of the sand bank).

Thus, we scanned two grids, sized 30x30 m, covering an area of 0.18 ha, and a grid with a 20 m side, which means an area of 0.04 ha. The spatial arrangement of the three grids can be seen in the picture below, overlapped with the topographic measurement plan (Fig. 5).

In order to perform the prospection of the above-mentioned area a dual sensor gradiometer was employed. The first two grids were scanned on the general direction WSW-ENE (the orientation of the first traverse was always at 45°); as regards the grid with a 20 m side, its orientation was northwards. The grids were surveyed in a zigzag path, a traverse surveying every meter.

The data resolution represents the collection of eight samples for each meter of the surveyed traverses at an operating interval of 100 nT with a resolution of 0.01 nT.

Despite the presence of significant disturbance factors for such prospections – like wire fences or reinforced concrete foundations – the raw data collected can be integrated in a value range of -33.1 and + 99.7 nT, which points to a poor influence of these elements.

To increase the quality of the data, some filters were used, designed to remove extreme outliers (Clip and Despike) or to visually improve data (H/L Pass, DeSlope or Interpolate). A magnometric plan was thus obtained, whose data may be assigned to the value range of -1nT and 1nT, in which several structures can be observed.

From an archaeological perspective, we can identify several areas which group archaeological complexes, represented by black marks (shown by red arrows on the interpreted plan), which have no correlation in terms of form to the spots in white. The spatial arrangement of these anomalies suggests a clear concentration of possible anthropic structures in the first grid, while the density is lower in the second grid, where there have been documented azonal round-shaped anomalies with a diameter of 1 to 3 m. However, in the second grid, in the southern part of meters 30-33, a 3 m long and 2.5 m wide structure clearly stands out.

The area of interest for invasive research, marked on the plan by a yellow dotted line, is represented by a rectangular anomaly, which is clearly noticeable against the surrounding areas because of its grey colour, while punctual anomalies are better outlined by their black colour. Grid 3 did not present relevant findings from an archaeological point of view, which is why it was not included in our analysis.

Based on the results provided by the magnetometric prospection it was decided that the future area (6x6 m) would be placed over the rectangular print, as it was assumed to represent a quadrangular house (Fig.6).

4. The archaeological excavation proper

Following the removal of topsoil, which was affected by modern agriculture, archeological research continued by excavating several artificial layers, each being separately documented.

Before the outlining of distinct entities (archaeological complexes), the area excavated by manual digging was plotted with the aim of investigating its archaeological situations as accurately as possible (from a spatial perspective).

Due to the archaeological situations that arose, it was necessary to expand the area, both to the north and to the south, going from a 6x6 m to a 6x7.5 m + 2x1 m square area. These expansions aimed at completely capturing some complexes of great interest, such as graves C.4, C.9 and C.11, or dwelling C.14 (Fig. 7).

As a result of the preventive research carried out on the site of Moşniţa Veche – Objective 16, spectacular findings were made not only in terms of the density of traces of old human activity, but especially in terms of their chronological diversity in such a small space. Thus, within the 47sq.m. were found 28 distinct archaeological complexes (numbered from 1 to 31, three of which were cancelled), dating from the Neolithic age to the developed Middle Ages, whose preliminary chronologies are outlined below.

Prehistory – the complexes that can be traced back to the prehistoric period occupy a significant part of the investigated area, as seven such complexes were found, of which three are possible pit-houses, partially captured (C.19, C.23, C.29), while the functionality of four complexes cannot be ascertained (C.18, C.20, C. 21, C.31). With the exception of a few decorated fragments, typical of the Neolithic and Eneolithic ages (possibly Vinča C and Baden), the majority of artefacts are either atypical, or typical but undecorated; thus a high-precision chronology is difficult if not impossible to establish at this stage of the research.

La Tène (second Iron Age) – the discoveries assigned to this age within the investigated perimeter, although consisting of a single complex proper (home C.14) and the two internal pole pits (C.25 and C.30), occupy the largest area of the excavation. The materials found in this home are by far the most important quantitatively, but a large part of the artefacts are in a secondary position, dating back to a time period before the building of the house (prehistory). Nevertheless, the materials contemporary with the building of house are significantly quantitative, very diverse (ceramic, clay, bone, metal, lithic pieces), and can at a preliminary stage be assigned to the 4th -2nd centuries B.C.

Middle Ages – **(a)** Early Middle Ages (8th-10th c.) has assigned to it only one definite complex (C.10), consisting of a pit of supplies, of which two ceramic fragments stood out as befitting the age. **(b)** Developed Middle Ages (14th-15th c.) – traced back to this period are the five burial sites discovered, with an E-W orientation (heads towards the west), with no inventory but containing sporadic ceramic fragments traceable to this period (C.3, C.4, C.8, C.9, C.11).

The graves are most likely part of a cemetery, this hypothesis being supported by their orderly position (in line, without intersecting one another), which suggests the structures under discussion are contemporary (Fig. 8).

If absolute dating confirms the preliminary relative dating of the graves as belonging to the developed Middle Ages (14th-15th c.), the cemetery we discovered on "Dealu Sălaş" can be correlated to the historical realities of the area, as recorded by the "Josefinische" topographic maps 1769, which illustrates the location of an old village hearth "Das Alte Dorf" only 300m N-NW of the area we investigated; this village had existed most likely since the 14th-15th centuries on the very same site.[1]

The confirmation for the La Tène house (C. 14) dating to the 4th-3rd centuries B.C., whose materials are partly traceable to the Celtic civilisation, would represent a unique discovery, as it is – to the best of our knowledge – the first home of this type in the space of the Banat region and one of the few evidences of Celtic presence in the region, along with several other isolated discoveries.

Comparing the results obtained during the excavation to the magnetometric plan done before the beginning of the invasive research, we may notice that the structures of the two plans do not overlap perfectly, and the rectangular structure assumed to be

[1] This is confirmed by bibliographic sources, carefully analysed in their 2012 monograph by S. Forţiu, A. Magina and L. Măruia, in L. Măruia, D. Micle, C. Floca, A. Stavilă, A. Berzovan, L. Bolcu, O. Borlea, O. Rogozea, S. Forţiu, A. Magina, E. Pîrpîliţă, I. Vedrilă, P. Horak, L. Vidra, A. Gogoşanu, *Geografia istorică a zonei Moşniţa Veche. Rezultatele cercetărilor arheologice de teren*, Cluj-Napoca, 2012, pp. 143-147, as well as by the field research performed in 2010, when materials specific to the 14th-15th centuries were found in the area under discussion (see objectives MV 20 – MV 30).

a house finds no counterpart in the discoveries we made, as it is very different from the C.14 quadrangular house in shape, size and position (Fig. 9).

There are two possible ways to interpret this:

1. The spot revealed by the magnetometric prospection in the western corner of the dwelling can be the magnetic mark of the layer of ash caused by the burning of the house, an ash layer which was preserved in this sector only. The high value of the magnetic mark in the corner of the dwelling may obstruct the image of other archaeological complexes, which, having not burnt, cannot show such high values (Fig. 10);
2. This discrepancy may be the result of the fact that the rectangular spot on the magnetometric prospection is not an ancient man-made structure but a structure of a different origin (created naturally and/or the result of errors and interferences that occur when measurements are made), while its regular shape is mere coincidence.

5. Conclusions

Whichever the explanation might be, magnetometry data clearly revealed anthropic presence in the area and the existence of man-made structures. As it is a multi-layered archaeological site, with different (functional) structures and ages, it is highly likely that the overlapping of structures may lead to misinterpretations, due to the fact that the magnetometer only reads the highest values. As regards future archaeological investigations in the area we intend to calibrate the device for different values and to perform successive surveys for the same area in order to see which of them will fit the magnetometry data more accurately.

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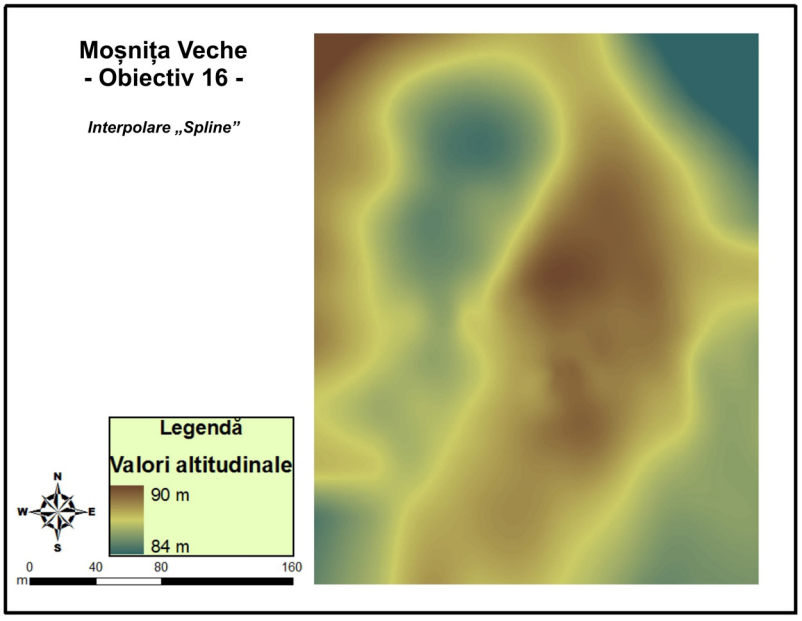

Fig. 1. Topographical plan of MV16 archaeological site

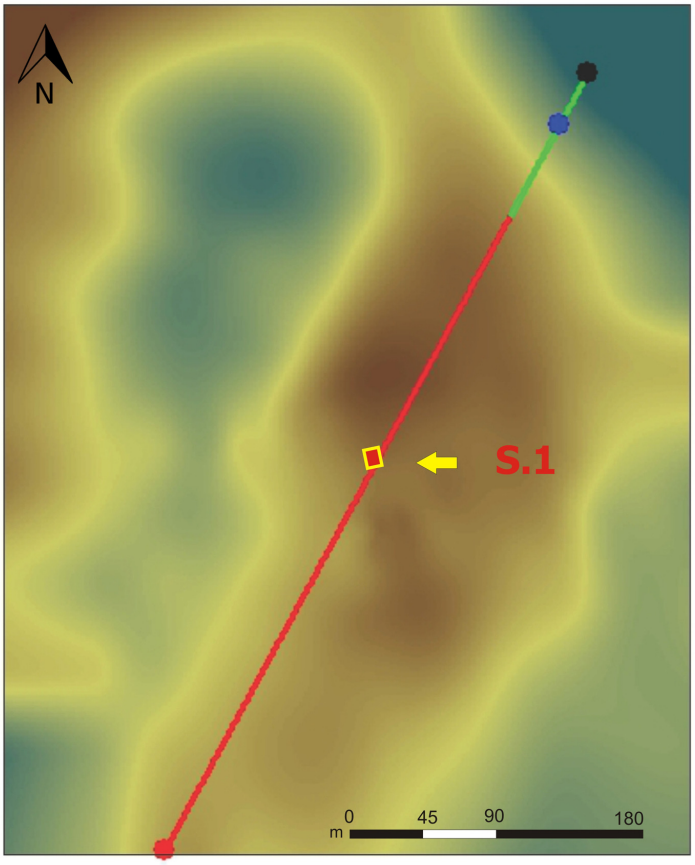

Fig. 2a. Virtual section paths through MV16 archaeological site

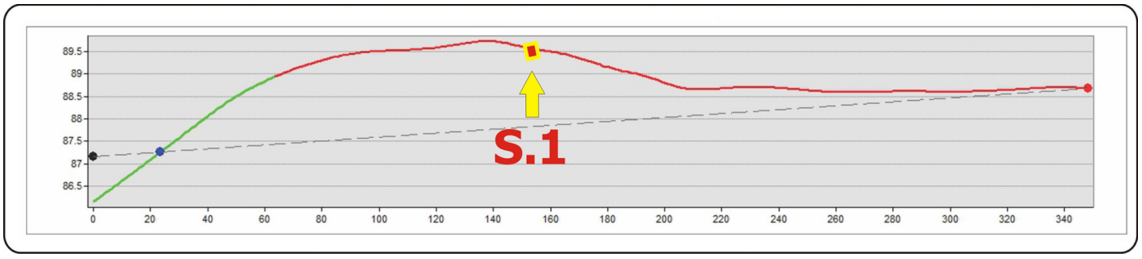

Fig. 2b. Cross-section profile on the N-S axis

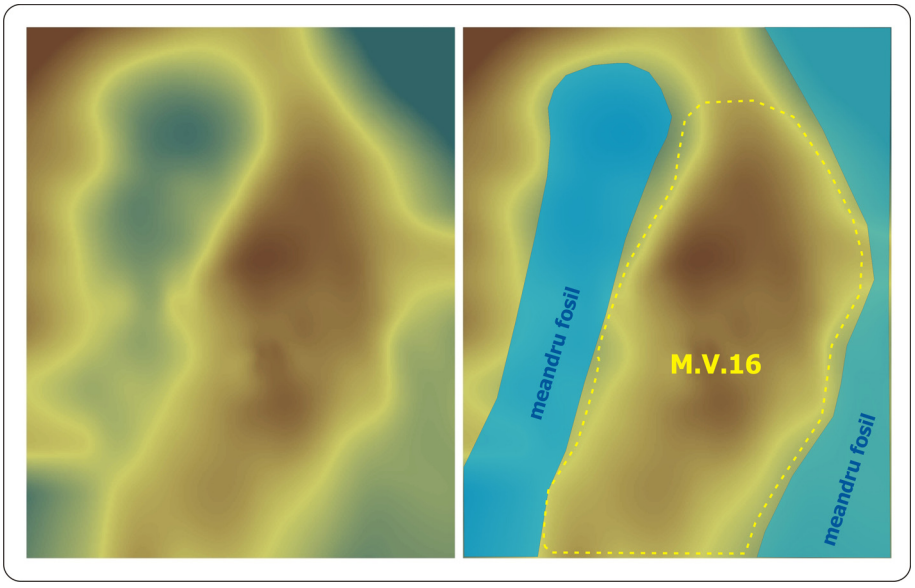

Fig. 3. Reconstruction of the old arm of the water

Fig. 4. Area of previous discoveries

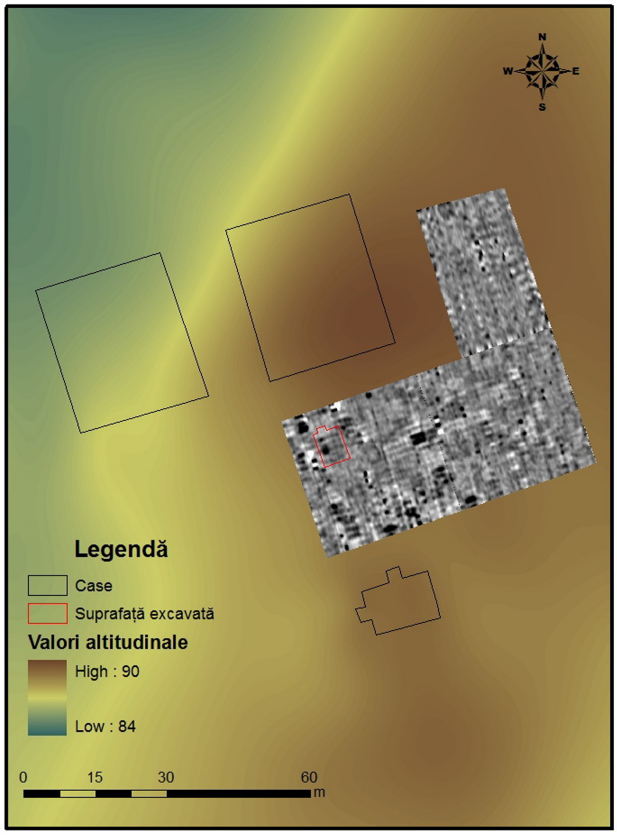

Fig. 5. Magnetometry results overlapped with the topographic plan

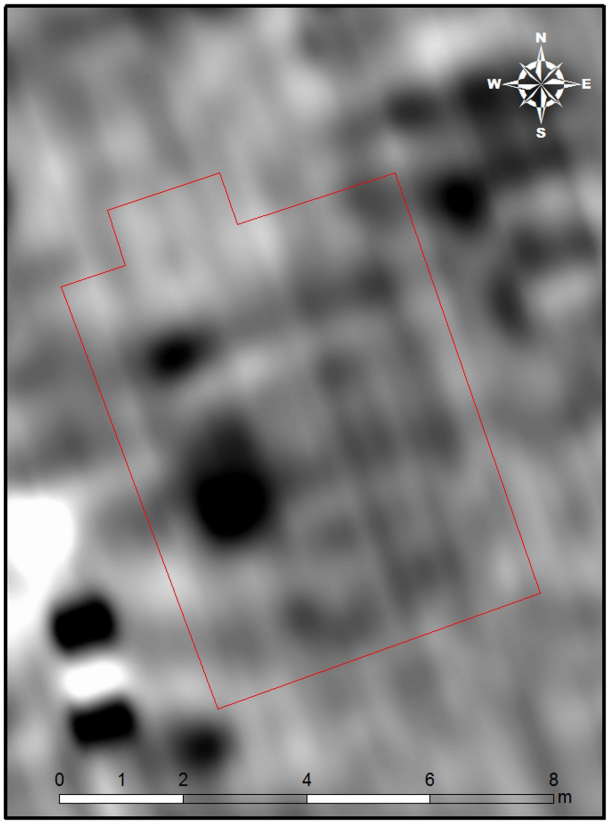

Fig. 6. Magnetometric plan and the area of excavation

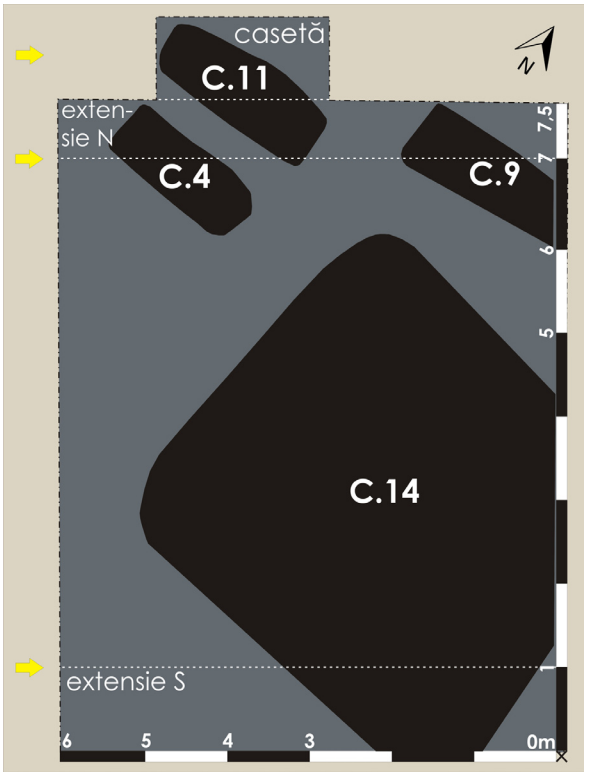

Fig. 7. The area of excavation

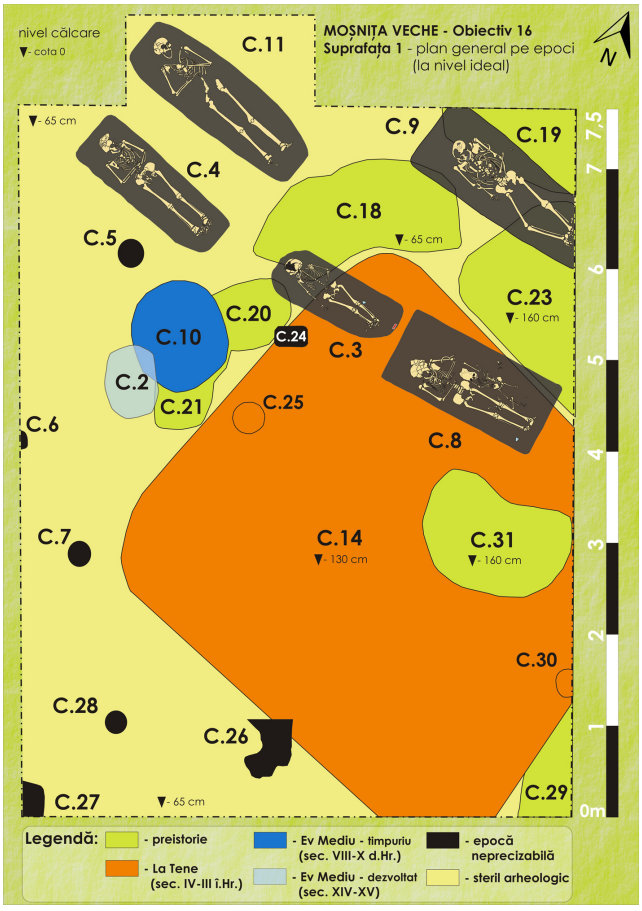

Fig. 8. Position and orientation of graves

Fig. 9. Photo with the details of the graves

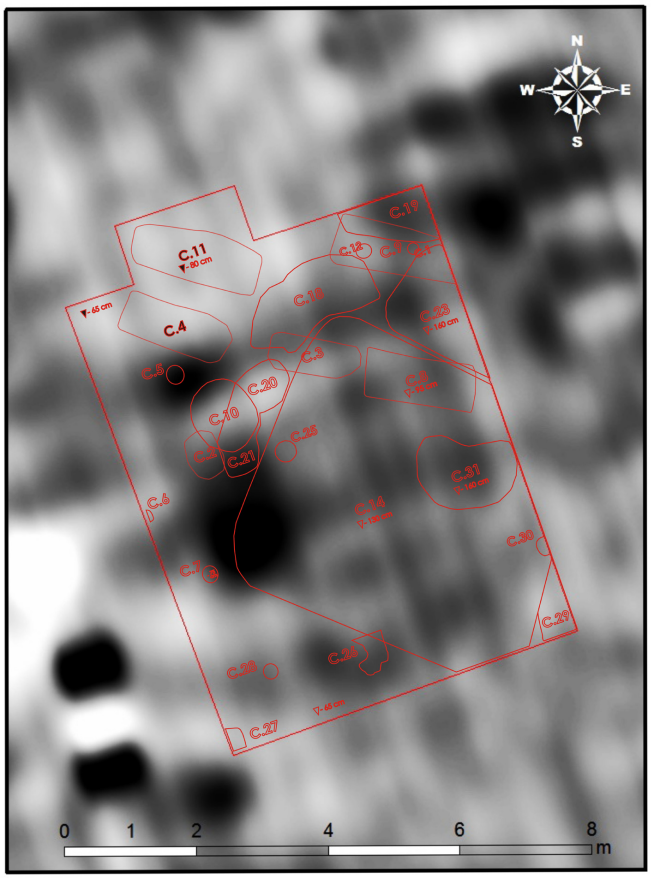

Fig. 10. Interpretation of magnetometry results after excavation

NOUVEAUTÉS ÉPIGRAPHIQUES D'ISTROS

Alexandru Avram*

Résumé : L'auteur publie douze inscriptions grecques qui, bien que provenant de découvertes plus anciennes, n'ont pas été incluses dans le corpus des monuments épigraphiques d'Istros–Histria (*ISM* I, 1983). Il s'agit de quatre inscriptions funéraires d'époque classique ou de haute époque hellénistique (nos 1-4), de deux monuments honorifiques hellénistiques (nos 5-6), d'un monument érigé en l'honneur de Septime Sévère (n° 9), d'un catalogue fragmentaire de l'époque des Sévères (n° 10) et de quelques autres inscriptions fragmentaires (nos 7-8 et 11-12).

Mots-clés : Istros, inscriptions funéraires, monuments honorifiques, catalogue, époque des Sévères.

Abréviations :

BE	*Bulletin épigraphique*. Annuellement dans la *Revue des études grecques*.
ISE I	L. Moretti, *Iscrizioni storiche ellenistiche. Testo critico, traduzione e commento*, vol. II. *Grecia centrale e settentrionale* (Florence, 1976).
ISM I	D.M. Pippidi, *Inscripţiile din Scythia Minor greceşti şi latine*, vol. I. *Histria şi împrejurimile* (Bucarest, 1983).
LGPN IV	P. M. Fraser et E. Mathews (éds), *A Lexicon of Greek Personal Names*, vol. IV (Oxford, 2005).
SEG	*Supplementum Epigraphicum Graecum*. Leyde, puis Amsterdam, ensuite à nouveau Leyde, 1923-1971, 1979 –.

Après la publication magistrale du corpus des inscriptions d'Istros (Histria) par Dionisie M. Pippidi (*ISM* I, 1983), un supplément comportant des *addenda et corrigenda* fut compilé par l'auteur de ces lignes en 2007.[1] Plusieurs autres découvertes épigraphiques, dues essentiellement aux fouilles des dernières années[2] ou à des trouvailles fortuites,[3] furent ajoutées depuis lors. Cependant, la moisson épigraphique qu'a fournie Istros peut être complétée par quelques fragments disparates, plus ou moins significatifs, trouvés pour la plupart dans des circonstances inconnues, que Pippidi, pour une raison ou une autre, n'avait pas insérés dans son corpus. Dans ce qui suit, je me propose de combler cette lacune, en confiant aux lecteurs intéressés le résultat de mes dernières enquêtes à la fois dans le lapidarium du site archéologique d'Histria et dans celui abrité par l'Institut d'Archéologie de Bucarest (ancien Musée National des Antiquités, MNA). Les douze nouveaux documents épigraphiques que j'ai identifiés sont classés ci-dessous dans un ordre chronologique.[4]

1. Fig. 1. Musée d'Histria, inv. 427. Fragment informe d'une stèle de marbre : ht. = 0,090 ; lg. = 0,200 ; ép. = 0,065. Inscription disposée selon toute probabilité sur deux lignes, dont la première fait défaut. Lettres profondément gravées : *xi* avec pied vertical traversé d'une barrette au milieu ; ht. des lettres = 0,023-0,025.

V^{e}/IV^{e} siècles *a.C.*

[ὁ δεῖνα]
[E]ὐξεν[ίδου].

[Πολ]υξέν[ου] semble être tout aussi possible. Les deux noms sont attestés à Istros, mais Εὐξενίδης est manifestement plus fréquent.[5] À en juger d'après la forme des lettres et surtout d'après le trait du *xi*, il s'agit sans conteste de l'un des plus anciens monuments funéraires d'Istros.

2. Fig. 2. Musée d'Histria, sans inv. Fragment de la partie supérieure d'une stèle massive de calcaire : ht. = 0,145 ; lg. = 0,235 ; ép. = 0,150. Lettres profondément gravées, de grandes dimensions et élégantes ; ht. des lettres = 0,032-0,035.

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[1] Avram, 2007.

[2] Avram, 2014, avec, à la note 2, les références complètes aux publications épigraphiques concernant Istros ayant fait suite à mon article de 2007.

[3] Avram, 2018.

[4] Les dimensions sont données en mètres.

[5] Voir les entrées respectives dans *LGPN* IV.

V^e/IV^e siècles *a.C.*

[- - -]μον[- -]
[- - γυ]ν̣ή *vac.*
vac.

Ce fragment peut, lui aussi, être classé parmi les plus anciennes inscriptions funéraires d'Istros.

3. Fig. 3. Musée d'Histria, sans inv. Fragment informe d'une stèle de calcaire : ht. = 0,200 ; lg. = 0,280 ; ép. = 0,065. Lettres de grandes dimensions, profondément gravées ; ht. des lettres = 0,052.

IV^e siècle *a.C.*

[ἡ δεῖνα - - -]ō
[τοῦ δεῖνος γυ]νή.

À la première lignes, très probablement, la désinence du génitif du patronyme porté par la défunte.

4. Fig. 4. Musée d'Histria, sans inv. Stèle de marbre brisée de tous les côtés : ht. = 0,420 ; lg. = 0,445 ; ép. = 0,14. Lettres assez profondément gravées ; ht. des lettres = 0,030.

Première moitié du III^e siècle *a.C.*

[Ἀ]π̣ολλᾶ[ς]
[Ε]ὐ̣πόλιδ̣[ος]

Tous les deux noms sont nouveaux à Istros,[6] bien qu'ils soient assez connus ailleurs, y compris en Thrace et sur les côtes du Pont-Euxin.

5. Fig. 5 a-b. Musée d'Histria, sans inv. Base de marbre brisée en haut, à gauche et en bas : ht. = 0,125 ; lg. = 0,330 ; ép. = 0,140. On n'en conserve que le bord droit. La présence de deux trous de forme rectangulaire sur la surface supérieure (**fig. 5 b**) pourrait indiquer qu'il s'agit d'une base de statue. Lettres profondément gravées, voire élégantes, pourvues d'*apices* ; ht. des lettres = 0,022-0,024.

Première moitié du III^e siècle *a.C.*

[Ἡ βουλὴ καὶ ὁ δῆμος]
[τὸν δεῖνα τοῦ δεῖνος Κα]
λλατ[ιανὸν]
[τὸν εὐ̣]
ε̣ρ̣γέτην.

« Le Conseil et le peuple (honorent) le bienfaiteur Untel, fils d'Untel, Callatien. »

La restitution assurée de la dernière ligne est en état de révéler que nous avons affaire à un monument honorifique, dont le formulaire peut être rapproché des inscriptions suivantes :

ISM I 70 : ἡ βουλὴ καὶ ὁ δῆμος | Καλλιάδην Καλλιάδου | τὸν εὐεργέτην (III^e siècle *a.C.*) ;

ISM I 71 : ἡ βουλὴ κ̣αὶ ὁ δ̣ῆ[μος] | Ἀπατούρι[ον] Θεοπόμ[που] | τὸν εὐεργέτην (II^e siècle *a.C.*) ;

Avram et Marcu 1999 (*SEG* 50, 683), face A : [- -]τ̣ων ἡ βουλὴ καὶ ὁ δῆμος | [τὸν δεῖνα] Θεογνήτου | [τὸν εὐερ]γέτην (fin du II^e – début du I^er siècle *a.C.*) ;[7]

peut-être aussi, pour autant que la restitution en soit tenable, Avram 2014, 278-282, n° 8, face A : [τὸν δεῖνα τοῦ δεῖνος τὸν ε]ὐε[ργέτην | ἡ βουλὴ καὶ ὁ δῆμο]ς (IV^e siècle *a.C.*, *stoichèdon*).

La combinaison des lettres conservées à la l. 2 permet de restituer l'ethnique porté par les Callatiens. C'est ainsi que nous prenons connaissance de la présence d'un nouveau Callatien à Istros. Les deux autres sont mentionnés par les décrets honorifiques *ISM* I 9[8] et 47,[9] datant respectivement du III^e et du II^e siècle *a.C.* En revanche, le monument honorifique *ISM* I 117 (III^e siècle *a.C.*), dans lequel Pippidi avait restitué le même ethnique ([Ἰ]στριανοὶ Καλλα[τιανὸν - - -]), n'a rien à voir avec un Callatien : comme l'a bien vu Luigi Moretti,[10] il s'agit plutôt d'un anthroponyme : Κάλλα[ισχρον (*vel sim.*) τοῦ δεῖνος].

[6] Je laisse de côté *ISM* I 65, l. 4 (Εὔπολις Φιλομήλου), car cette inscription à provenance inconnue (Olbia?) n'est sûrement pas d'Istros.

[7] Cf., pour ces trois documents, Nawotka, 2014, 88.

[8] Voir aussi *ISE* II 130 ; Migeotte, 1985, 126-128, n° 41. Ajouter la traduction allemande de ce décret dans Brodersen *et alii,* 1999, 52, n° 444.

[9] Voir aussi Nawotka, 1999, 189, n° I. 72 (*SEG* 49, 1007 [3]). J'en ai donné une nouvelle restitution dans Avram, 2007, 91, n° 47 (*SEG* 57, 652 ; cf. *BE* 2008, 375).

[10] Moretti, 1983, 54 (cf. *BE* 1984, 269).

Il est intéressant de constater que les étrangers pouvaient, eux aussi, être proclamés « bienfaiteurs du peuple ». Normalement, on leur octroyait la qualité de proxène et les privilèges qui en découlaient, alors que l'inscription comme évergètes était réservée aux seuls citoyens.[11] Cependant, la désignation de notre Callatien comme « évergète » peut être comprise de manière plus générale, au sens de « bienfaiteur » tout court, le monument ayant été sans doute érigé suite à une munificence ponctuelle : il n'était peut-être pas question d'inscription officielle sur les listes d'évergètes tenues par les autorités publiques de la cité.

6. Fig. 6. MNA, sans inv. Trouvé en 1977 à un endroit non mentionné. Partie droite d'une petite plaque de marbre : ht. = 0,065 ; lg. = 0,070 ; ép. = 0,090. Lettres profondément gravées : *mu* avec les extrémités obliques, *pi* avec la haste horizontale prolongée au-delà des points d'incidence avec les pieds ; ht. des lettres = 0,006-0,007.

I^er^ siècle *a.C.*

[Ὁ δῆμος τὸν] στρατηγ[ὸ]ν̣
[τὸν δεῖνα] Διονυσίο[υ]
[κατασκευάσαντα] τὴν πύ-
4 [λην ὑπὲρ τοῦ δή]μου.

« Le peuple (honore) le stratège Untel, fils de Dionysios, qui a fait ériger pour le peuple la porte. »

Le principal problème que pose ce menu fragment concerne le caractère du monument. Il s'agit, certes, d'une inscription honorifique, mais les dimensions infimes de la pierre et de ses lettres ont le don de surprendre. Il ne peut être question d'une base de statue ou d'une stèle (portant éventuellement le décret en l'honneur du concerné). Il s'agirait, à mon avis, d'une petite plaque commémorative encastrée discrètement dans une niche auprès de la porte (πύ[λη]) érigée par l'*honorandus*.

La date attribuée sur la foi des caractères paléographiques à cette inscription nous invite à envisager une opération de reconstruction des remparts d'Istros, peut-être après la terrible destruction subie par la ville à la suite de l'invasion des Gètes du roi Byrébista. Le décret *ISM* I 54,[12] dont le titulaire, Aristagoras, fils d'Apatourios, est désigné comme τειχοποιός, « bâtisseur des remparts », en rend compte de la plus belle des manières. Il est donc peut-être permis d'imaginer, dans ce cadre, la construction – ou la réfection – d'une porte par les soins de notre stratège.

La magistrature de la stratégie n'est pas attestée à Istros. Un décret du début du II^e^ siècle *a.C.* (*ISM* I 15) mentionne la charge exceptionnelle d'un στρα[τη]γὸς ἐπὶ τῆς [χώ]ρας [αὐ]τοκράτωρ, alors qu'un autre, publié plus récemment,[13] nous fait connaître un ressortissant d'Amisos (?) envoyé comme στρατηγὸς <ἐπὶ> [τῆ]ς πόλ[ε]ως par le roi Mithridate VI Eupator, ce qui, bien entendu, n'a rien à voir avec les institutions de la *polis*. Notre stratège était-il un magistrat, membre d'un collège à six (correspondant ainsi sans doute au nombre des *phylai*, comme à Olbia à l'époque impériale),[14] auquel cas nous aurions ici la première attestation de cette magistrature, ou tout simplement – et peut-être plus probablement – un « officier » ? Aucune réponse n'est pour l'instant possible.

7. Musée d'Histria, inv. 163. Fragment informe d'une stèle de marbre : ht. = 0,240 ; lg. = 0,160 ; ép. = 0,105. Dans sa partie supérieure, la stèle était pourvue d'un relief, duquel il ne reste qu'une partie du cadre. Inscription disposée sous le relief, avec des lettres bien profondément gravées : ht. des lettres = 0,010.

Époque hellénistique.

Ἀγαθ̣[ῆι τύχηι]
- - - - - - - - - - -

8. Fig. 7. Musée d'Histria, inv. 177. Fragment d'une architrave de marbre brisé en haut, à gauche et à droite : ht. = 0,160 ; lg. = 0,350 ; ép. = 0,230. Inscription disposée sur une seule ligne. Écriture monumentale, avec des lettres pourvues d'*apices ;* ht. des lettres = 0,065.

Époque des Antonins.

[11] Gauthier, 1985, 35.

[12] Voir aussi Maier, 1959, 257, n° 80 ; Gauthier, 1985, 34, note 85 (rest. des l. 55-57) ; Bielman, 1994, 189-193, n° 53. Pour le rapport entre ce décret et les actions de Byrébista, voir Pippidi, 1957 = Pippidi, 1967, 270-280 ; Avram, 2000, 154-156 (*SEG* 51, 930 *bis*) ; P. Alexandrescu, dans Alexandrescu *et alii,* 2005, 143-154 (*SEG* 55, 793).

[13] Avram et Bounegru, 1997 (*SEG* 47, 1125), repris, avec des *corrigenda*, dans Avram et Bounegru, 2006 (*SEG* 55, 845).

[14] Ehrhardt, 1988, 206 ; Nawotka, 2014, 86. Plus récemment, Ivantchik, 2017.

[Αὐτοκράτορι] Καίσ̣[αρι - - - -]

9. Fig. 8. Musée d'Histria, sans inv. Plaque de marbre brisée de tous les côtés : ht. = 0,125 ; lg. = 0,175 ; ép. = 0,060. Lettres profondément gravées : *éta* avec la haste horizontale sans incidence avec les pieds, *sigma* lunaire ; ht. des lettres = 0,010-0,012. 193-196 *p.C.*

[Ἀγαθῇ τύχῃ·]
[ὑπ]ὲρ̣ τ̣ῆς το[ῦ αὐτο]-
[κρά]τορος ν[είκης,]
4 [Λ. Σεπ]τ̣ιμίου [Σευή]-
[ρου καὶ σύν]π̣αντ[ος]
[αὐτοῦ οἴκου κ]<αὶ> δ̣[ή]-
[μου τοῦ Ῥωμαίων - - -]
- - - - - - - - - - - - - - - -

L. 6 : plutôt N (qu'il conviendrait sans doute de corriger), puis un lettre triangulaire, peut-être Δ.

« À la bonne fortune! Pour la victoire de l'empereur L(ucius) Septimius Severus et de toute sa famille et du peuple romain… »

À en juger d'après les débris des lettres conservées, l'on a affaire à une dédicace pour l'empereur Septime Sévère. Les restitutions reposent sur un formulaire quasi commun aux nombreuses inscriptions de ce genre, dont on trouve des spécimens entre autres à Istros (*ISM* I 81, 82, 87). Il est pourtant à remarquer que la tournure est incomplète et surtout qu'elle n'est pas tout à fait correcte : le mot ν[είκης] aurait dû être inséré plus bas ; il manque ensuite, après [σύν]π̣αντ[ος | αὐτοῦ οἴκου] et avant le supposé [κ]<αὶ> δ̣[ή|μου τοῦ Ῥωμαίων], la formule habituelle καὶ ἱερᾶς συγκλήτου.

Si l'on tient compte du fait que le fils de l'empereur, Caracalla, n'était pas encore associé à son père en tant que *Caesar*, l'inscription est à placer dans l'intervalle compris entre 193 et le 4 avril 196, date de l'octroi du titre de *Caesar* à Caracalla.[15] Puisque le formulaire de l'inscription présente les quelques imperfections déjà mentionnées, peu compatibles avec un monument érigé par les autorités de la cité, il est très probable que cette stèle provient d'un village du territoire d'Istros.

10. Fig. 9. Musée d'Histria, sans inv. Bloc de marbre brisé en haut, à droite et en bas : ht. = 0,530 ; lg. = 0,220 ; ép. = 0,180. On en conserve le bord gauche. Espace de 0,060 entre ce dernier et le début des lignes du texte gravé. Inscription disposée, semble-t-il, soit sur une, soit sur deux colonnes. Lettres profondément gravées : *alpha* à barre intérieure brisée, *théta* avec barre intérieure sans incidence avec le corps de la lettre, *mu* tantôt de forme normale, tantôt de trait cursif ; ht. des lettres = 0,015-0,018.

Époque des Sévères.

- - - - - - - - - - - - - - -
Ἀθην[άδης - - - - - -]
Διονύσ[ιος - - - - - -]
Ἀρτεμίδ[ωρος - - - -]
4 Μενίσκος [- - - - - -]
Θεόγνη[τος - - - - - -]
Ἀπολλώ[νιος - - - - -]
Μενέχ[αρμος - - - - -]
8 Νεικί[ας - - - - - - - -]
Κρατ̣[- - - - - - - - - -]
- - - - - - - - - - - - - - -

Il s'agit d'un *album* mentionnant peut-être les membres d'une association. Faute de patronymes, il est pratiquement impossible de faire des enquêtes prosopographiques à ce propos. Tous les noms étaient déjà attestés à Istros. Parmi les nombreux Ἀθηνάδης, l'on préférerait peut-être [Ἀ]θηνάδης Δαματρίου (*ISM* I 100, l. I.18) à tel Ἀθηνάδης Αἰσχρίωνος (*ISM* I 200, l. 3) ou à tel Ἀθηνάδης β′ (*ISM* I 212, l. 28), lesquels semblent être plus anciens, car actifs au II^{e} siècle. Νεικί[ας] a de grandes chances d'être le même que Νεικίας Οὐαλερίου ὁ καὶ Μᾶρκος (*ISM* I 218, l. 11), mentionné par une inscription quasi contemporaine de la nôtre.

[15] Schillinger-Häfele, 1986, 69 ; Kienast, Eck et Heil, 2017, 156.

11. Musée d'Histria, sans inv. Deux fragments parfaitement jointifs du cadre en relief d'une stèle en calcaire : ht. = 0,300 ; lg. = 0,470; ép. = 0,110. Lettres profondément gravées : *alpha* à barre intérieure brisée; *éta* avec la barre intérieure sans incidence avec les pieds; *théta* en forme de losange, avec la barre intérieure sans incidence avec le corps de la lettre ; ht. des lettres = 0,020-0,025.

III[e] siècle *p.C*.

Ἀγαθῆι *vac*. τύχηι

- - - - - - - - - - - - -

12. Musée d'Histria, sans inv. Fragment informe d'une stèle en marbre : ht. = 0,110 ; lg. = 0,080 ; ép. = 0,050. Lettres plutôt profondément gravées ; ht. des lettres = 0,008.

Époque impériale.

[Ἀγαθῆ] τύχῃ

- - - - - - - - - -

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Fig. 1. Inscription funéraire n° 1. Photo Iulian Bîrzescu.

Fig. 2. Inscription funéraire n° 2. Photo Iulian Bîrzescu.

Fig. 3. Inscription funéraire n° 3. Photo Iulian Bîrzescu.

Fig. 4. Inscription funéraire n° 4. Photo Iulian Bîrzescu.

Fig. 5 a-b. Base honorifique n° 5. *a :* champ de l'inscription; *b :* partie supérieure de la base. Photos Iulian Bîrzescu.

Fig. 6. Inscription honorifique n° 6. Photo Cătălin Nicolae.

Fig. 7. Dédicace impériale n° 8. Photo Iulian Bîrzescu.

Fig. 8. Dédicace impériale n° 9. Photo Iulian Bîrzescu.

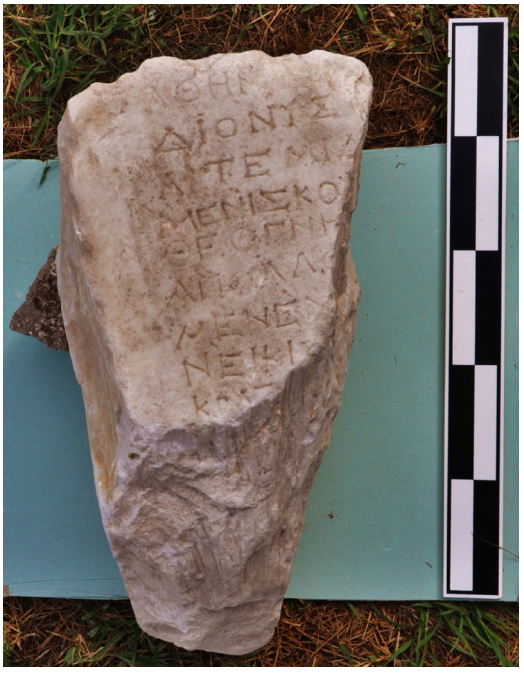

Fig. 9. Album n° 10. Photo Iulian Bîrzescu.

COINS AND DEITIES
REMARKS ON THE MONETARY ICONOGRAPHY OF THE GREEK COLONIES FROM THE WEST COAST OF THE BLACK SEA DURING THE HELLENISTIC PERIOD

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Abstract: The Hellenistic coinage of Histria (Istros), Callatis and Tomis circumscribes the types issued by the local workshops as a sign of the political and economical authority of these West-Pontic colonies during this chronological framework. The main purpose of these monetary issues was to be used as payment means, at an imposed value, validated on the local market and inside the chora, and sometimes on larger geographic areas as well. At the same time the coins represent items of propaganda and social display, their iconography corresponding to deities significant both inside the area controlled or influenced by the cities and beyond. Also, the gods' presence on the coins, accompanied on the reverse by their characteristic attributes, is just another way of paying them homage. During the Hellenistic times, in general, such representations are characterised by expressivity and artistic quality. The presence of specific deities on coinage is dictated by religious criteria (each colony favouring various cults and gods), but also by the historical and military contexts which influence directly the situation of the analysed cities, inclusively from the point of view of their economical and commercial life.
This paper focuses on several new observations concerning relevant aspects of the West-Pontic monetary iconography during the Hellenistic period until the complete instauration of the Roman authority in Dobrudja.

The coin represents a fundamental aspect of the evolution of the human society, as an element that both ensures the cohesion of the civic body and is deeply implicated in the proper functioning of economy and trade. Its existence was tributary to its functions (payment method, measure of value etc.) and to the context in which was issued and circulated, the coin being at the same time an expression of the needs and interests of the society. The use of coins becomes a common practice in the Greek world during the 5th century BC, also involving the local populations interested in trade and other economic relations. The coins, especially those made of precious metals, not only supported the commercial activity, but also played a role in establishing political relations and in various occasions represented the means of employing mercenaries, a practice widely spread in the world of the Greek cities. These various aspects can be analysed to a certain degree by taking into consideration the probable trends of monetary circulation in pre-Roman Dobrudja.

The founding of the three colonies Istros, Callatis and Tomis during the 7th – 6th centuries BC, closely spaced chronologically, allowed the gradual installation and diffusion of the Greek civilization in the indigenous world, not only along the shore but also in the hinterland. As already mentioned, in the Greek world the coinage issuing becomes almost generalized during the 5th century BC, and could be seen as an expression of the sovereignty of a city marked by printing local signs, and an instrument defined and enforced in accordance with the interests of local authorities.[1] The first issue is dated for Istros to the 5th century BC,[2] for Callatis to the 4th century BC,[3] and for Tomis from the middle of the 3rd century BC.[4] The monetary workshops of the Greek cities were a necessary presence in the context of the economic and political life, and the monetary activity was supervised and organized by local officials. The issues of the three cities from the western coast of the Black Sea during the autonomous period represent, given the relationship between coinage and art, on one hand, and between coinage and its circulation, on the other, important numismatic sources regarding their artistic, religious, economic and commercial life during the 6th – 1st centuries BC.

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[1] Planet 1992, 36.

[2] Lacroix 1975, 154; Gorini 1980, 697; Chamaux 1985, 175; Bouyon 1998, 10-14; Howgego 2005, 44.

[3] Iliescu 1967, 11; Preda, Nubar 1973, 36; Iliescu 1976, 88-93; Preda 1998, 49; Poenaru Bordea 2001, 32; Talmaţchi 2011, 338.

[4] Preda 1969, 14; Preda 1998, 74; Talmaţchi 2011, 434.

The late Hellenistic period, especially the 2nd – 1st centuries BC, was often precarious for the cities from the western coast of the Black Sea, situation caused by frequent political and military events, doubled by a state of internal tension.[5] Still, although usually depicted as increasingly weaker and abandoned in front of the locals, the Greek *poleis* from this area, due to more or less regional rivalries, started to be of strategic interest both for Mithridates VI Eupator, king of Pontus, and for Rome. Already, before the years 89-88 BC, the Black Sea basin was controlled by the ruler of the Kingdom of Pontus,[6] the most important rival of the Roman authority in the area.[7] Once included in the alliance system of Mithridates,[8] the western coast cities strengthen this way their authority and internal stability (even if on short term) and affirm their political and commercial position externally.

The coins issued by Istros, Tomis and Callatisvduring the Hellenistic period were produced in their workshops as a sign of their own political and economic authority regime. The monetary issues represent emblematic aspects for the issuing authority, benefiting from the realities and local myths and representations, and are characterised by elements that reflect the economical and commercial activities. Far from pretending to treat exhaustively the iconography in use for the coinage issued by the mints of these three cities during the Hellenistic period and early 1st century AD, the intention is to analyse some relevant aspects taking into consideration a series of recent finds.

Several remarks could be made concerning the monetary issues characteristic for these mints during the time span between the 3rd century BC and the first quarter of the 1st century AD. As is the case for the Greek art in general, the image on the coins shows motion from right to left,[9] rarely vice versa, and also, the female characters are often difficult to distinguish from the beardless males. Perhaps as a result of perfecting the local symbols, the representations on the obverse are superior to those on the reverse in terms of iconography, quality and diversity of details. It is possible that the representations of deities on the obverse of items belonging to various monetary types are "copies" of statue portraits, images from friezes or metopes present in public or private places in *poleis* (markets, temples, sanctuaries and others), a situation already attested in other colonies.[10] This constituted actually a practice of paying tribute to some memorable events or to the important deities of the polis. These deities are accompanied by vegetal elements such as wreath (of ivy), vine, ears (of wheat), (oak or laurel) leaf and others. To this must be added the representations specific to the "bestiary" of the Black Sea area, various mammals and birds. In other words, representations of gods, heroes, as well as vegetal and animal symbols were chosen to embellish the coins. Most of the gods and heroes are accompanied, less on the obverse and more on the reverse of the coin, by specific attributes, which also explain or hint to their field of competence. Some representations correspond to universal images found in the Greek art of that period, which were also included in the colonial monetary iconographic themes. They correspond to the spiritual and symbolic context specific to the Greek world, reflecting myths (myths of foundation inclusively), artistic trends and religious beliefs.

Starting with the Classical period, one notices the generalisation of the presence of a deity's head on the obverse of the coins and the representation of the accompanying attributes on the reverse. From the Hellenistic period one also notices the predilection in the Black Sea area for concentrating in the monetary iconography more on social and civil aspects, while previous themes, emphasising heroic subjects, became increasingly less visible. But the mythological element continues to be used. The Hellenistic coins issued by the colonies from Dobrudja point to, in terms of iconography, a lively religious life, of remarkable intensity.[11]

Looking at the whole issue of monetary iconography in these centres, one can identify a certain homogeneity in monetary types (which can be an expression of a regional chronological reality), but also some progressive development of the local style and themes. For the 2nd – 1st centuries BC, in Istros are minted coins of the Hermes, Demeter (Pl. 1-2), Athena (Pl. 3, nos. 1-4) and Apollo on *omphalos* (Pl. 3, nos. 5-10) types. In Callatis are minted coins of the Artemis (Pl. 5, nos. 1-2), Hermes (Pl. 5, no. 3), Athena (Pl. 5, nos. 7-15) and Demeter (Pl. 4, nos. 1-18) types. An in Tomis are minted at least coins of the Demeter (Pl. 6, nos. 11-12), Zeus (Pl. 7, nos. 1-11), and Hermes (pl. 6, nos. 1-8) types.

[5] Poenaru Bordea 1970, 133-144; Preda 2000, 113; Talmațchi 2011, 500.

[6] Condurachi 1958-1960, 7-28; Pippidi 1960, 45-54; Pippidi 1965, 99-118; Pippidi 1967, 275-276; Ștefan 1974, 648-663; Alexseev 1974, 648-663.

[7] Gaggero 1978, 196-300; Avram 1996, 504; Bounegru 2002, 33; Avram 2003, 315; Avram, Bounegru 1997, 156.

[8] Bounegru 2002, 33.

[9] Avram, Bounegru 1997, 156; Avram 2003, 315.

[10] Winckelmann 1985, 235.

[11] Kobylina 1972, 19.

We notice that in general the same deities are present in the local iconography. The present paper will focus mainly on Demeter, one of the favourite iconographic themes in this region. The fact that she was worshipped in the Pontic area as early as the 4th century BC can be easily explained by the predominantly agricultural character of the communities. Demeter is a protector of agriculture and of the fruits of the earth (especially wheat), of the harmonious social life and fertility; her myth is closely connected to the cycle of nature, of seasons and crops.[12] "Mother Earth", one that gives plenty of everything, as she is called in a hymn attributed to Orpheus, worshipped in the Homeric world as goddess of fruitfulness of the earth;[13] she enjoyed a special worship, with secret rituals, widespread during Hellenistic and Roman times. During the first half of the 3rd century BC, Demeter's effigy (head with wreath and veil, to the right, and on the reverse her attributes: wreath with ears of wheat – smaller or larger in diameter, the arrangement being approximately circular – or only wheat ears) appears on coins from Callatis[14] (Pl. 4, nos 1-18). In Callatis, Demeter is one of the major deities worshipped in the city, given the consolidation of the agricultural character of the colony.[15]

Only on one item of the Demeter type, but with different details and partially-changed rendering style, the head of the goddess appears on the obverse with veil, to the right, with no other decorative elements or in addition with an ear of corn to the head. On the reverse there is a crown made of two ears of wheat.[16] On other two items, the head of the goddess is represented, with veil, to the right and on the reverse only an ear of wheat in one case and a club pointed to the right in another case.[17]

Callatis also issued a different series of the Demeter type: a few items that have on the reverse a large wreath and the legend of the city, dated generally during the late 3rd and early 2nd centuries BC.[18] In our opinion, this monetary series could be dated even later, based on its style and characteristics of the legend (maybe end of the 1st century BC and early 1st century AD).

Also to the end of the autonomous period in Callatis could be dated a few coins of the Demeter type, extremely rare finds, minted with two stamps on the obverse and one on the reverse. On the obverse there is the head with veil and wreath of ears of wheat, to the right and on the reverse two ears of wheat placed to the right. The items have a barbaric character, both from artistic and epigraphic perspectives, when it comes to legends. The name of a possible magistrate appears on the reverse, ***APIΣTΩN***, which may be related to an important person documented in Callatis, known from the local inscriptions as a benefactor of the city, together with his son, Ariston, son of Ariston. These coins seem to be minted after the event of Burebista's campaign, which left deep traces in the economic, commercial and urban development of the city of Callatis.[19]

In Istros, the cult of Demeter, although attested only since Hellenistic times (more precisely for the 2nd century BC), enjoyed a great popularity, especially in the territory, where agricultural activities were dominant.[20] The second silver monetary type of the city in autonomous period was dedicated to Demeter. It repeats, on hemidrachmas, in terms of iconography, the images existing on bronze issues with the same deity, minted by the city in the second part of the Hellenistic period.[21] The head of Demeter, covered by a veil, is placed to the right, and on the reverse are represented the eagle and the dolphin; the eagle's head is turned to the right, the rest of the image is oriented to the left.[22] On the city's drachmas, Demeter wears a cist on her head and an ear of wheat in her hair, the reverse being identical to that of the hemidrachmas.

On a bronze coin, the same image appears on the obverse (except for the size of the cist), but on the reverse only the eagle is present, also with the head turned to the right, standing, leaning on a prop (Pl. 1, no. 6). Based on the discovery during archaeological excavations at Istros of a small silver coin belonging to the analysed type, iit was established that silver minting could be dated there around 235-230 BC, during the developed Hellenistic period.[23]

[12] Talmațchi 2008, 75.
[13] Seaby 1966, 13-143; Ferrari 2003, 276.
[14] Kernbach 1995, 143.
[15] Pick 1898, 103, no. 225; Ruzicka 1913, 9, no. 225 a; Sutzu 1912-1913, 362, no. 4-5.
[16] Pippidi, Berciu 1965, 261;Talmațchi 2006, 106.
[17] Stambuliu 2004, 51, no. 212.
[18] Ruzicka 1913, no. 206 a; Talmaţchi 2002-2003, 375, no. 164; Grămăticu, Ioniţă 2007, 12.
[19] Stambuliu 2004, 51, nos. 213-214.
[20] Grămăticu, Ioniţă 2006-2007, 60-61, 67-68, 70.
[21] Pippidi 1998, 48-49.
[22] Stambuliu 2003, 19, no. 76.
[23] Stambuliu 2003, 19, no. 75.

The main bronze type (Pl. 1, nos. 1-2, 5, 7, 9, 11-12) complies with rendering on the obverse Demeter's head with a wreath of ears of wheat and veil; at Istros the goddess is associated with the representation, on the reverse, of the city emblem – eagle on a dolphin – and an ear of wheat or the cornucopia with ears; another series has on the obverse the head of the goddess with wreath, to the left, and on the reverse, the dolphin jumping to the left and on the top of monetary field, the ethnic of the city.[24] We also mention that the presence of the *parasemon* "eagle on the dolphin" is known on the reverse of coins from three Milesian colonies in the Black Sea basin, respectively Istros, Olbia and Sinope, being probably related to a common founding myth.

Three different monetary series appear during the second part of the 1st century BC and early 1st century AD, which present on the obverse the head of Demeter with veil (very rare in number). The first has on the obverse the head of Demeter with veil, to the right, and on the reverse eagle and dolphin, respectively the legend **IΣTPIHI**.[25] The second has on the reverse four ears of wheat, which form a wreath, and inside it also has the legend **IΣTPIHI**[26] (Pl. 1, nos. 3, 4, 8). This legend finds a very good analogy in a special series minted in Istros. This is equally rare in specialized publications (only several items are known) and it belongs, at first impression, in terms of iconography, to the general Apollo type. On the obverse, is represented the head of Apollo, with a laurel wreath, to the right. This image is very similar to the one present on the Macedonian monetary issues of King Philip II (on staters and bronze coins). On the reverse, we notice the eagle holding the dolphin in its claws. These monetary items are of high nominal and they generally comply with the Histrian iconography of the Apollo type.[27] Actually, we can identify their evolving iconography of the obverse; the represented character changes from one item to another.

The third late series renders the head of Demeter to the left, and three ears of wheat on the reverse, one at the base of the monetary field, the second to the left and the third to the right[28] (Pl. 1, no. 13), or with wreath of corn ears[29] (Plate 1, no. 10) ; here we notice the legends **IΣTPIH** and **ICTPOY** (the genitive singular form of the city name, which is very rare in the numismatics of Istros). An analogy to the legend can be identified on a single coin in the series with Hermes on the obverse and with a *kerykeion* on the reverse.[30] As in the case of the copy mentioned, the iconographic achievement is sloppy, and maybe we can even speak of a barbarization of the current style. This copy with Hermes was dated to the end of the 2nd century and the 1st century BC, but we cannot agree with this, given the good quality of many mints of monetary series from the same period issued in Istros. Actually, both can easily be part of the extremely limited monetary series, restricted to the first quarter of the 1st century AD (considering the style and legend).

In Tomis, the same effigy of Demeter is found on the obverse of coins which have on the reverse the ear of wheat between two stars (symbols of the Dioskouroi);[31] it is the only iconographic type with Demeter used by the workshop of Tomis in its autonomous period.[32] In Tomis, the goddess' cult seems to have been very old, but the available data is very limited. Only in the 1st century BC (according to an inscription which mentions that a *thiasos* of Bacchus subjects dedicated a statue to the deity, once Parmis gained priesthood) she has the divine eponymy of the city and is attested by the appellation of deity of fertility and abundance.[33]

CONCLUSIONS

The coin appeared in the ancient world out of practical reasons, which regarded the simplification of the commercial transactions (means of exchange), the creation of a standard of value, of small dimensions, easily useable, the obtaining of a reserve of value (hoarding), and the appearance of a means of payment.[34] With coins, one could pay or measure a merchandise from the point of view of its value, and it was accepted and guaranteed by a state or a city (through imposition), by the simple

[24] Popescu 2003, 351-353.

[25] For both ies see Ruzicka 1917, 105, no. 474 a; Talmaţchi, Sandor 2006-2007, 368, no. 4.

[26] Stambuliu 2004, 70, no. 312.

[27] Stambuliu 2004, 71, no. 315; Talmaţchi, Vasilescu 2014, 332, no. 9.

[28] Stambuliu 2004, 71, no. 313; Talmaţchi, Diaconu 2006-2007, 43, no. 2, 46, fig. I, no. 2; Talmaţchi, Bujduveanu 2009, 197-198, fig. 2, nos. 1-2.

[29] Talmaţchi, Sandor 2006, 368, no. 5; Talmaţchi, Vasilescu 2014, 332, no. 10.

[30] Preda, Nubar 1973, 122, no. 519; Kempinsky 2012, 73, no. 494.

[31] Preda 1958, 113, no. 4.

[32] Regling 1910, 653-654, no. 2487-2492; Sutzu 1912-1913, 373, no. 61.

[33] Talmaţchi 2006, 109.

[34] Avram, Poenaru Bordea 2001, 578.

user or the merchant (through convention), as it was a direct expression of authority, an assertion of prestige, sometimes within the limits of the administrative, economic, political and military supervision, other times beyond these fluctuating boundaries. Also, its moulding or striking pertained to a financial sovereignty of the emitter, to his decisions, depending on present or future interests, with direct consequences on a set of economic and commercial actions. It remained up to the authorities to decide the epigraphic and iconographic details, the constitutive metal, the inner value etc.

The Greek coin seems to be partially an expression of the artistic quality of the emitter city, as the representations were correlated, even in the case of some foreign engravers, with the demands and the aesthetic taste of the authority. These representations can "suffer" only from the point of view of the "work subjectivity" of the respective author, of the mode of rendering from the point of view of composition and originality, without losing parts of the artistic value typical of the city. Every deity that appears on the coins is accompanied by the majority of his/her attributes. We must draw the attention towards valuable images from the point of view of their artistic quality, which could constitute a clue on the rich religious life manifested in Istros, Callatis and Tomis.

During the Hellenistic period, we witness the generalization of the appearance on the obverse of the head of a divinity, and on the reverse of the accompanying attributes. Every deity present on the coins is accompanied by the majority of his/her attributes. Usually, all the types existing for every issuing centre is defined by a local deity.

Demeter appears more often, on coins minted in Callatis and Tomis, in a double quality – the goddess of crops and grieving mother of Persephone. Istros also minted coins that have on the obverse only the image of a grieving mother, but on the reverse are added some of her attributes – ears of wheat – which gives her the quality of patroness of plant cultivation.

Regarding the evolution of the representations on the coins of Demeter type, it is quite clear that the general activity of the local autonomous mints cannot be separated from the historical context of the 1st century BC. We mainly refer to the years of 72-71, 62-61, 55-48 and 29-28. An immediate consequence of the confrontations which characterise this century for this region was, in our opinion, in the context of existing finds, a drastic reduction in quality, quantity and typological variety of all local monetary issues (characterized by a continuous quasi-general decay, a pronounced barbarization of style, a lack of attention to details, to the general form of presentation and also to the execution technique); their end was closely linked to the imposition of the Roman administration and military authority in the Black Sea area.[35] Of all these autonomous late monetary series, only maximum five copies are left. We can wonder if, in the early Roman political and military setup, some of these coins were minted only to pay homage or to mark certain events or local religious holidays, all in the context of a general decline of the cities already mentioned. Therefore, looking at the whole picture, during the 1st century BC, autonomous series stop being minted.

In the 1st century AD – in the time of Augustus (in Istros and Tomis) or Nero (int Callatis) – ,[36] these centres (just like others in Moesia Inferior) start issuing bronze coins (according to the privilege granted to a city or province by the emperor to issue bronze coins) with or without the representation of the emperor's head or of a member's of the Imperial family on the obverse, with the legend in Greek and with the mention of *etnikon* on the reverse (the so-called Greek or Roman provincial imperial coins). With this a new of coin-minting begins in the Greek cities of the western coast of the Black Sea.[37]

The emissions of the three cities during the Hellenistic period represent, taking into account the coin-art ratio, the coin-symbol ratio and the coin-circulation ratio, first-hand numismatic sources in what concerns the research of the artistic, economic and commercial life, characteristic to the 4th – 1st centuries BC from the Black Sea region.

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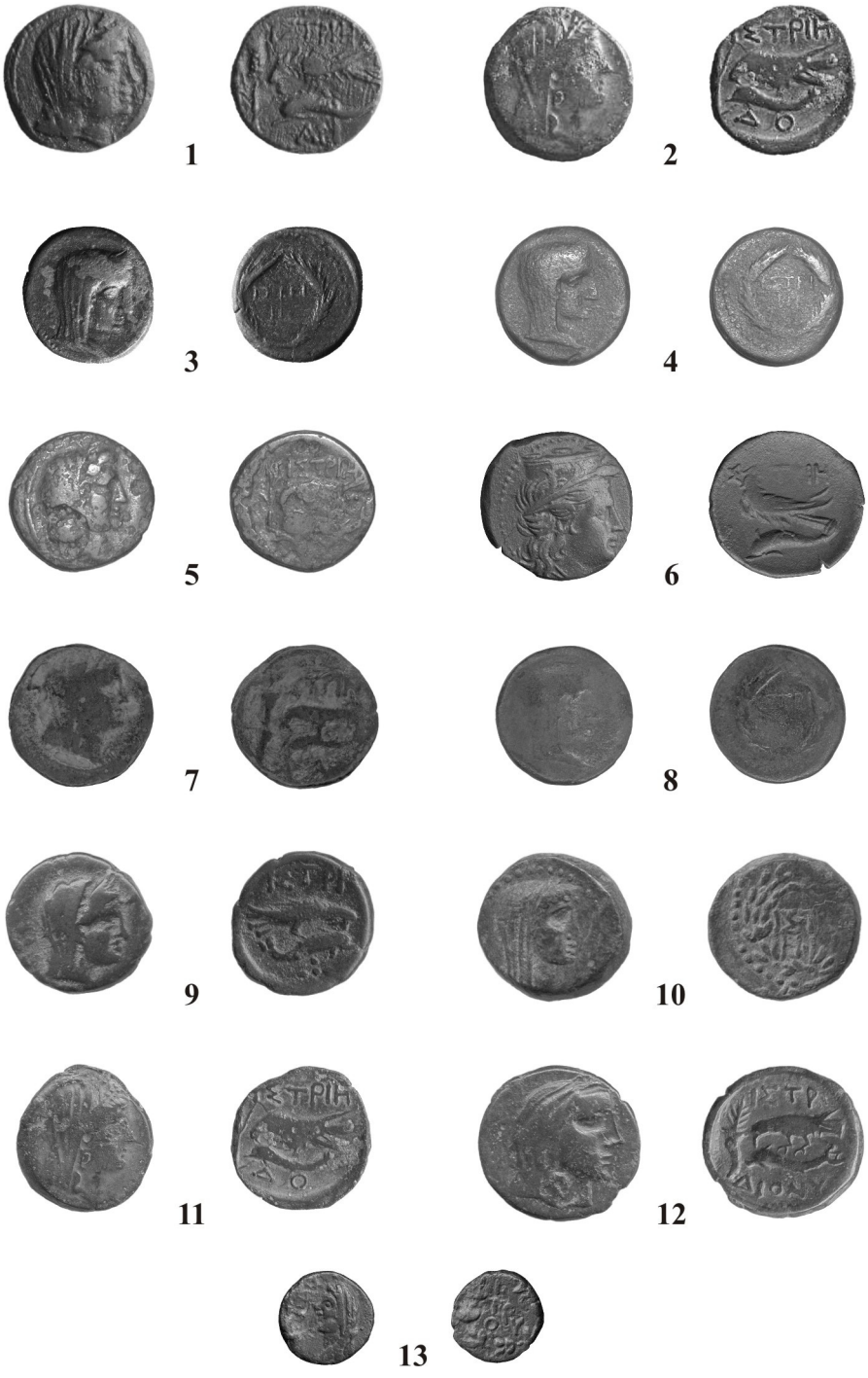
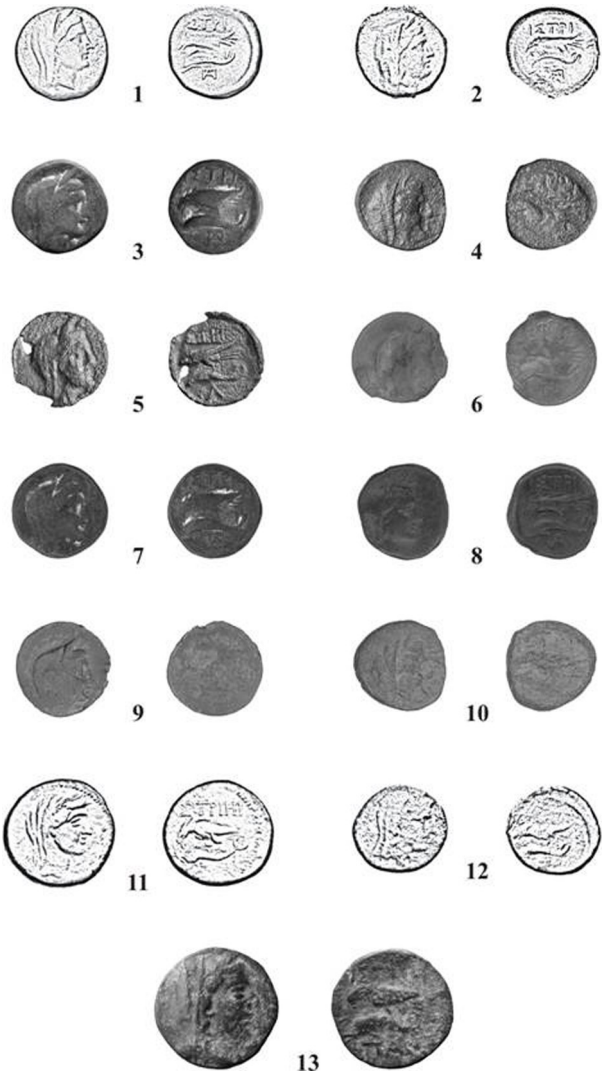
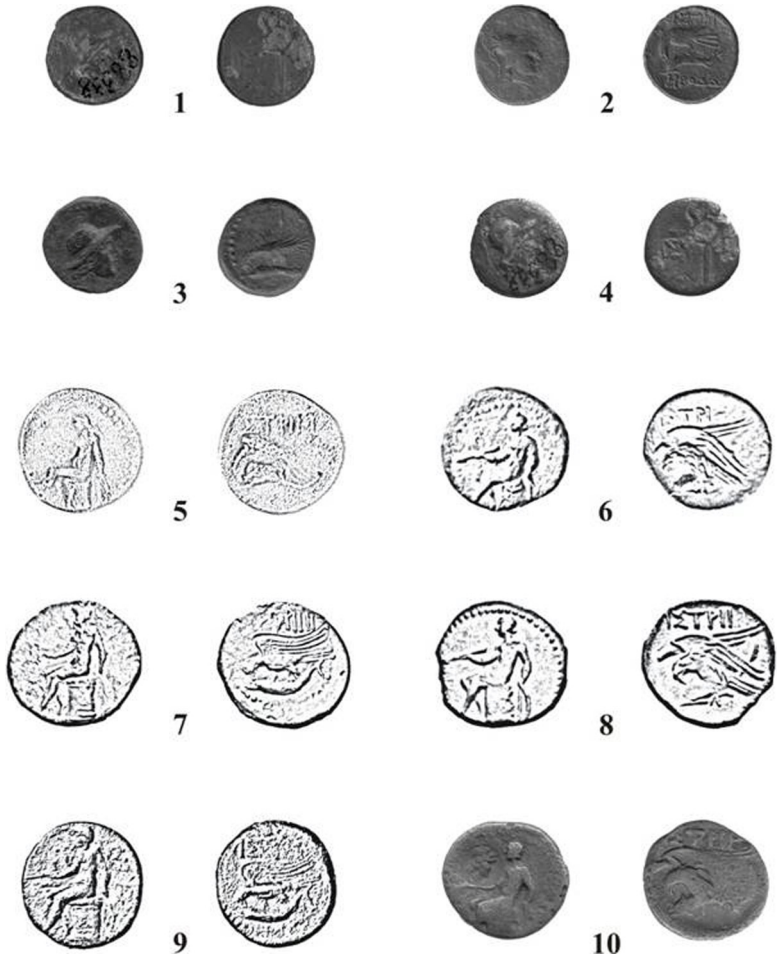


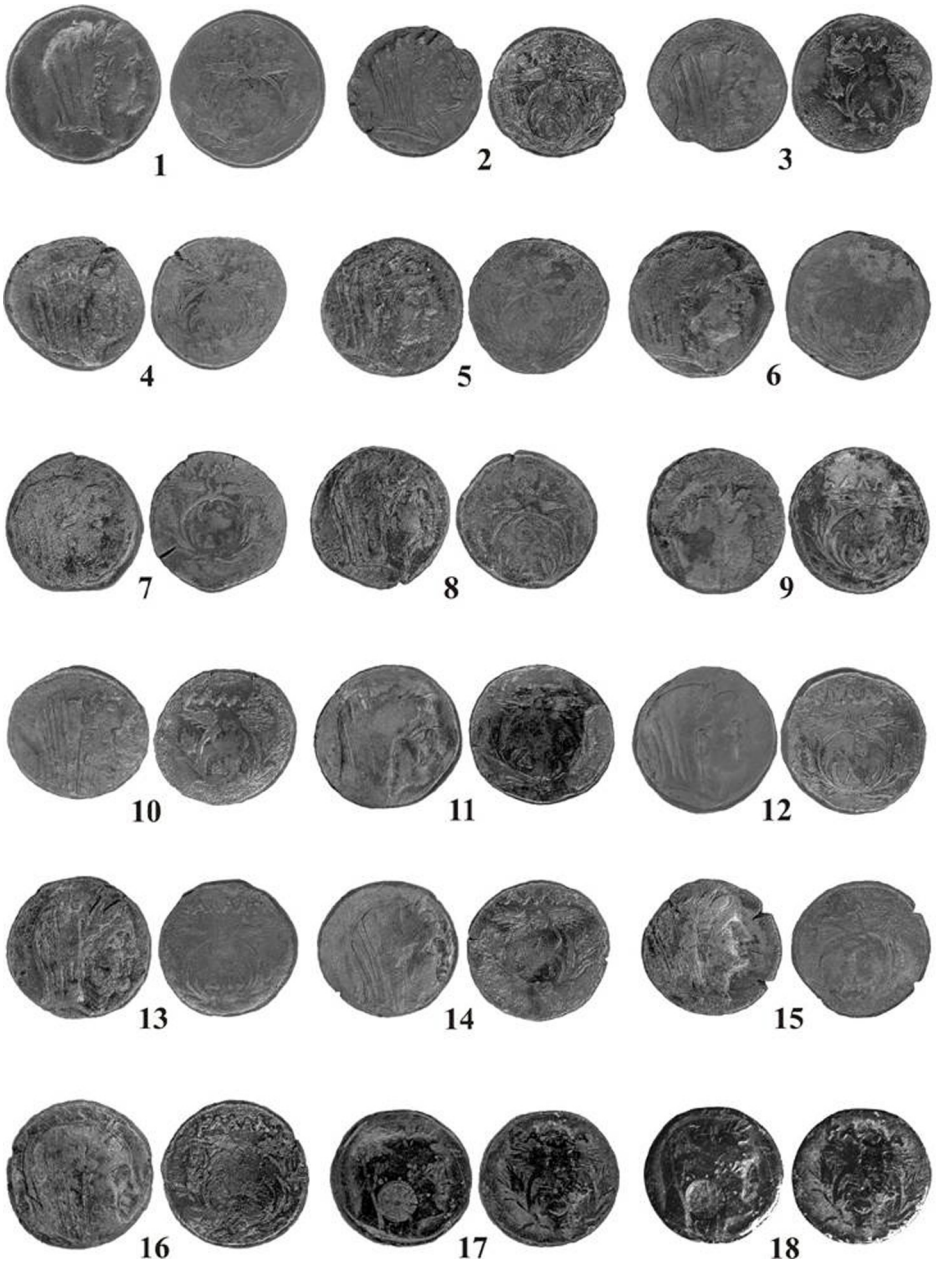
Pl. 1: Demeter type coins issued during the autonomous epoch in Istros.



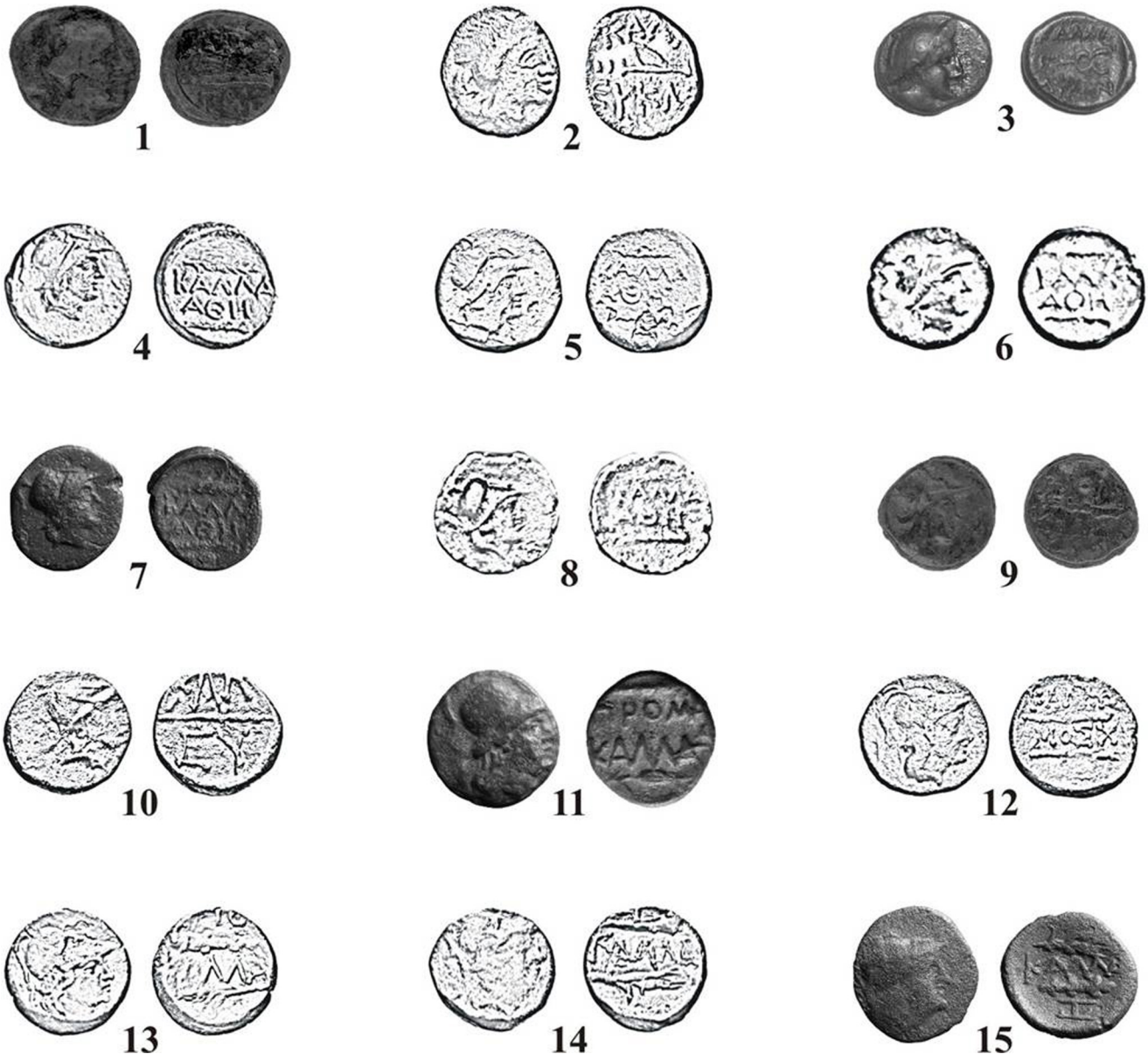
Pl. 2: Demeter type coins issued during the autonomous epoch in Istros.



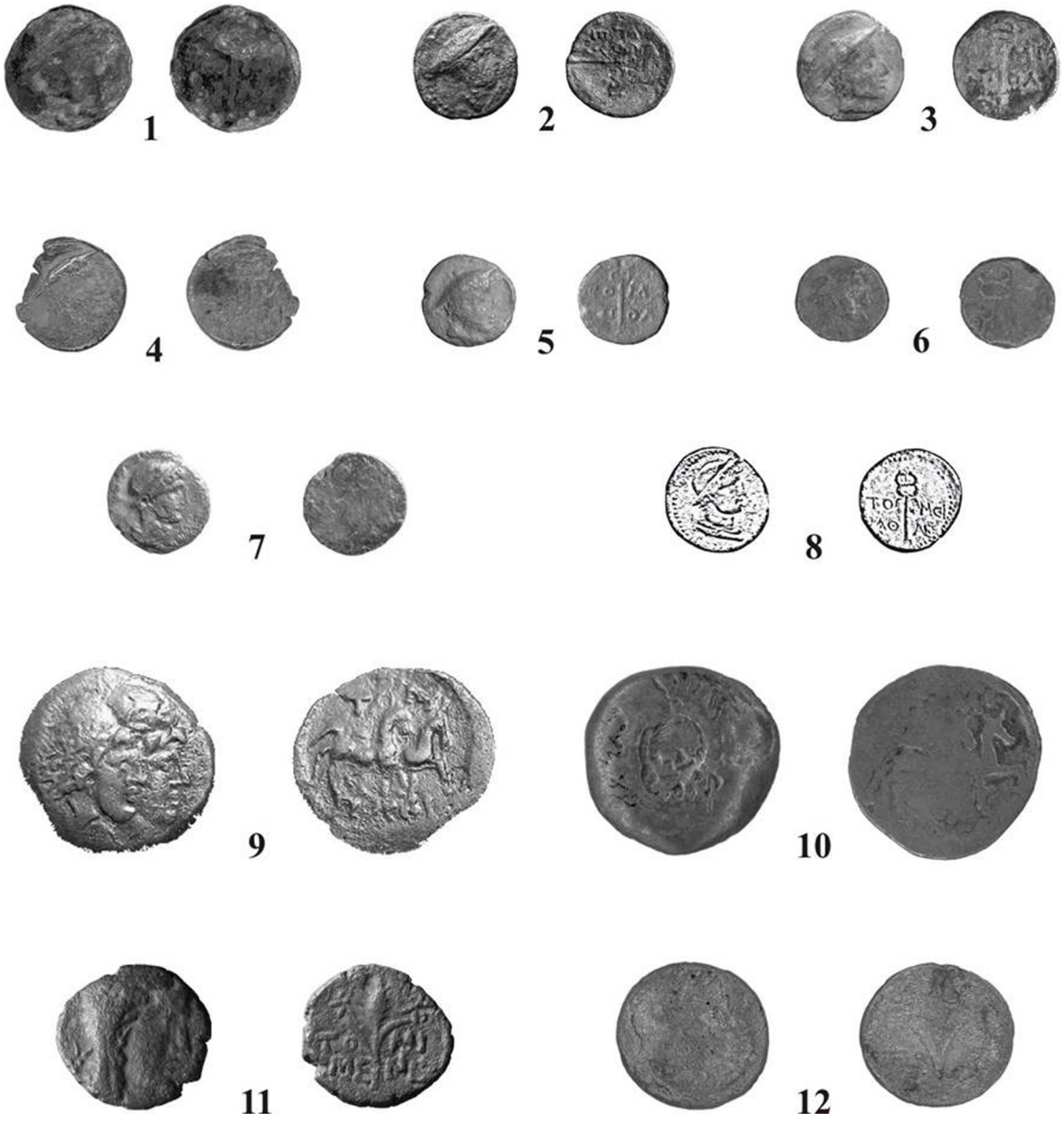
Pl. 3: Atena and Apollo on omphalos types bronze coins during the autonomous epoch in Istros.



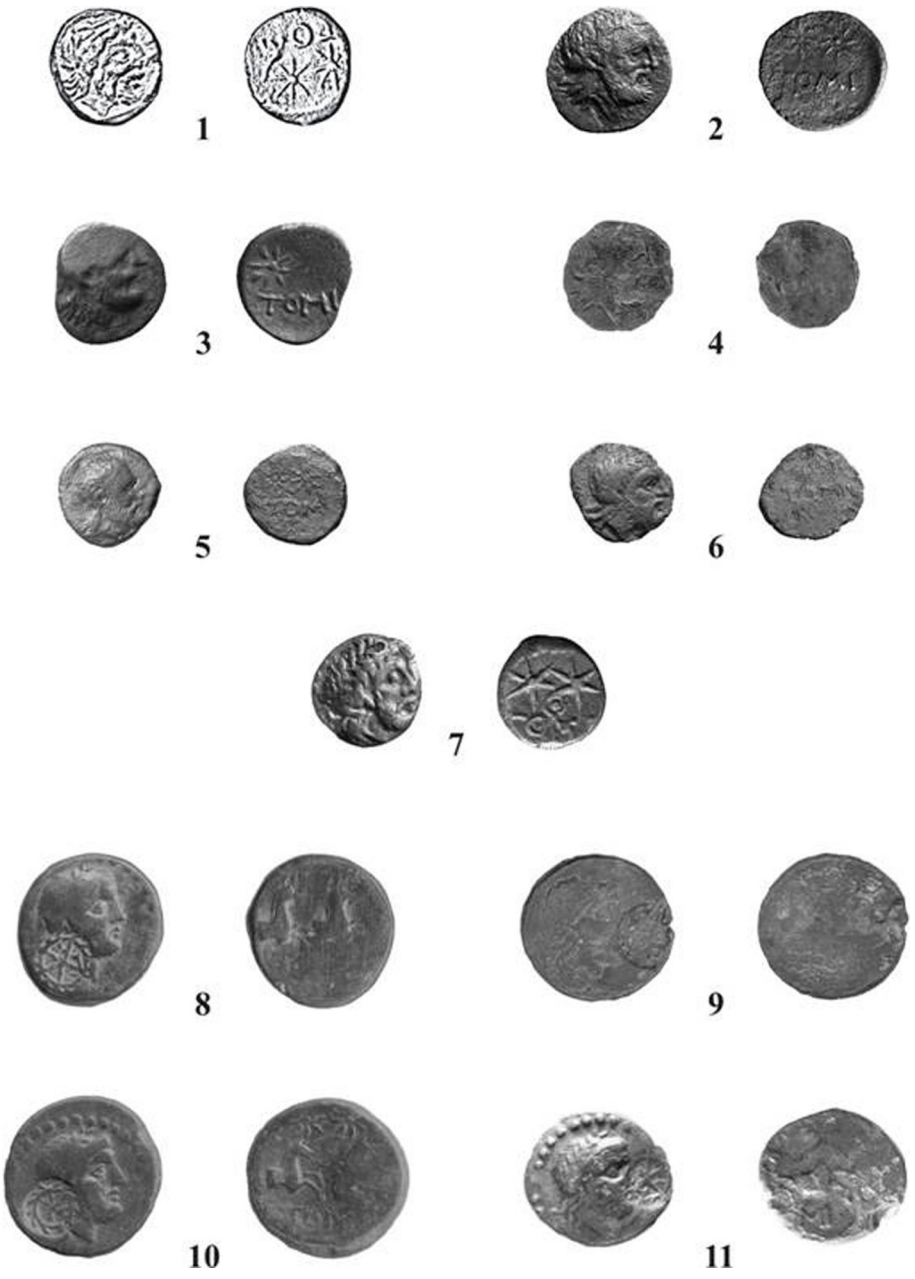
Pl. 4: Demeter type bronze coins issued during the autonomous epoch in Callatis.



Pl. 5: Artemis, Hermes and Athena types bronze coins issued during the autonomous epoch in Callatis.



Pl. 6: Hermes, Dioscurii and Demetra types bronze coins issued during the autonomous epoch in Tomis.



Pl. 7: Zeus type bronze coins issued during the autonomous epoch in Tomis.

GLASS AND MYTHOLOGY IN TOMIS. A MYTHOLOGICAL BEAKER RECONSIDERED

Laurențiu Cliante*
Alexandra Lițu**

Abstract: The mythological beaker found in the Early Roman necropolis of Tomis (now Constanța, Constanța county, Romania) is revisited in light of new archaeological information; some iconographical remarks are added and also some preliminary conclusions regarding the molds used in order to produce it.
Keywords: Tomis, mythological beaker, archaeological context, mold.

Abbreviations:

AnnAIHV	*Annales de l'Association Internationale pour l'Histoire du Verre.*
CA	Cercetări arheologice, Muzeul Național de Istorie a României, București
JGS	*Journal of Glass Studies*, The Corning Museum of Glass, Corning, New York.
LIMC	*Lexicon Iconographicum Mythologiae Classicae*, Zürich, München, Düsseldorf, 1981-1999.
Pontica	*Pontica*. Muzeul de Istorie Națională și Arheologie, Constanța.

Mold-blown mythological beakers have attracted some attention from those scholars interested in Roman glass due to their scarcity, problems raised by the potential identification of the mythological figures and, in many cases, the impossibility to assess their archaeological context as many of these beakers appeared straight on the art-market. Even so, scholars like Gladys Davidson Weinberg and Karol Wight[1], building on previous scholarship, were able to reach several, widely accepted, occasionally tentative conclusions concerning the beakers (about chronology, iconography, figural influences, uses, production). All mythological beakers belong to the second half of the 1st century. AD, a conclusion drawn on the basis of the few beakers found in an archaeological context.Their state of conservation pleads for the hypothesis that a large number of them were grave goods. As far as we know, the beakers originate from the Eastern Mediterranean area. They were distributed into four groups by Weinberg exclusively on the basis of their iconography.[2] We will refer later in more detail to some of these conclusions.

In the meantime, we would like to shed some further light on a discovery made in the ancient city of Tomis (nowadays modern city Constanța, Constanța county, Romania), on the western shore of the Black Sea. Archaeological research in Tomis, an ancient Milesian colony, that is better known as the far-away, on the edge of the world, semi-barbarian city where Ovid was relegated to, has been hindered by the presence of the modern city on top of the greco-roman one. While doing rescue archaeology work, specialists was able to investigate here and there remains of the ancient city, among which is the Early Roman necropolis. In one of the excavated graves, was found a mythological beaker, belonging to Weinberg's group I. It is now part of the collections of the Archaeological National Museum of Constanța (inventory number MINAC 35842). Constantin Chera, the archaeologist who discovered the said grave, as well as a number of Romanian ancient glass specialists, did, on occasion, partially published or commented upon the beaker in question[3]. We would like to add to these earlier discussions some previously unknown information pertaining to the archaeological context and to share some thoughts on its iconography and uses, adding some preliminary observations facilitated by plaster models we took of the mythological beaker.

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[1] Weinberg 1972; Wight 1994 with updated entries and new iconographical parallelisms. We were not able to consult Wight 1991.

[2] Weinberg 1972, 33 about Asia Minor. No. 1 in her catalogue was said to be from Syria in the previous publication, but Weinberg suggests Turkey. See also Wight 1994, 27, for all beakers Turkey and Asia Minor were given as finding spots (one beaker from Syria-Palestine), but only three of the beakers can be linked to the region safely enough.

[3] This mythological beaker was previously published, mentioned and/or briefly analysed in Lungu, Chera, 1992, 273-276; Chera 1997, 228, 230-231, pl. 8; Drăghici, 2007-2008, 78; Drăghici 2009; Chera, Lungu 2010; Chiriac, Boțan 2014, 530. Another mythological beaker belonging to Weinberg's group III was apparently discovered at Histria, conditions of discovery unknown (Bucovală 1984, 61-62, fig. 6). Up to now, we haven't been able to recover additional information pertaining to this second mythological beaker. For the Black Sea area, Wight 1994, 45, cat. no.12 registers a group II beaker said to be found in Panticapaeum.

The mythological beaker[4] was found in an inhumation grave discovered during the salvage archaeological excavations undertaken in the modern city area in 1989 (Mircea cel Bătrân Street, MV1 building), in one of the nuclei of the Early Roman necropolis. The rectangular pit, at 300 cm down from the modern level, was ca. 190 cm long and 50 cm large (SE 160º – head to NV 340º – feet orientation). Its section was trapezoidal, 65 cm large at the top. The skeleton was placed on its back, with the hands crossed over the pelvis and the head at SE. It could be the grave of a female as there were three hairpins found near the skull. It also had a coin in its mouth. A clay oil lamp, its discus decorated with a kantharos, a two-handled cup and our beaker were placed all three at the feet of the skeleton. We do not know the state the objects were in, except for the beaker which was broken up; its pieces were recovered and the beaker was restored. Unfortunately all the items from the grave were subsequently lost with the exception of the mythological beaker. Our 3D reconstruction approximates the pit and its inventory according to the sketch and description in the excavation records.

The beaker has a cracked-off rim, a ground, conical body and a slightly concave base. The base is decorated with a raised ring motif. It was blown into a five part-mold (four vertical ones for the sides and one horizontal part for the base); traces of the panels are visible on all faces. Large amounts of small bubbles and blowing spirals are visible all over the body. The glass is transparent and colorless. As *comparanda*, we cite the following Harden et al 1968, no. 64; "Recent" 1969, 110, no 5; Weinberg 1972, 26-47; Lazarus 1978, no. 10; Constable-Maxwell 1979, no. 143; von Saldern 1980, no. 46; Harden et al 1987, no 85; Wight 1994, 24-55; Whitehouse 2001, no 527; Antonaras 2012, no. 76.

Weinberg, followed and further refined by Wight,[5] gives a standard description of these items. The mold-blown beakers have a figural relief field going all around the beaker, organized in four *naiskoi*, each containing a mythological figure facing right. She compiles the features visible on the best preserved objects and establishes probable identities of the four mythological figures decorating the beakers belonging to group I. Of the four figures, three of them seem easier to name: Figure A (Weinberg)/figure D (Wight) would be Mercury, figure B (Weinberg)/figure A (Wight) would be Winter, figure C (Weinberg)/figure B (Wight) would be a calf-bearing young man, possibly Hercules. Some points of contention were raised regarding the figure D (Weinberg)/ figure C (Wight). In Weinberg's description: 'a figure, wearing a knee-length chiton with a chlamys over it, walks with the weight on the left leg, the right leg bent (the sex of the figure is in doubt ...). In the lowered right hand is an amphora (...) and the raised left hand supports a curved staff or sickle upon the left shoulder. This hand appears to be partially covered with the drapery of the chlamys and some object may also be held in it. The hair is fastened in a knot at the nape'. Weinberg also mentions Paul Wolters' opinion that the object in the hand of the young person in figure D could be a torch, (he does not say Hymen). She adds Carl Robert's positive identification of figure D with Hymen, carrying his torch and a loutrophoros as seen on the Albani sarcophagus, and his remark regarding the similarity of Winter on the sarcophagus to Winter on the beakers.[6] What's more, in order to solve the crook/torch conundrum a conflation was proposed by Weinberg between the iconography of Winter and Hymen. Hymen, of the Albani sarcophagus, would have received a crook instead of a torch through that contamination, Winter being also figured on that sarcophagus.[7]

[4] We would like to thank Dr. Constantin Chera for allowing us to use his previously unpublished excavation records. All available and detailed information is due to these records as we have been unable to identify the present location of the other objects found in the grave.The same is true for the skeleton. Other publications have previously mentioned the beaker's discovery in a funerary context with no further details (see the note above).

[5] Weinberg 1972, 27-29 general description, 29-38 catalogue and previous scholarship on the iconography; Wight 1994, 25-27. The main iconographical identifications had already been done by Paul Wolters at the end of the 19th century, as well as the reference to the wedding of Thetis and Peleus (Weinberg, 33-34 and note 6). We will refer to the standard description established by Weinberg and Wight without citing it in full.

[6] Weinberg 1972, 34 and note 6, 34-35 with notes 7 and 8.

[7] Weinberg 1972, 36. Abad Casal 1990, 512, 533, cat. no. 7 shares the same opinion. Another opinion (Hanfmann) identified figure D to a Season (Spring/Summer; cited by Weinberg, 35) as on the Season Sarcophagus he analysed all four Seasons were male figures. For Seasons as male figures (not Greek female figures) decorating funerary art since the 2nd century AD and their becoming decorations on the front of the sarcophagi in the first half of the 3rd century AD, see briefly Hanfmann 1951, 21 and 22.

The most important point in Wight's assessment, where the figure is positively identified as Hymen[8], is the description of the torch in his hand as having a curving continuous flame[9] that would explain the similarity to the *pedum*/shepherd's crook. The closest parallel would remain Hymen on the Albani sarcophagus. The torch and flame clearly visible on the sarcophagus appear blurred on the glass beakers because of alterations both in the process of mold making and glass inflation (an already altered mold?). Details would have been lost and flames and shaft would have been fused so that what should have been flame and torch now resembles some kind of crook.[10] An important role in the identification and alteration hypothesis is played by the inclusion of Hymen in wedding scenes as seen on later art and the perceived association of the figures on the beakers with the wedding of Thetis and Peleus.

At the same time, an experiment made by Wight in order to determine what kind of material was used for the molds and how precisely worked the whole production process revealed that, while it could not be determined what kinds of molds worked best (clay and bronze worked as well), the chosen way of applying and taking off the side panel molds (they practically fell down on their own or were manually pulled off) left the mythological reliefs in perfect shape without smudging or other alterations due to the removal of the molds[11]. The beaker used in the experiment belonged to Weinberg's group II, thus having Hymen on one of the side panels. While it is by no means a definitive verdict, these results should perhaps caution us against fully accepting the hypothesis of a flaw (or flawed mold) that changed flame to sickle/*pedum*-like appearance. Of course, it remains to be seen if the viewer would have been capable of recognizing a Hymen partially disguised as Winter (the curving of the so-called flame seems to us a little too explicit to be a happening), or if a flawed panel mold would have still been used if the fabricant had a particular figure or model in mind. Wight's hypothesis needs further explaining especially because what is at stake is what is considered to be a luxury item. Possibilities are endless: nobody cared, it was meant as a pun on a less established figurative identity or it was acceptable because the figure was not yet well established or maybe, because it was not as easily identifiable, it should have been by far the easiest to point out.

As it is already obvious from the above brief discussion regarding the identity of figure D (Weinberg), there are iconographical parallelisms between the four figures, individually taken or in various combinations, and figures on other types of objects, both before and after the mythological beakers; the fact that these parallelisms are not found in an Eastern Mediterranean milieu, but further to the West, is also interesting.[12] Arretine pottery, the Campana reliefs, Neo-Attic reliefs, a glazed skyphos from Munich, puteals and gems, and later on the Albani sarcophagus, all bear representations of the figures (not all and not in this particular combination) on the mythological beakers group I. Figure D as Hymen is the only one that has an analogy only on the later monument, the Albani sarcophagus,[13] meaning that the beakers are very early figurative portrayals of Hymen. Two of the above

[8] It should be said that Hymen also appears on the beakers belonging to Weinberg's group II. Weinberg had already drawn attention to the closeness between the first two groups of mythological beakers (1972, 39-43, iconography discussed at 42-43). On group II, there were two figures under debate, both hypothesized to be Seasons or some deities connected to nature. One of them (figure D) carries on his shoulder a *pedum* or a sickle. Wight 1994, 36 (35-47 on group II) identifies it as Hymen carrying a torch and loutrophoros.Wight notes that on two beakers this figure is a female for reasons unknown. Weinberg had already made an observation regarding the ambiguous gender of the supposed Hymen on group I beakers (1972, 28).

[9] Wight 1994, 26: 'Figure C: Hymen, who wears a chitoniskos and chlamys; his hair is pulled back in a bun. Over his left shoulder, he carries a burning torch, whose flame has been shaped into a continuous curve. In his downstreched right hand, he carries a vessel that resembles an amphoriskos, but it is probably a stylized loutrophoros, which would be more appropriate to the context. His weight is placed on his straight left leg, and the right leg is drawn back.' Wight continues the description with a survey of Hymen's iconography.

[10] Wight 1994, 26 and notes 25 and 30. All iconography pertaining to Hymen is later than the mythological beakers. Wight's survey identifies among others a representation in a Hellenistic composition of the wedding of Alexander and Roxane that would predate the beakers but is known only from a literary description, and also a sarcophagus with an initiation scene linked to Demeter.

[11] Wight 2000, 71-78. A five-part mold was used, with four side panels for the mythological reliefs.The beaker in question belonging to Weinberg's group II is Wight 1994, cat. no. 9. One of the conclusions of the experiment was that the side panels, being mobile, could be used in various combinations. On the contrary, the base mold containers, having different concentric rings and measurements, could be assigned to different workshops. Accordingly, the different sets of side panels should be talked about separately from the base molds.

[12] For the iconographical analogies in full, see Weinberg 1972, 33-37; Wight 1994, 24-28. Abad Casal 1990, 512-513, 533 lists all five (groups of) items where the *Horae* in a dancing procession of Neoclassical type take part in the marriage of Thetis and Peleus (the terracotta Campana reliefs, the Late Republican puteal, the glazed skyphos in Munich, the Albani sarcophagus and the Carabella beaker).

[13] Even this identification is in doubt, not a positive one as Linant de Bellefonds 1990, 585 remarks, while still identifying the sarcophagus as associated to the wedding of Thetis and Peleus. In fact, she says, one should not put the finger on Hymenaios as soon as attributes as the

mentioned analogous artefacts, the glazed skyphos from Munich that predates the beakers and the later Albani sarcophagus that postdates them, were specifically linked one to another and together to an important mythological and iconographical nexus, the wedding of Thetis and Peleus, thus putting the figures into a context (the connection to this mythological event had already been made by Paul Wolters[14]). The glazed cup from Munich that predates the mythological beakers is considered by Weinberg the most important analogy for it associates Hercules and especially Hermes, as seen on the beakers, with the Thetis-Peleus festive event, both spouses being placed similarly to what can be seen on the Albani sarcophagus; three Seasons (no Winter) are also present.[15] The Albani sarcophagus, though later than the mythological beakers, is also important because it puts Hymen in the context of the wedding of Thetis and Peleus, and it associates him with the Seasons. At the same time, a few of the figures on a Late Republican puteal in Rome appear on the Albani sarcophagus and the same puteal has identical figures (Winter and Hercules/the calf-bearer) to the those on the beakers[16].

The above iconographical connections, and the available archaeological context together with the funerary inventory, are important because they were taken largely into consideration when trying to discern the potential cultural meaning and uses of the mythological beakers.

A more cautious set of assertions was put forward by Weinberg, developing ideas expressed by late 19th century scholars, such as Wolters, Robert and Dragendorff. In her opinion, which reiterates Carl Robert's discussion of the Carabella beaker, there is no definitive proof that the four mythological figures, found elsewhere on different monuments, originating in Italy and Asia Minor,[17] would have been meaningfully selected and arranged in succession, nor proof to the contrary.[18] It seems to Weinberg that, despite the partial analogies, since there is no clear succession of the figures on monuments, which are or aren't necessary and explicitly connected to a wedding, one cannot assume they were, in the beginning, part of a wedding procession.[19] The more decisive opinion belongs to Wight who connects the four figures on the beakers to the mythological wedding in question. The consistency in the manner of representation of the figures, both before and after the mythological beakers, on various supports and in various compositions from the 2nd century BC to the 1st century AD, lead her to a hypothetical late Hellenistic original production, a relief of the wedding of Thetis and Peleus[20].

Few mythological beakers were recovered from systematic archaeological excavations, the majority of them having been circulated on the art-market. As far as we know, next to the beaker found in Cyzikos and published by Titus Carabella, ours is the only other one belonging to group I[21] that has an explicit archaeological context, more precisely a funeral one. Carabella's conclusion that the burial in Cyzikos could have been the grave of a male, of an athlete, was based on the inventory- two other glass objects, an aryballos said to have contained oil and a patera, a terra-cotta lamp and an iron strigil. Weinberg finds that there could also be something worth retaining in Carabella's interpretation that links the beakers to athletic events and athletes' funerary inventories[22], while Wight thinks that, while no positive proof of the gender and occupation of the deceased exists, the

torch, the flower crown and the loutrophoros are identified because they belong simply to the wedding specific iconography. Contrast with Abad Casal 1990, 513, cat. no. 6, 533 who would rather see Hymenaios on the Albani sarcophagus.

In Linant de Bellefonds' opinion, even the only potential representation of Hymenaios that predates the mythological beakers, a Hellenistic painting (584, cat. no. 6, 585), is under question since it survives only in a literary description whose author does not identify Hymenaios for sure; the torch-bearer would be in fact Alexander's best friend, Hephaistion. The only positive identification, due to the inscription next to the figure and the torch, is on a mosaic in Syria (583, cat. no. 2) at the end of the IIIrd century AD where Thetis and Peleus are also named, and the context seems to be their wedding.

[14] Weinberg 1972, 34.

[15] Weinberg 1972, 36-37.

[16] Weinberg 1972, 37 discusses Erica Simon's take on the Late Republican puteal.

[17] Weinberg 1972, 38 with note 25 citing Dragendorff's opinion concerning Italy and Asia Minor.

[18] Weinberg, 1972, 47 with note 42 citing Carl Robert.

[19] Weinberg 1972, 38.

[20] Wight 1994, 24.

[21] A few mythological beakers are from archaeological excavations, some of them from graves. Extensive archaeological information does simply not exist or is unclear here and there: Cyzicus (Wight 1994, no. and detained description in Weinberg 1972, 30: cat. no. 3, 32-33), the only one belonging to group I, is the best archaeologically documented beaker alongside Črnelo. The pieces from Črnelo and Les Bolards burials (Wight 1994, 37, 46, cat. no. 1 and 14) belong to group II. The fragments from Massada and Vindonissa (Wight 1994, 52-53, no. 1-5) belong to group IV and were excavated in the area of the palace (Massada) and from dump outside the wall of the *castrum* (Vindonissa).

[22] Weinberg 1972, 47.

absence of objects marking femaleness in the cremation tomb from Črnelo, where was found a beaker belonging to the group II, might indicate that it also belongs to male.[23] However, the information available pertaining to our grave, where the hairpins could indicate a female grave, shows that things are less clear than that.

Wight further elaborates on the potential uses of the beakers. What function they might have had is also unclear. The most obvious potential everyday? use derives from their being drinking vessels, but they do not appear on wall paintings of that age containing drinking services, a fact that might reflect long-established practices of representing drinking more than real uses. A putative ritual or ceremonial use, as gifts, is possible, but unverifiable and Wight seems to suggest a possible link between such a ceremonial use and what she considers to be a transparent connection of group I beakers, through their imagery, to wedding ceremonies. On the other hand, according to Wight, their presence in inventory graves and their luxury items status when compared to the other objects from the Cyzicus and Črnelo burials (a point already raised by Carabella for Cyzicus), could indicate a costly offering for the deceased;[24] the item could hint at the personality of the deceased or at the personality and status of those responsible for the burial. However she does not pursue the suggested chain imagery choices/practices-mythological wedding-art/luxury item-actual burial.[25]

Some thoughts could be spared on the increased value and singularity of the mythological beakers as compared to the other items to whom they are associated in graves (when we know they were and anyway by no means a regular association). They seem to be the only objects there with a potential, layered cultural background, as positively identifying the mythological figures claims a certain familiarity with their representation, in this specific manner and/or on different other objects. If there is something to be found behind their simple representation (the dynamics fabricant-intended audience could organize perception to a certain amount), if there is a mythological narrative offered in order to be remembered and investigated, depends largely on the viewer and its cultural capacity of recognizing citation. In fact, isolating the figures each in its own *naiskos* and not having a specifically marked order of reading the images liberates perception. They are all facing right, it is true, a fact that might indicate a succession and the need to turn the beaker always to the right, but nobody tells where the viewing should start and which figure should be investigated and identified first. It is a circular reading as opposed to a linear, right to left or left to right, reading. It could indicate the insulation of the mythological figures, toning them up as visually typified, and toning them down as belonging to a narrative. There seems to be however a selection operating and establishing the alternate order of the figures with Hercules/calf-bearer and Mercury, not in immediate succession.

A later (140 AD), but useful example to shortly explore the potential and the fragility of connotations is once again the so-called Albani sarcophagus.[26] We should pay attention to the fact that the previous identification as a wedding image bearing monument has been challenged and what was once identified as the gift-bearing procession at the wedding of Thetis (a veiled figure seated in the background, as if she were a spectator) and Peleus (almost in the nude, with a heroic, premier plan attitude) is now viewed as a mourning scene that fits perhaps better with a funerary context.[27] The sadness of the goddess and her mourning

[23] Wight 1994, 54, note 103. Description of the finds in Weinberg 1972, 39. Functions of the beakers discussed at Wight 1994, 54.

[24] Extremely tentative conclusions could originate in the Massala and Vindonissa discoveries (military context/possessors? or luxury items just travelling), but the beakers there are not deposed on purpose.

[25] The most directly evocative of the four figures on the beaker for a wedding imagery, even in absence of a mythological perception, could be Hymen (if his identification on the other artistic media is correct) with the caveat that mythological beakers are very early representations of Hymen. His personality and mythology, forged in Roman and Roman Age literature (so to speak at a late date), show him as unbelievably, even womanly beautiful (he is sometimes represented as a woman; such aspects put him very close to Dionysos' imagery) and meeting an early death (Linant de Bellefonds 1990, 583, 585).

[26] Machaira 1990, 508, cat. no. 46, the only representation of the wedding of Thetis and Peleus on a Roman sarcophagus with the four *Horai* in the center of the gift-bearing procession.

[27] Zanker, Ewald 2012, 246-247 on the Albani sarcophagus. As Zanker and Ewald put it, the particular context of production and reception of sarcophagus reliefs using the Greek imagery and myths agrees with the wider cultural movement in that imperial age towards Greekness and the existence of knowledgeable fabricants and public. Usually there is, in the beginning, a famous Greek work of art as an ultimate referent of these later productions, but the chain of (selective) reproduction of the imagery from piece to piece, on very different types of artefacts, sometimes contemporary, is as impossible to follow as the viewers' capacity to refer back to the original work of art. See also 283-293 about the Achilles sarcophagi. Achilles's selected imagery on the sarcophagi, as well as the funeral eulogies and inscriptions, enforces the mortality inherent to humankind, even to a hero such as him, as well as associating the dead to his handsomeness and unmatchable *arete*; the emotional connotations of the scenes reach easily to the viewers and their connections with death are more important than the peculiarities of the narrative development (283-284). For the switch from wedding to mourning in interpreting the sarcophagus, see Müller 1994. For the complexity of the

gesture and costume are rather more consistent with the gods Hephaestus and Athena, followed by the Horae, presenting her son, Achilles, with the weapons forged for him on Thetis' demand, an omen of his soon to arrive death. This later monument shows how it was possible to detach already standardized figures from their original celebrating context and re-insert them in a related mythical scheme pertaining to the same family and playing on the ambiguity of Thetis mourning her marriage versus Thetis mourning her son's eventual demise.[28] While this situation is admittedly consistent with instances of breaking and re-working of mythical sequences visible in the work of the sculptors responsible for the reliefs decorating mythological sarcophagi, and both the intricate mythological referent and even more its emotional charge are important for the culturally sophisticated and vulnerable viewer, it also shows the easiness in passing the figures from one mythological chain of events to another potentially invested with a different meaning. However sarcophagi suggest a story to the viewer, mythological beakers can only hint at it.

Accordingly, the figures may well be derived from a celebrating context, namely the immensely popular wedding of Thetis and Peleus, as Wight suggests, but lately connected to another potential, more direct, interpretation which does not necessary refer to the wedding, although the presence of Hymen, if Hymen, could support a wedding reference, if not a reference to ambiguous gender, remarkable beauty and early death. While the alternate interpretation of the Albani sarcophagus does not change the iconographical analogies figure by figure, it challenges the potential meanings of the figures on the beakers, if they ever had one, besides the decorative/luxury purpose, or if they had a larger one than provoking the more sophisticated and learned possessor.[29] At the end of the day, what was said about the Albani sarcophagus could also be said about the glazed skyphos in Munich, including here a more direct hint to Homer's *Iliad* -presenting Achilles with his new weapons rather than his parents' wedding. Even in the presence of an acknowledged mythological reference by the fabricant or by the viewer, it seems to us that the different visual *medium* that is the mythological beaker leaves the door open for a lot of readings and associations (one might for example focus only on some or the better known figures), or for none at all. It is all the more difficult to establish a range of possible readings since the archaeological contexts of those beakers are, even when known, incomplete and we are unable to reasonably imagine a so-called social life of the object.

A last point we would like to touch on concerns the production of the beakers. What is clear, from every analysis, is that the bottom mold was a separate one. The beakers were apparently produced with different molds, at least two estimates Weinberg, as shown by variation in the columns of the *naiskoi* sketched on the beakers (fluted versus unfluted) and in the bottoms of the beakers.[30] Series of precise measurements of the 11 items of group I, expanding Weinberg's previous analysis, were taken by Wight in order to establish the number of molds used in the fabrication process. Her preliminary conclusions find that two base molds were used, with two and respectively three rings, and only one set of side molds. This conclusion, coupled with the supposed exclusive association of the beakers with Asia Minor, would lead to the existence of a workshop producing the beakers somewhere on the coastal area[31]. No comment is made regarding Weinberg's remark on the fluted or unfluted columns on the side panels which had brought her to consider the existence of multiple molds.

As the beaker from Tomis was not included in the above summarized discussions, we decided to test some of the previously reached conclusions. Measurements were taken, the same kinds that Weinberg and Wight took[32], and a plaster model was made in order to better study the iconography.

The measurements (in centimeters) are the following: total height 11.9, rim diameter 6.4, foot diameter 4.3, figure height: Winter 6.5, Hercules 6.9, Hymen 6.8, Mercury 7.1, ring diameter 1.9 (what would be in other cases the middle ring), height

interaction between myth, even with a negative content, sarcophagi, *consolatio* and the narrative of the dead person and its companions, see Gessert 2004.

[28] On the veiling of Thetis as expression of grief and/or anger in the *Iliad*, see Llewellyn–Jones 2003, especially 301-301, 306. It is true that emotion is communicated through the use of colour (Thetis dons a black/dark *kalumna*), but the gesture, in the absence of colour, might have been easily interpreted when made by Thetis. Veiling, a constant of everyday life, expected at weddings and while in mourning, is consistent with the *aidos* that must inform the feminine behaviour.

[29] In a manner comparable, for example, to the learned participants in Athenaios' *Deipnosophistai* so interested in intricate and arcane cultural connections.

[30] Conclusion drawn by Weinberg 1972, 27, 28 and 47 about molds. In a note added in proof, Weinberg mentions a beaker, presumably found in Gallipoli, whose measurements, when compared to cat. no. 3 (group I, the Carabella beaker), would also indicate a different mold.

[31] Wight 1994, 27-28. It should be highlighted that Wight herself considers her conclusions to be provisional. On the East as a space of innovation in early Roman glass production, see Lightfoot 2003, 342.

[32] Wight's comparative measurements in 1994, 28-29.

of figural field (up to the top angle of the pediment) 9.4, height of base area 1.7, width of column top 1.1, base 1.1. They are in the range indicated by Wight's table or very close to it. Two additional measurements were taken, the height of figural field to the horizontal ridge of the pediment 8.0 and width of the column in the middle 0.7. A correlated measurement derives from them-the height of thepediment of 1.4. We were able to make the following observations regarding iconographical particularities when compared to the beakers analysed by Wight.[33] The columns of the *naiskoi* are seemingly thinning from bottom to top, their diameter decreasing progressively. No ornament seems to have been placed between the pediments, on top of the columns, no flames, nor loops are visible. The oblique ridges of the pediment are angled more sharply and the ridges themselves seem thinner (although variation is possible on the same beaker). What is possibly more relevant is the height of the pediment, our example appearing to have a higher pediment than other examples. There seems to be some kind of decoration/decorations in the interior of the pediment, maybe a rounded one like a patera or a three pointed one. What's more, the bottom of the beaker in Tomis has only one center raised ring, with no outer ring, the edges having been rounded, and no knob at the center. Apparently the details of decoration of the figural field and bottom would indicate the use of a different set of side panels and a different base mold for the fabrication of the Tomis beaker.

[33] The photos of the figural field given by Wight 1994, 30-35 are cat. no. 7, 9 and 1, fig. 1-10 and fig. 11 bottom of cat.no.11. Weinberg 1972, 27-32, cat. no. 1, 2, 3, 6, fig. 3-8 gives photos and drawings of the figural field and bottoms.

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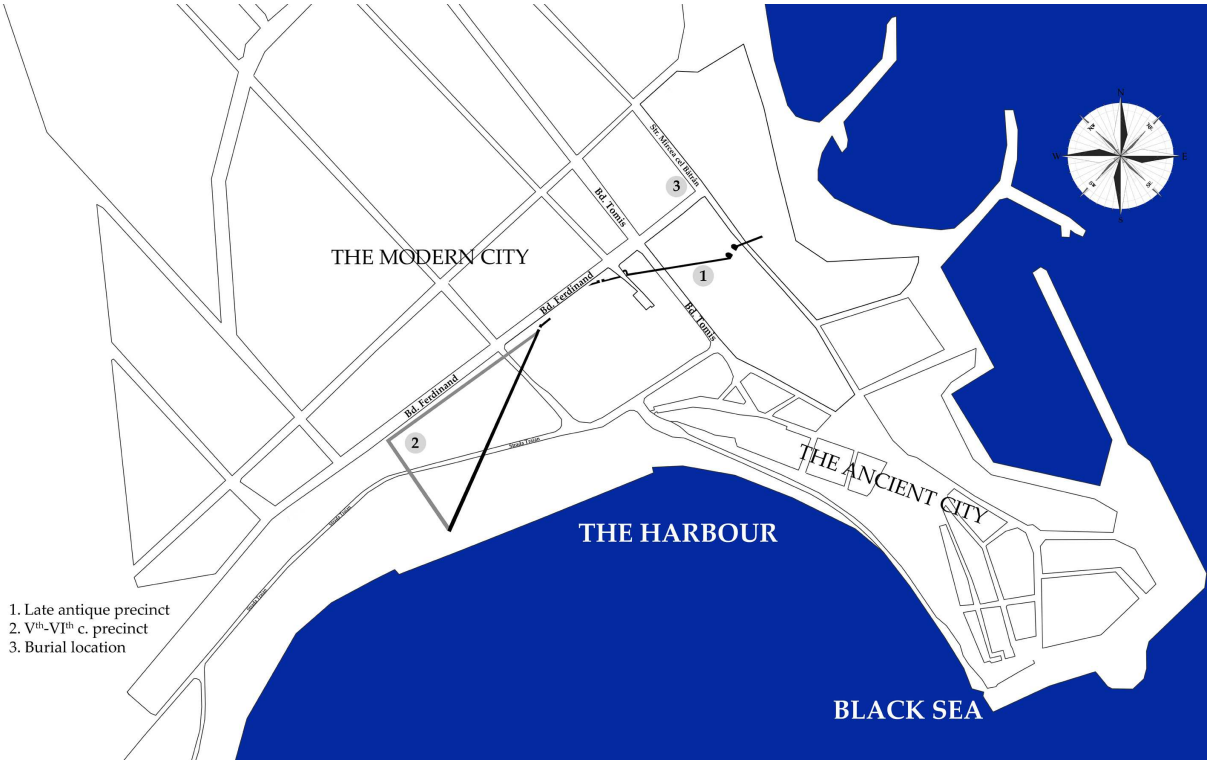

Fig. 1. Map

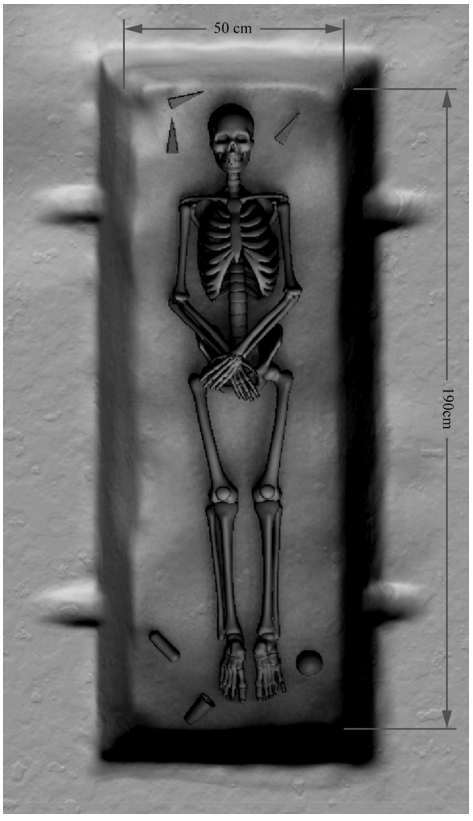

Fig. 2. 3D Reconstruction of the Tomis Burial

Fig. 3 a. Hercules

Fig. 3 b. Himen

Fig. 3 c. Mercury

Fig. 3 d. Winter

Fig. 4. Bottom

Fig. 5 a. Hercules

Fig. 5 b. Hymen

Fig. 5 c. Mercury

Fig. 5 d. Winter

RECHERCHES ARCHÉOLOGIQUES ET D'ÉPIGRAPHIE DANS LE MILIEU RURAL D'IBIDA À L'ÉPOQUE DU HAUT-EMPIRE

*Lucreţiu Mihăilescu-Bîrliba**

Résumé : Les recherches archéologiques d'Ibida (Slava Rusă, dép. de Tulcea), déroulées systématiquement depuis peu de temps, ont mis en évidence les traces de la cité d'époque romaine trdive (IV^{e} – VII^{e} s. ap. J.-C.), conservées sur une surface de 24 ha. Même si, du point de vue stratigraphique, l'époque de Haut-Empire est faiblement attestée, les trouvailles archéologiques et les inscriptions indiquent une habitation intense dans cette période. Il est très probable une présence militaire régulière dans la zone. Dans cette étude nous analysons le territoire rural de la cité à l'époque du Principat, en corroborant les informations archéologiques et épigraphiques.

Abréviations :

AE	L'Année Épigraphique, Paris.
ArhMold	Arheologia Moldovei, Iași.
CBI	Der römische Weihebezirk von Osterburken. Corpus des griechischen und lateinischer Beneficiarier-Inschriften des Römischen Reiches, Stuttgart.
CIL	Corpus Inscriptionum Latinarum, Berlin.
Dacia N.S.	Dacia Nouvelle Série. Revue d'archéologie et d'histoire ancienne, Bucarest.
DHA	Dialogues d'histoire ancienne, Besançon.
	Diomedes NF. Schriftenreihe des Fachbereiches Altertumswissenschaften Alte Geschichte, Altertumskunde und Mykenologie der Universität Salzburg, Salzburg.
IDR	Inscriptiones Daciae Romanae, Bucarest-Paris.
IGB	Inscriptiones Grecae in Bulgaria repertae, Sofia.
IGRR	Inscriptiones Graecae ad Res Romanas Pertinentes, Paris.
ILB	Inscriptiones Latinae in Bulgaria repertae, Sofia.
IOSPE	Inscriptiones antiquae orae septentrionalis ponti euxini Graecae et Latinae per annos 1885-1900 repertae, St. Petersburg.
IPOstie	Inscriptions du port d'Ostie, Lund.
ISM	Inscriptiones Scythiae Minoris, Bucarest-Paris.
Peuce S.N.	Peuce Serie nouă. Studii și cercetări de istorie și arheologie, Tulcea.
RIB	The Roman Inscriptions of Britain, Oxford.
SCIV	A Studii și cercetări de istorie veche (și arheologie), Bucarest.
ZPE	Zeitschrift für Papyrologie und Epigraphik, Bonn.

1. Le dossier archéologique d'Ibida et de son milieu rural : un bref regard

Les recherches archéologiques systématiques à Ibida ont commencé assez récemment[1] et, même si elles n'ont mis en valeur que des monuments d'époque romaine tardive (**Fig. 1)**, quelques tombes, et surtout des inscriptions, ont attesté l'existence d'une cité assez importante au centre-nord de l'actuelle Dobroudja (**Fig. 2**), qui a eu son territoire (voir les *uici* situés à proximité, sur lesquels je vais discuter tout de suite) et qui probablement possédait le statut de *ciuitas stipendiaria*.[2] Dans l'*extra-muros* de la cité, les fouilles archéologiques ont mis au jour des structures d'époque romaine tardive (**Fig. 3**),[3] mais il y a des trouvailles archéologiques hors d'un certain contexte qui datent de la haute époque romaine[4]. Les dernières années, on a entrepris des recherches non-intrusives (aéro-photographiques) dans le milieu rural d'Ibida (Fântâna Seacă et Mihai Bravu) ; pour l'instant,

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[1] Voir en général Iacob *et alii* 2002, 293–303 et plus récemment Iacob *et alii* 2016a, 87-93 ; Rubel 2015, 175-190 ; Rubel 2017, 113-125.

[2] Le dossier épigraphique d'époque romaine du Haut-Empire a été discuté par Mihăilescu-Bîrliba 2011, 83-143. Voir aussi Rubel 2008, 1-8 ; Mihăilescu-Bîrliba 2008, 199-210 ; Mihăilescu-Bîrliba 2010, 377-385.

[3] Mihăilescu-Bîrliba 2003, 329-336, plus récemment Honcu *et alii* 2017, 134.

[4] Opaiț, Paraschiv 2012, 113-124 ; Opaiț, Paraschiv 2014 ; Boțan, Mocanu 2012, 147-148.

les constructions révelées par les photos datent de l'époque romaine tardive.[5] À Mihai Bravu, les recherches de surface achevées dans les années 1990 et 2000 ont mené à l'identification d'un vaste habitat rural (peut-être un carré de 800 x 800 m), daté entre le milieu du I^er^ siècle ap. J.-C. et la fin du IV^e^ siècle (**Fig. 4**), sur lequel nous avons malheureusement peu d'informations archéologiques[6] mais d'où provient une douzaine d'inscriptions, chronologiquement homogènes, en partie remployées dans les structures du fort[7] et pour la plupart inédites ; tout cela constitue une source précieuse pour la reconstruction partielle de la vie institutionnelle et sociale de ce *uicus*, l'une des nombreuses petites agglomérations rurales qui avait surgi entre les I^er^-III^e^ siècle ap. J.-C., entre Slava Rusă et Enisala.[8] Les archéologues ont effectué des nouvelles recherches de surface en 2013-2014 ; ils ont confirmé l'existence d'un établissement rural du Haut-Empire (probablement le *uicus Bad[---]*).[9] Sur le territoire de l'actuelle commune de Turda (3 km de Mihai Bravu), on a identifié un autre habitat datant des II^e^-IV^e^ siècles.[10] Dans la zone de Topolog, les recherches effectuées ces dernières années par G. Nuțu ont mis au jour des vestiges datant du Haut-Empire. Ces recherches sont encore inédites.[11].Sur le plateau et dans la vallée Casimcea, les recherches de surface effectuées en 2015 ont identifié un habitat romain du Haut-Empire, tout comme dans les villages de Beidaud et de Ciucurova.[12] L'existence de ces établissements a été communiquée mais il n'y a pas d'autres détails là-dessus. Les fouilles effectuées en 2009 par G. Nuțu à la limite sud-ouest de la ville de Babadag ont mis au jour un établissement rural, qui n'a pas encore été complètement exploré à ce jour.[13] Il n'est pas exclu que le *uicus Nou(...)*, sur lequel je reprendrai la discussion, soit identique à cet habitat. Enfin, A. Avram a effectué des sondages à Camena (*uicus Petra*), où il a identifié une *uilla,* et à Ceamurlia de Sus.[14] Les résultats détaillés de ces recherches n'ont pas été publiés.

2. Le dossier épigraphique du milieu rural d'Ibida

Passons maintenant au dossier épigraphique de la zone rurale d'Ibida. Un premier *uicus* mentionné dans la proximité d'Ibida est le *uicus Petra*, localisé dans le village actuel de Camena (dép. de Tulcea, Roumanie) : le texte atteste la construction d'un *balneum* public par les *uicani*, étant *magistri* Nymphidius Maximus et Aelius Geminus, et les questeurs Ulpius Romanus et Cassius Primitivus.[15] Le premier *magister* et un autre personnage, Aelius Iulius (parent du second *magister* ?) ont veillé à la construction de l'édifice. On observe ainsi une organisation quasi-municipale du village, avec les représentants de l'élite locale portant des noms romains. Tous les gentilices sont populaires dans le monde romain, sauf Nymphidius. Pourtant, en Mésie Inférieure, un P. Nymphidius Valens remplit la charge de *buleuta* à Nicopolis ad Istrum.[16] Les Nymphidii sont surtout évoqués à Rome et à Ostie.[17] Il semble que le *uicus* a été colonisé avec des citoyens romains mais on ignore s'il y avait d'autres éléments de colonisation dans le village. La manière d'utiliser un gentilice (Iulius) à la place du surnom me fait penser à une datation du début du III^e^ siècle.

Des proximités d'Ibida, proviennent d'autres inscriptions. Ainsi, dans la zone qui comprend les villages de Topolog et de Sâmbăta Nouă (comm. de Topolog, dép. de Tulcea, Roumanie), de Luminița et de Cerbu, il y a plusieurs vestiges archéologiques et épigraphiques. À Luminița, les recherches effectuées par G. Nuțu[18] ont identifié une *uilla* d'époque du Haut-Empire, qui était située à environ 300 m de la localité moderne. La zone présente une haute plateforme où, sur une surface d'environ 4000 m^2, on a trouvé de la céramique. À 250 m au sud il y a un *tumulus* funéraire. À l'extrémité sud du village, à l'ouest de la route vers

[5] Iacob *et alii* 2017, 135-136.

[6] Opaiț *et alii* 1992, 107 ; Vizauer *et alii* 2001, 144-145 ; Opaiț 2004, 109 ; voir aussi Aparaschivei 2010, 107. Parmi les matériaux, nous pouvons rappeler des fragments d'amphore « Late Roman 2 », en usage entre les IV^e^ – VII^e^ siècles ap. J.-C ; Mihaela Iacob a identifié des pièces de monnaie en circulation entre l'époque de Claude et le IV^e^ siècle ap. J.-C.

[7] Sauf les inscriptions présentées dans ce catalogue, une recherche de surface menée en 2016 a révélé entre les structures d'une tour du *burgus* les fragments d'une colonne de calcaire, appartenant à un bâtiment public ou privé du *vicus*.

[8] Bărbulescu 2001, 88-96.

[9] Iacob *et alii* 2016b, 227-228.

[10] Iacob *et alii* 2016b, 228.

[11] Je remercie G. Nuțu d'avoir eu la gentillesse de me communiquer ses résultats.

[12] Paraschiv *et alii* 2016, 231-232.

[13] Nuțu 2009, 125-126.

[14] Lungu *et alii* 1990, 161, note 8.

[15] ISM V, 222.

[16] Conrad 2004, 347.

[17] CIL VI 9679, 23179, 30712e ; XIV 221 ; IPOstie-A, 146, 147.

[18] Recherches inédites.

Topolog, il y a quelques monuments en pierre conservés dans un cimetière turc. Un four, qui selon les fragments d'amphore trouvés à son intérieur, date des II^e^-III^e^ siècles ap. J.-C., a été fouillé dans le lieu-dit « Stejarul lui Dobrică », à environ 500 mètres nord-nord-ouest de la localité de Topolog.[19]

Comme je l'ai précisé plus haut, il y a aussi des témoignages épigraphiques concernant des structures d'habitation ancienne dans la zone actuelle du village de Topolog.[20] Une inscription atteste un personnage provenant d'Asie Mineure, d'Amorium[21] – Aufidius Helius ; il s'agit d'un autel funéraire, dont le lieu exact de découverte reste inconnu. Le lieu de naissance du personnage et les occurrences des Aufidii (aussi en tant que militaires) en Mésie Inférieure,[22] me fait penser à une descendance militaire d'Helius. Si lui-même n'était pas un ancien soldat, alors il était un descendant d'un militaire. On sait que les recrutements du Pont et de Bithynie ont eu lieu sous Trajan, pour les guerres parthiques, et surtout sous Hadrien, pour la guerre de Judée.[23] C'est pourquoi je pense que notre personnage (ou son père) a été recruté sous Hadrien, lorsque la V^e^ légion Macedonica se trouvait en Asie Mineure. En terminant son service, il (ou son parent) est resté au Bas-Danube, ayant une *uilla* dans la région. Tout près de Topolog, dans le village Cerbu, une stèle funéraire évoque deux membres d'une famille de citoyens romains, (A)elius Aulusenus et son fils, (A)elius Marcus. Le texte date, selon le surnom du fils (une forme de prénom) du début du III^e^ siècle ap. J.-C.[24] Aulusenus, attesté aussi dans la forme Aulusenis, est un nom rencontré deux fois dans les diplômes militaires où les bénéficiaires ont l'ethnonyme de *Bessus.* Dans un cas, il s'agit d'un Aulusenis Densatralis filius,[25] dans l'autre d'Aulusenus.[26] Il y a aussi la forme Auluzenis, comme le prouve un texte grec provenant du territoire d'Odessos.[27] Par conséquent, notre Aulusenus est un Thrace qui a reçu la citoyenneté ; son fils porte déjà un *cognomen* romain. Ce n'est pas le seul personnage d'origine thrace qui s'établit dans cette zone. À Mihai Bravu, Tarsa, ancien *tesserarius* de la flotte de Ravenne, rentre chez lui en 71[28] (**Fig. 4.1**). À Ibida, il y a Durisses Bithi,[29] Othis Seuti, Bithidia Biti, Lupussis (?).[30] On peut dire qu'il y avait une communauté assez puissante des *Bessi* colonisés dans le milieu rural de la partie septentrionale de la province par des raisons économiques (agriculture et exploitation de surface des métaux[31]). Du village de Sâmbăta Nouă, selon les informations des villageois, a été trouvé un autel voué à Jupiter Très Bon et Très Grand et à Junon la Reine par un certain Lae(...) Comicus, datant probablement aussi au II^e^ siècle[32] (**Fig. 4.2**). Les vœux pour Jupiter et Junon sont fréquents dans le milieu rural de Mésie Inférieure.[33] Un lion funéraire en calcaire trouvé en 1970, considéré comme étant le produit d'une des *officinae* d'une *uilla* locale, complète l'image des monuments sculpturaux découverts dans la région.[34] Des nombreux *tumuli* funéraires bordent les anciennes routes romaines, une vers Cius (Gârliciu) et une autre dans la Valea Roştilor, vers Beroe. Dans le village Făgăraşul Nou, appartenant toujours à la commune de Topolog, on a trouvé deux reliefs votifs pour Bacchus.[35] Le culte de Bacchus est relativement bien documenté en Mésie Inférieure (surtout du point de vue archéologique) et il est présent particulièrement dans le milieu rural.[36] D'autres informations proviennent

[19] Recherches effectuées par G. Nuţu, inédites. Voir plus récemment l'article de Nuţu, Mihăilescu-Bîrliba 2017, 171-176.

[20] Aricescu 1973, 105, note 3.

[21] Baumann 1971, 597 ; Baumann 1984, 228-229, nr. 16, 626, fig. 69 ; Aricescu 1973, 105. Sur les Aufidii, voir aussi Mihăilescu-Bîrliba, Dumitrache 2012, 63-64. Sur Helius, voir aussi Mihăilescu-Bîrliba 2015a, 443.

[22] ISM I, 276-277 ; II, 458 ; V, 127, 278 ; ILB 438.

[23] Voir Mihăilescu-Bîrliba, Dumitrache 2012a, 63-64.

[24] Baumann (1984, 229-230, nr. 18, 625, fig. 67) lit *Aulusemius*, mais on voit sur la pierre qu'il s'agit d'Aulusenus.

[25] Eck, Pangerl 2008, 326.

[26] RMD V, 348.

[27] IGB I², 281 bis.

[28] Chiriac *et alii* 2004, 265-269 + Petolescu, Popescu 2007, 147-152.

[29] ISM V, 229 ; voir aussi Mihăilescu-Bîrliba 2011, 108-109.

[30] ISM V, 228 ; voir aussi Mihăilescu-Bîrliba 2011, 107-108.

[31] Voir Mihăilescu-Bîrliba 2011, 118 ; Mihăilescu-Bîrliba 2015e, 441.

[32] Mihăilescu-Bîrliba 2014, 303-307 ; voir aussi Mihăilescu-Bîrliba 2015a, 439-445.

[33] Voir CIL III 7466 ; ISM I, 324-332 (Mihăilescu-Bîrliba 2012, 93-98), 344, 346, 347, 368 (Bâltâc 2011, 252-253), 378 (Bărbulescu, Buzoianu 2013, 183-184) ; ISM II, 141 (Bounegru 2011, 238, Bâltâc 2011, 264) ; ISM V, 13-15, 17-18, 123, 62-64, 69, 129 (Bâltâc 2011, 239-240) ; ILB 235.

[34] Baumann 1984, 213-214.

[35] Dragomir 1962, 421-429.

[36] Voir aussi Covacef 1998, 163-179 ; Bărbulescu 2001, 245-280 ; Baumann 2011, 208-209 ; Baumann 2015, 91-106. Du point de vue épigraphique, à Lazen, est mentionné un collège de *Bacchi vernaculi* (de 227) (ILB 438).

de la zone nord de la localité de Topolog, qui n'est pas loin du four romain découvert par G. Nuțu.[37] Les nombreux fragments céramiques, le lion funéraire mentionné ci-dessus et les *tumuli* appartiennent à une habitation de type *uilla*. Vers le sud-ouest, sur la terrasse du ruisseau Topolog, ont été découverts les vestiges d'une autre *uilla* et de nombreux fragments céramiques d'époque romaine du Haut-Empire.[38] Des monnaies, des accessoires de vêtement et des pièces d'équipement en bronze ont été trouvés à proximité du cimetière du village.[39] L'habitation intense du plateau de Casimcea, dans la vallée du ruisseau Topolog et dans la Valea Roştilor se reflète dans les nombreuses *uillae rusticae* et les établissements signalés jusqu'à présent.[40] Dans la même mesure, plusieurs attestations d'objets archéologiques trouvés au fil des années contribuent à l'image d'une zone riche en vestiges d'époques hellénistique et romaine. Un four est mentionné, brièvement, par M. Irimia dans le lieu-dit « Vraja »[41] – une petite vallée naturelle située à environ 3 km nord-est de Topolog. Il y a la possibilité d'attribuer ce four à l'époque romaine, car une recherche de surface dans cette zone n'a identifié que des matériaux d'époque romaine du Haut-Empire appartenant à une *uilla*.

Les informations archéologiques de Topolog, associées aux sources épigraphiques, font preuve de l'existence au moins d'un *uicus* et des plusieurs *uillae* dans la zone. Plus encore, il semble qu'une partie des habitants étaient les descendants des vétérans, sinon vétérans eux-aussi, comme Aufidius Helius, provenant d'Asie Mineure. Lui-même, ou l'un de ses ancêtres, a été recruté à l'occasion des guerres parthiques de Trajan ou de la guerre de Judée d'Hadrien. Sa famille était sans doute aisée, raison pour laquelle il était propriétaire dans le milieu rural de cette partie de la Mésie Inférieure. Une autre partie était formée par des citoyens romains dont les origines restent inconnues (comme *P*. Lae(...) Comicus) et des Thraces (pérégrins, comme Tarsa, Othis Seuti et Durisses Bithi, ou citoyens, comme *(*A)elius Aulusenus). Il faut aussi remarquer que les Thraces étaient en train de romaniser leurs noms (le fils d'*Aulusenus* porte le surnom de *Marcus*). On ne dispose pas d'informations claires sur l'appartenance du village à un certain territoire, mais la proximité d'Ibida, ainsi que la présence d'une population thrace dans la zone, me font penser à cette cité.

À Casimcea (dép. de Tulcea, Roumanie), un texte fragmentaire mentionne un certain [Vic?]tor, vétéran de l'*ala Dardanorum.*[42] L'éditeur de l'inscription et l'éditrice des ISM V n'ont pas exclu la possibilité de la lecture *Vital(is)* au lieu du vétéran.[43] La photo (**Fig. 4.3**)[44] montre, à mon avis, d'une manière assez claire, qu'il s'agit d'un *E* entre le *V* et le *T* (la haste horizontale médiane est moins visible, mais elle est visible). C'est sans doute un vétéran mentionné avec un ou plusieurs membres de la famille. L'un de ces membre s'appelle Valeri(u)s donc il est probable que le gentilice de l'ancien soldat soit aussi Valerius, d'autant plus que c'était un gentilice commun chez les militaires. Ma lecture sur la photo distingue aussi la fin d'un surnom, [---]umiu(s). L'aile a été stationnée à Arrubium, selon les évidences épigraphiques.[45] Le texte date probablement du III^{e} siècle, si l'on prend en considération les anomalies épigraphiques (les formules *aue uiator* et *hic siti sunt* mises au début, et non à la fin du texte). Il y a une forte possibilité de l'existence du village, selon les recherches archéologiques de surface effectuées dans le village de Casimcea ; un établissement romain (II^{e}–IV^{e} siècle) y a été identifié.[46]

2bis. Le cas du *uicus Bad[---]* et le problème de son appartenance

Le second *uicus* qui est mentionné dans la région, même si son attribution au territoire d'Ibida reste incertaine, est le *uicus Bad[---]*. Les recherches récentes sur le corpus d'inscriptions de ce village, localisé dans la localité Mihai Bravu (dép. de Tulcea, Roumanie), seront publiées dans un article plus ample, avec le collègue A. Ibba.[47] Le corpus d'inscriptions sera mis dans une annexe à la fin de ce chapitre. Il faut pourtant faire des commentaires sur la population de ce *uicus*.

[37] Voir *supra*, note 7.

[38] Les informations proviennent des recherches inédites effectuées par G. Nuțu. Nous remercions G. Nuțu pour avoir mis à notre disposition ces données.

[39] Renseignements fournis par M. Ion Trofin, que l'on remercie vivement.

[40] Baumann 1983, 78-81, fig. 26-27.

[41] Irimia 2006, 142, note 60 ; Irimia 2007, 156.

[42] ISM V, 131.

[43] Baumann 1971, 597-598 ; ISM V, 131, *sub numero*.

[44] ubi-erat-lupa.org/monument 15201.

[45] ISM V 251. Voir aussi Matei-Popescu 2010, 170.

[46] Paraschiv *et alii* 2016, 231.

[47] Mihăilescu-Bîrliba, Ibba 2018 sous presse.

Un premier texte évoque une communauté des *ueterani et ciues Romani consistentes uico Bad[---]*. On apprend ainsi non seulement le nom (il est vrai, fragmentaire) du village, mais aussi le fait qu'il y avait un *conuentus* de citoyens romains et des vétérans[48] (**Fig. 5.**). Un autre texte, tout aussi fragmentaire, représente très probablement une inscription votive : seule la formule *cura agentibus* a été conservée, suivi d'un seul nom (Aelius Carinus), le deuxième étant perdu. Une telle formule supposait les noms des *magistri* du village. On apprend indirectement, par conséquent, que le *uicus* avait une organisation quasi-municipale (deux *magistri* et probablement deux *quaestores*).

Quelles sont les autres personnes mentionnées dans les textes ? D'abord, un diplôme militaire évoque un ancien *tesserarius* de la flotte, un Thrace nommé Tarsa, fils de Duzius, et son fils Macedo ; le vétéran qui rentre chez lui après avoir été libéré le 5 avril 71.[49] Ce n'est pas entièrement certain que sa maison ait été à Mihai Bravu. Pourtant, la présence des Thraces dans les campagnes de Mésie Inférieure est habituelle. Il faut rappeler les *Bessi consistentes* et les *Lai consistentes* dans le territoire rural d'Istros[50] et les *Lai consistentes* dans le territoire rural d'Istros et de Tomi. C.C. Petolescu et A.-T. Popescu ont proposé la restitution *Besso* pour le deuxième fragment du diplôme.[51] C'est une hypothèse plausible, mais seulement une hypothèse. La datation du texte prouve que Tarsa s'est installé dans la région avant son recrutement, c'est-à-dire au moins du temps de Néron. On connaît encore des Thraces mentionnés dans les diplômes militaires en tant que marins dans les flottes impériales. Par exemple, Sparticus, fils de Diuzenus, actif dans la flotte de Misène, a été libéré en 54 ;[52] Tyraesus[53] et Dules, fils de Datus,[54] ont fini leur service dans la *legio I Adiutrix*, en 68 et 70, mais la légion était formée par d'anciens marins. Hezbenus, fils de Dulazenus, soldat de la flotte de Misène, est libéré le 9 février 71.[55] Parmi tous ces marins, Tyraesus est aussi attesté comme rentrant dans son village. En revenant à Tarsa, on peut dire qu'il est retourné dans une communauté de Thraces habitant, selon toutes probabilités, le village de Mihai Bravu. Comme d'autres Thraces de la région, il « latinise » le nom du fils.

Une autre inscription rappelle l'*ex uoto pro salute* accompli par T. Caelius Cato,[56] beneficiarius des gouverneurs Cn. Suellius Rufus[57] et Cosconius Gentianus :[58] la formule utilisée peut suggérer un rapport personnel entre Catus et les deux *legati Augusti.*[59]. Je ne vais pas reprendre la discussion sur ces deux gouverneurs. E. Doruţiu-Boilă a vu un seul personnage, tandis que P.M. Leunissen[60], D. Boteva,[61] A. Avram et M. Bărbulescu[62] ont considéré qu'il s'agit de deux personnes différentes. Je me rallie à ces dernières opinions. Le personnage qui voue le texte s'appelle T. Caelius Catus ; il a le rang de bénéficiaire du consulaire. Est-ce qu'on peut parler d'une *statio* à Mihai Bravu? Le vśu est associé aux souhaits de santé pour le gouverneur. Non loin de Mihai Bravu, à Nifon, deux autres bénéficiaires sont mentionnés, dans des textes datant de Marc Aurèle et d'Héliogabale.[63] Toujours du

[48] Informations succintes chez Opaiţ *et alii* 1992, 107 ; Bărbulescu 1998, 240 ; Bărbulescu 2001, 94, 179 ; Avram 2007, 97, 107 nr. 17 ; Aparaschivei 2010, 107.

[49] Chiriac *et alii* 2004, 265-269 + Petolescu, Popescu 2007, 147-149.

[50] Pour les *Bessi consistentes*, ISM I, 324, 326-328, 330, 332. Pour les *Lai consistentes* dans le territoire d'Istros, voir ISM I 343-347, 349. Voir aussi Mihăilescu-Bîrliba 2012b, 94-95.

[51] Petolescu, Popescu 2007, 149.

[52] CIL XVI 1. Voir aussi Mihăilescu-Bîrliba, Dumitrache 2012b, 10-11.

[53] RMD III 136. Voir aussi Mihăilescu-Bîrliba, Dumitrache 2012b, 11-12.

[54] CIL XVI 10. Voir aussi Mihăilescu-Bîrliba, Dumitrache 2012b, 13-14.

[55] CIL XVI 12. Voir aussi Mihăilescu-Bîrliba, Dumitrache 2012b, 12. Sur la participation de l'armée de Mésie à la guerre civile de 68-69, voir aussi Paunov, Doncheva 2013, 43-55.

[56] Doruţiu-Boilă 1985, 197-203. Voir aussi CBI 642 = AE 1985 725 ; Opaiţ *et alii* 1992, 107 ; Aparaschivei 2010, 107.

[57] Dans l'inscription de la déesse Fortune à Oescus, sa période en tant que *legatus Augusti* est datée, selon la titulature de Commode, de 189 à 191 (AE 1987, 893 + AE 2006, 1202).

[58] Ce personnage était connu par l'intermédiaire des monnaies de Marcianopolis et de Nicopolis ad Istrum datables sous Septime Sévère (Pick 1898, 198-199).Ultérieurement, d'autres documents épigraphiques se sont ajoutés au dossier de Cosconius Gentianus. Il a été identifié dans une inscription d'Olbia, datée de 197 (mais où son nom est conservé dans un état fragmentaire, l'inscription d'Olbia, datant de 197, conserve seulement les lettres *KO*: IOSPE I^2, 174 = IGRR I 854) et dans un fragment d'inscription à Barboşi (ISM V, 294).

[59] Il est intéressant d'observer que la formule utilisée n'est pas celle que l'on trouve habituellement après la réforme supposée avoir eu lieu entre 155 et 170 (Dise 1997, 273-283), lorsque les bénéficiaires sont devenus plus stables dans l'*officium* du gouverneur. Dans l'inscription discutée ici, le bénéficiaire a probablement eu l'intention d'exprimer un rapport personnel avec ces gouverneurs.

[60] Leunissen 1989, 198.

[61] Boteva 1996, 239-241.

[62] Avram, Bărbulescu 1992, 178-181.

[63] ISM V 247, 248. Sur les *beneficiarii* dans les cités grecques de Mésie Inférieure, voir aussi Matei-Popescu 2014, 184-185.

même endroit, provient aussi une fibule à inscription, présente seulement dans le milieu militaire.[64] La présence du bénéficiaire à Mihai Bravu, village situé sur la route d'Ibida à Noviodunum, plaide en faveur de l'existence d'une *statio* dans ce village. En plus, on trouve aussi l'habitation des militaires et la communauté villageoise formée également par des citoyens romains.

Il y a encore deux dédicaces à Jupiter Dolichenus (voir l'annexe 4.1 à la fin du chapitre), dont l'une a conservé le nom du dédicant (Atidius). Le gentilice, sans être très répandu,[65] est d'ailleurs absent dans les provinces danubiennes mais bien attesté, seulement, en Ombrie[66] et à Rome.[67] Une autre inscription votive de Mihai Bravu fournit les noms d'un nouveau couple de consuls (voire l'annexe 4.1, no 7) (**Fig. 4.5**), tandis qu'un autre texte nous informe sur un certain Rammius. Le personnage a un gentilice peu commun appartenant soit à un vétéran habitant le milieu rural de Mihai Bravu,[68] ou bien à un Thraco-Gète qui avait pris intentionnellement un nom de tradition archaïque ou avait latinisé son ancien nom pérégrin, selon une pratique habituelle chez les nouveaux *ciues* :[69] d'ailleurs, dans la région située entre Beroe et Cius, deux textes mentionnent un *uicus Rami[ani?]* et un *uicus Vero[...]rittiani.*[70]

En ce qui concerne les épitaphes, une première mentionne une famille où le père est citoyen, ayant un surnom grec (Claudius Metrodorus), tandis que la mère s'appelle Sura et le fils Fuscus (annexe 4.1, no 9) (**Fig. 4.6**). L'absence du gentilice devant le nom de la femme peut indiquer une origine pérégrine ou bien une origine affranchie (on peut lire l'abréviation du gentilice Claudius au pluriel – *Cl(audii) Metrodorus et Sura*). En tout cas, le père semble avoir une origine hellénophone (s'il n'est pas lui aussi affranchi) mais il rédige l'inscription en latin et, en plus, son fils porte un surnom latin. Encore deux textes trouvés dans le village voisin de Turda (mais appartenant à la même commune moderne, Mihai Bravu) font preuve d'une *gens* Iulia dans le village ancien (annexe 4.1, nos 12 et 13). D'abord, il s'agit d'un certain Iulius Silvanus, puis d'une famille où le père, Iulius Epiphanes, est décédé à un âge très avancé, s'il ne s'agit pas d'une erreur du lapicide (102 ans!). Dans l'inscription, sont encore évoqués sa fille Iulia, son petit-fils (qui apparaît seulement avec le surnom, Iulianus), et un personnage nommé Flavius Onesimus, sans doute apparenté avec eux (peut-être l'époux de Iulia). On remarque le surnom grec d'Epiphanes mais on constate que le petit-fils porte déjà un surnom latin. Si l'on considère Iulianus le fils de Iulia et de Flavius Onesimus, alors son nom est Flavius Iulianus. Le surnom Onesimus est aussi grec : par conséquent, il essaye de « latiniser » le nom de son enfant.

L'analyse du matériel épigraphique du *uicus Bad [---]* (pour la plupart peu connu et en cours de publication) pose certains problèmes. D'abord, il s'agit du territoire auquel appartenait le village. Nous avons pensé à plusieurs possibilités d'appartenance à un territoire : Troesmis, Istros, Ibida. A. Avram pense qu'il peut s'agir de Noviodunum.[71] À notre avis, comme la limite septentrionale du territoire d'Istros est Argamum[72] et comme Mihai Bravu est situé plus près de Troesmis et d'Ibida que de Noviodunum, ces deux dernières variantes restent en question. Troesmis est une *ciuitas* au milieu du II^e^ siècle[73] et, peu après, devient municipe. Le statut d'Ibida n'est pas connu, malheureusement ; en raison de la grandeur de la cité romaine tardive et des

[64] Mihăilescu-Bîrliba, Chiriac 2006, 423-430.

[65] Solin, Salomies 1994, Le gentilice At(t)idius est attesté dans la *regio I* à Cales (CIL X 4645), Tusculum (CIL XIV 2532), dans la *regio IV* à Corfinium (CIL IX 3188 = ILS 5273), dans la *regio X* à Ateste (CIL V 2499 = ILS 2268 ; AE 1997, 681) ; une *officina* d'A. Atidius Philetius est rappelée à Rome (CIL XIV 4090.31b = XV 2239.2 ; CIL XV 2238.1-2) et à Tusculum (CIL XIV 4090.30 = XV 2238.3 ; CIL XV 2238.4), à Albanum (CIL XIV 4090.31a = XV 2239.1), dans la *regio V* à Sassone (CIL XV 2238.5). Il y a d'autre attestations en Afrique proconsulaire (CIL VIII 18065) et en Egypte (CIL III 6580 = 12045 = AE 1947, 112).

[66] Dans la *regio VI* à Attidium (CIL XI 5676-5677, 5680), à Suasa (CIL XI 6179:) et à Spoletium (CIL XI 7884 ; AE 1990 326).

[67] AE 2003, 266 ; CIL VI 12712-12713 ; AE 1993, 203 ; CIL VI 2004 ; L. Attidius Cornelianus fut consul sous Antonin le Pieux (ILD 38 = AE 2001 1705 ; RGZM 32 ; CIL XVI 106 = IDRE II 349 = AE 1900, 27 = 58 = 1972, 669 ; AE 2010, 1272 ; CIL III 129 ; CIL VI 41225a = AE 2000, 93 = 179).

[68] L'anthroponyme peut être celte: Ramius / Rammius est attesté en Bretagne à Salinae (RMD I, 8 = RIB I, 2401.3 = AE 1962, 253) et à Brampton (CIL VII 332 = RIB I, 2063 = ILS 4640) ; un *Salmas Rami ex n(umero) P(almyrenorum)* est mentionné à Porolissum (Dacie) (CIL III 837).

[69] Sur ce dernier aspect, voir aussi Mihăilescu-Bîrliba 2012, 95.

[70] CIL III 14214.22 = ISM V 117 ; Doruţiu-Boilă 1977, 180-185 ; Aparaschivei 2010, 246 ; Mihăilescu-Bîrliba 2015b, 183 (Cius). Selon Bărbulescu 2001, 99: *Rami[dava]* ou *Rami[us]*. Dans le cas de *vicus Vero[...]rittiani*, le toponyme est certainement celte (ISM V, 115 – Cius). Voir la discussion chez Matei-Popescu, Falileyev 2007, 324 ; Mihăilescu-Bîrliba 2015d, 161.

[71] Avram 2007, 97, 107, nr. 17.

[72] ISM 67-68 ; voir aussi Avram 1990.

[73] ISM V 158 ; voir Avram 2007, 93.

inscriptions trouvées, on suppose qu'Ibida a eu un statut de *ciuitas*. C'est pourquoi on ne peut pas l'exclure comme cité ayant le territoire où se trouvait le *uicus Bad[---]*.

Un deuxième problème est constitué par la date de la fondation du village. Si le document mentionnant l'ancien *tesserarius* Tarsa provient certainement de Mihai Bravu, alors le *uicus Bad[---]* a probablement été fondé au Ier siècle ap. J.-C., en même temps avec d'autres villages attestés entre Oescus et Odessos, et a été habité, au début, par des éléments d'origine thrace.[74].

Un autre problème qui se pose est celui de l'organisation du village. Les vétérans et les citoyens Romains colonisés dans les *uici* sont attestés en Mésie Inférieure dans la *regio Histriae* (parfois avec les Thraces colonisés dans les zones rurales),[75] au *uicus Nou[---]* (peut-être dans le territoire de Noviodunum)[76] et dans un *uicus* appartenant à une probable *regio Tomitana.*[77] Si, dans le cas des cités grecques, A. Avram voit la *regio* comme une solution administrative pour les citoyens romains et pour les vétérans d'échapper à l'autorité pérégrine ; ce n'est pas le cas pour les cités romaines. L'inscription de Mihai Bravu représente une nouvelle pièce à ajouter à ce dossier. La colonisation romaine est donc évidente dans ce *uicus*. Les vétérans peuvent appartenir à la Ve légion Macedonica, stationnée à Troesmis. Le problème de la restitution du texte est lié aux Thraces habitant la région. Le diplôme du 5 avril 71 atteste la colonisation des *Bessi* dès le début de l'installation des Romains dans la province. Non loin de Mihai Bravu, à Ibida, une communauté de Thraces est attestée.[78] Parmi eux, Durises Bithi est mentionné comme *magister uici* dans le *uicus Quintionis.*[79] J'ai déjà exprimé la possibilité que les *Bessi* aient été aussi colonisés pour les exploitations minières de surface[80] mais dans le cas du *uicus Bad[---]*, il est sûr qu'aux côtés des vétérans et des citoyens romains, il y avait également des *Bessi*. L'ancien *tesserarius* Tarsa, qui rentre chez lui après avoir été libéré de la flotte en 71, constitue un bon exemple dans ce sens.

Le *uicus Bad[---]* a eu ses *magistri*, comme le montre l'inscription d'Aelius Carinus et comme le suggère le texte attestant le nom du village (*cura agentibus*...). Il est possible, comme les inscriptions du territoire d'Istros en font preuve, qu'il y ait eu également des questeurs. Il s'agit donc d'une organisation quasi-municipale du village, comme c'était d'ailleurs le cas dans d'autres *uici* où il y avait des *conuenti* de citoyens romains.

Un quatrième aspect important est représenté par le fait que, vers la fin du IIe siècle, une *statio* des *beneficiarii* est installée dans la proximité du village. Il s'agit sans doute d'un point de contrôle de l'armée sur la route Ibida-Noviodunum. Ainsi, le tableau social du village est complété par la présence de l'armée. Il faut aussi remarquer que le bénéficiaire, T. Caelius Catus, est assigné à l'office du gouverneur.

Enfin, la cinquième question importante vise la composition juridique et sociale du village. Les citoyens romains sont représentés par les Aelii (Aelius Carinus), les Iulii (un Iulius Epiphanes et sa famille, un Iulius Silvanus), les Flavii (Flavius Onesimus) et les Claudii (Claudius Metrodorus qui fait ériger l'épitaphe pour son fils Claudius Fuscus). Les surnoms grecs (Epiphanes, Metrodorus, Onesimus, Sura) suggèrent une origine d'une cité hellénophone ; pourtant, ils avaient la citoyenneté depuis plusieurs générations. Il n'est pas exclu non plus que la femme de Metrodorus (Sura), qui pourrait porter le même gentilice que son mari, soit une affranchie. De même, Atidius, fidèle de Jupiter Dolichenus, peut être un affranchi ou bien une personne originaire d'une province hellénophone. À propos du culte de Jupiter Dolichenus, il faut souligner qu'à Mihai Bravu il y a deux dédicaces pour cette divinité, ce qui suppose l'existence d'une communauté de fidèles ou d'un lieu de culte, symbole de la loyauté des *uicani* à l'empereur et à Rome.[81]

Le petit corpus du *uicus Bad[---]* fait ainsi la preuve de l'existence du village où il y avait une communauté formée par des citoyens romains, des vétérans et des Thraces (*Bessi*), à côté de la population indigène. Les *cives Romani* et les *ueterani* se sont constitués dans un *conuentus*. On ne sait pas si les Thraces y ont été inclus ; tout ce que l'on sait, c'est que les *Bessi* habitent le

[74] Poulter 1980, 734 rappelle que jusqu'à la fondation de la Mésie Inférieure, toute la Dobroudja a été sous le contrôle du *praefectus classis Moesiae et ripae Danuuii*.

[75] CIL III 14442, ISM I 138 (*ueterani et ciues Romani consistentes*) ; ISM I 324, 326-328, 330-332 (avec les *Bessi* colonisés dans le territoire *d'Istros)*. Voir aussi Mihăilescu-Bîrliba 2012, 91-98.

[76] ISM V, 233.

[77] CIL III 14441.

[78] ISM V, 228-229 ; voir aussi Mihăilescu-Bîrliba 2011, 107-109.

[79] ISM I, 326. L'inscription d'Ibida est ISM V, 229.

[80] Mihăilescu-Bîrliba 2011, 118.

[81] Alexandrov 2009, 142.

village (le diplôme de 71 attestant Tarsa, fils de Duzius en fait preuve). Les inscriptions nous fournissent également une petite fresque sociale, avec des citoyens romains (dont quelques-uns portent des surnoms grecs, suggérant leurs racines hellénophones), des vétérans (comme Tarsa, libéré de la flotte de Ravenne), et probablement des affranchis (comme Sura, la femme de Claudius Metrodorus). Il y avait certainement des pérégrins indigènes ou des Thraces colonisés (comme l'était Tarsa avant son service militaire).

3. Conclusions

Le dossier épigraphique du milieu rural d'Ibida est assez riche ; même si l'importance de la cité était moindre en comparaison avec d'autres agglomérations urbaines au statut plus élevé ou avec une position stratégique et économique mieux située, les villages proches de la localité fournissent un matériel épigraphique considérable. Bien sûr, ici se pose la question de savoir si le *uicus Bad[---]* (localisé à Mihai Bravu) a fait partie de ce territoire. Comme le *uicus Petra* a certainement appartenu à la campagne d'Ibida et que la cité a eu des proportions importantes (de même que la documentation épigraphique qui est d'ailleurs également importante), il n'est pas exclu que le territoire de la cité ait été assez large. De toute façon, le site de Mihai Bravu se situe, selon toute probabilité, à la limite du territoire d'Ibida avec celui de Troesmis. En ce qui concerne le *uicus Petra*, il s'agit d'une communauté villageoise assez importante car elle est organisée d'une manière quasi-municipale (deux *magistri*) et a les moyens financiers pour construire des bains publics. Il semble que le village ait été peuplé par les citoyens romains. Quant au *uicus Bad[---]*, il a été fondé probablement au I^er^ siècle et la population était composée surtout par des Thraces. Le début du toponyme suggère un nom non-romain : il peut être soit un nom celte (voir le culte des *Badonae* attesté en Dacie[82]) soit un nom thrace. Le recrutement de la population locale marque aussi le début du contact effectif avec les autorités romaines. Le village est colonisé avec des vétérans et des citoyens romains et, au II^e^ siècle, on le retrouve organisé avec deux *magistri*. Les citoyens portent des noms latins et grecs (comme le texte en témoigne). Il y a même quelques *gentes* établies dans le village (les Aelii, les Claudii, les Flavii, les Iulii). La présence des Thraces est liée avec leurs attestations même à Ibida.[83] Les exploitations minières de surface pourraient être une raison de cette présence.[84]

La documentation épigraphique et archéologique de Topolog nous montre que, s'il ne s'agit pas d'un village, on peut certainement parler des *uillae*. Un [Au]fidius Helius, originaire d'Amurion, a sans doute une propriété dans la région. Le personnage est le vétéran ou le descendant d'un vétéran recruté plus probablement à l'occasion de la guerre d'Hadrien en Judée. En même temps, on remarque de nouveau la présence des Thraces, par l'intermédiaire d'Aulusenus, qui avait acquis pourtant son droit de cité.

On dispose, par conséquent, d'une image complexe de la population dans les campagnes d'Ibida : des villages habités par les Thraces qui ont connu, surtout au II^e^ siècle, une colonisation des vétérans et des citoyens romains, des villages organisés dès le début à la manière romaine, des propriétés rurales appartenant aux vétérans ou à leurs descendants. En plus, il n'est pas exclu que l'exploitation minière de surface (cuivre) soit une raison de la présence des *Bessi* dans la région. Une autre explication de la relative richesse de la documentation épigraphique dans le territoire d'Ibida peut être la position de la cité sur la route qui menait de Noviodunum (le siège de la *classis Flauia Moesica*) à Tomis (la métropole du Pont-Gauche).

Annexe 1 : *Supplementum epigraphicum*. Les inscriptions du *uicus Bad[---]* (Mihai Bravu)

Note : Le catalogue des inscriptions de Mihai Bravu, avec les détails techniques et les commentaires des textes, sera publié dans Mihăilescu-Bîrliba, Ibba 2018.

1. Inscription votive. Dalle en calcaire jaunâtre, brisée en cinq fragments jointifs et complète seulement à gauche. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédite. Datation : II^e^ siècle ap. J.-C., selon les caractéristiques extérieures de l'inscription.

------ / ue[t(erani)] et c(iues) R [omani] / consist[entes] / uico Bad[---] / sub cura [agen(tibus) ?] / ------

2. Autel votif, probablement en calcaire brisé en haut et en bas. Perdu. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédit. Datation : II^e^ siècle ap. J.-C., selon les analogies avec le texte précédent.

------ / *cura [age]n/tibus Aeli(o)* / *[C]arino et ------*.

[82] IDR III/5, 37.

[83] ISM V, 228-229.

[84] Mihăilescu-Bîrliba 2011, 118.

3. Deux fragments de diplôme militaire, publiés séparément. Il s'agit du même texte. Datation : 71 ap. J.-C., selon la date consulaire.

Bibliographie : Chiriac, Mihăilescu-Bîrliba, Matei 2004, 265-269 + Petolescu, Popescu, 147-149.

Intus :

[Imp(erator) Caesar Vespasianus Augustus, pont(ifex) max(imus), trib(unicia pot(estate) II, imp(erator VI, p(ater) p(atriae) co(n)s(ul) III, design(atus) IIII, nauarchis et trierarchis et remigibus qui militauerunt in classe Ravennate sub Sex. Lucilio] Basso et ant[e emerit]ta [stipendia, quod se in ex]peditione belli forti[ter industrieque gesserant, ex]auctorati sunt et [deducti in Pannoniam, quo]rum nomina subscr[ipta sunt, ipsis liberis poste]risque eorum ciui[tatem dedit et conuibium cum] uxoribus, quas tund [habuissent, cum est ciuitas]

Extrinsecus :

[iis data, aut siqui caelibes essent, cum iis quas potea duxissent, dumtaxat singul(i) singulas. Non[is April(ibus)], Caesare Aug(usti) f(ilio) Domitiaano, [Cn(aeo) pedio Casco co(ns)s(ulibus)], tesserar[rio] Tarsae Duzi f(ilio) [Besso?] et Macedoni f(ilio) [eius]. Romae in Capitolio ad a[ram gentis Iuliae ---ex]trinsecus podi parte sin[isteriore tab(ula) ... pag(ina)...] loc(o) XX.

4. Inscription votive. Datation : 198 ap. J.-C., selon les noms des gouverneurs.

Bibliographie : Doruţiu-Boilă 1985, 197-203.

[---] / pro salute Cn(aei) Sue[l(li) Rufi] / Cos(coni) Gen(tiani) l[eg(atorum)] / T(itus) Cael(ius) / Cat[us] / b(ene)f(iciarius) eius ex / u(oto) p(osuit)

5. Autel votif, photo d'A. Opaiț. Aujourd'hui perdu. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédit. Datation : 212-217, selon la titulature impériale.

[I(oui) O(ptimo) M(aximo)] / Dolic[he]no p[ro] / [s]alute Imp(eratoris) M(arci) / Aurel(ii) / Seu[e]ri / Anton[ini Aug(usti)] / et Iu[liae] / [Domnae]

6. Autel votif. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédit. Datation : probablement III[e] siècle, selon la diffusion du culte de Jupiter Dolichenus dans les provinces danubiennes.

I(ovi) O(ptimo) [M(aximo)] / Doliçhe/no Ati/dius u(otum) / l(ibens) m(erito) s(oluit)

7. Autel votif. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédit. Datation : probablement fin du II[e] siècle ap. J.-C., selon le nom d'un consul.[85]

----- / Cestio / et Quin[tian]o siue Quin[till]o / co(n)s(ulibus).

8. Autel votif en calcaire, très endommagé. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédit. Datation : probablement II[e] siècle ap. J.-C., selon les caractéristiques extérieures de l'inscription.

[---] /[---] V [---]S [---] / Rammius S[---] / [---] EC [---] / ------

9. Stèle funéraire. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédite. Datation : certainement II[e] siècle ap. J.-C., selon les caractéristiques extérieures de l'inscription.

------ [--- Claudi(?)*] /o Ḟusço / uix(it) an(nis) VI / Ḉl(audius) Metro/dorus et / Sura par/ẹn[te]s ḟili/o B[---] / et / [---] L / -----*

10. Fragment de stèle funéraire, profondément endommagée. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédite. Datation : Probablement II[e] siècle ap. J.-C. (?)

[---] KA-/ [---] NO

11. Fragment de stèle funéraire, endommagée. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédite. Datation : Probablement II[e] siècle ap. J.-C. (?)

------ / V[---]

12. Fragment de stèle funéraire, trouvée à Turda. Datation : probablement II[e] siècle ap. J.-C., selon les caractéristiques extérieures de l'inscription.

Bibliographie : ISM V, 237.

D(is) M(anibus) / Iul(ius) Silva/nụs [---] / ------

[85] Identifié avec L. Cestius Gallus Cerrinius Iustus Lutatius Natalis (PIR[2] II, C 692). Degrassi (1952, 117) pense qu'il a été consul sous Marc Aurèle ou sous Commode.

13. Stèle funéraire endommagée trouvée à Turda. Datation : probablement II^e siècle ap. J.-C. (ou début du III^e ?)
Bibliographie : Baumann 1984, 229.
------ / Iụl(ius) Ẹpiṗḥạ/nes vixit / annis CII / OPPI Iul(ia) filia / et Iulianus nep(os) / et Fl(avius) Onesimus / b(ene) m(erenti) patri p(osuerunt)

14. Fragment de dalle funéraire. Jusqu'à la publication de Mihăilescu-Bîrliba, Ibba 2018, inédite. Datation : Probablement II^e siècle ap. J.-C. (?)
------ / [---]VIN[---]/ ------

Annexe 2. *Les Thraces dans le milieu rural d'Ibida*

Nom du personnage	**Statut social ou juridique**	**Source**	**Datation**
Aelius Aulusenus	citoyen	Baumann 1984, 229-230	début du III^e s. ap. J.-C.
Aelius Marcus	fils du précédent, citoyen, nom «latinisé»	Baumann 1984, 229-230	début du III^e s. ap. J.-C.
Tarsa Duzi f.	ancien marin, devenu citoyen	Chiriac, Mihailescu-Bîrliba, Matei 2004, 265-269 + Petolescu, Popescu 2007, 147-149	71 ap. J. C.
Macedo	fils du précédent, citoyen, nom «latinisé»	Chiriac, Mihailescu-Bîrliba, Matei 2004, 265-269 + Petolescu, Popescu 2007, 147-149	71 ap. J. C.

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Fig. 1. Tour d'époque romaine tardive à Ibida. Crédit photographique: Dorel Paraschiv

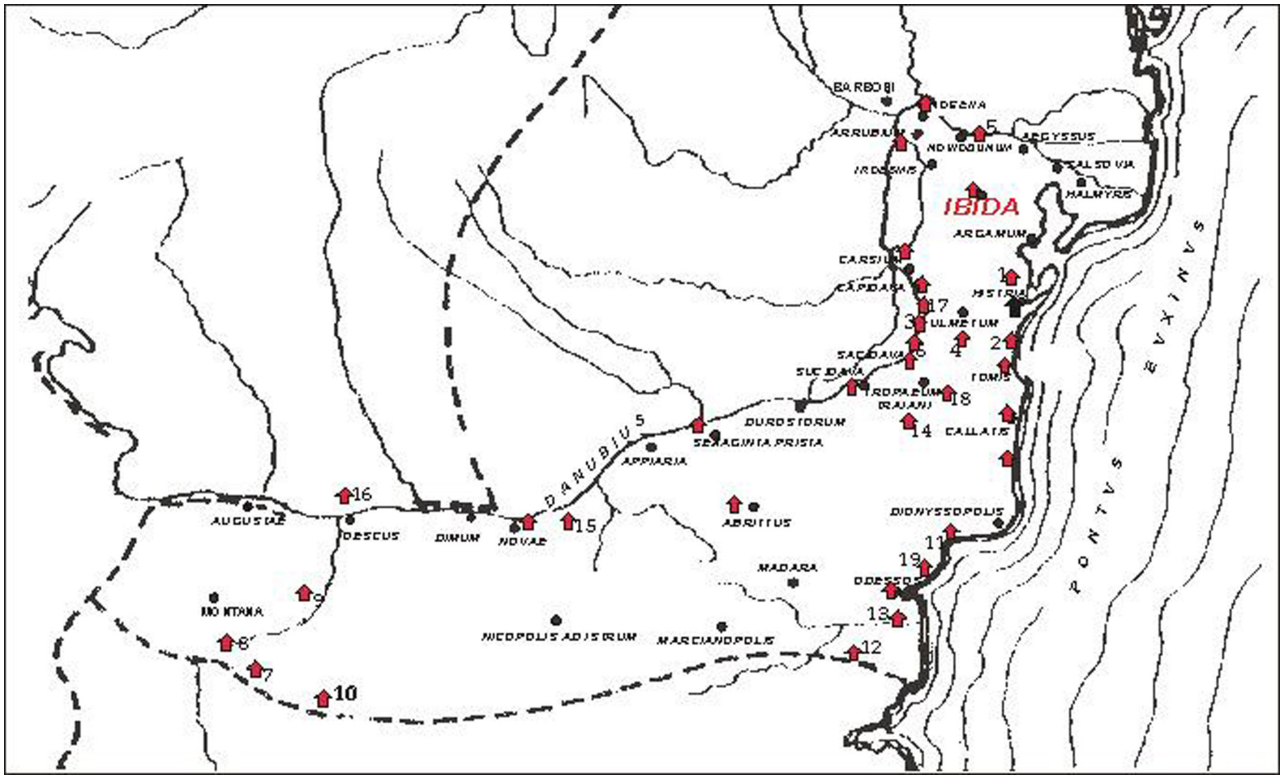

Fig. 2. Localisation d'Ibida

Fig. 3. Structures rurales *extra-muros* (Fântâna Seacă). Crédit photographique: Ștefan Honcu

Fig. 4. Vicus Bad[---]. Crédit photographique: Antonio Ibba

Fig. 5. Inscriptions attestant *vicus Bad[--]*. Crédit photographique: Antonio Ibba

LATE URBAN PLANNING IN ISTROS. A PREVIOUSLY UNKNOWN 6TH c. AD *INSULA* ON THE CITY'S ACROPOLIS

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Abstract: starting with 2013, a team from the University of Bucharest undertook an excavation in the southern part of the acropolis of Istros (Histria, Constanța County, Romania). In five excavation seasons we delimited the last Late Roman *insula*, divided into two nuclei (N and S), with two phases of functioning. *Phase I:* first half of the 6th c. – 559 (Kutrigur raid); *Phase II:* reign of Justin II – beginning of the 7th c.

Keywords: Histria, Late Roman, *insula*, residential district, urban evolution

The aim of this paper is to present the main results of the archaeological excavation undertaken by a team of the University of Bucharest in Istros (Histria, Constanța County, Romania), starting in 2013 and which is still on-going. Most of the resulting material is yet to be analysed, even if our team has already published or submitted for publication a series of 16 articles.[1] The final analysis will be published in the shape of a volume/several volumes in the monographic series *Histria*.

The project

In 2013 a team from the Faculty of History obtained financing from the University of Bucharest for an initial four-year archaeological research program in Istros (Constanța County). This included funds for excavating (necessary equipment plus hiring workers from the nearby village), as well as student training.[2] In 2017 the University of Bucharest approved another project, aimed at finalizing research on the 6th c. AD *insula*.

The permanent team is formed by the authors of this paper, who cover, apart from the excavation proper, aspects such as data registration, stratigraphy, publication of the Late Roman pottery, archaeometry, epigraphic material and small finds. In 2018 two other specialists became part of the team, namely Dr Virgil Apostol (architectural study), and Dr Corneliu Beldiman (bone industry study). For further domains we have collaborations with specialists from other institutions, such as Dr Aurel Vâlcu (*Vasile Pârvan* Institute of Archaeology) on numismatics, and Dr Valentin Radu (National History Museum) on archaeozoology.

Apart from the obvious scientific interest in a site such as Histria, one of the motives for starting this excavation was the University of Bucharest's important contribution in specialists (three of the authors of this article had been excavating for over ten years in Istros, but on sectors coordinated by other institutions), which unfortunately had never materialized in a separate research program. This project helps the University create and develop its own archaeological research team by offering archaeological practice to its undergraduate and graduate students.

Location of the excavation (Fig. 1)

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[1] For the preliminary reports see Bottez *et alii* 2015, and Bottez *et alii* 2018; for publications focusing on pottery and coins see Bădescu, Bottez 2014; Bivolaru, Bottez 2015; Vîlcu, Ţârlea 2016; Bădescu, Iiescu 2016; Iliescu *et alii* 2017; Iliescu 2017; three other articles, focusing on Late Roman pottery (by Iliescu *et alii*), bone objects (by Beldiman *et alii*) and coins (Ţârlea *et alii*) were submitted for publication in *Materiale și Cercetări arheologice* 2018. Furthermore, five more articles (archaeological, epigraphic, pottery, archaeozoology and metal analyses results) will be published in the proceedings of the 6th International Black Sea Congress, probably in 2020.

[2] Already one former student is part of the team, while three others have started working on the material produced by the excavation.

Choosing the location for the excavation was done according to the area's archaeological context. One of the most important reasons for settling for the perimeter to be researched was the fact that no modern excavations are attested for this part of the site, apart from the area of the Late Roman defensive wall (excavated by Pârvan in 1914-1916).

Located S of the crossroads between **street c** and the street leading N to the Episcopal Basilica (Fig. 2), the sector now covers 50 (N-S) × 40 m (W-E) and could expand in time another 20 m westwards, in order to connect with old digs in the *Cetate* Sector. This would eventually allow us to obtain a better image of this part of the city, namely the area S of the centre of the acropolis of Istros, starting from **street c** and descending to the southern part of the Late Roman defensive wall, which provided the sector's name – *Acropolă Centru-Sud* (*Acropolis Centre-South* – acronym *ACS*).

This perimeter of what is conventionally called the acropolis of Istros (a rocky promontory on the city's eastern limit, around 8 m above sea level) promised to contain significant monuments, as was the case in the surrounding sectors: the Episcopal Basilica[3] to the N, the largest cult building discovered in Istros until the present moment and centre of the civic and religious life during the Late Roman period;[4] the *Domus*[5] Sector to the E, where several large buildings contemporary to the Episcopal Basilica were identified, one of which has an apsed hall, which was interpreted by some as the bishop's residence[6] but is now considered to be a dining hall; the sector's SE limit is given by the Late Roman defensive wall; to the S is located another Christian basilica (in a sector conventionally named *Basilica Pârvan*);[7] finally, to the W lies the *Cetate* Sector, probably a residential area during the Late Roman period.[8]

Objectives

The **general aim** of the dig is to clarify the evolution in time of the urban plan in the area between the *Cetate* and *Domus* sectors.

Therefore our first specific objective is to establish the general stratigraphy for the southern part of the acropolis (S of **street c**), which can be achieved by obtaining a main N-S profile between **street c** to the N and the Late Roman defensive wall to the S, starting from the current surface down to the bedrock.

Another specific objective is to excavate the last Late Roman *insula*, which would allow us to compare it in time with previous *insulae* and determine how the urban plan evolved in this part of the city.

Finally, we intend to determine how the *insulae* from different periods were integrated in their contemporary urban plan and how they interacted with the surrounding complexes.

Given these specific objectives, our first current objective for 2013-2017 was to identify the limits and excavate as much as possible from the latest Late Roman *insula*, which for now will be conventionally called α.

Methodology

Given the position and size of the area to be investigated, we chose to use as excavation units 4×4 m square trenches, numbered starting with **C001** onwards (Fig. 3); each trench is divided into 1×1 squares, marked A–D on a S–N direction and numbered 1 m on a W–E direction.[9] All layers and complexes identified are registered as contexts on sheets developed by the MoLAS.[10] Each context receives a name that contains the number of the trench (maximum of three digits) and that of the context (three digits).[11] All depths are taken with the optical level from the same point (conventionally called **point 0**), identified in

[3] Suceveanu 2007.

[4] The basililca is dated to the reign of Justinian, but it superposes an older one (4th c.) (Suceveanu 2007, 10; Bounegru 1993; Băjenaru 2003-2005), a situation that we also encounter in the basilica to the S (Angelescu, Bottez 2009, 202; Achim 2012, 128-131) that suggests a continuous presence of a church on the spot during the Late Roman period. For the most comprehensive and complete description of the Christian basilicas at Histria, see Achim 2012.

[5] Condurachi *et alii* 1954, 324-349; Bounegru, Lungu 2003-2005.

[6] Bounegru, Lungu 2003-2005, 171, fig. 2; Sodini 1997, 452 interprets it as a banqueting hall.

[7] For the results of recent, as well as old excavations in this area see Angelescu, Bottez 2009, Bottez 2014; Bottez 2015; Angelescu *et alii* 2018, Histria. New research on the Early Christian basilicas in the southern part of the acropolis of Istros, Dacia N.S., in print.

[8] Munteanu 2011a, 33-42.

[9] We will be using the following abbreviations: **C** for square trench (*casetă* in Romanian), **Z** for wall (*zid* in Romanian), **P** for **p**avement, **T** for sidewalk (***t**rotuar* in Romanian), **ST** for **st**reet, and **CR** for Roman building (***c**lădire **r**omană* in Romanian).

[10] Museum of London Archaeology Service.

the terrain by a nail set between two large slabs in **street c**, with the Romanian national topographic coordinates (STEREO70) 799964.3467, 345599.9315, 6.11.

All the discovered material is marked with the inventory number, followed by the site's initials, the year and context (which includes the number of the trench and of the context); e.g. *143) HIS14 10002*.

Excavation results (2013-2017)

Excavation units

Up to 2017 we have excavated 38 square trenches (**C001-038**) and 18 baulks (Fig. 3), in an order dictated by the need to faster understand certain contexts, as well as that to easily evacuate the excavated dirt, a growing problem given the increasing size of the excavation. The baulks were registered according to the two trenches delimiting it (e.g. **Baulk C007-015**), and the contexts according to the corresponding ones in the neighbouring trenches (e.g. **context 7000-15000**).

General stratigraphy

The stratigraphy of the trenches excavated until now is the same on the entire area of the sector (Fig. 4), with the exception of **C019**, where the Late Roman defensive wall was dismantled (probably when the Ottoman fortress in Vadu was built) and the slope created in time exposed older layers which we identified, but did not investigate, as they will be researched together with their contemporary contexts.

Going back to the general stratigraphy, the last living surfaces are superposed by a yellow layer of debris (generally registered as context *002* in most excavation units, but not in all), characterized by strong traces of burn, which represents the moment of destruction of the last building level. Above this layer and under the vegetal layer there is a grey layer of debris (generally registered as context *001* in most excavation units, but not in all), identical to *002* as far as the composition is concerned, but with much less traces of burn. This layer marks the moment of the final collapse after the abandon of the buildings affected by the fire.

As far as the living surfaces are concerned, they were identified at different depths and are generally highly solidified yellow clay layers, some of which had a complex structure (such as *7014*, which was made of wooden planks superposed by a layer of hard yellow silt). In several cases (*8006* and *10004–11003–12005*), these layers had the same level as the plinths of the walls they functioned with, which indicates they must have been covered by different types of pavement that is now gone. Also, six stone pavements were identified (*P001* in *C002*, *C003*, *C004*, *C014* and *C017*; *P002* in *C014*; *P003* in *C017*; *P004*? in *C011*, *P005* in *C036* and *P006*? in *Baulk C005-007*).

Building structures

The main structure identified in our excavation is the last Late Roman *insula* (Fig. 5), which resembles the large 6th c. AD buildings in the residential district located to the east (the *Domus* Sector). Our building was destroyed and then the area of the city in which it functioned was abandoned, as we have not discovered yet any traces of later dwelling. We use for this structure the conventional name *insula* α.[12]

This building complex (Fig. 6) seems to be divided into two different dwelling nuclei, separated by an alley that runs between *Z018* and *Z019*. The N nucleus has an open courtyard (*Space 1*) paved with large stones (*P001*) and with a circular pit (dm 1.50 m) for draining rain water (similar to the one in *CR01*, the large residence N of the so-called *Basilica Pârvan*) in its centre, surrounded by large rooms and corridors. The courtyard could have been surrounded by a peristyle of wooden posts, as there are linear patterns of stones around it (*Z001*), but we have no certain proof for the presence of this architectural element, made of perishable materials. Therefore, even if this is a large residence, there is a clear difference in the living level when comparing it to the ones in the *Domus* Sector.

There are two entrances leading N (1.30 m wide, blocked in the second functioning phase) and W (1 m wide) from the courtyard. Access from the street to the E (*ST01*) was possible through another entrance, now destroyed but identifiable through

[11] E.g. the first context in **C001** is *1000* and in **C018** it is *18000*.

[12] The *insulae* that will be discovered underneath will be called β, γ, δ etc.

the fact that wall *Z017* has a thicker, 2.15m-long segment in front of the circular basin. SW of the paved court (*P001*) there is also what seems to be a narrow entrance (*Z028*, W 0.70 m), but for now it remains unclear what spaces it connected. N and S of the court lie two narrow spaces (*Spaces 2* and *3*), whose functionality remains unclear. *Space 2* was blocked to the W in the *insula*'s second phase and it opened towards *ST01* (probably by the dismantling of *Z017* in that area), and it was paved with bricks (*P003*). *Space 3* was also paved, with stones (*P002*).

W of the courtyard lie two other rooms, *Spaces 4* and *5*. These were separated by a very wide passage way (4.40 m), which was narrowed by a wall (*Z009*) added in the second functioning phase, which left open a 1 m-wide entrance. *Space 4* to the S had no entrance in the first phase of the *insula*, but during the second *Z027* was partially dismantled and a yellow silt floor passed over the former wall, providing access to *ST02*. Also, plinths in its E and S walls indicate that it was covered by a pavement, probably in brick. *Space 5* was initially almost L-shaped, and in it we discovered two *pythoi* (the one to the NE completely buried, the one to the W partially buried) and a hearth. During the second phase of the *insula* the two vessels were taken out of use; the one to the NE was filled up with successive layers of soil and stones, and was finally covered by a hard yellow silt floor (*7014*); the one to the W was razed, what remained in the ground was filled with hard yellow silt and covered by a stone pavement (*P006*). The W wall of *Space 5*, *Z027*, was partially dismantled in the second functioning phase, and the yellow silt floor mentioned above (*7014*) passed over it, creating a new access way towards *ST02*, possibly transforming *Space 5* into an open area. Another wall (*Z011*), added in the second functioning phase, separated *Space 5* into *Spaces 5a* and *5b*. Also, a S-N mud brick wall (*Z010*) was added, which probably turned E, but this segment collapsed on the already mentioned silt floor (*7014*).

Finally, to the SW lies *Space 6* and to the SE *Space 7*. *Space 6* is a large room, in which we found two *pythoi* (one still *in situ* – Fig.), a large quantity of amphorae and pottery in general (and traces of burnt wooden beams than must have been part of the shelves the pottery was stored on), and a grain grinder. *Space 7* was covered by a brick pavement, which is preserved only in the room's SW corner.

For now we have little information concerning the S nucleus, other than it must have been delimited to the S by the Late Roman defence wall, which unfortunately was largely dismantled.

We can hypothesize concerning certain structures, for which we only have part of the walls. Such a structure is *Space 1* to the NW, almost square in shape and for which we have no clue concerning its functionality. To its E lies *Space 2*, where we discovered a beautiful pair of silver-gilded bronze earrings. From this area access is provided towards *Space 3* through an entrance. *Space 3* is also connected to *ST02* through an entrance, and it seems to have been an open space, maybe an inner court paved with large stone slabs. Also, this space could have been divided by a wall raised near the entrance towards *Space 2*.

Space 4 seems to be rectangular in shape, and it has an entrance in the middle of its S side, which was blocked in the *insula*'s second functioning phase, while part of its N wall and the E of its S side were dismantled and hard yellow silt floors passed over them, changing the configuration of the access ways and possibly the structure's functionality (it might have become an open space). The plinth of its E wall seems to indicate it was covered by a pavement. Its N wall also has a pilaster base/buttress protruding 0.36 m southwards,[13] which suggests a certain monumentality of this space, a fact also indicated by the discovery of several fragments of marble wall tiles.

We have very scarce information concerning *Space 5*, other that it borders to the S what seems to be an inner courtyard (excavated in the *Basilica Pârvan Sector*).[14] *Space 6*, of which only a small area was excavated, seems to have been a storing area paved with large stone slabs, where we found a small *pythos*, a great quantity of pottery and burnt beams of what must have been part of wooden shelves.

We discovered sidewalks along the *insula*'s E limit (*T001* – Fig. 8 – and *T002*), probably along the S side of S nucleus' *Space 4* (*T003*), probably 5 m S of *T003* (*T004*),[15] and two others along the *insula*'s W limit (*T005* and *006*).[16] *T005* was laid along a blocked entrance into N nucleus' *Space 6*, which implies at least some of the sidewalks were added during the *insula*'s second functioning phase.

[13] For similar structures in Istros see the case in the *Domus* Sector – Condurachi *et alii* 1954, 342-343.

[14] For this see the upcoming article by M. Angelescu, V. Bottez and I. Achim on the Christian Basilica in the S part of the acropolis, to be published in *Dacia* 2017.

[15] Which would indicate a street running between the two sidewalks on an E-W direction.

[16] Sidewalks were also identified in *Domus* I (Condurachi *et alii* 1954, 326), **streets D** and **C**, N of the *Basilica Florescu* and E of the Late Roman defence wall N of the Great Gate (Munteanu 2011b, 236).

We have also identified walls from previous structures (*Z015*, *Z016*, *Z022*, *Z025* and *Z026*), which are still to be researched. The last two belong to a structure that was aligned to **street c** and the secondary street that was perpendicular to it, namely Phase I of *ST02* – which will be discussed in the following lines.

Among the most important structures discovered in our sector are two new streets, conventionally called *ST01* and *ST02*. *ST01* (Fig. 8) delimits *insula* α to the E, and *ST02* to the W (Fig. 9). *ST01* is perpendicular to **street c** and connects the latter to the Late Roman defensive walls, as do all the streets along **street c**. Its substructure is made of hard silt mixed with small stones and pebbles, and it was covered with a very hard silt layer. This street was probably not used by heavy vehicles.

ST02 presented us with an interesting situation. This street has two phases, with the earliest one (Fig. 10) perpendicular on **street c**, as proven by the already-mentioned building (*Z025* and *026*), which is bordered by a gutter that separates it from the street pavement, made of large (0.70×0.40 m) stone slabs. The second phase is oblique to **street c** and has a N-S orientation, connecting the junction of **street c** and the one leading to the Episcopal Basilica, with **street d** and *Basilica Pârvan* to the S. When Phase II was built, previous structures were razed to the treading level and incorporated into the new street's pavement (Fig. 11), which is made of hard silt mixed with small stones and pebbles. The change of the street plan indicates a major change of the urban plan in this part of the Istrian acropolis, and shows the growing importance of the local Church authorities in public affairs. It can indicate the development of a ceremonial topography,[17] which made use of a privileged itinerary in order to connect the *intra urbem* churches in this part of the city,[18] with the Episcopal Basilica at its centre, as the "new foci of the urban grid".[19]

Chronology

The on-going excavation started in 2013 provided enough information for us to conclude that *insula* α was built in the 6th c. AD over the previous one, for which we have very scarce information. Given the known construction phases in the city, we hypothesize that this earlier *insula*, which we will conventionally call β, is to be dated during the 4th c.

The 6th c. *insula* modified the previous street grid in order to connect the basilica in the S part of the acropolis to the Episcopal basilica; its second phase (built maybe after the Kutrigur raid in 559 AD), marked by blocked entrances, addition of sidewalks, creation of new access ways by dismantling walls and laying hard yellow silt floors over them, is to be dated in the second half of the century, during the reign of Justin II. Sometime at the beginning of the 7th c. this area, as well as the rest of the city, was destroyed (this created the yellow debris layer) and later abandoned (which created the grey debris layer).

Future objectives

Given the stage of the excavation at the end of the 2018 season, we estimate that in four years we will be able to finish the last remaining square trenches, baulks, and test trenches. At the same time, publication of the discoveries will continue, and once it is over, we will start analysing the discoveries separately on contexts and internal spaces of the buildings, in order to establish each space's functionality. The results of our analysis will be published in a monographic volume in the *Histria* series. During the publication we will continue excavating *insula* β, while at the same time extending the excavation of the structures from the city's last functioning phase westwards, in order to connect our excavation with the *Cetate* Sector, and southwards, in order to connect with the *Basilica Pârvan* Sector. This will allow us to draw conclusions and solve certain problems that were left open in the afore-mentioned sectors.

[17] This conclusion and others concerning the changes operated in the urban grid in order to accommodate the new churches were presented by I. Achim and V. Bottez at the 6th Black Sea Congress in 2017, in Constanța, and will be published in the Congress' proceedings in the near future.

[18] For the distribution of Istrian Christian churches by neighbourhoods and their separate specific purposes see Achim 2012.

[19] Cantino Wataghin 2003, 243.

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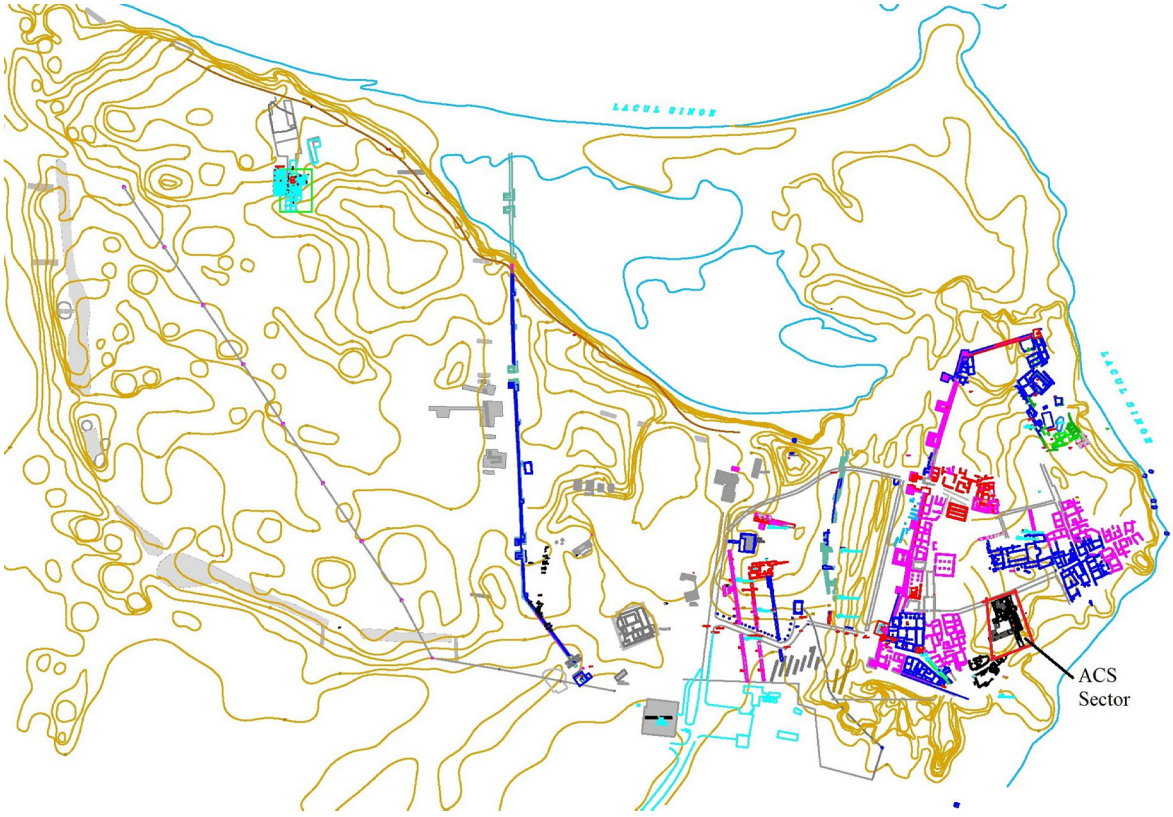

Fig. 1. Location of the sector in Istros.

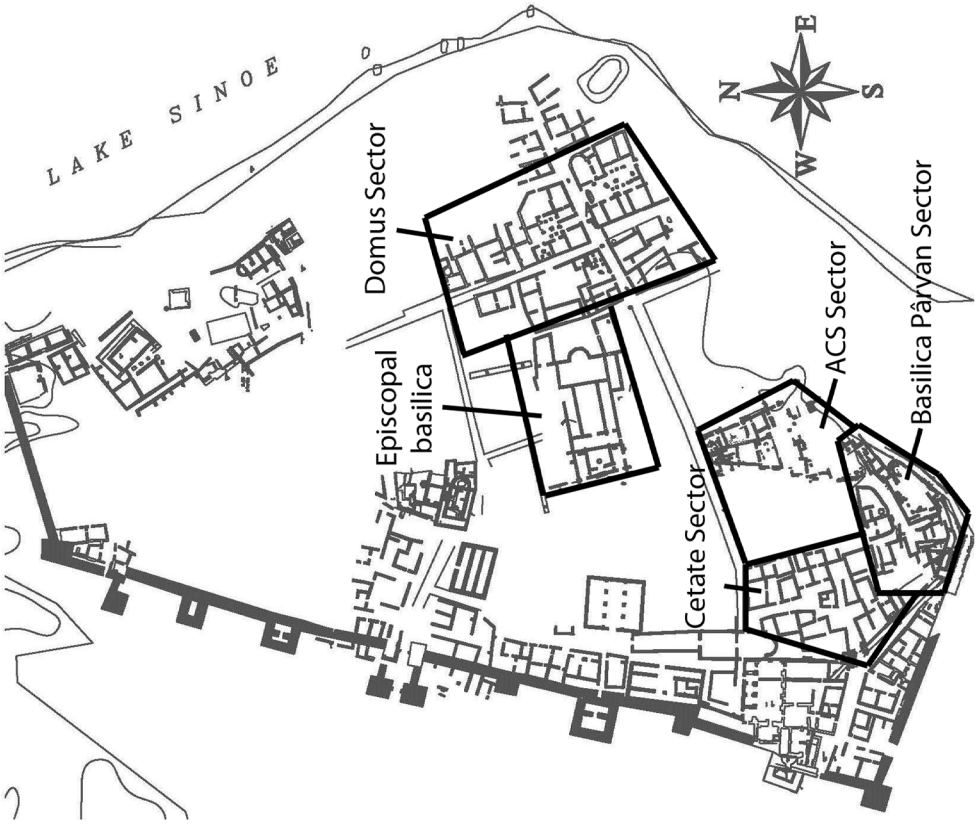

Fig. 2. Location of the sector on the acropolis Istros.

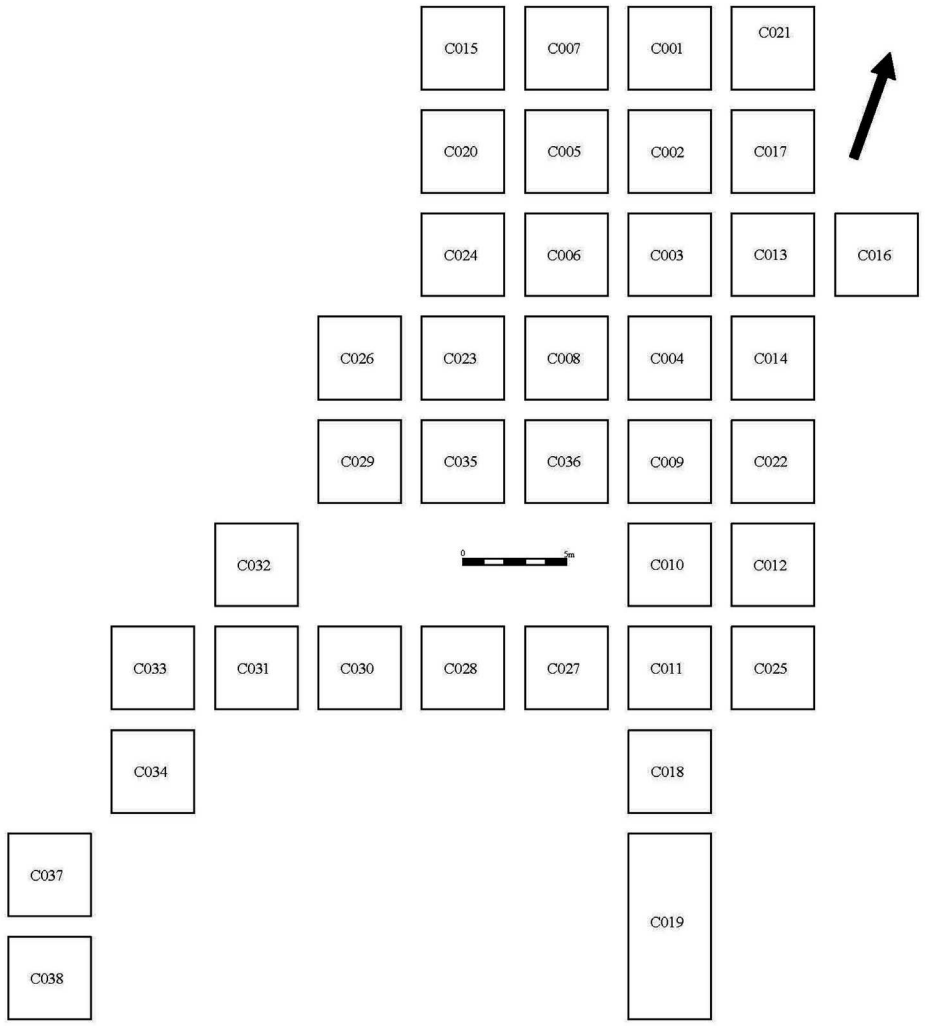

Fig. 3. Excavation units in the *ACS* Sector.

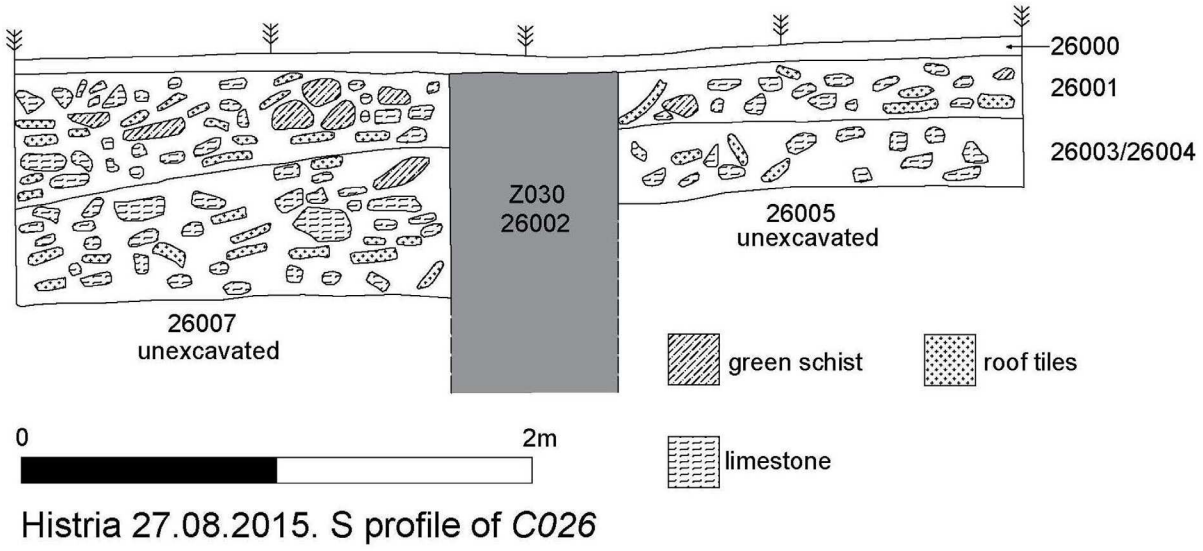

Fig. 4. General stratigraphy – S profile of C026.

Fig. 5. General plan of the sector (2017).

Fig. 6. The two nuclei and internal spaces.

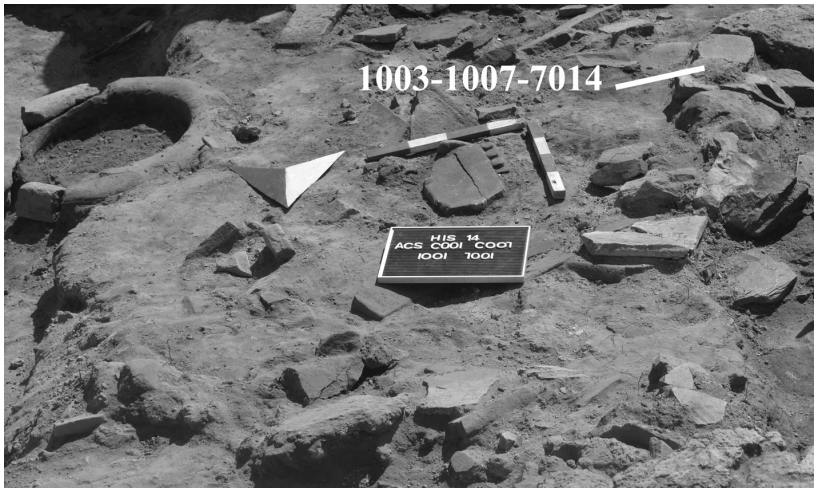

Fig. 7. Buried *pythos*.

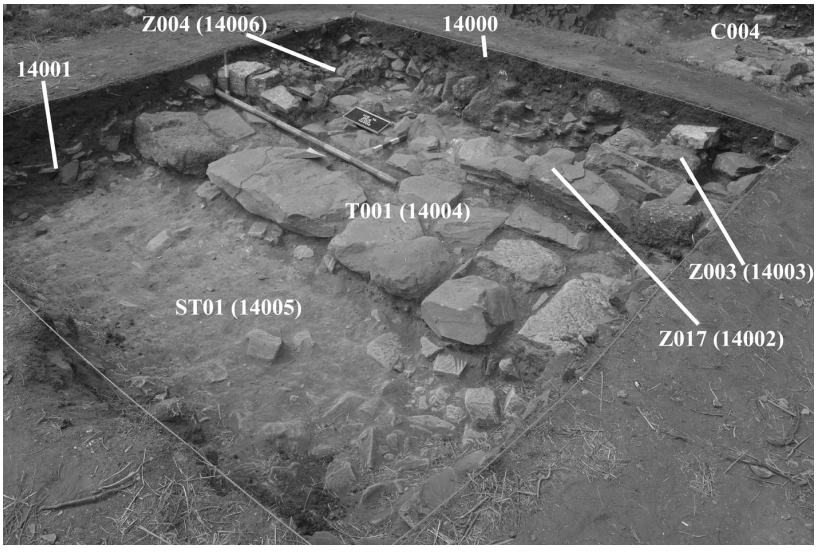

Fig. 8. ST01, T001, Z017.

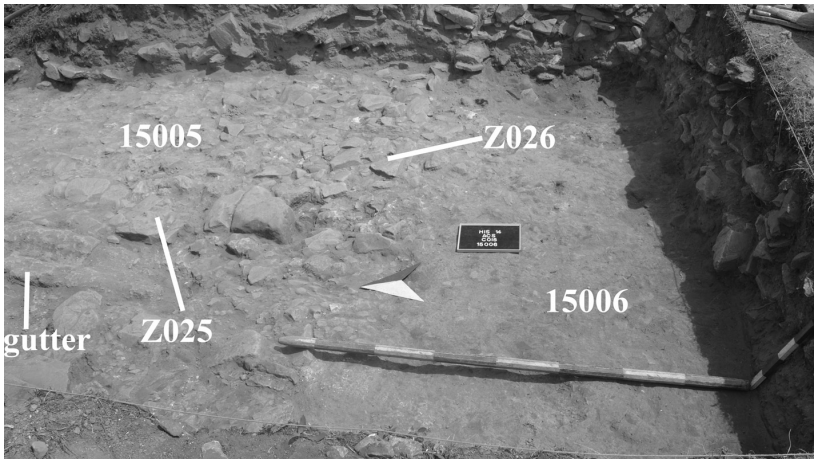

Fig. 9. ST02.

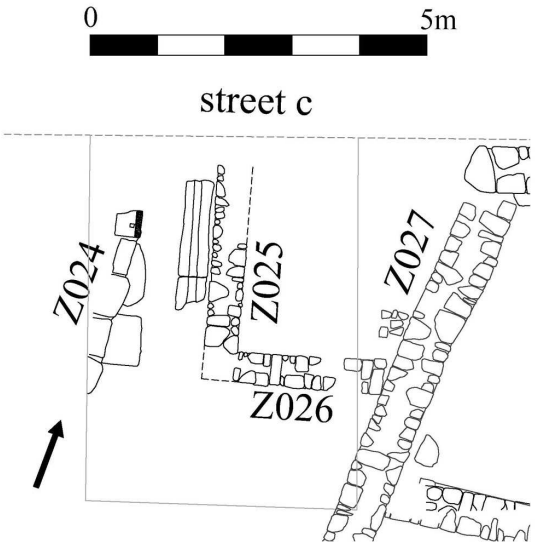

Fig. 10. Phases of ST02.

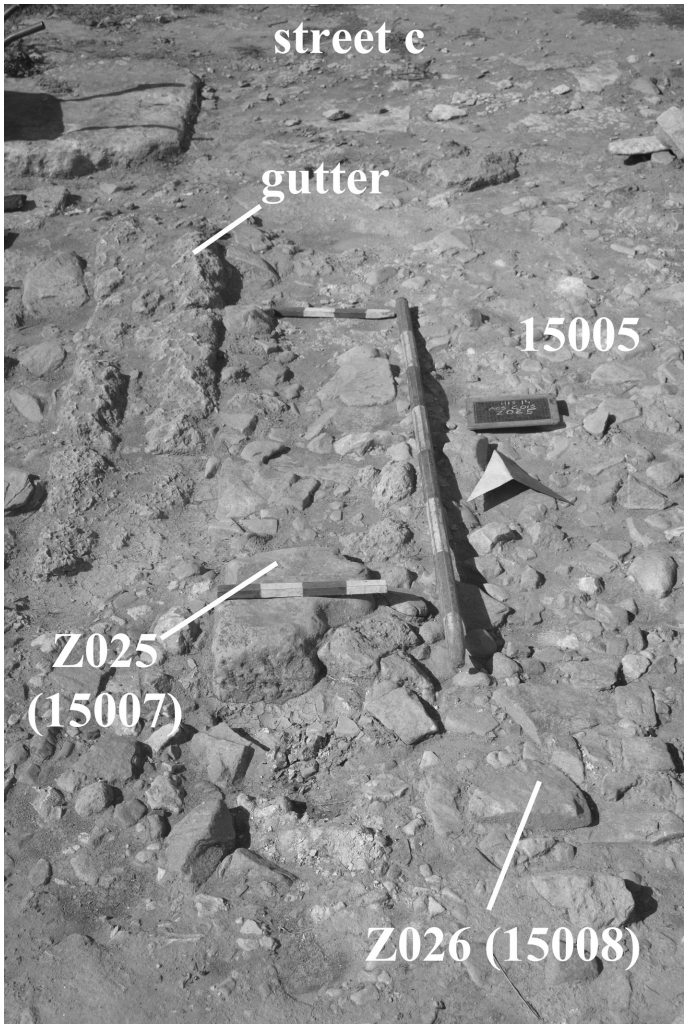

Fig. 11. Pavement of ST02.

THE NORTHERN SUPPLY CHAIN IN *QUAESTURA EXERCITUS*. 6TH TO EARLY 7TH CENTURY *AMPHORAE* AT CAPIDAVA – ARCHAEOLOGY OF THE *ANNONA* FOR *LIMES SCYTHICUS*

Ioan Carol Opriș*
Alexandru Rațiu***

We have recently tackled this precise topic on the occasion of the official opening of the Romanian Archaeological Institute in Athens;[1] since then a monograph of an architectural objective in Capidava – Building C1 has seen light[2] and many of the key ideas regarding the Danubian limes in the 6th c. previously sketched in Athens took shape. The aim of the present contribution is precisely that of summarizing the preliminary conclusions of our recent book, as well as bringing supplementary information that had obviously exceeded the constraints of a thematic monograph.

In 536, precisely on May 18th, the creation of a new administrative unit is attested in Justinian's Novel 41 (*Corpus Iuris Civilis* III: 262): the *quaestura exercitus.*[3] It survived at least until AD 575, when it was for the last time explicitly mentioned in official sources (Novel 173 of Justin II – AD 575, Nov. Iust. CLXII)[4]; a mention of a certain John, *archon of the islands* by Menander Protector (*Excerpta de legationibus*, I, 15) concerning events from AD 578[5] does not necessarily mean that the *quaestura exercitus* survived until Emperor Tiberius II (AD 578-582).[6] Ruled from the city of Odessos (present-day Varna), it gathered, besides the province of Scythia and the neighbouring Moesia Secunda, the Aegean Islands (Cyclades), Caria and Cyprus. The only direct links between all these provinces were the sea and the navigable Danube, as Florin Curta rightly observed.[7] Furthermore, all three Aegean and Eastern Mediterranean territories were "almost the most prosperous of all", according to a well informed bureaucrat contemporary with Justinian – John Lydus (*On powers*, II 29). It becomes clear that its main institutional *raison d'être* was that of ensuring the financial stability and continuous food supply to the troops stationed on the Danubian border. In fact, one might rightly assume that besides the supreme judiciary power he was empowered with, the *quaestor*'s main task was to take care of the continuous supply with wine, olive oil and corn from southern Greece and the Aegean for the garrisons in the forts along the Danube frontier and the northern Balkans. Strategically speaking, this initiative was Justinian's "desperate attempt to protect the northern flank of Constantinople and the Balkan peninsula".[8]

Available pieces of the puzzle related to *quaestura exercitus* and the way it actually functioned have been gathered by Florin Curta and Olga Karagiorgou, as early as 2001.[9] In his *The making of the Slavs. History and Archaeology of the Lower Danube Region c. 500-700,* Curta heralded an interdisciplinary approach, combining written sources of the sixth century known for long time with the archaeology of the LRA 1 and LRA 2 amphorae filled with *species annonariae*, the subsistence products coming from the Aegean to the Northern provinces. This maritime "Hänsel and Gretel" reconstruction method of the supply chain linking "almost the most prosperous of all" (provinces) to the Danubian border ones payed attention to both scattered amphora sherds and, in a broader sense, to all imported pottery. It also seems to have paid off, off since, shortly after, monographs[10] and

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[1] Romanian Archaeological Institute in Athens – Inaugural Conference, October 19th-20th 2017, Scuola Archeologica Italiana di Atene.

[2] Opriș, Rațiu 2017.

[3] Gkoutzioukostas 2008, *passim*, and 109, n. 1 for the most important contributions on this topic. A monograph was dedicated to the subject shortly after: dedicated to the subject: Gkoutzioukōstas, Moniaros 2009. Recently, see Curta 2016b; Curta 2017. One should further add that from 535 AD, to 539 Justinian legislated on the governance issues regarding no fewer than 17 provinces, see Sarris 2006, 210.

[4] Gkoutzioukostas 2008, 111, n. 9. See also Torbatov 1997, 85.

[5] Gkoutzioukostas 2008, 113.

[6] Curta 2016b, 320 and n. 60: "Although correctly identifying John as the *quaestor exercitus* under Emperor Tiberius II, few have noticed that this is in fact the last mention of the "prefect of the islands"; Torbatov 1997, 84-85.

[7] Curta 2001, 76.

[8] Morrisson, Sodini 2002, 171.

[9] Curta 2001, 76-77, 185-189; Karagiorgou 2001.

[10] Opaiț 2004; Pieri 2005; Gkoutzioukōstas, Moniaros 2009; Opriș, Rațiu 2017.

subsequent studies tackled the issue.[11] To all these the "ground-breaking syntheses" was that of Catherine Abadie-Reynal, who demonstrated the intimate relationship between grain *annona* shipments to Constantinople and the distribution of the long-distance African Red Slip wares, once Africa was reconquered.[12] In contrast to that, the concurrent tableware, known as Late Roman C or Phocaean ware – looks "more of a local commercial good", according to Chris Wickham, thus following a different capillary sale approach. Moreover, the discussion on state-run economy vs. free market during the 6th c. AD went further, by adding to the amphora issue supplementary topics, tackling the distribution of commercial lead seals, of Danube mould-made lamps or built infrastructure of late antique warehouses/granaries in the Balkans.[13] Piggybacking or riding piggyback[14] on grain and oil military *annona* and its supply-network in LRA 1 and LRA2 amphorae, luxury goods such as tablewares and lamps followed the same routes and were most likely subsidiary to the main transport. The route followed by the Cilician fleet, started from the main production area of LRA 1 containers in the northeastern corner of the Mediterranean (Cilicia/ north Syria/ Cyprus) and led to the ports of Tomis and Odessos; it passed through the Aegean for the LRA 2 consignments at certain gathering bases[15] and via Constantinople – clearly the crux of most of the empire's trade relations.[16] At the other end of the supply chain, several supply bases and *horrea* / warehouses have been investigated in the territories of the four Danubian Late Roman provinces.[17]

One might also understand the big picture, i.e. the huge quantities of goods transported to the Northern frontier, from the critical review of ancient sources. Thus, according to Egyptian papyri, the daily food ratio for a soldier consisted of three pounds of bread, two pounds of meat, two *sextarii* of wine and 1/8 *sextarii* of olive oil.[18] Marie-Claire Amouretti calculated an annual consumption of olive oil *per capita* of around 18.5-20 litres, chiefly based upon modern data.[19] On the other hand, several approximations on both the strength of the Lower Moesian army[20] and that of the combined *limitanei, comitatenses,* federates and flotillas in the 6th c. for the four Lower Danube provinces (Moesia Prima, Dacia Ripensis, Moesia Secunda and Scythia)[21] are available, though calculations are just orientational and therefore must be considered with caution. Olga Karagiorgou, who offered new calculations based upon previous estimations of A.H.M. Jones, W. Treadgold and J.F. Haldon,[22] believes that the total manpower of the four Danubian provinces must have numbered at least 75,000.

This rough estimation results as a compromising average of the *limitanei* in the four provinces between the figures given by Jones (64,000) and Treadgold (44,000), which would give 54000 for the beginning of the 4th c.[23] To this force one should also add the *comitatenses* (41,000 calculated by Treadgold – 17500 for the *Magister militum per Illyricum*, vs. 24,500 under the command of the *Magister militum per Thracias*).[24] J.F. Haldon thinks that by the end of Justinian`s reign "up to three-quarters of each field army was actually distributed through the provinces behind the frontier zone",[25] i.e. permanently garrisoned in these lands. If adding the available figures would give a total of 84,750 / 85,500, further shrunken by Olga Karagiorgou to at least 75,000 men.

[11] Curta 2016a; Curta 2016b; Rizos 2013; Rizos 2015.

[12] Abadie-Reynal 1989; see also McCormick 2001, 99, n. 66; Wickham 2005, 715.

[13] Curta 2002; Curta 2016b; Curta 2016a; Gkoutzioukōstas 2008; Rizos 2013; Rizos 2015.

[14] Curta 2016a, 103-104; Wickham 2005, 711.

[15] Karagiorgou 2001, 154-155.

[16] Morisson, Sodini 2002, 209.

[17] See Rizos 2013 and 687, fig. 29 for the map of the late Roman *horrea* in the Balkans; Rizos 2015; for the *horrea* and logistic centres in the Upper Moesian Region, see Ilić, Golubović, Mrđić 2011, 68, 70.

[18] Curta 2001, 186; Ilić, Golubović, Mrđić 2011, 64. See also Haldon 1999, 166-167, for supplies and rations during the 5th-6th c.

[19] Amouretti 1986, 183; Opaiț 2004, 105.

[20] Duch 2015, 236-237, table 1: an average of 19,600 to 21,800 soldiers is offered for 92-158 AD, respectively 16,400 to 18,500 from late 2nd to mid 3rd c. (last figures without *classiarii*). One should add that under Trajan the calculations on the army of Moesia Inferior indicate cca 15,000 legionaries, 4,500 alae horsemen and 12,000 cohortes horsemen and footsoldiers, which makes an extraordinary number of 31,500 soldiers, precisely in relationship to the *bellum Dacicum Traiani*, see Matei-Popescu 2010, 275.

[21] Karagiorgou 2001, 152.

[22] Jones 1964, 682 (64,000 – the *limitanei* in the four provinces); Treadgold 1995, 52 (table I – 64,000, i.e. the units mentioned by the *Notitia Dignitatum*); Haldon 1997, 251-253; Haldon 1999, 99-101.

[23] Karagiorgou 2001, 152.

[24] Treadgold 1995, 52. J.H. Haldon estimated a slightly smaller figure, 23500 under the command of the *Magister militum per Thracias*, Karagiorgou 2001, 152, n. 135.

[25] Haldon 1999, 69.

But this is is more than a not just a military issue. The demand for basic products as bread, wine and oil is general throughout the empire and therefore "the *annona* was merely the expression of this need, felt by both urban and rural populations, as well as by monastic communities".[26] Angeliki Laiou mentioned figures frequently cited for Greece and the Balkans: for nearly 550,000 km^2 the population would have been 2 million plus 3 million (350 AD); 1.2 million plus 1,8 million (600 AD).[27] Based upon such calculations, Andrei Soficaru advanced, for the 20,000 km^2 of Scythia, a corresponding population of 180,000 that shrunk to 110,000 by the beginning of the 7th c.[28] Pointless to mention, though, the conclusion of Angeliki Laiou: "None of these estimates are more than educated guesses, and there are virtually insuperable difficulties in reaching any solid estimate".[29]

* * *

A brief description of the above-mentioned Building C1 from Capidava, as well as that of the large *Horreum* next to it and curtain H of the fortress is indispensable to the economy of our approach, given their functions undisputedly proven by the analysis of the archaeological material found inside.

Building C1[30] is an almost square structure, with outer walls measuring approximately 10 by 11 m (precise outer measurements indicate 9,93 m on the side parallel to the *Horreum,* while the side parallel with Gate Tower No. 7 measures 11.06 m. It was carefully aligned with the large building (*Horreum*) erected sometime during the 4th c. AD, as well as with Tower No. 7 mentioned above, but also with the axes of the main gate and the main street of the fort – *via principalis* – to which it is directly adjoined. The moment of its construction must have been subsequent to the building of the largest edifice identified so far *intra muros* in Capidava*,* i.e. the *Horreum.*[31]

The latter, a large basilica-plan edifice, with three naves preceded by a portico – was first called *Corps de Garde/ Guardhouse* by Prof. Radu Florescu, but finally proved to play the function of a *Horreum* (granary).[32] Along with its portico*,* this large strategic warehouse covers an area of 750 m^2 (by comparison, Building C1 has a total area of only 109.5 m^2).

In fact, the *Horreum* is the largest architectural object discovered so far *intra muros* at Capidava: the three-aisled building measures 23 × 32 × 21.5 m (with the portico and 16.25 × 32 × 18.75 m the building alone). The perimetral walls are 1.50 m wide, while the wall of the portico is just 1.20 m. Two rows of seven pillars stood in its central part, and the north-western one was complete; from the south-eastern row just five of the 1.20 m square pillars could be archaeologically documented. Six slightly smaller pillars (1.20 × 1.05 m) have been added during a second constructive phase, when they were attached on the longer side to the curtain H. They have specific dimensions and intervals. The portico superstructure stood on L-shaped pillars, its corners and six square-shaped intermediary ones. Intensive archaeological investigations of the *Horreum* took place between 1985 and 1993, concentrated on the third phase of its existence; one third of the building in its south-western part has was previously excavated by Grigore Florescu in 1942-1943, but no detailed report on those two campaigns is available. From its three different phases, the last one, destroyed most likely during the same attack that put an end to Building C 1, was given a *terminus post quem* based on Justin II bronze coins dated 571/572 (and largely 565-578).[33] This third phase of the building corresponds to a warehouse with inner compartment walls made of adobe brick masonry around a central courtyard.[34]

Erected next to *via principalis*, Building C 1 was divided by the construction of inner walls (Z 5 and the median wall Z 6), forming thee chambers, conventionally named Room I (22.55 m^2), Room II (14.60 m^2) and Room III (33.50 m^2).[35] The perimetral Z2, Z4, as well as the inner Z5 walls present a width varying from 0.60 to 0.64 m; they are interrupted on the front side of the building by the Late Roman *castellum*'s *fossa.*[36] This late 6th c. – early 7th c. AD intervention perturbed the previous archaeological

[26] Morrisson, Sodini 2002, 196.

[27] Laiou 2002, 47, n. 6. See Russel 1958, 148, table 152. By the end of the 6th c. AD, an up to 40% decline of the population (less dramatic for drier lands) was assumed, see Russel 1958, 99.

[28] Soficaru 2011, 34.

[29] Laiou 2002, 48.

[30] Opriș, Rațiu 2017, chapter 2 – Building C1. The excavation: architecture, stratigraphy and finds, 25-40.

[31] Opriș, Rațiu 2017, 19-21.

[32] Opriș, Rațiu 2017, 19, 25. See also Rizos 2013, 660, 661, fig. 1. For a complete reading, see Opriș 2003, 26-33.

[33] Opriș, Rațiu 2017, 19, 25; previously, Opriș 2003, 33.

[34] Opriș, Rațiu, Pl. IV.3; Opriș, Rațiu 2017, 20, fig. 8 (phase 3).

[35] Latest exhaustive description of the excavated structure, with its specific contexts and stratigraphy, at Opriș, Rațiu 2017, 25 sqq.

[36] See Opriș, Rațiu 2018.

contexts in Room I and II for more than half of the inner surface. Room III – largest chamber of the edifice, measuring 33.5 m^2 from a total inner area of the building of 87.5 m^2 – was, however, unaffected. The artefacts were in a good state of preservation and in a primary position, under the structural wood and tile debris of the collapsed roof. Both Room II and III sheltered large sunken *dolia* along the perimetral Z 2 wall, next to the entrance inside Gate Tower No. 7.

The basic interpretation of Building C1 is that it had a commercial function, a theory also acknowledged by Florin Curta in a recent in-depth analysis of the economy and exchange system of the 6th c. Balkans.[37] After analyzing the entire assemblage included in the catalogue of our monograph, both typologically and topographically, one can add further nuances to the functions that Building C1 played. First of all, besides the notorious LRA 1 and 2 *annona* containers, the amphora assemblage includes several other amphorae (a LRA 3, three Cretan amphorae type TRC 4/ Zeest 99/ Sazanov 11/ Opaiț E IX, and finally eight LRA 4 containers used for transporting precious goods (wine, above all). This last concentration of LRA 4 containers (carrying the famous *vinum Gazetum, Gazetina,* or *Gazeticum*) constitutes undisputedly the most important deposit known so far at *Capidava*, when compared to the already published contexts from the *Horreum* or inside the buildings east of *via principalis*.[38] As it has been rightly pointed out, the Gaza wine (LRA 4) was indeed **the *DOCG*** or ***premier grand cru*** of Late Roman wine production.[39]

To summarize, inside Building C1 the number of amphorae for luxury goods is 12,[40] against a total of 37 amphoral containers.[41] This third part of the whole amphora assemblage allows us to infer the function of a retail shop that, additionally to common merchandise, sold expensive (or at least costlier) goods.[42] The whole picture is firmly sustained by the 51 bronze coins in a wooden box (a circulation/ emergency hoard, according to Andrei Gândilă)[43] on the threshold between Room I and III, as well as by the scale tray (Cat. No. 147) used for weighing coin. Domestic artefacts (23 vertical-loom weights and several other spindle whorls, a bill-hook, two fishing hooks, fishing net weights, a felting mill and rotary querns), besides ceramic lamps, few African tableware items, an *umbo* or a further unexpected statue cannot change in any way the functional interpretation of our building.

As we have pointed out in our recent monograph, to such purpose the location of the building was an excellent one: it stood next to the city gate and had direct access from the *via principalis.* Analogies for this planimetric distribution and cases of urban design adapted to commercial use are so far conspicuous in the province of Scythia at Histria and Tropaeum Traiani.[44]

From a parochial perspective, one should further note the indisputable functional difference of the buildings aligned west and east of the *via principalis* at Capidava. In a perfect opposition to the *horreum* and Late Roman *principia* stood the so-called Eastern Sector (Sectors II, IV, V), situated at the corner between curtains G and F of the fort. This area accommodated *contubernia* in the Early Roman period, but later (during the 4th-6th c.), the constructions adapted to different specific needs and the space was occupied by mixed storage rooms and civil habitations. Two small-sized private baths have been discovered so far. One of them stood next to curtain wall G, not far from the fan-shaped Tower No. 6 and had two rooms; the second *hypocaustum* serving the same purpose was found in dwelling C13.[45]

One more thing: Building C1 at Capidava is one of the few lucky archaeological situations of a so called "enclosed complex". Both interpretation of the latest bronze coins from to the hoard found on the threshold between Room I and III and that of the

[37] Curta 2016c, 21-22; Curta 2017, 449.

[38] See Opriș 2003, pl. VIII; Opriș, Rațiu 2017, 45 and n. 90. For the general description of the eastern sector, see Opriș, Rațiu 2017, 21 and fig. 9: "The southern quarter of the Late Roman Capidava presents itself in a perfect opposition to the so-called Eastern Sector (Sectors II, IV, V), next to *via principalis*. This is situated in the corner between curtains G and F of the fort. Previously, in the early Roman period, this area accommodated *contubernia*, but later, during the 4th-6th c., the constructions adapted to other specific needs and the space was occupied by mixed storage rooms and civil habitations. Two small-sized private baths have been discovered so far. One of them stood next to the curtain wall G, not far from the fan-shaped Tower No. 6 and had two rooms; the second hypocaustum serving the same purpose was found in dwelling C13".

[39] Wickham 2005, 714.

[40] Opriș, Rațiu 2017, 69-73, Cat. No. 45 (LRA 3), Cat. Nos 46-53 (LRA 4), Cat. Nos 54-56 (Cretan TRC 4/ Zeest 99/ Sazanov XI/ Opaiț E IX).

[41] See Opriș, Rațiu 2017, 63-78 for the amphora assemblage, Cat. Nos. 36-67.

[42] Opriș, Rațiu 2017, 46.

[43] Gândilă 2009, 87; Gândilă 2018, 127-130; Curta 2017, 449.

[44] Opriș, Rațiu 2017, 46-47.

[45] Opriș, Rațiu 2017, 19, 21 and fig. 6, 7, 9.

tree-ring analysis brought added value and happily competed to convincingly offer the date of the violent destruction of the edifice. Relying on these elements, but also based upon the spatial distribution of the finds, as well as on the relationship with the surrounding architectural objects destroyed during the same events, we managed to establish an interval for the end of our building between AD 580/582-586.[46]

The disaster that affected the whole southern and eastern parts of the fort, including both curtains G and H, the gate and the gate tower, occurred a decade later than the last known mention of the *quaestura exercitus* in Novel 173 of Justin II (AD 575). This means the structure or its equivalent kept functioning, maybe as late as the introduction of the themal organization.[47] Several seals found in the region and dated to the second half of the 6th or largely from 6th to the 7th c., could have also belonged to military or civil officials from the structures of the *quaestura exercitus.*[48] The artefacts in Building C1, namely amphorae and ARS and LRC/ Phocaean, wares are conspicuously pleading for the cohesion of the supply system, as well as for the uninterrupted commercial relations linking the remote corners of Scythia to the Aegean, Eastern Mediterranean or even to Proconsularis/Byzacena.

* * *

It might be undoubtedly worth mentioning the available pieces of information regarding the types of amphorae that arrived in the province of Scythia and, in a larger sense, in the cities and forts along the Lower Danube frontier, according to published data obtained from systematic archaeological excavations.

Capidava is one of the 6th c. sites in the province of Scythia that offered enough amphoric material in order to draw statistics for the distribution of the *species annonariae* and not only. Thus, African *spatheion* amphorae coming most likely with the ARS Ware represent just 4%, but the Oriental ones, with an overwhelming 68%, represent more than 2/3 of all analyzed material. From seven different Oriental types, LRA 1 and 2 hold 31%, 23% respectively, while each of the other types won't go over the limit of 3-4%. These figures are relevant to the ubiquitous presence of the state in what was the redistribution system of *annona militaris.* As far as the Pontic amphorae are concerned, they represent 28% of all amphoric finds (best represented type is Antonova V/ Kuzmanov 16 with an astonishing 66% among Pontic containers, followed by Opaiț B V with 18%).[49]

A similar pattern emerged from the statistical analysis of the pottery at Halmyris (Murighiol). Amphorae are the best-represented ceramic category (42.64%), i.e. transport amphorae, table amphorae, *opercula*/stoppers. Chronologically speaking, 35.6% of the amphoric material is dated between 4th-6th c. (first quarter of the 6th c.), with a further steep increase to 61.4% to the layers from Justinian until the abandoning of the fort in the early 7th c. Furthermore, Oriental Amphorae reach 71.6% in the 6th c. and 77.8% in the first decades of the 7th c.; the same tendencies could be observerd in the case of the Oriental Tableware, with an astonishing 89.76% (while African Red Slip wares hold just 8.19%). As for the West Pontic Provincial Amphorae, they represent 26% in the 6th c. and 16% in the first decades of the 7th c. Two types – Kuzmanov 1985 types 15 and 16 – assemble 58.6% of all Pontic amphorae.[50] The LRA 1 type claims 26.7% for the Romano-Byzantine levels, closely followed by LRA 2, with 22.6%[51]. Finally, it is quite interesting to note that according to Florin Topoleanu, who studied the pottery of the site, LRA 1 holds almost 45% for N 13, i.e. the last habitation layer at Halmyris.[52]

Dans le pays profond of Scythia, the only data available so far for an earlier 4th-5th c. *extra muros* assemblage (sector west III) next to the 27 hectares city of (L)ibida shows a percentage of 49.06% for amphorae (from all pottery finds); the Oriental ones almost reach 2/3, with 64.69% (LRA 1 holds 25.87%, LRA 2 33.22%), whereas the Pontic Kuzmanov 15 type is at 24.12%.[53] A distinct approach to old excavations would count up to 44.1% as far as LRA 1 are concerned, and 23.5% for LRA 2.[54]

[46] Opriș, Rațiu 2017, 43. See also annexes I and II in the book, 161-174, 175-181.

[47] Torbatov 1997, 84.

[48] Gkoutzioukōstas 2008, 118.

[49] Opriș 2003, 177-178.

[50] Topoleanu 2000, 263-264, 266-267.

[51] Topoleanu 2000, 132, 135.

[52] Topoleanu 2000, 135, 252-253.

[53] Paraschiv 2010, 1002.

[54] Paraschiv 2006, 91, 94, where the author additionally offers 34% (LRA 1) and 31% (LRA 2) for Acrae and Bizone, with personal calculations after published catalogues.

Unpublished data comes from *Tropaeum Traiani,*[55] where African amphorae are absolutely missing from the ceramic assemblages. The ARS wares are, however, present (see *infra*). One should notice the absolute rule of the Oriental containers, because LRA 1 and LRA 2 count 68% of all amphoric material (30% goes to LRA 2, while the absolute supremacy belongs to LRA 1, with 38%), with further 10% for other Oriental types. A closer look at tableware types would instantly remark the domination of Phocaean/ LRC wares (62%), with Hayes LRC 3 as the most popular (49%); LRC 10 holds 18%; LRC 1 again 18%. LRC 3 represents one third (31%) of all tableware finds. As for the West Pontic tableware, it holds 28%; ARS wares stand at just 10% of all eating vessels, among which we find Hayes 104 B and C plates with stamp decoration.[56] Speaking of these proofs of long-distance commercial relationships, the latest African form found at Tropaeum Traiani (and in the whole province) would be ARS ware type Hayes 109 (c. 580/600-650+), defined by burnished decoration (or the so-called *Glanztonfilm*).[57]

Alexandru Bădescu is the one who gathered in his PhD thesis (2010)[58] the most important database for the 6th c. pottery assemblages in the province of Scythia so far. His calculations show, as expected, Oriental amphorae to be preponderant with 53.79% of all transport containers, followed by Pontic ones (24.89%). This high proportion of Oriental amphorae, as well as the dominance of the LRA 1 and LRA 2 *annona* types speak for themselves. Again, African amphorae are present, but they do not go beyond the limit of cca 10%.[59]

For Iatrus, Burkhard Böttger calculated the LRA 1 comes after LRA 2 and was exceeded by the latter type by 6.5%; an increase tendency to 16% was noted, with 22.4% LRA 2 amphorae constituting the most numerous group of amphorae.[60] An interesting and, in a certain sense, comparable result is available for Novae, where the highest figures belong to the popular LRA 2 (39% of all *amphoric* finds in 4th-6th c., stoppers included).[61] Though LRA 1 is frequently reported in 6th c. layers, the second largest group at Novae is that of LRA 4 (Berenice LR 3).[62] This situation is out of ordinary and might be explained just by the high needs of a rich, sophisticated city.

Moving upstream, the nearest available data come from Moesia Prima, where the most popular two *annonariae* amphoric containers are types XX (LRA 2) and XXI (LRA 1), according to Ljiljiana Bjelajac`s monograph.[63] They were discovered in high numbers in Singidunum, Viminacium and all *limes* forts in the Iron Gates area. Data are available for Svetinja, close to Viminacium, where a pottery assemblage dated 567-596 AD has been analysed: LRA 1 and LRA 2 are dominant (54 vs 42%), while the other five types of amphorae found there are poorly represented.[64] One should nevertheless notice that, despite their small numbers (2.7%), *spatheia* also arrived in this area;[65] this observation is valid for other exquisite products, packed in containers of Bjelajac`s type 26 (rather Cretan than African).[66]

We shall conclude here, by saying that two decades after the visionary study of Olga Karagiorgou on LRA 2 amphorae, her high expectations for well-stratified pottery assemblages, followed by appropriate quantifications in the archaeology of the Lower Danube in the 6th – early 7th c., are still legitimate.[67] The same is needed for the production sites, supply/gathering bases in the Aegean and Eastern Mediterranean. The main topic, state-run distribution vs. free-market economy within the *quaestura Iustiniana exercitus*, most definitely awaits a 2.0 version.[68]

[55] Unpublished PhD thesis of Ioana Paraschiv-Grigore (University of Bucharest, 2014), who generously conveyed all mentioned pieces of information.

[56] Paraschiv-Grigore 2014, 144-146; see also Opriș, Rațiu 2017, 47, n. 108-110.

[57] Personal presentation of dr. Adriana Panaite (Institute of Archaeology of the Romanian Academy in Bucharest). ARS ware form Hayes 109 has been thus far reported in Scythia in Tomis and Cumpăna (outskirts of Tomis, suburban settlement), as well as at Istros (Histria). For the form, see Hayes 1972, 172 and 170 = fig 33.

[58] Bădescu 2010: a translation of the title in Romanian should be "The 6th c. Roman in the Lower Danube area. Statistic and functional study with special regard to the territory of Dobrudja".

[59] Opriș, Rațiu 2017, 47-48, n. 112.

[60] Böttger 1991, 157, table 1.

[61] Biernacki, Klenina 2015, 105.

[62] Biernacki, Klenina 2015, 109.

[63] Bjelajac 1996, 67-72, 72-76 and 124 for the "ribbed or combed" amphora types found in the Upper Moesian sector. See also Curta 2016b, 309, for LRA 2 finds in Ratiaria (Archar), in Dacia Ripensis.

[64] Karagiorgou 2001, 134.

[65] Bjelajac 1996, 87-91, 125, type XXVII.

[66] Bjelajac 1996, 85-87, type XXVI. See recently, Opriș, Rațiu 2017, 72 for this TRC 4/ Sazanov 11/ Opaiț E IX type from Southern Crete, near Gortyn.

[67] Karagiorgou 2001, 156.

[68] Opriș, Rațiu 2017, 48.

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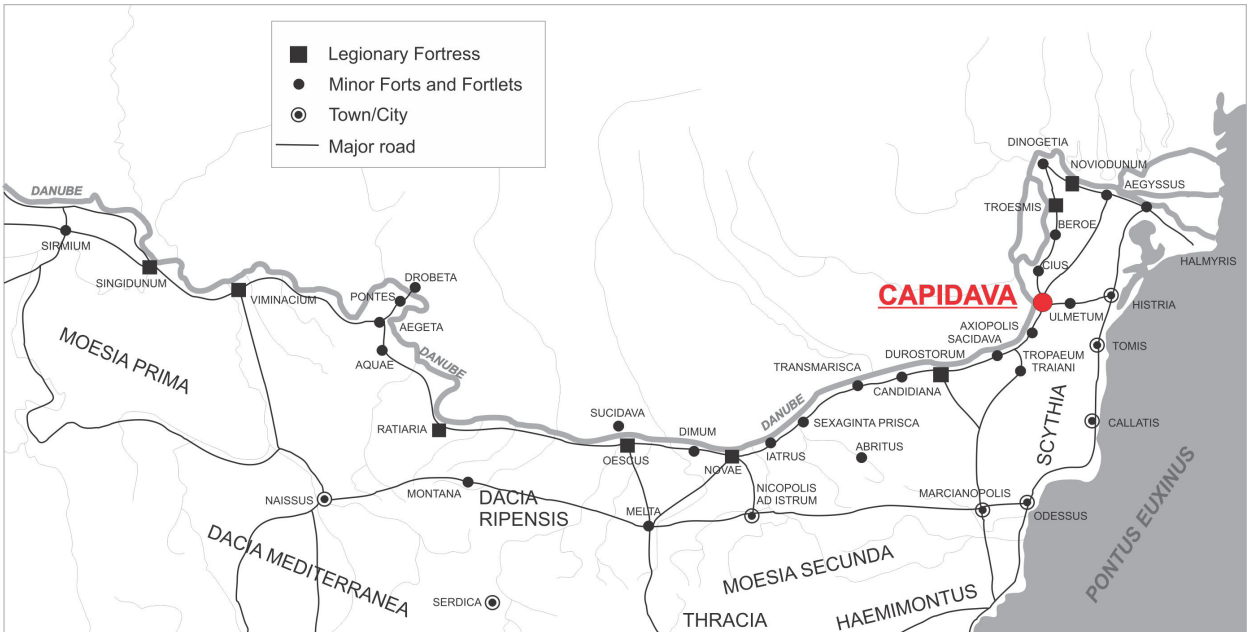
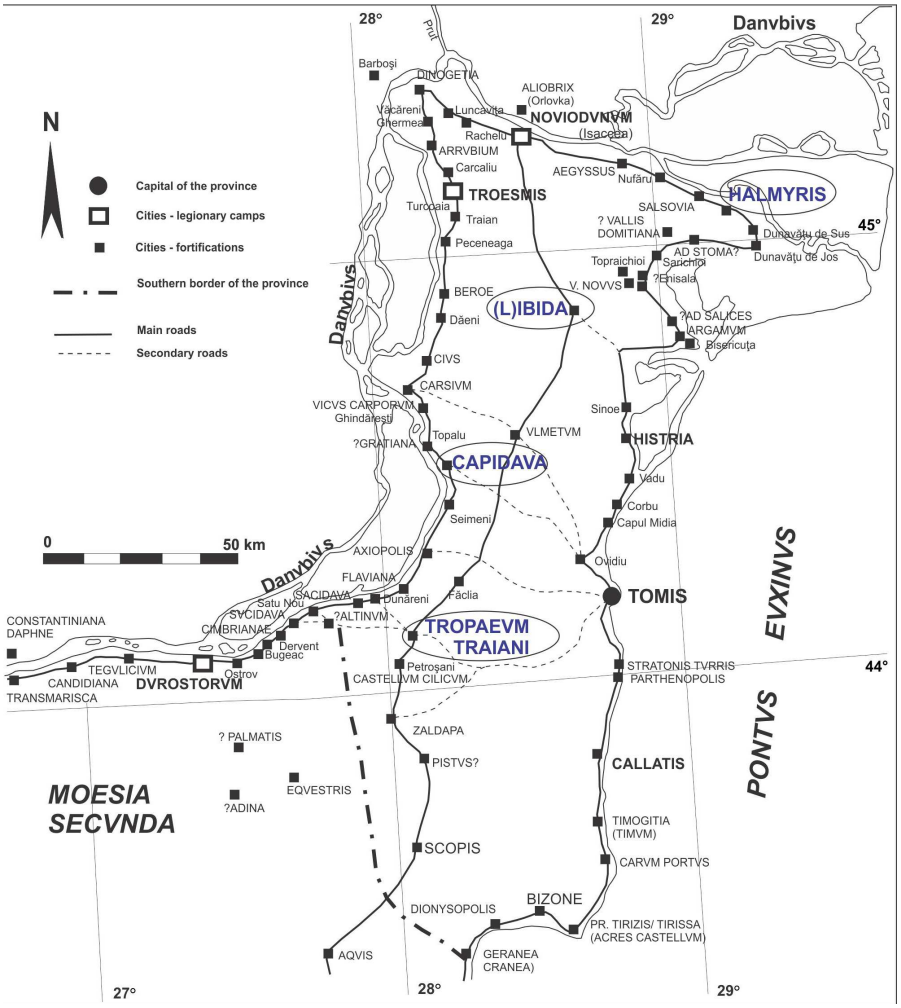


Fig, 1. The Lower Danube and the Late Roman Frontier – 4th – early 7th c. AD.



Fig, 2. The province of Scythia – 4th-7th c. AD.

Fig. 3. Quaestura Iustiniana Exercitus.

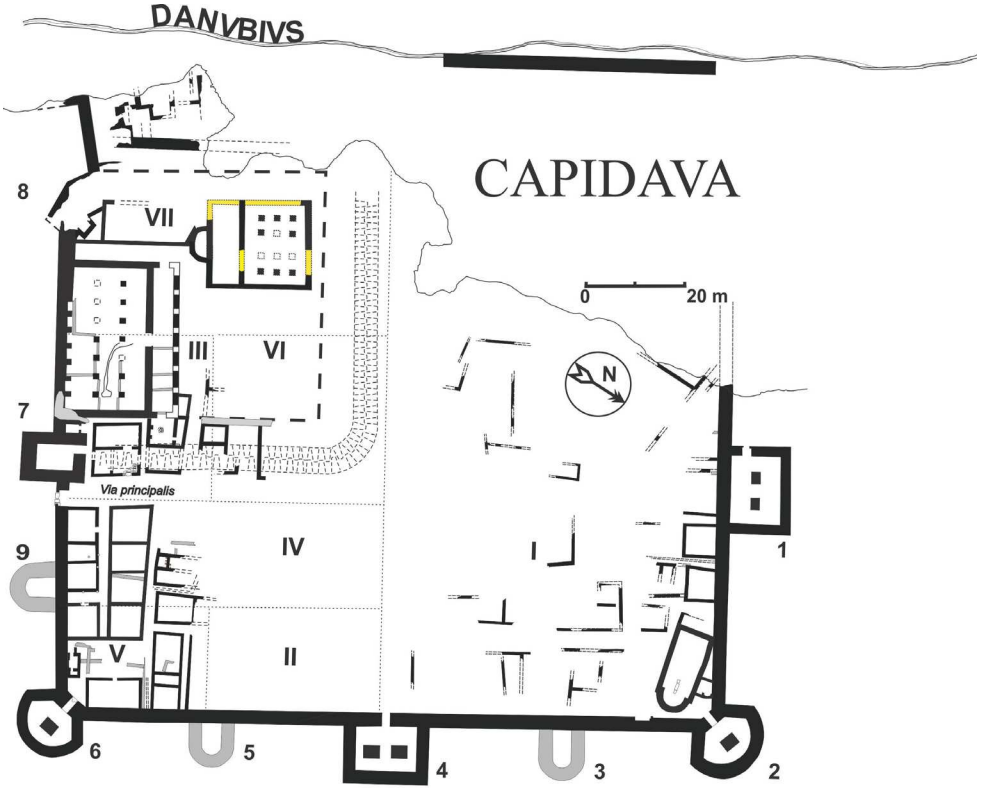


Fig. 4. The Roman fort at Capidava. General plan with sectors (6th-7th c. AD).

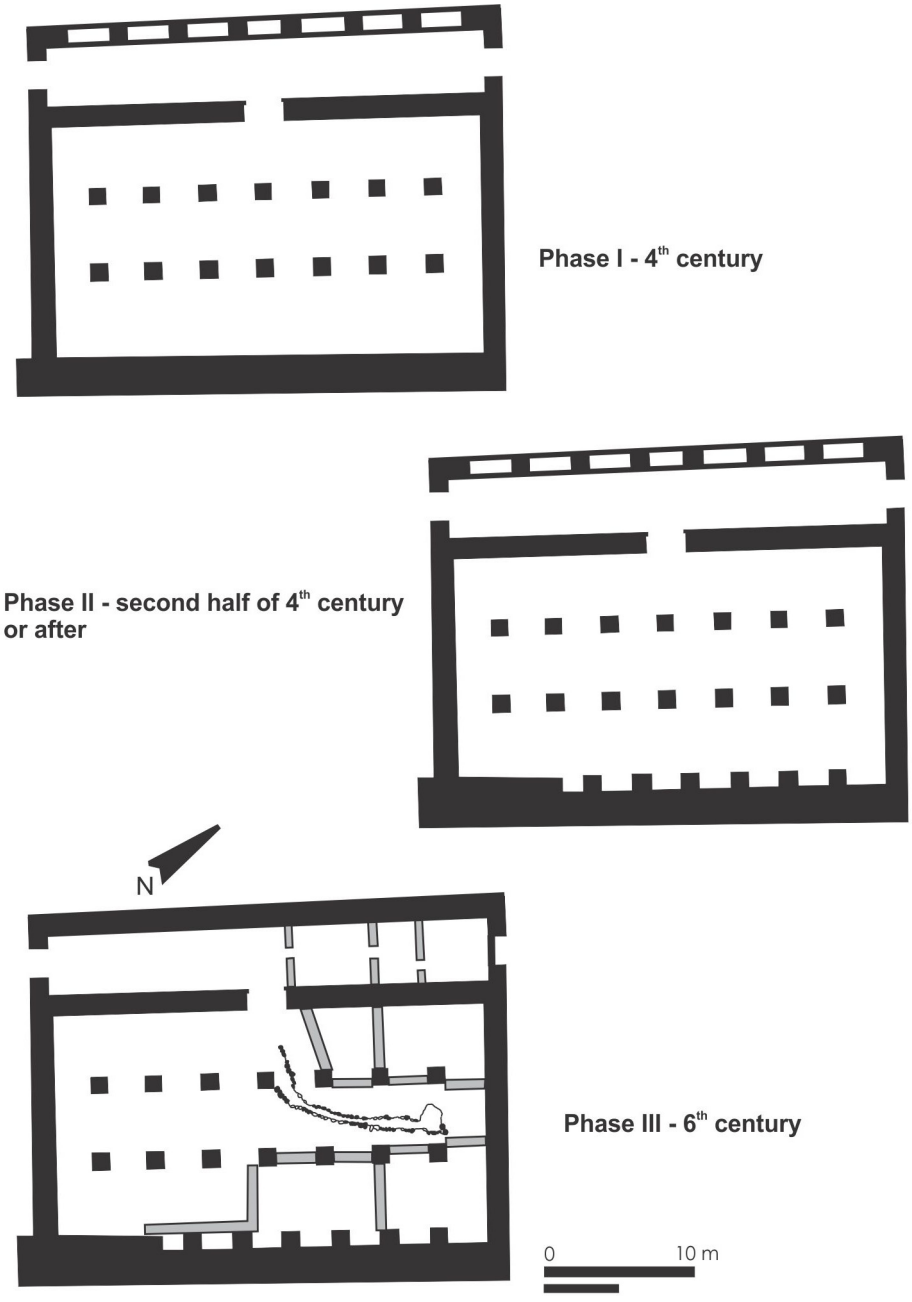
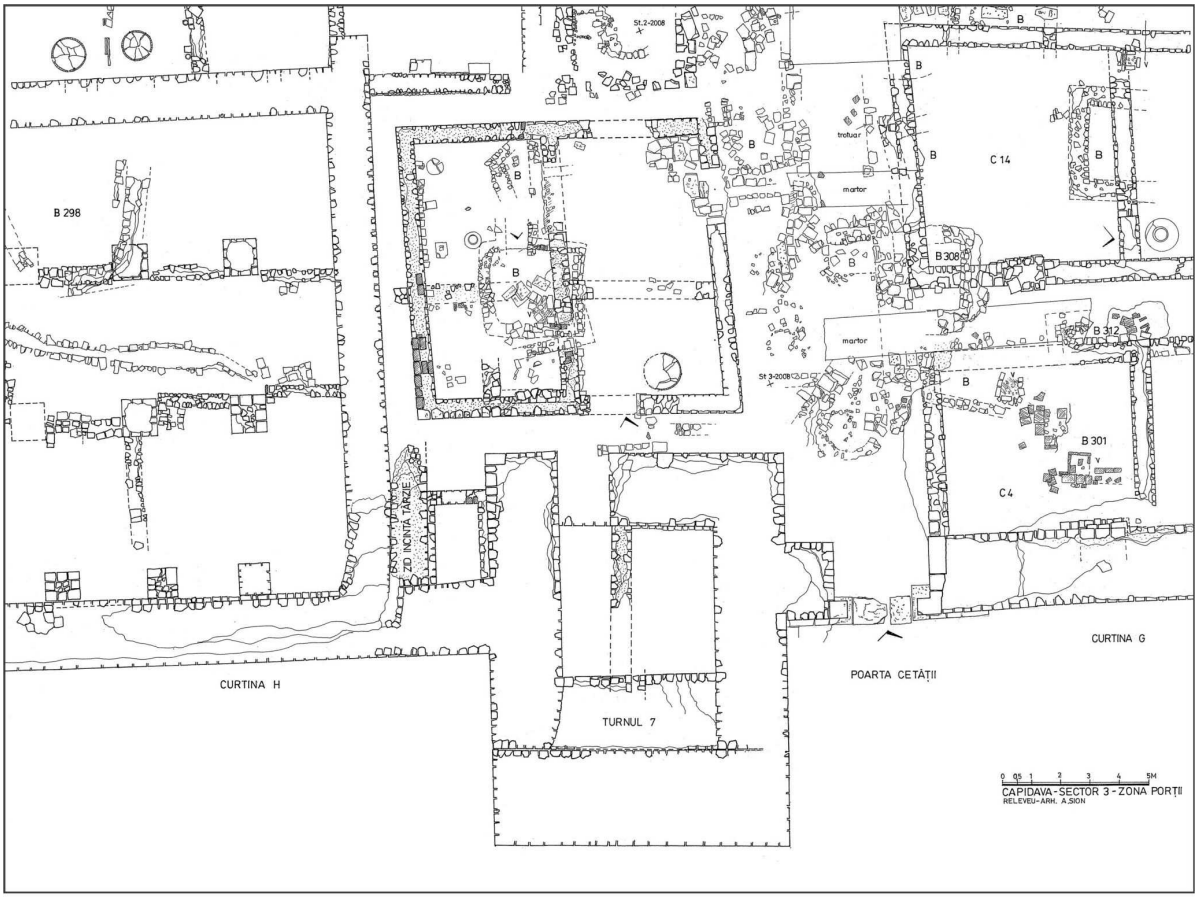


Fig. 5. The construction phases of the *horreum* in Capidava (4th-6th c. AD).



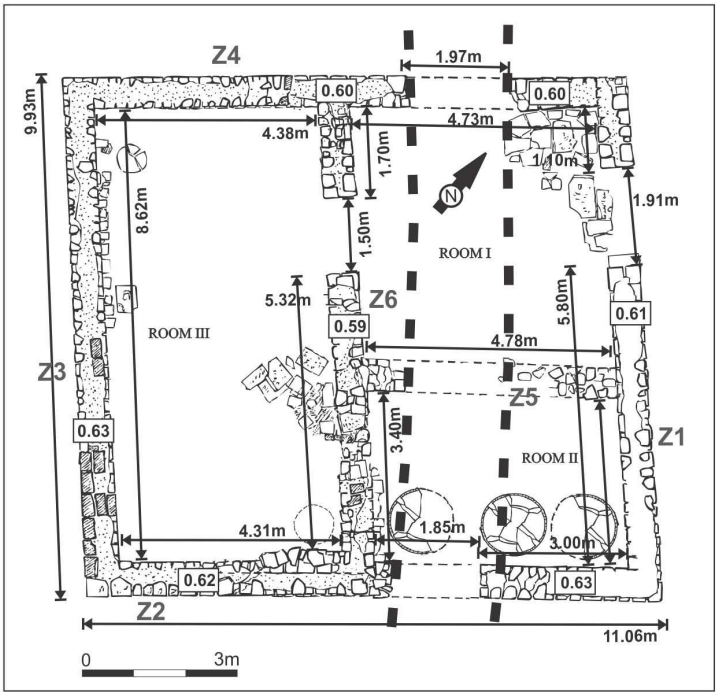
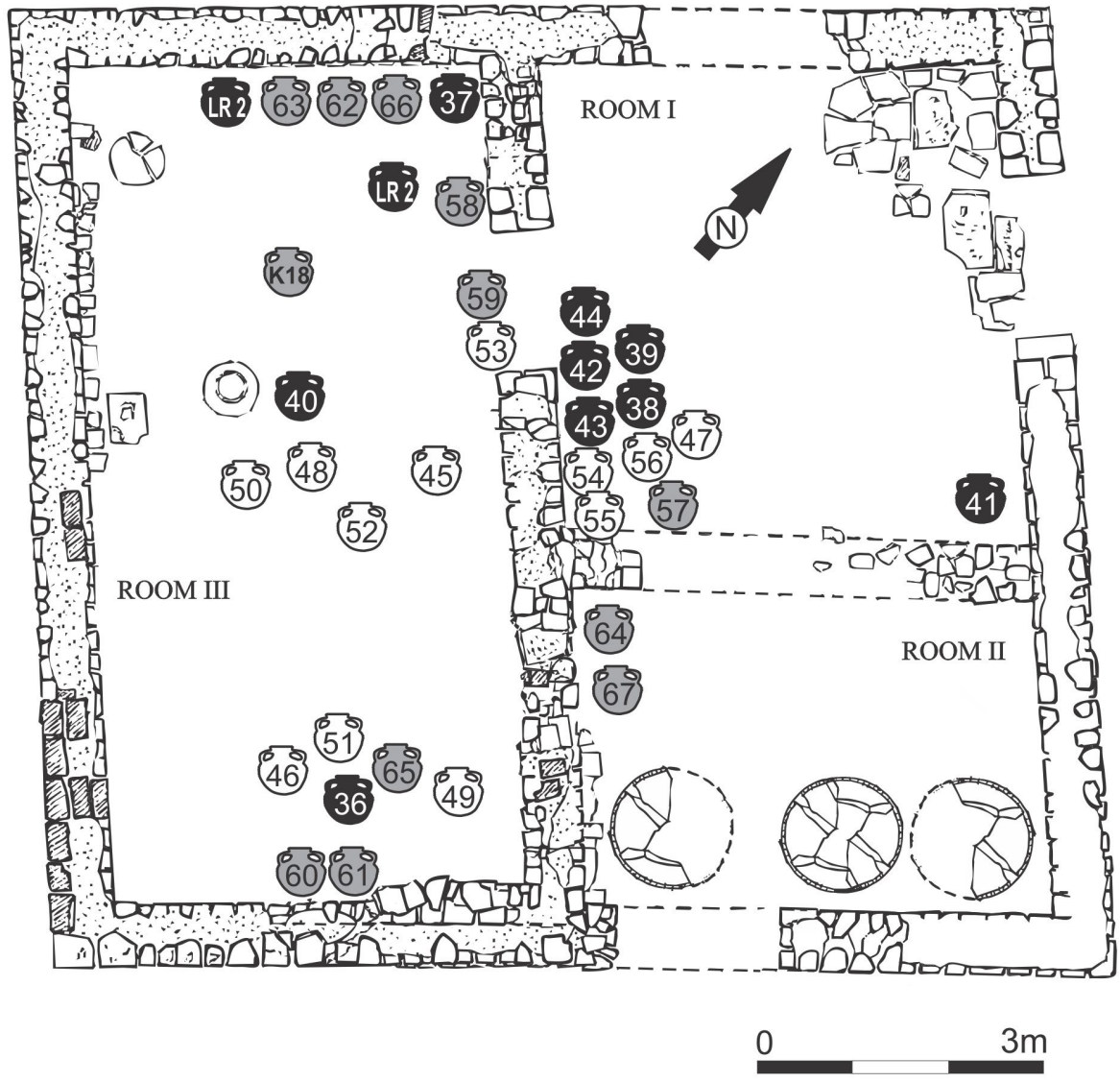


Fig. 6. a-b. Building C 1 and surrounding area.



AMPHORAE

KEY:

40 ***Annona* goods amphorae (LRA 1-2)**
Cat. No. 36-44

60 **Pontic amphorae: unassigned type (Cat. No. 57); type Opaiț B V (Cat. No. 58); type Kuzmanov XIII or XVII ? (Cat. No. 59); type Antonova V/ Kuzmanov XVI (Cat. No. 60-65); type Romanchuk/Sazanov/Sedikova 1995, class 14 (Cat. No. 66); table amphora (Cat. No. 67)**

45 **LRA 3 amphora (Cat. No. 45)**
LRA 4 amphorae (Cat. No. 46-53)
Levantine amphorae
Cretan TRC 4/ Zeest 99/ Sazanov 11 (Cat. No. 54-56)

K18 **Amphorae not included in catalogue**
LR 2 **(LRA 2; Kuzmanov XVIII)**

Fig. 7. Distribution of amphorae inside Building C1 in Capidava.

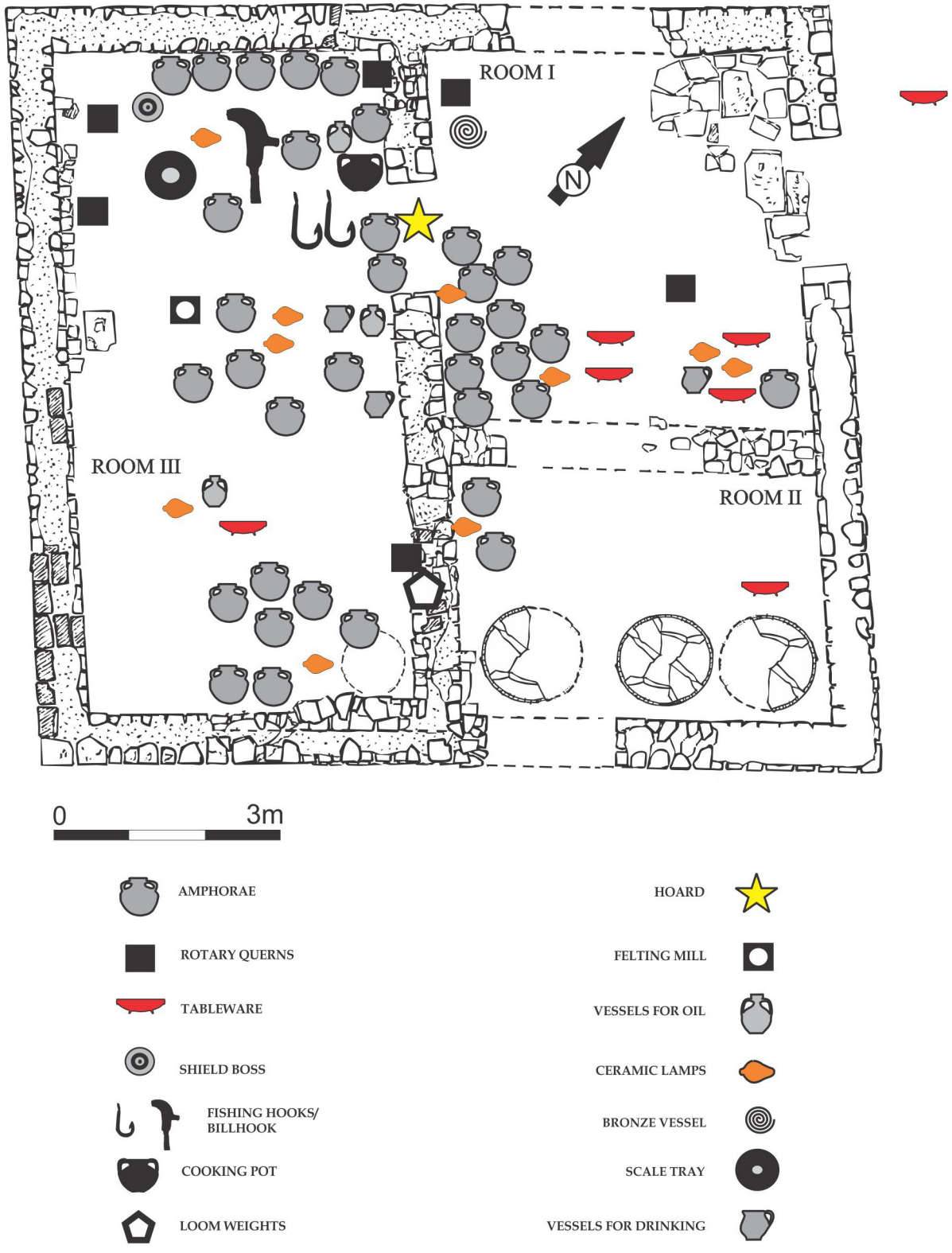


Fig. 8. Distribution of artefacts inside Building C1 in Capidava.

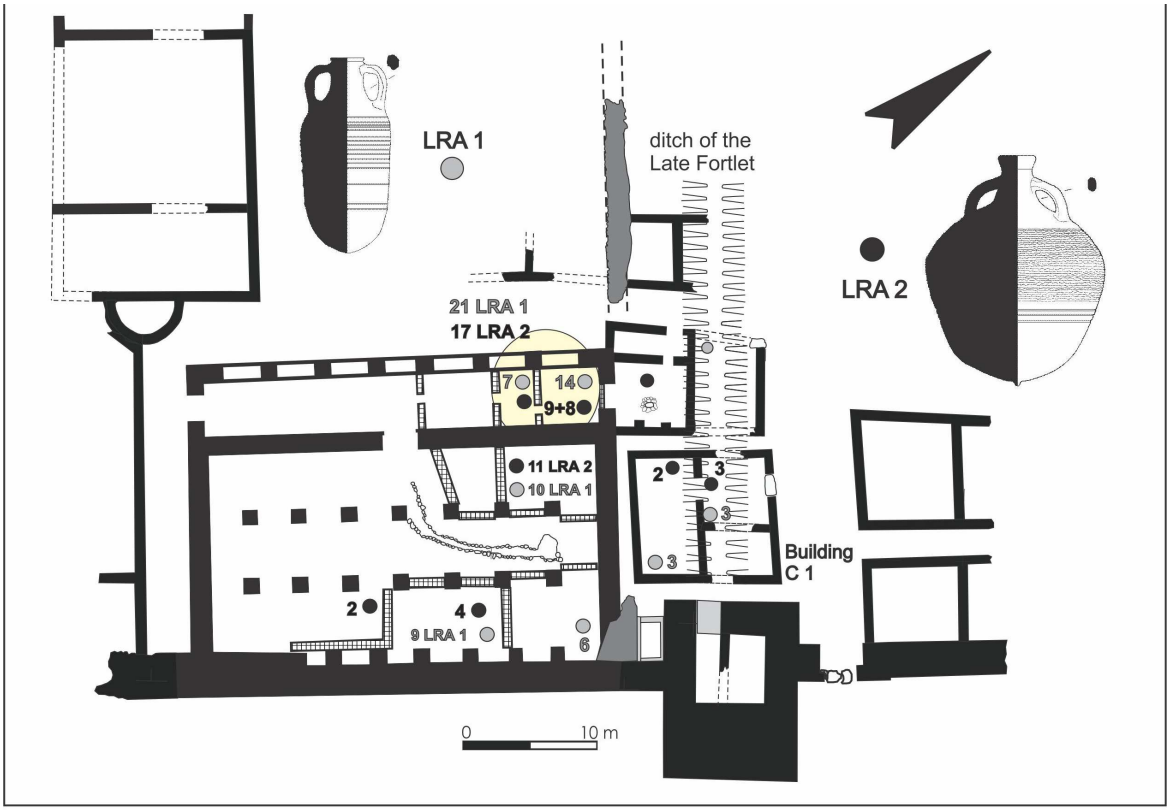


Fig. 9a. Capidava. Southern quarter (6th c. AD). LRA 1 and LRA 2 amphorae.

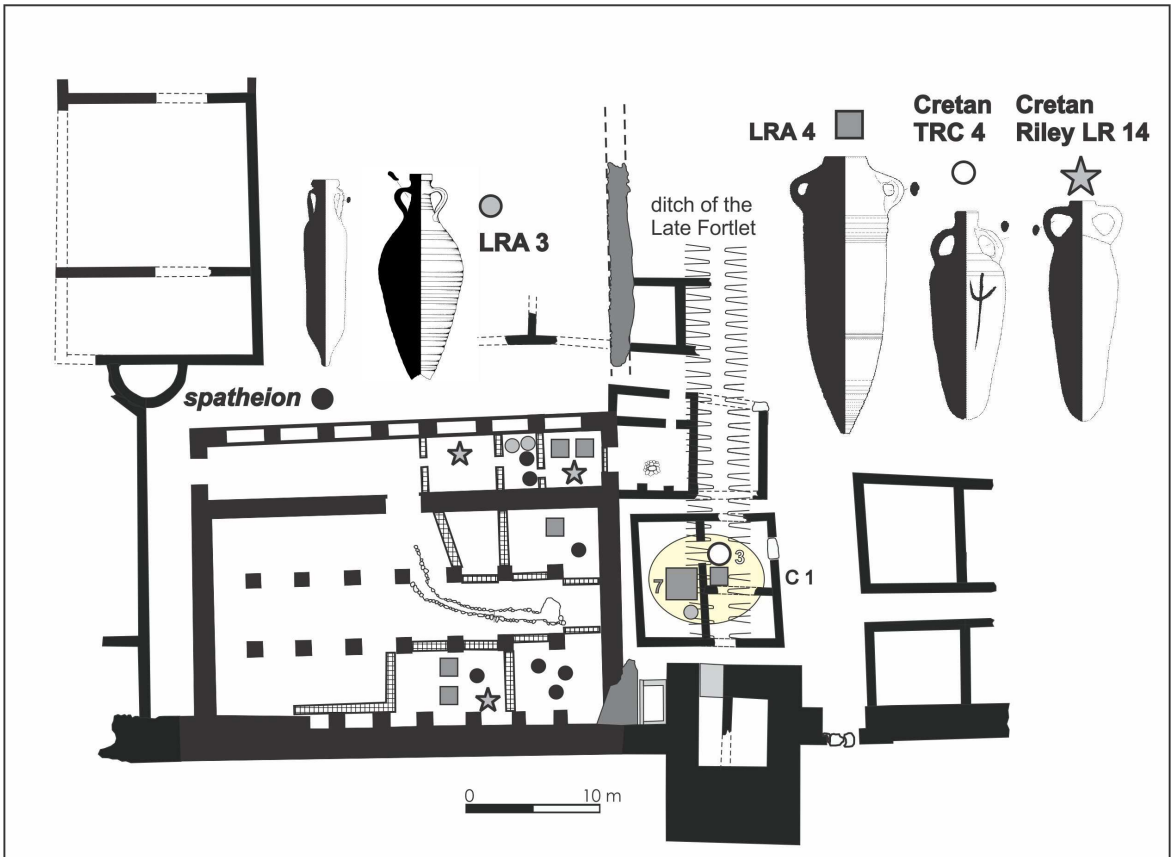


Fig. 9b. Capidava. Southern quarter (6th c. AD). LRA 3-4, Cretan TRC 4, Cretan Riley LR 14 and *spatheia.*

THE CENTRAL PLAN CHURCHES OF TRANSYLVANIA. OLD AND NEW ARCHAEOLOGICAL RESEARCH

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Abstract: Central plan churches are found in the mediaeval architecture of Transylvania as rotundas, both in their simple forms, with circular nave and east-facing apse (e.g. Alba Iulia, Geoagiu, Orăștie, Sibiu, Sighișoara and Saschiz), and their more complex form, i.e. circular on the outside and poly-lobed on the inside (e.g. Cluj-Mănăștur), or four-lobed or with a Greek cross plan. Archaeological research, both older and more recent, has made a significant contribution to establishing the chronology of existing structures, as well as in terms of the discovery of the remains of structures now no longer in existence, thereby painting a picture that matches the situation for churches with this same type of plan in neighbouring regions. Moreover, based on this more recent research, it is possible to advance the hypothesis of a revival of the central plan in Renaissance architecture in Transylvania.

Besides the longitudinal plan churches that make up the majority of mediaeval religious architecture in Transylvania, there also exists a much smaller group of churches with a central plan. Rotundas, either in their simple form (with a circular nave and a small apse) or those with a more complex plan (four-lobed, six-lobed and Greek cross), have received a lot of attention on account of the uncertainty surrounding their origin, spread, function and confession.[1] In the absence of any direct sources, the few churches still existing or mentioned during the 19th century (Geoagiu, Gurasada, Odorheiu Secuiesc, Sânzieni, Densuș, and Pelișor, Sibiu and Saschiz, respectively) were studied by art historians in comparison with better known analogous churches from East-Central Europe mostly dated to the 13th century, without excluding the possibility in some cases of the influence of Byzantine models.[2] The systematic archaeological research begun in the second half of the previous century made a decisive contribution in terms of establishing both the chronology and the different stages of development of existing churches and, above all, the discovery of remains of other structures.

Rotundas were built in almost every region of Western and East-Central Europe from the 9th to the 13th century and either served auxiliary functions within secular or ecclesiastical complexes (e.g. private chapels, baptisteries and funeral chapels), especially in the West, or were used as parish churches (in particular in the mediaeval Hungarian kingdom).[3] In terms of Transylvania proper (i.e. the inter-Carpathian part thereof) an observation should be made from the outset regarding the geographical spread of rotundas: with the exception of the example with a more complex plan (circular on the outside and six-lobed on the inside) found at the Benedictine monastery of Cluj-Mănăștur (the only known example in Transylvania), these are – at least according to our current state of knowledge – all to be found in the southern half of the province, in the regions occupied by the colonists of western origin who later became known as the Saxons. As we will discover presently, more recent archaeological research would appear to support the idea of a preference among the colonists for this type of central plan (Fig. 1).

A second unavoidable observation is that all of these rotundas are found in communities whose adherence to the Catholic faith is beyond all doubt, meaning that the possibility of a Byzantine/Orthodox origin of these monuments can be excluded.

Interest in the rotundas of Transylvania was (re)ignited by the publication of a comprehensive study of the cathedral in Alba Iulia by the art historian Géza Entz, which brought to the attention of the academic community the surprising results of research conducted during restoration works performed over four decades earlier. The remains of the small rotunda, located next to the southern collateral nave of the first cathedral, which preceded the current building, with its northern wall common to that of the nave, confirms, in the opinion of the author, the contemporaneity of the two buildings and their dating to the second half of the 11th century, with the only plausible function of the rotunda being that of a baptistery.[4]

The extensive archaeological research conducted at the cathedral in Alba Iulia in the period 1968-1977 convinced Radu R. Heitel, who had led the excavations, to radically revise this interpretation, concluding instead, based on observations that

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[1] Gervers-Molnár 1972, 13-54; Petrov 1996b, 33-60; Kiss 1999, 76-96; Pinter 2003, 272-275; Marcu Istrate, 2007, 48-50; Pinter 2012, 23-27; Szakács 2012, 19-26; Takács 2013, 130-135; Marcu Istrate, 2015, 197-200.

[2] Vătășianu, 1959, 88-98.

[3] Gervers-Molnár 1972, 31-32; Untermann 1989, 187-2008.

[4] Entz 1958, 70-71; Gervers-Molnár 1972, 52.

nonetheless raise certain reservations on account of the insufficient documentation, that the foundations of the cathedral in fact intersected with the rotunda, whose axis deviates by a few degrees from that of the cathedral, and which is therefore older, having possibly been built in the 10th or even 9th century[5] (Fig. 2. a,b). What cannot be denied is that all of these extensive interventions, both older and more recent, have permanently destroyed the archaeological context and that, due to the lack of archaeological documentation, the hypotheses put forward at the time cannot be verified. Incidentally, it should be noted that Entz stuck to his position, even showing a preference, in his last summary of mediaeval architecture in Transylvania, for the oral testimony of the person effectively in charge of the excavations conducted at the beginning of the 20th century.[6]

On the other hand, in Romanian historiography Heitel's dating gave rise to a series of debates and controversies that were focussed less on the archaeological issues and instead predominantly sought to identify the most plausible historical context from a socio-political and above all ethno-religious point of view. The hypothesis was even proposed that the rotunda reused a circular Roman tower to which an apse was then added,[7] leading to the conclusion, exaggerated in my opinion, that this could represent one of the origins of ecclesiastical architecture in Transylvania.[8] While it is true that many churches reused Roman remains, especially in the southern regions of the province, we know of no religious building that reused a Roman structure *in situ*.

The dating of the rotunda to the 9th century was associated with a centre of indigenous (Romanian-Slavic) power presumed to exist by Kurt Horedt,[9] but as Heitel's excavations themselves demonstrate, the erection of a structure symbolising political authority on this scale in the middle of the modest sunken featured dwellings of the local population is hard to envisage.[10] The majority of specialists have associated the building of the rotunda with the well-known fact, based on Byzantine sources, of the conversion to Christianity of a Magyar leader (gylas) in Constantinople during the second half of the 10th century, with the emperor Constantine VII Porphyrogenitus conferring him the title of *patrikios* and awarding him generous stipends. In order to convert these populations to Eastern Christianity, the gylas was accompanied by Hierotheos, a monk ordained as a bishop by the patriarch Theophylactos.[11] While there is some documentary evidence pertaining to the bishops of Hungary (*Tourkia* in Byzantine sources), who were subordinated to Patriarchate of Constantinople, during the following decades, it is practically impossible to establish the precise location of Hierotheos' diocese, with expert opinion centred on either the entire territory controlled by the Hungarians, the region to the east of the lower course of the river Tisza, with its seat in Gyula, or southern Transylvania, with its seat in Alba Iulia.[12] If the latter is true, then the rotunda can only ever have been a private chapel of the Magyar leader, given that its layout and modest dimensions exclude its use as a cathedral.[13]

The situation in Alba Iulia is in fact even more complicated owing to the discovery, admittedly based on incomplete and superficial research, during Heitel's excavations of a third church to the west of the current cathedral. The author rushed to attribute this structure to the Hungarian king Stephen I and assumed it was built after the defeat of Gyula, the Hungarian ruler of Transylvania, as an episcopal church. Based only on limited stratigraphic data and a basic layout, this finding has given rise to serious reservations, with some archaeologists going as far as outright denial of the church's existence, believing it to be a figment of Radu Heitel's imagination.[14] However, new research conducted in 2011 by Daniela Marcu Istrate not only confirmed the existence of this church, but also revealed it to have had what would have been a unique floor plan in mediaeval Transylvania.[15] Indeed, the church had a semi-circular detached apse, with a 6.50 m opening towards the inside of the nave, and a four-sided nave, in the middle of which were four pillars forming a square with a width of 4.3 m (Fig. 3. a,b). Based on these features, the author believed it to be a church with a Greek cross plan – a Byzantine model with strong analogies in Constantinople and the South Danube – which, from a chronological point of view, is in keeping with the archaeological observations and confirms its dating to the second half of the 10th century and the first half of the 11th century. In the opinion of the author, the chronology and nature of the discovery are consistent with the theory of a local centre of power, loyal to the Byzantine Church and Empire, which

[5] Heitel 1972, 139-160; Heitel 1975a, 3-10; Heitel 1985, 215-231.

[6] Entz 1994, 25.

[7] Heitel 1975a, 5-7; Moga 1998, 28; Blăjan 2007, 246-247.

[8] Popa 1991, 339-340.

[9] Horedt 1954, 487-512.

[10] Rusu 2009, 47.

[11] Moravcsik 1988, 85-86; 100; Horedt 1986, 137; Vătășianu 1987, 9; Madgearu 2010, 84-87; Marcu Istrate 2014, 114-116.

[12] Madgearu 1994, 147-154; Madgearu 2010, 82; Marcu Istrate 2015, 190-191.

[13] Rusu 2009, 47-48.

[14] Heitel 1975a, 9; Heitel 1975b, 346; Heitel 1985, fig. 1; Rusu 2009, 47.

[15] Marcu Istrate 20014, 93-112; Marcu Istrate 20015, 180-189.

would be the only way to explain the existence of a church with this floor plan and these dimensions (21.20 x 12.20 m). What I find to be less clear is the fate of the Orthodox Church after the establishment of the Catholic episcopate. Was it taken over after the campaign against Gyula and kept the same until the new cathedral was built during the final decades of the 11th century?

As it happens, the layout of the church contains some less common features in terms of the liturgical requirements of the Eastern Church that should not be overlooked, especially in the case of buildings with episcopal and missionary functions. Its single semi-circular apse instead of the usual three has no counterpart among other churches of this size and with this function. Moreover, the lack of a narthex, which is possible in the case of small parish churches, is hard to imagine in light of the liturgical requirements of a cathedral. On the other hand, churches with cross plans are also frequently found in the Catholic world, so unequivocally attributing the church in Alba Iulia to the Orthodox faith would be too restrictive.[16] And while the decommissioning of the church can be dated with some certainty from the graves of the cemetery established around the cathedral built at the end of the 11th century, the date of its construction is less clear but may, in my opinion, lie somewhere in the second half of the 10th century or the beginning of the following century. In the latter scenario, the possibility that the cathedral was built after the establishment of the catholic episcopate by Stephen I would also have to be taken into consideration.

Returning to the issue of the rotundas in Transylvania, more recent archaeological research has brought to light new information that allows us to gain a better understanding of existing churches, as well as to discover new such structures. For example, the excavations of the rotunda in Geoagiu de Jos led to a significant rethinking of the chronology of the church (Fig. 4 a).[17] Previously, opinions voiced in the specialist literature ranged between the first half and the middle of the 13th century, while in terms of function cemetery chapel, parish church and seigneurial chapel were all proposed, with documentary evidence from the end of the 13th century attributing ownership of the estate to the Ákos noble family, who also owned other property in the area.[18] Based on the graves in the cemetery surrounding the cathedral, which were accurately dated using coins, it was demonstrated that the rotunda must have been built at the end of the 11th century, meaning it must be contemporary with the baptistery in Alba Iulia, which may have served as a model, and that it most likely served the function of a parish church until the construction of a new church nearby during the 15th century.

In Orăștie, just a few kilometres from Geoagiu, before the beginning of the Mureș Gorge, the remains of a religious building of the utmost importance for the early days of Saxon colonisation were found: a double rotunda with a basement and raised ground floor made up of a circular nave and a semi-circular apse, with a central pillar to support the vault and with exterior dimensions of 10.50 m.[19] The entire complex is situated on a bank of a marshland, with human habitation beginning with a settlement, dated by the author of the excavation to the 8th-9th centuries, that was destroyed by a mud fortification with a moat, rampart and palisade most likely dating from to 10th-11th centuries. This fortification was reinforced in the 12th century by the construction of a rectangular stone tower (donjon) and the rotunda with the function of court chapel within a seigneurial complex (Fig. 4 b). At the start of the 13th century, after colonisation by the Saxons, the chapel, now with an added porch, was used temporarily as a parish church until a new church suitable for a larger community could be built. After completion of the Romanesque church, the rotunda became a cemetery chapel, while during the 14th century it was transformed, by increasing the thickness of the walls, into a defensive tower on the eastern curtain wall of the stone fortress of Orăștie. Later, around the turn of the 19th century, the chapel was demolished and its basement used as a lime-pit during the construction of the town's new Lutheran church.

While trying to decipher the historical context of this architectural ensemble it is tempting to establish a connection, suggested from as early as the 19th century in Saxon historiography, with the well-known historical fact of the settlement in Hungary of the knight Anselm de Braz from Malmédy (Belgium), together with his sons, at the beginning of the 12th century.[20] The similarity between the name of the Western feudal lord and the Saxon name for Orăștie (Broos) could indicate that the person who built the rotunda was also the recipient of a royal endowment, but unfortunately we have no confirmation of his ever having settled in Orăștie.

The author of the research conducted in Orăștie offers no opinion as to the first layer of habitation, which he dates based on ceramic fragments to the 8th-9th centuries, nor the mud fortification reused by the seigneurial court. I believe that the results of the findings from necropolises in the vicinity of the town, on Dealul Pemilor, can be linked to these settlements.[21]

[16] Takács 2013, 97-114.

[17] Petrov 1996a, 405-409; Petrov 1996b, 33-60.

[18] Vătășianu 1959, 88-89; Anghel 1965, 615-623; Gervers-Molnár 1972, 36; Popa 1988, 236.

[19] Pinter 2003, 263-286.

[20] Nägler 1992, 74-76; Pinter 2003, 271.

[21] Luca and Pinter 2001, 98-132.

The archaeological research conducted at Huet Square in Sibiu, undertaken to a large extent in parallel with that in Orăștie, produced very similar results to the rotunda in question both in terms of the dimensions and structure of the edifice and in terms of its function and chronology.[22] The remains of a rotunda were known about from as early as the start of the 20th century owing to the public utility works performed at the time, but the official identification itself of the ruins only took place in 1999 as part of systematic research.[23] The excavations performed in the following years revealed the foundations of a rotunda of the double-chapel type with a central column in the crypt to support the vault, probably with a ground floor with apse for religious use and possibly also an upper floor for defensive purposes (Fig. 5 a, b). This chapel also formed part of a seigneurial court with a defensive moat and palisade. Based on archaeological arguments and the existence of similar structures in Western and East-Central Europe, the head of the research dated the building of the complex and the rotunda to the 12th century. During the 13th century, the rotunda was taken over by the colonists from Sibiu and used as a cemetery chapel, with the crypt becoming an ossuary.

Given its proposed dating and function, a link with the start of Saxon colonisation provided the most plausible contextualisation for the rotunda. References to Sibiu in historical documents, first in a document of great importance for Transylvanian history dating from 1223 under the name of *villa Hermani*, as well as in its German variant of *Hermannsdorf*, and then, later, as *civitas Hermanorum*, *Hermannstadt*, all indicate someone called Hermann, with a similar status and role as Anselm de Braz, as being the founder of this settlement.[24]

The ruins of the rotunda also intersected to the south and west with the sections of another archaeological investigation, begun subsequent to the first excavations, which arrived at entirely different conclusions regarding the chronology, function and structure of the edifice.[25] The main observation, based on stratigraphic evidence, is that the foundation trench of the rotunda cut across the lime kiln of a mediaeval building site, meaning the rotunda could not have been the first religious building on the site. Moreover, the discovery in the western part of the rotunda of a four-sided structure of 5x5 m, which from a technical and stratigraphic point of view is contemporary with the rotunda, was known about from earlier research and believed to delineate the entrance to the rotunda albeit intersecting with an even greater number of mediaeval graves, gave rise to the hypothesis that both structures date at the earliest to the 13th century, or even the end of the century. In this case, the rotunda could under no circumstances be a 12th century seigneurial chapel, but rather the chapel of the cemetery formed around the Romanesque church of the population from Sibiu.

If we accept the conclusions drawn by the authors of the archaeological research conducted in Orăștie and Sibiu, our understanding of the nature and extent of the colonisation by the settlers in Transylvania gains much valuable information. This would mean that, besides the founding of rural settlements by numerous groups of colonists, we should also not overlook the role of the knights who, as the beneficiaries of royal endowments, settled in Transylvania amid various different political contexts and circumstances, building for themselves seigneurial residences in the Western style with befitting religious buildings. Moreover, the list of names including Johannes Latinus, Gocelinus and Fulkun could now more justifiably be extended to include those of Hermann and Anselm de Braz.[26] A further argument in this sense could be the discovery of similar rotundas in Sighișoara and perhaps also in Saschiz.[27]

Of the more complex variant of rotunda (semi-circular on the outside and six-lobed on the inside) there is to date only one known example in Transylvania, i.e. that discovered as part of the archaeological research undertaken at the Benedictine monastery of Cluj-Mănăștur.[28] This edifice was carefully constructed from blocks of cut stone and underwent various subsequent alterations, initially in terms of a thickening of the interior walls of the lobes and later through the addition of a rectangular nave to the west, which destroyed the three apses on that side of the rotunda, with the three remaining apses to the east taking on the function of a sanctuary (Fig. 6 a,b). Based on stratigraphic observations and architectural fragments, the authors of the research dated the construction of the rotunda to somewhere around the middle of the 13th century, given the overlap, in the area of the sanctuary, with a three-nave Romanesque basilica that was most likely decommissioned as a result of the destruction wreaked by the great Mongol invasion of 1241-1242.[29]

[22] Pinter 2012, 32-55.
[23] Marcu Istrate 2007, 44.
[24] Pinter 2012, 50.
[25] Marcu Istrate 2007, 44-50.
[26] Zimmermann and Werner 1982, I, 8-9; 24-25; 78-79.
[27] Marcu Istrate 2007, 49-50.
[28] Iambor and Matei 1979, 606-618; Iambor and Matei 1983, 131-146.
[29] Iambor 2005, 206-208.

In terms of typology, the rotunda of Cluj-Mănăștur belongs to a small group of which there are only three known examples in the Hungarian kingdom (Kiszombor, Karcsa and Horjany), something explained in terms of the existence of Byzantine influences, with some researchers even attributing them to the same builders being dated to the first half (Kiszombor) or second half (Karcsa and Horjany) of the 11th century[30] – albeit in the case of Kiszombor a dating to the middle of the 11th century was also suggested, with the important observation that the exterior girdled wall was added two centuries later, meaning that initially the apses were exposed, thus describing a floor plan similar to that of analogous structures in the South Danubian regions.[31] More recently, an extensive study of six-lobed rotundas in the Hungarian kingdom brought their dating forwards to the 12th century, thus associating them with the revival of the symbols of the trinity in the context of the fight against Cathar and Bogomil heresy. Accepting the possibility of distant Byzantine origins, the author believes this type of rotunda to have been less widespread in the western regions of the empire, with which, however, these edifices from Hungary, as late examples, transformed by Western elements, should still be associated.[32] Beyond their similarities in terms of floor plan, the six-lobed rotunda in Cluj-Mănăștur stands out from the aforementioned group both in terms of building materials (stone rather than brick) and its chronology. The archaeological reports contain no clear information regarding the moment of destruction of the rotunda or its function, but, given the current state of research, it would seem plausible that it may have been used temporarily as the church of the monastic community until the construction of a new Gothic basilica during the first decades of the 14th century.[33]

One last type of central plan church also found in Transylvania is that of the four-lobed church, which is found in the same southern region and which, like the rotundas, were dated in older research to the second half of the 13th century, despite various differences in terms of planimetrics and religious confession.[34] With its well-documented paleo-Christian origins, the four-lobed plan also spread to the western provinces, in particular the circum-Mediterranean regions with their stronger and longer-established links to Ancient traditions.[35] Fifteen such edifices have been identified to date on the territory of the former Hungarian kingdom (admittedly, for five of these the identification is not certain), and of these four are to be found in Transylvania (Gurasada, Odorheiu Secuiesc, Gheorghieni and Sânziene).

In respect of their dating to the 13th century, the first surprise came with the archaeological excavations performed in 1973 by Mariana Beldie at the church in Odorhei.[36] Besides the observation that nothing was found that could be dated to before 16th century, a silver coin issued by the emperor Ferdinand I in 1561 was discovered in an undisturbed archaeological layer of the foundation trench of the northern apse, a circumstance that irrefutably dates the building of the edifice to the 16th century (Fig. 7 a). This discovery differed so widely from the accepted chronology that art historians refused to accept it, claiming that, in the absence of any analogous examples, it would create insurmountable problems in the field of art history.[37] More recent research, however, has demonstrated that the two other edifices in Székely Land (Sânzieni and Gheorghieni), can also be dated to the 16th century based on architectural and documentary evidence.[38] These results mean we must remove the structures in question from the list of mediaeval edifices and attribute them to a revival in the use of the central plan during the Renaissance (Fig. 7 b; 8 a).

The church in Gurasada, in the Mureș Gorge, located in very close proximity to the border between Transylvania and Banat, represents a special case among churches of this type. Comprising in its current form a four-lobed structure extended along the east-west axis, laid out in a relatively approximate fashion and lacking the planimetric markings of a central square, which is still surmounted by a prismatic dome, and with a narthex and belfry added to the west of this central nucleus, what we see is in fact the result of a number of different interventions that can only be understood with the aid of archaeological research that was carried out in different phases and not fully published.[39] The authors explicitly stated that because of the restriction of the research to the exterior areas of the four-lobed structure and the interior of the nave added to the west, it was not possible to specify the date of construction of said four-lobed structure, which nonetheless must represent the first stage of the church's existence.

[30] Gervers-Molnár 1972, 45-52.

[31] Dávid K. 1974, 39-47.

[32] Tóth 2004, 18-24; 33-34.

[33] Entz 1994, 34.

[34] Vătășianu 1959, 88-89; Drăguț 1968, 56-58; Entz 1994, I., 63.

[35] Szakács 2012, 7-10.

[36] Beldie 1974, 59-62.

[37] Dávid L. 1981, 321.

[38] Kovács 2003, 7-25 on Sânzieni. I am most grateful to Emődi Tamás for the information about the as yet unpublished archaeological and documentary research conducted in Gheorghieni.

[39] Popa and Chicideanu 1984, 54-67; Motzoi-Chicideanu, 1-2.

On the other hand, the interventions to the west were dated with a fair amount of precision, being divided into three different phases dating from before the 16th century, after which the current form was arrived at. The second phase saw the addition to the western side of the four-lobed structure of a rectangular nave of 8.30 x 9.20 m and probably also a sacristy where the eastern lobe meets the western lobe, a common form of extension in this period. During the third phase the nave to the west was partitioned by the addition of two pairs of pillars, thereby creating a three-nave structure which the authors attributed – quite arbitrarily in my opinion – to standard Romanesque architectural practice and dated to before the middle of the 13th century. It is worth emphasising that in this report the authors expressly underline the certainty of the chronology of the first three phases. The final phase, possibly comprising a number of smaller stages, principally involved the addition of the present-day belfry to the narthex that was added during the second phase (Fig. 8 b).

I tend to agree with the observation of the authors of the archaeological research that the four-lobed structure could not have been the parish church built by the Akos noble family for the Romanian serfs whom, by a royal decree of 1292, it was to transfer to its estates in Ilia, Feneș and Zad, just I as agree with them that the dating of the monument should be pushed back to the 9th-10th centuries and automatically and directly linked to Byzantium and the Church in Constantinople. However, the creation and maintenance of a noble estate in this strategic region prior to the reconfigurations brought about by the Pecheneg invasions during the time of Ladislaus I is less likely and, given the chronology of the central plan churches in Alba Iulia, Geoagiu and Orăștie, and even of that in Cluj-Mănăștur, the dating of the church in Gurasada to the 12th-13th centuries seems just as plausible. It is likely that future research will shed more light on these chronological issues.

This brief summary of the history of the central plan churches of Transylvania reveals their perfect integration, both in terms of chronology and typology, into the landscape of the religious architecture of the surrounding regions. Apart from a relatively large group of structures datable to the 11th-13th centuries, it is worth highlighting the revival of the central plan layout in the Renaissance architecture of Transylvania, a phenomenon which, if confirmed by future research, will without doubt represent an important achievement in itself.[40]

[40] Szakács 2012, 18-19.

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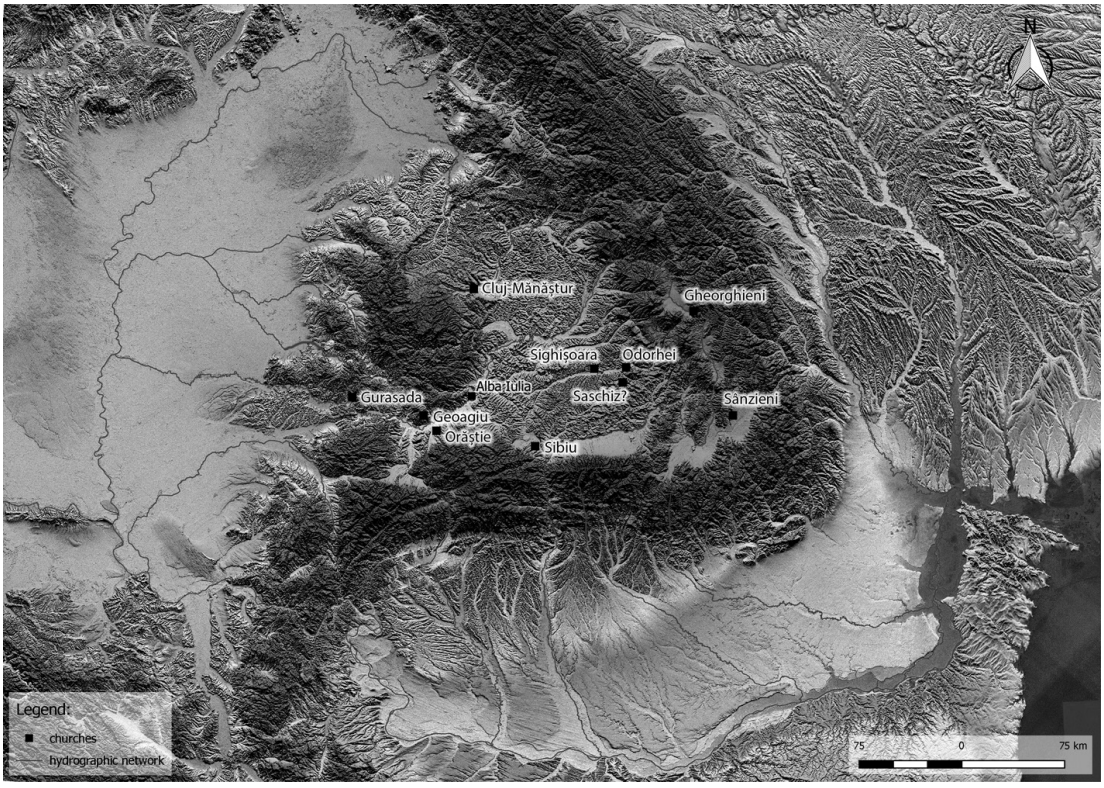

Fig. 1. Alba Iulia – General plan of the site (Heitel 1985, fig. 1)

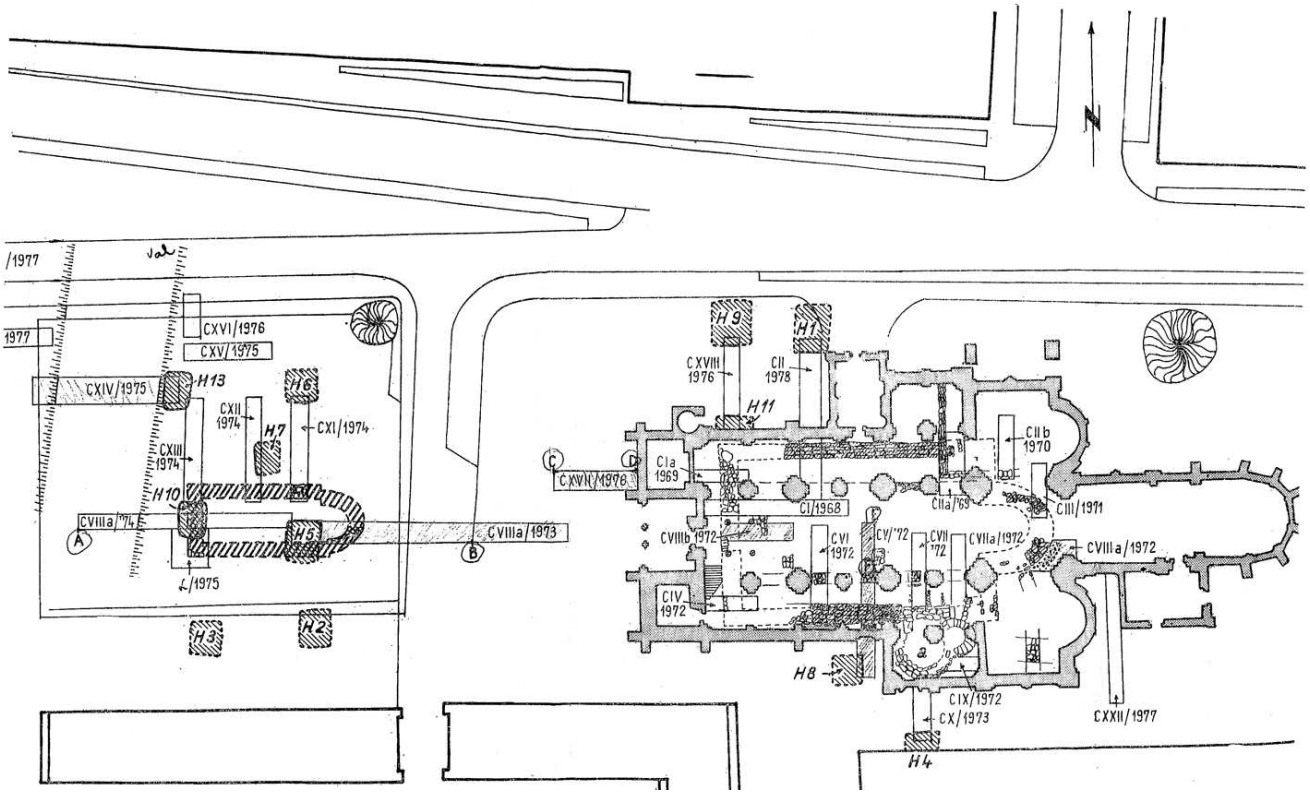

Fig. 2 a. Alba Iulia – General plan of the site.

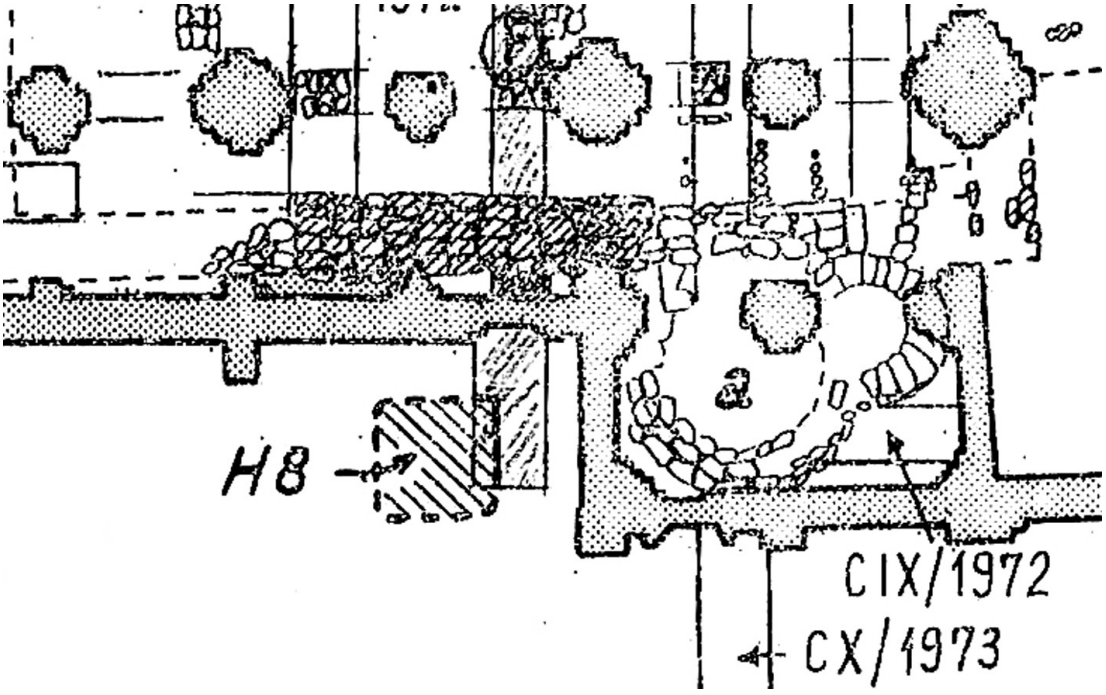

Fig. 2 b. Alba Iulia – The rotunda – detail.

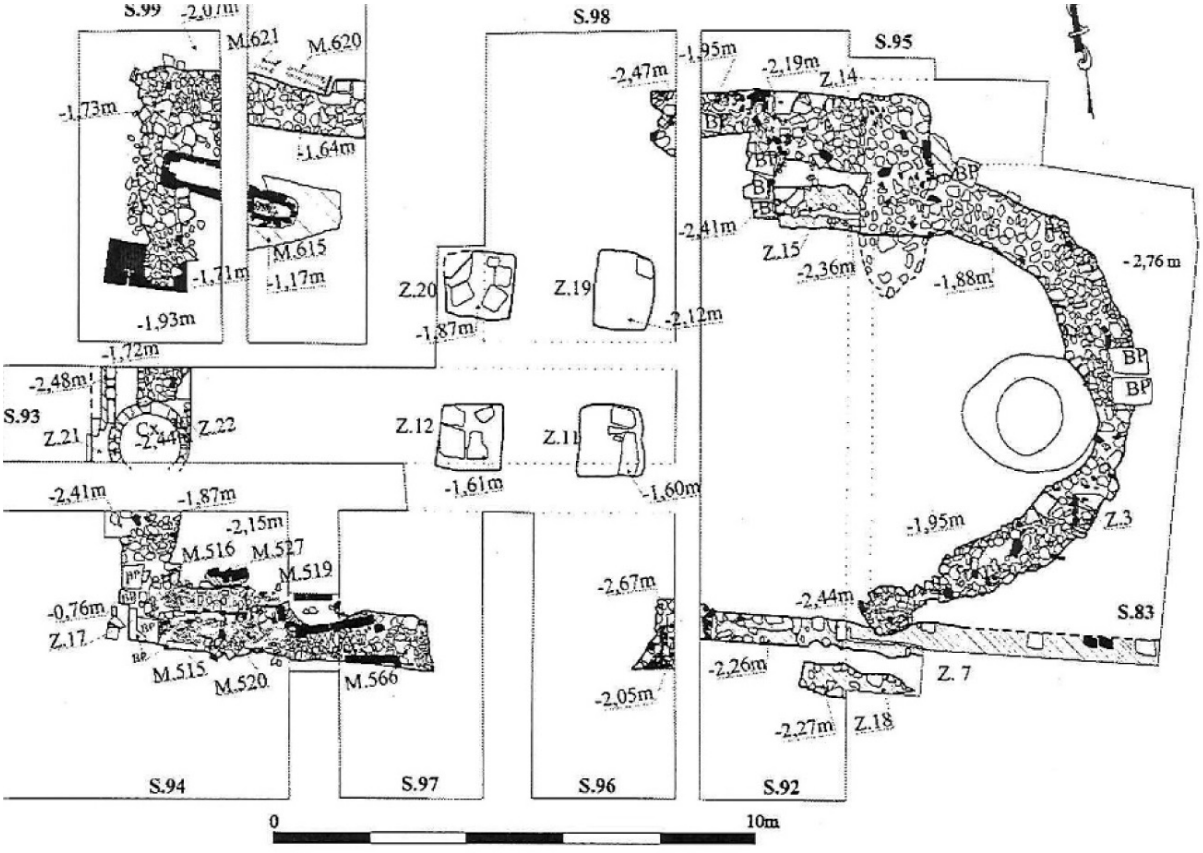

Fig. 3 a. Alba Iulia – The ruins of the pillared church (Marcu Istrate 2015, 26, fig. 3).

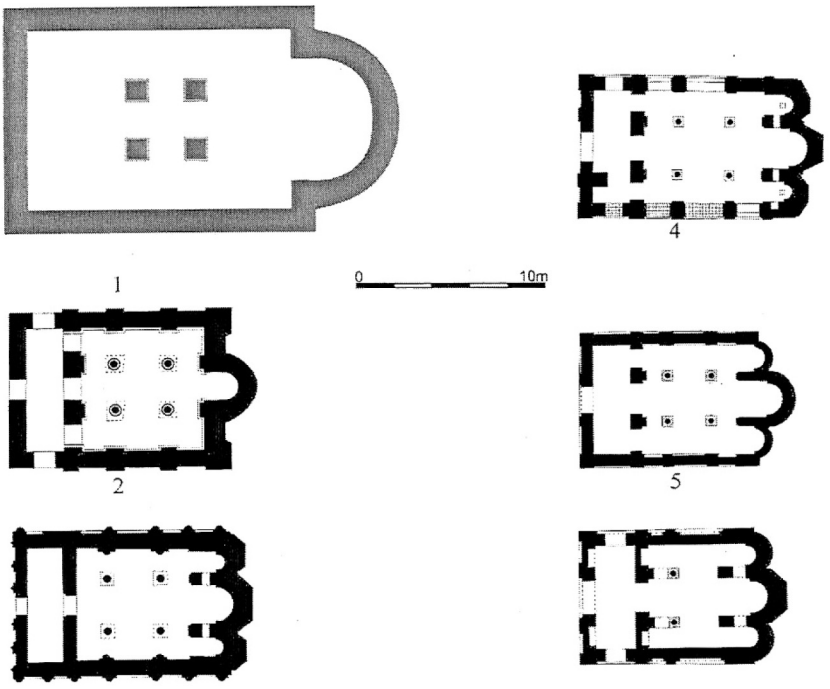

Fig. 3 b. Alba Iulia – Hypotetic restitution of the pillared church and south-danubian analogys (Marcu Istrate 2015, 28, fig.6).

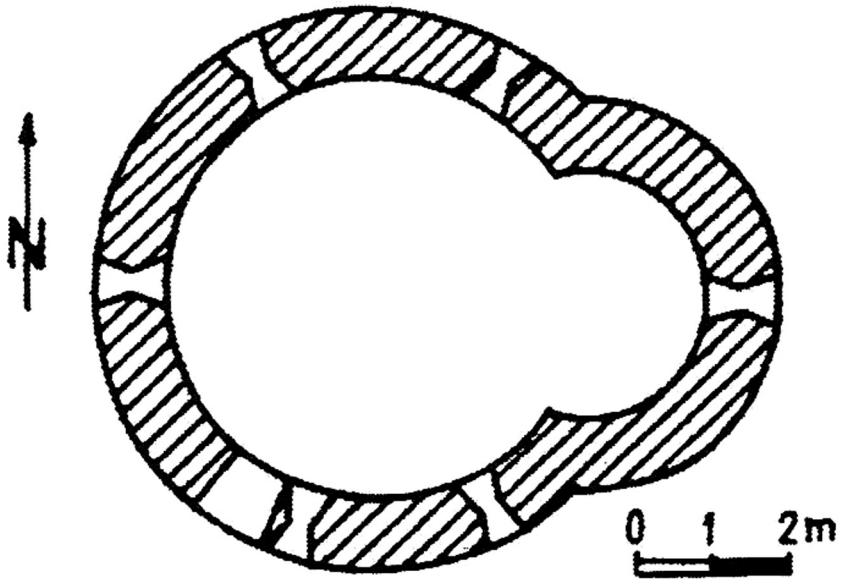

Fig. 4 a. Geoagiu de Jos – The groundplan of the rotunda (Popa 2014, 342, fig. 7).

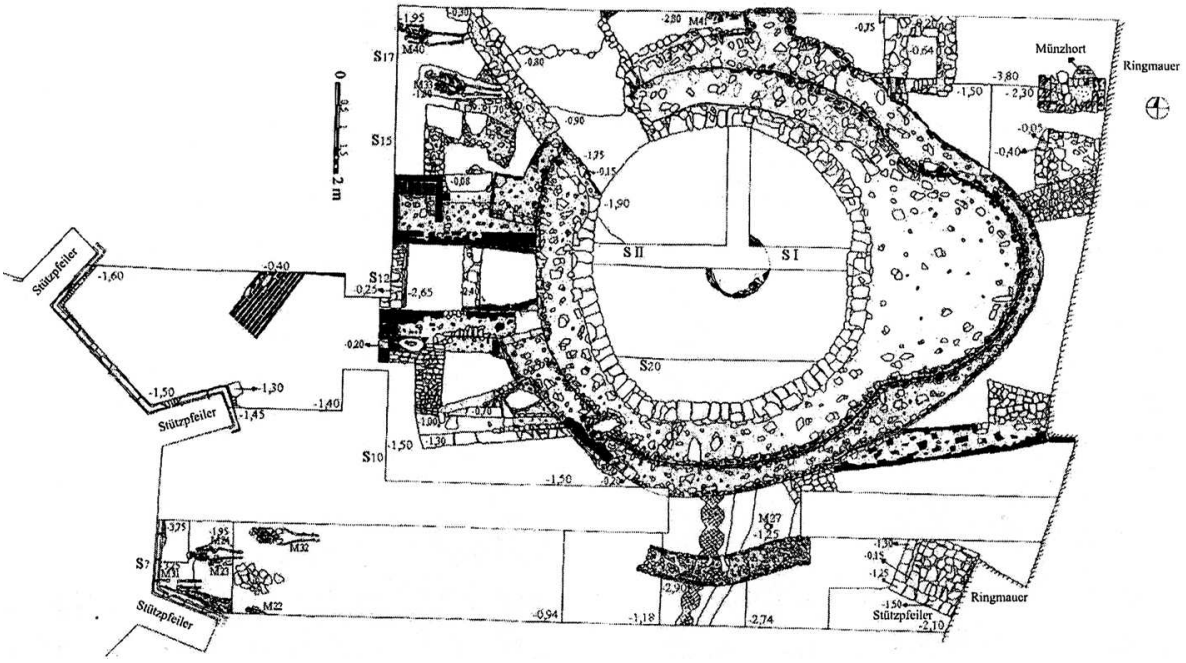

Fig. 4 b. Orăștie – The groundplan of the rotunda (Pinter 2003, 278, Pl. I).

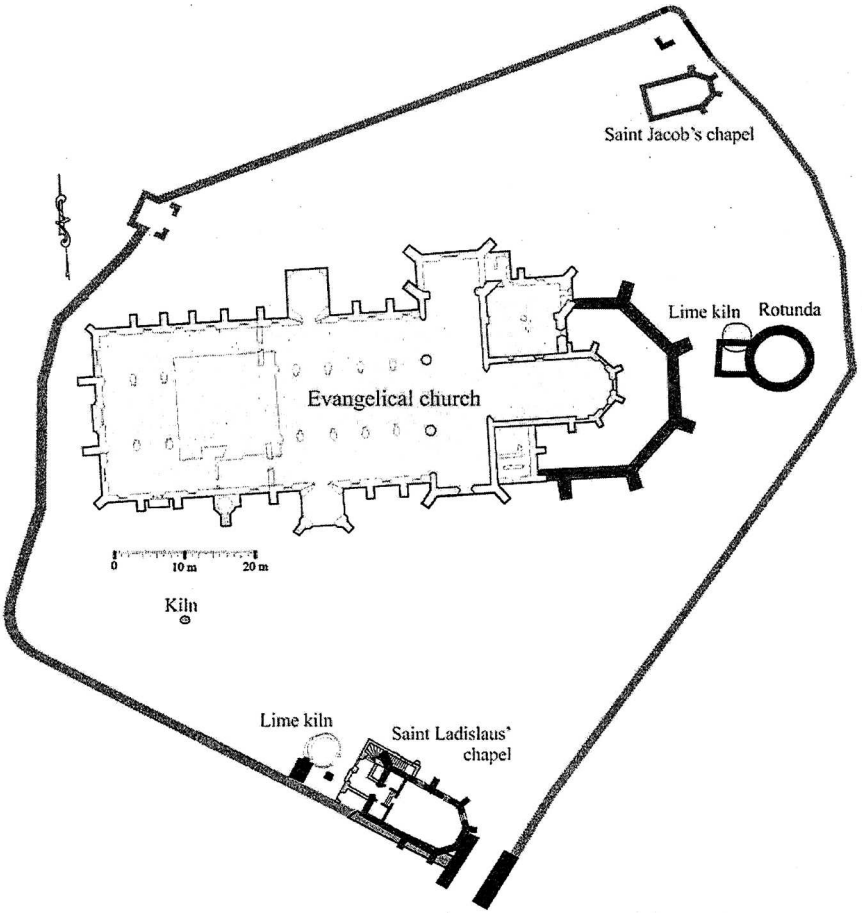

Fig. 5 a. Sibiu – General plan of the Huet Square (Marcu Istrate *et alii* 2015, 32, fig. II, 7).

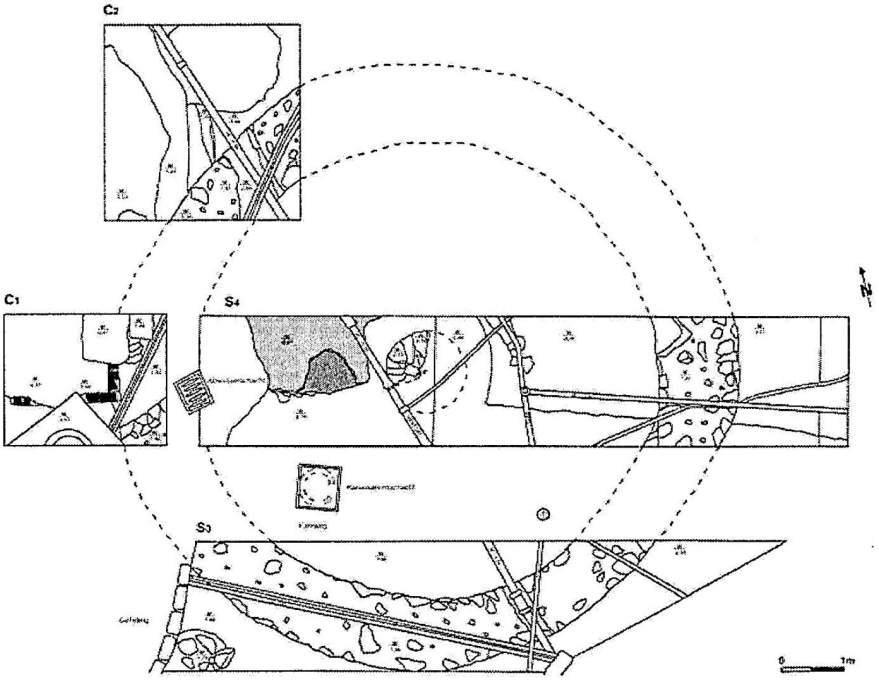

Fig. 5 b. Sibiu – The groundplan of the rotunda (Pinter 2012, 54, fig. 8).

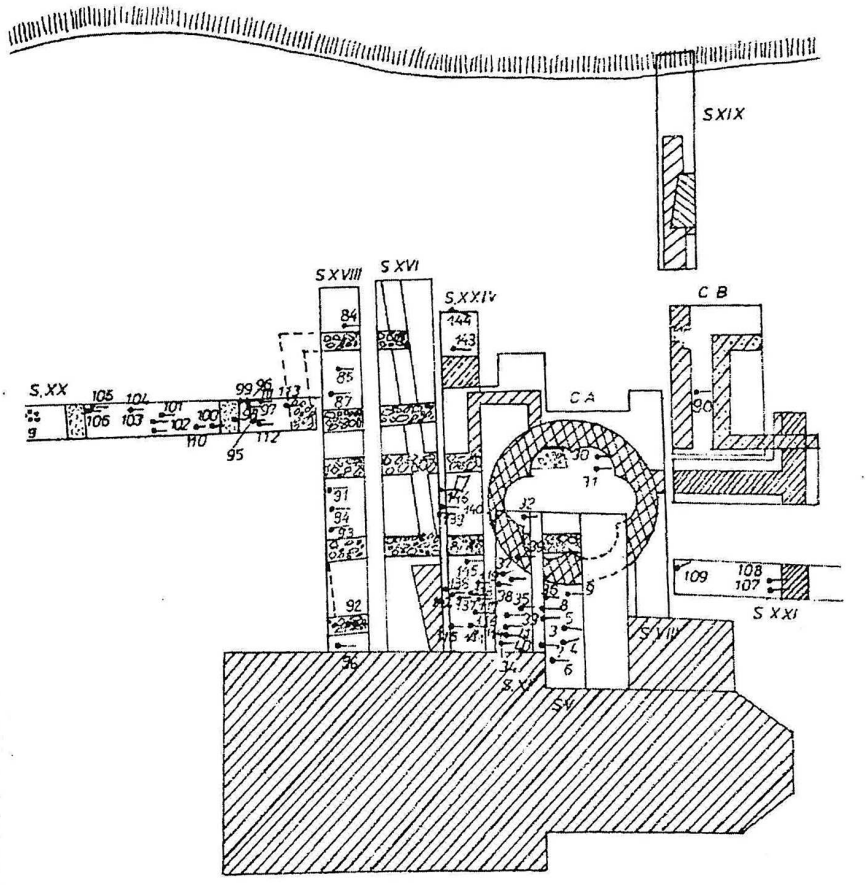

Fig. 6 a. Cluj-Mănăștur – General plan of the site (Iambor and Matei 1983, 618, Pl. I).

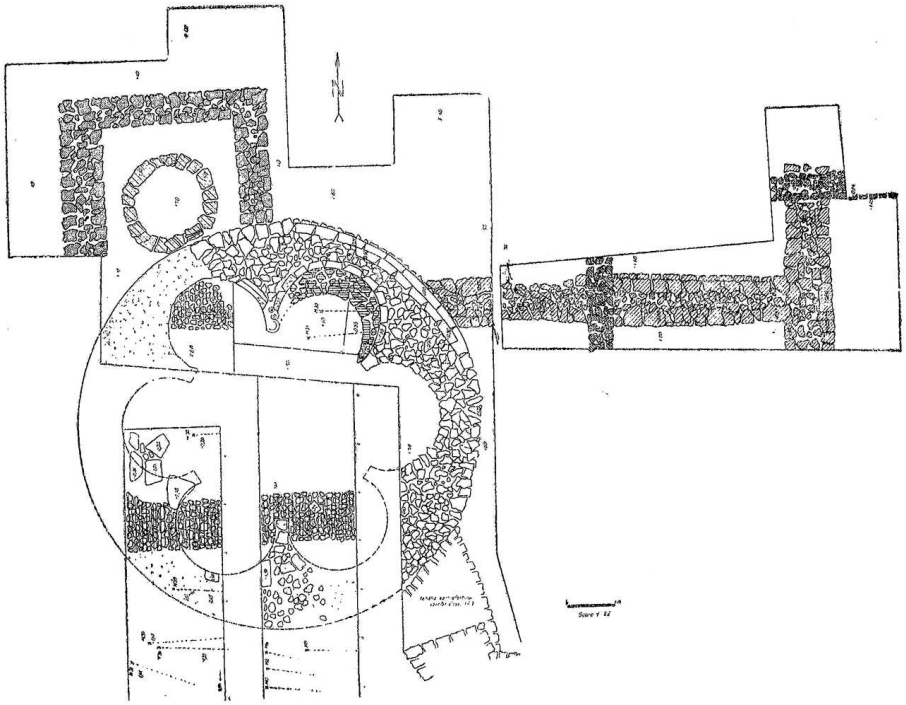

Fig. 6 b. Cluj-Mănăștur – The groundplan of the rotunda (Iambor and Matei 1979, 618, Pl. IX).

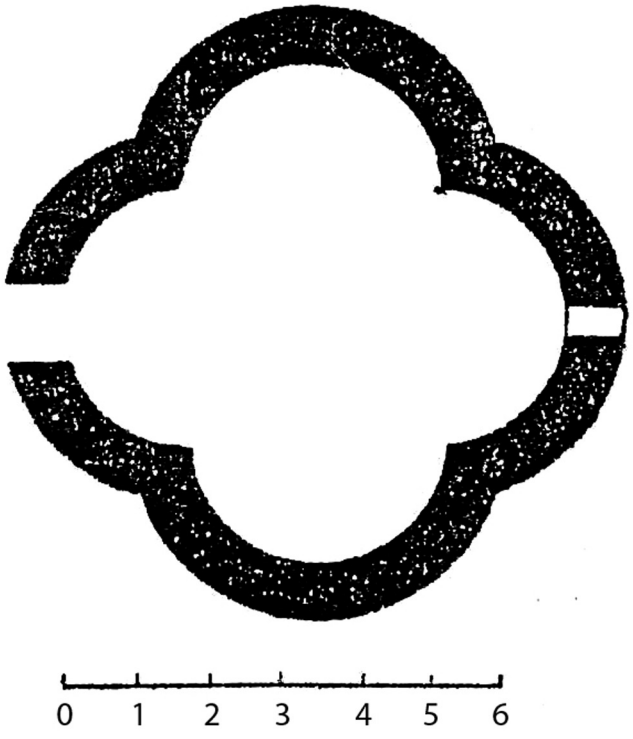

Fig. 7 a. Odorheiul-Seciuesc – The groundplan of the four-lobed church (Petrov 1996a, 59, fig 12).

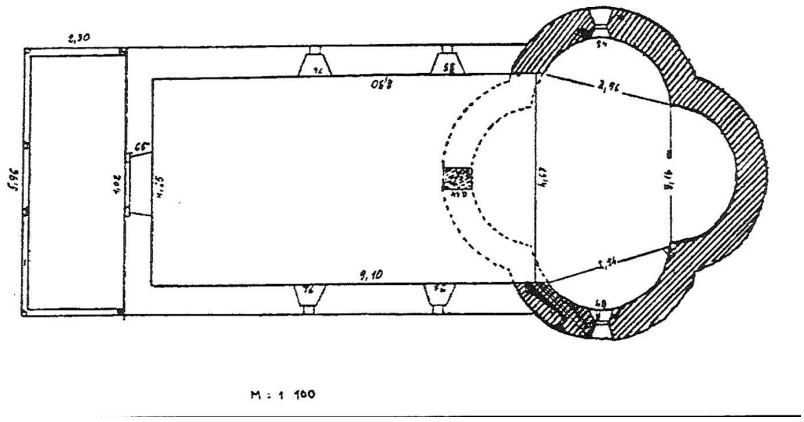

Fig. 7 b. Gheorghieni – The groundplan of the four-lobed church (Szakács 2012, 34, fig. 14).

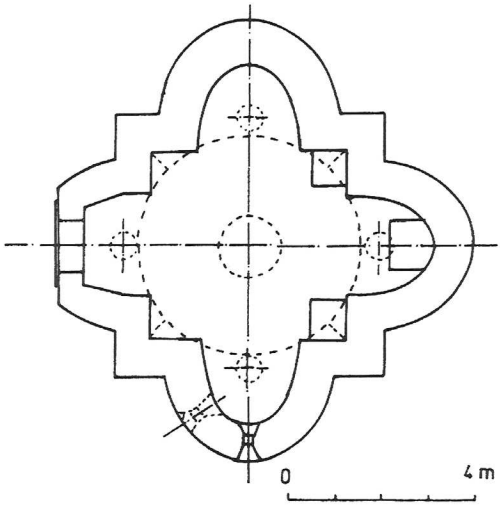

Fig. 8 a. Sânzieni – The groundplan of the four lobed church (Szakács 2012, 34, fig. 15).

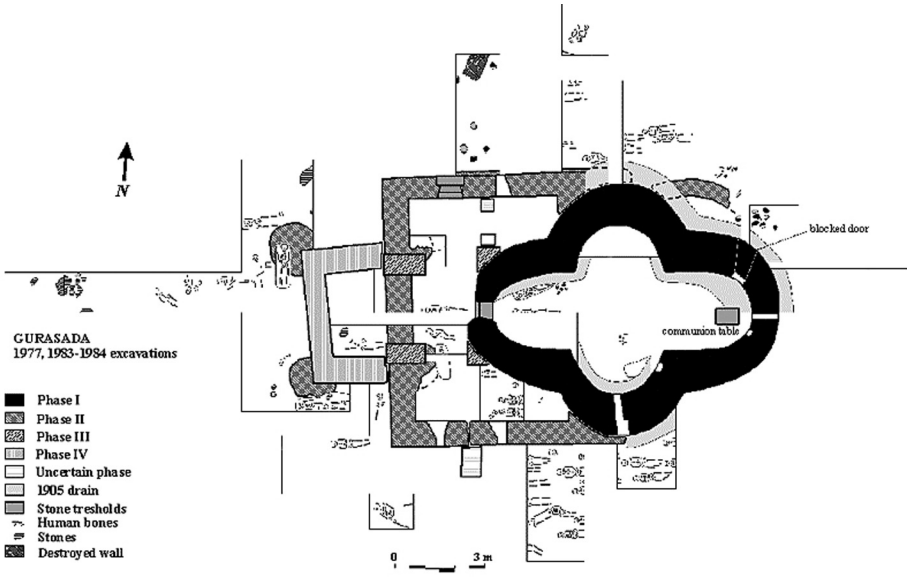

Fig. 8 b. Gurasada – The groundplan of the four-lobed church (Motzoi-Chicideanu, fig. 1).

THE INSCRIPTIONS ON THE TOMB OF EVANGELIS ZAPPAS IN BROȘTENI (ROMANIA) (a Balcanian benefactor)

Aris Tsaravopoulos*

Abstract: This paper is based on the presentation on the same subject "Evangelis and Konstantinos Zappas, the Balcanians" given at the Lyceum Zappeion in Constantinople in April 2018. The presentation was organized by the Romanian Archaeological Institute at Athens and the Zappeion Lyceum in Constantinople. In the paper I stress the funerary inscriptions on the tomb of Zappas in Broșteni, where its Balcanian non-nationalistic ideology can be noted.

Evangelis Zappas was born in 1800 in the village of Labovo (Labóva in Albanian) in the current county of Gjirokaster (Argyrokastro) in *Southern Albania* or *Northern Epirus* (Fig. 1). In the 18th c. the village belonged to the Tepelenë province, the fatherland of Ali Pasha, the "despot" of Epirus and Albania.

The village of Labovo, with the name of Slavic resonance, was inhabited by Vlachs, Greeks, few Slavs and Albanians, all Greek-Orthodox. All Orthodox believers belonged to the Rum (Roman-Greek) Milet and were considered Greeks (Rum=Romans) by the Ottoman authorities.

His father, Vasileios Zappas was a wealthy merchant,[1] a great personality in his region and his mother was Sotiria Mexi, the daughter of a rich landowner and sister of the doctor in the Ali Pashas' palace in Ioannena. At the age of thirteen, Evangelis was taken by his uncle to the court of Ali Pasha, firstly as doctor assistant and later he became member of the personal guard of Pasha. At that time the Epirus despot had begun to question his dependence from the *Sublime Porte* and after he was murdered by Choursit Pasha, who was sent by the sultan, Zappas entered the Greek revolutionary group of Markos Botsaris. He became officer in the Greek revolutionary army, administrator of the region of Salona (modern Amfissa, near Delphi) and, after the end of the war, the land properties he owned in the still-under-Ottoman-occupation Epirus were seized. He refused the small propriety offered by the newly formed Greek State[2] and moved to Wallachia, in the region of Ialomița, where very likely his father had commercial connections. He borrowed land in the Broșteni village, and due to his very progressive ideas in land and products administration, in very short time, he became one of the richest landowners of Wallachia. His participation in the Greek revolution seems to have left signs on his general behavior, which was influenced by Riga's[3] social and multinational revolutionary ideas. This can be seen on the funerary inscriptions on his tomb, where the non-nationalistic belief of Zappas is clear.

His tomb is located in Broșteni, close to the church he built in the middle of the 19th c. (Fig. 2). In the same area there are the tombs of his brothers Anastasios (1793-1874) and Athanasios (1810-1880). Evangelis, born in 1800, died before his brothers, in 1865, leaving as administrator of his fortune and continuator of his social vision his cousin Konstantinos Zappas (1813-1895).

On the tomb of his older brother, Athanasios, the "Hellenized" name of Broșteni is mentioned as *Vrosthenion* (Βροσθένιον).[4] (Fig. 3).

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[1] Considering the years of birth of his sons (Anastasios 1793, Evangelos 1800 and Athanasios 1810), which were dispersed at distances from seven to ten years, it seems that his commercial activity was at long distances from Labovo, as it was common to many merchants from Epirus in the 18th and 19th centuries. The later immigration of Evangelos in Wallachia may be an indication that his father had some relations there.

[2] The newly formed Greek state offered land proprieties to all the fighters for its independence.

[3] Rigas Velestinlis (or Feraios), the revolutionary name of Antonios Kyriatzis (1757 – 24.6.1798). Born in Velestino (ancient city of Ferae) and active in Constantinople, Bucharest and Vienna, he developed revolutionary ideas and wrote in 1797 the revolutionary song *Thourios* in order to revolt the people under Ottoman rule. Thourios was part of his political leaflet "A New Political Administration of the inhabitants of Roumeli, Asia Minor, the Mediterranean Islands and Vlachobogdania". He was strangled by the Ottomans in Belgrade in 1798.

[4] "*ἐνθαδε κεῖται / ὁ ἁμαρτωλὸς δοῦλος τοῦ Θεοῦ / Ἀθανάσιος Ζάππας / γεννηθεῖς ἐν Λαμπόβῳ τῆς Ἠπείρου / τῷ 1810 / ἀποθανῶν ἐν Βροσθενίῳ / τῷ 1880*". (Here lies / the sinful servant of God / Athanasios Zappas / born in Labovo of Epirus / in 1810 / dead in Vrosthenio / in 1880/

The inscriptions on Evangelis' tomb, one in Greek and one in Roumanian, show his love for his village Labovo, for the village and the country where he lived half of his life, Broșteni and Romania, and for the city and the country whose culture he shared, Athens and Greece, for the freedom of which he fought for many years.

The tomb (Fig. 4) has the following Greek inscription on the horizontal covering marble stone with the maeander around and the cross with the Angels:

Ἐνθάδε κεῖται	Here lies
ὁ ἁμαρτωλὸς δοῦλος τοῦ θεοῦ	the sinful servant of God
κτίτωρ αὐτῆς τῆς ἐκκλησίας	who built this church
ΕΥΑΓΓΕΛΗΣ ΖΑΠΠΑΣ	EVANGELIS ZAPPAS
ἀποθανὼν τὸ ἔτος 1865	who died in the year 1865
Ἰουνίου 19	June 19

On the frontal side of the vertical stone, the *stele* (Fig. 5), there is a profile of Evangelis Zappas over cross-linkedarms and the crown of the Greek kingdom underneath.[5] On its back and left side there are two inscriptions, one in Greek, on the back side, and one in Romanian, on the left side. They are not copies of the same text, although they have common parts. In both inscriptions is mentioned his will to be buried in Broșteni, his skull to be transported and buried in Athens and his bones in his village, Labovo.

The Greek inscription, in ancient Greek, is transcribed below (Fig. 6):

Ἄνδρα οὐ πέτρα τεκμαίρει
ὅ γαρ τύμβος τῇ κείνου δόξῃ οὔχ ὀνήρ
τη σήματος περιβάλλεται
τοῦτ' ἐκ πάντων τῷδε τῷ τάφῳ τύχη
ἔνειμε ξένων ὡς οὗχ εἷς ἑνὸς ἐστιν
ἀλλὰ τρις<ς> οἱ ἔχουσιν ἕνα
σάρκας μὲν ὁδὶ ἐν ἀλλοδαπῇ γαίᾳ
κεφαλὴν δ' ἄλλος ἐν ἱερῷ ἄστει Ἀθήνης
χὸ τρίτος ἐν Λαμπόβῳ ὀστέα κουφὰ
Εὐαγγέλου Ζάππα κείνου
οὗ τοὔνομα μέγ' ἀν' Ἑλλάδα πᾶσαν φέρεται
εὖ γὰρ ἄσβεστον κλέος ἑαυτῷ περισθεὶς
ἐν προμάχοις πατρίδα ἱερὰν ἀπ' αἰσχροῦ ζυγοῦ
ῥυόμενος οὐκ ἠρκέσθη
ἀλλὰ τῆς γειναμένης ἄπὸ τλησίμοχθος
ἀφενὸν οὐ κοινὸν θησαυρίσας.
Ἕλλησι Βασιλικῶς ἀρετῆς ἔστησ' ἀγῶνα
καλόν τε καὶ τέχνης
Ἴφιτε, τὸ σὸν κλέος οὐκ ἄφθιτον μόνον
Ἑλλὰς κατ' ἐκ τοῦ
Ζάππα
Ὀλύμπια ἔχει

The man is not glorified by the monument stone.

[5] It is known that Zappas had a correspondence with the royal government of Greece in order to constitute a modern continuation of the ancient Olympic Games.

Because the tomb takes the glory through him
and not the man through the brilliance of the monument;
From all the foreigners fate bewstowed it upon him.
He does not lie in one tomb
but in three tombs is buried one (man).
His corpse is buried in this tomb in foreign land
his head (is buried) in another in the holy city of Athens
and a third, in Labovo, has the light bones
of Evangelos Zappas, the one,
whose name sounds great everywhere in Greece,
because he was not satisfied by the endless glory he won
fighting in order to free his fatherland from
the outrageous slavery
but far from it (from the fatherland), tireless
(he) treasured not by common wealth
and to the Greeks offered rich games
with virtue and art.
Iphitos,[6] thanks to Zappas,
Greece has not only you and
your endless glory
the Olympiads.[7]

The Romanian inscription, in a language of the middle of the 19th c., and perhaps written by someone who did not known the language very well, does not mention the participation of Zappas in the Greek independence war, either his attempts to revive the Olympic Games, but stresses instead the love he had for the three countries, where he lived (Fig. 7).

Petra nu represinta pe barba
tului fiindu că mormentulu
însușiaste gloria barbatului
iar nici de cum barbatulu a
cea allu mormentulu.
Fortuna acesta între celle l
alte tote au aratatu și miraco
lulu la acestu mormentu că u
nulu nu se pote coprinde intru-
nulu, dar trei cuprinde unulu.
Astu felu dar în acestu mormen
tu din acesta bella terra Roma
nie se coprinde corpulu
iar în cellu de la sacra cetate
Atene capulu
și într' allu treile din patria
sa natala Labovu al Epiru-
lui useorele ose alle cestui
Evangelle Zappa.

[6] Iphitos, king of Elis, restored the Olympic Games and declared sacred truce for the duration of the game.
[7] Zappas had the initiative and financed the revival of the Olympic Games in 1856 (see infra).

Mari și gloriose faptele și re-
cunostința ta eroule barbate căci
nu numai stareați, dar și corpilu
teu ai dorit sa esiste în cate
trele iubite țerri în care ai
viețuitu.

The stone does not represent the
man as the tomb
itself is the glory of the man
and in no way the man takes
that (the glory) of the tomb.
This fate among all the others
had shown the miracle
of this tomb as it is
not contained in one, but three
(tombs) contain one (dead).
In this way in this tomb
in this beautiful country of Romania
is contained the body,
in that of the holy city
of Athens the head
and in a third (tomb) in his
fatherland Labovo in Epirus
the light bones of this
Evangelos Zappas.
Great and glorious your works and
the recognition of you hero man
as you, not only your wealth,[8] but
also your body you wanted to be
in the three beloved countries in which
you lived.

It is clear the message of these two inscriptions shows his love for the "countries", where he lived and which he had helped with his great fortune. During the heavy famine in 1845-46, after a prolonged drought, he offered large quantities of wheat to the inhabitants of Bucharest and other cities of Wallachia and, in 1847 due to his contribution to the reconstruction of Bucharest – after a big fire that destroyed the city – he was accepted into the high class of landowners of Wallachia (boier). In 1860, after the unification of the two Romanian voivodates, Wallachia and Moldavia, he donated to the newborn Romanian State 5,000 austrian ducats for the publication of the "Lexicon and Grammar of the Romanian Language" (Fig. 8, 9) and the foundation of the "Romanian Literary Society" that became the "Romanian Academy", and he also gave an amount for the construction of a concert hall, which later became the "Romanian Atheneum". In Broșteni he created a school which, today, is named "Evangelie Zappas" (Fig. 10). In Labovo and in the neighboring villages Zappas and later his cousin Konstantinos founded many general and professional schools. And in Athens from 1856 he took the initiative for the revival of the Olympic Games. He financed the Pre-Olympic Games in Athens, which took place in 1859, in 1870 and in 1875. The participants, as in the ancient Greek world, were athlets from Greece and the Ottoman Empire. He financed the building of the new Olympic stadium and the Special building for hosting the participanting athletes, the Zappeion Megaron (Fig. 11).This building was used for the fencing games at the first modern Olympic Games in 1896 and as a press conference center during the 2004 Olympiad. In the same building is kept the head of Evangelis Zappas, according to his last will (Fig. 12).

[8] Is a reference that all his wealth has been given to benefactions in these three countries.

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David C. Young, *The Modern Olympics – A Struggle for Revival* by, The Johns Hopkins University Press,1996.
David C. Young, *A Brief History of the Modern Olympic Games*, Blackwell Publishing, 2004.
Ζάππειο 1888-1988, in Greek, Επιτροπή Ολυμπίων και Κληροδοτημάτων, for the centenary of the Zappeion Megaron.

Fig. 1. The vilage of Labovo in the mountains of southern Albania.

Fig. 2. Broșteni, Romania. View of Zappas' church from the ruins of his palace.

Fig. 3. Broșteni, Romania. The tomb of Zappas' brother, Athanasios.

Fig. 4. Broșteni, Romania. The tomb of Evangelos Zappas.

Fig. 5. Broșteni, Romania. The portrait of E. Zappas on the tomb.

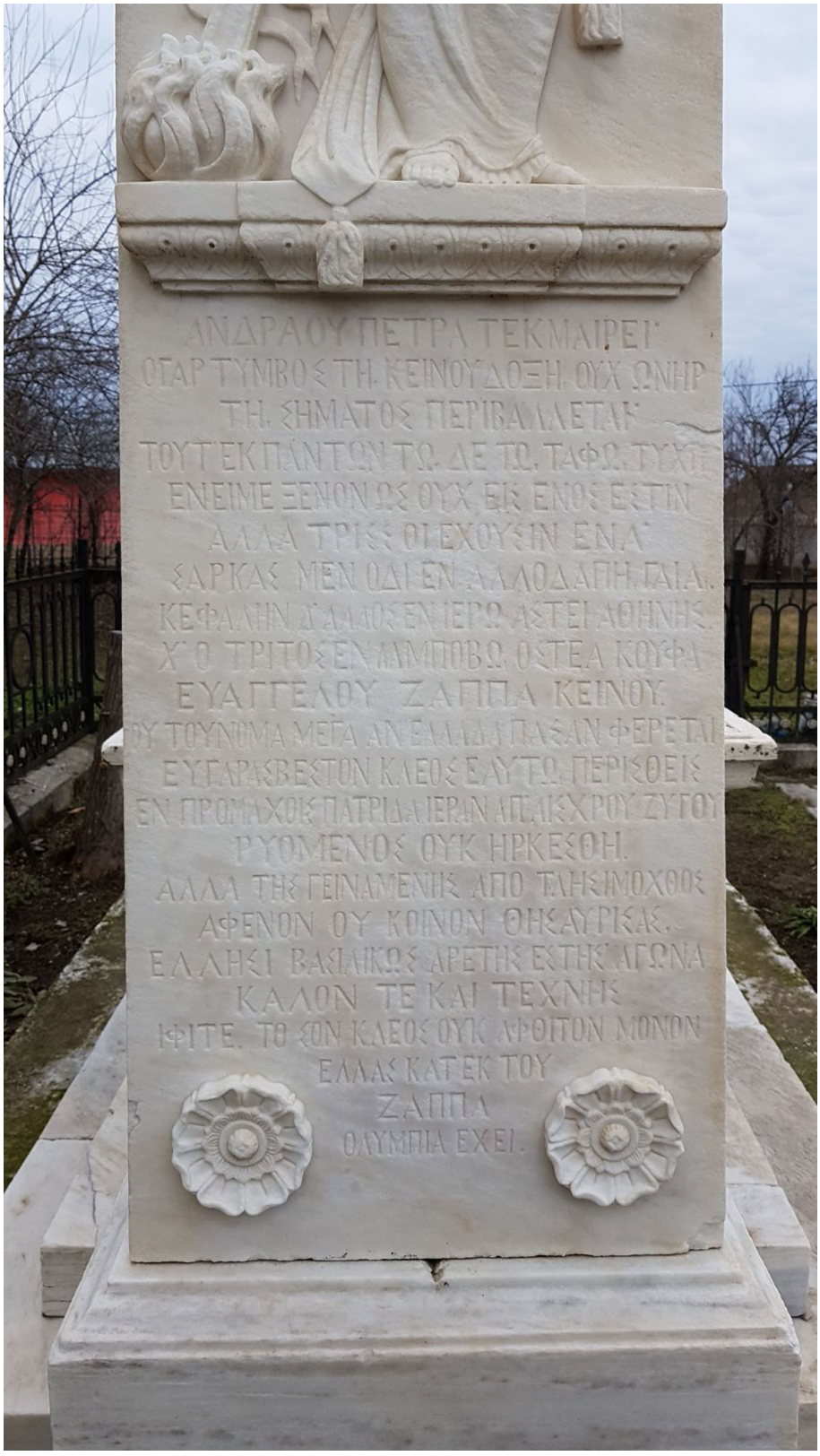


Fig. 6. Broșteni, Romania. The Greek inscription on the tomb of E. Zappas.

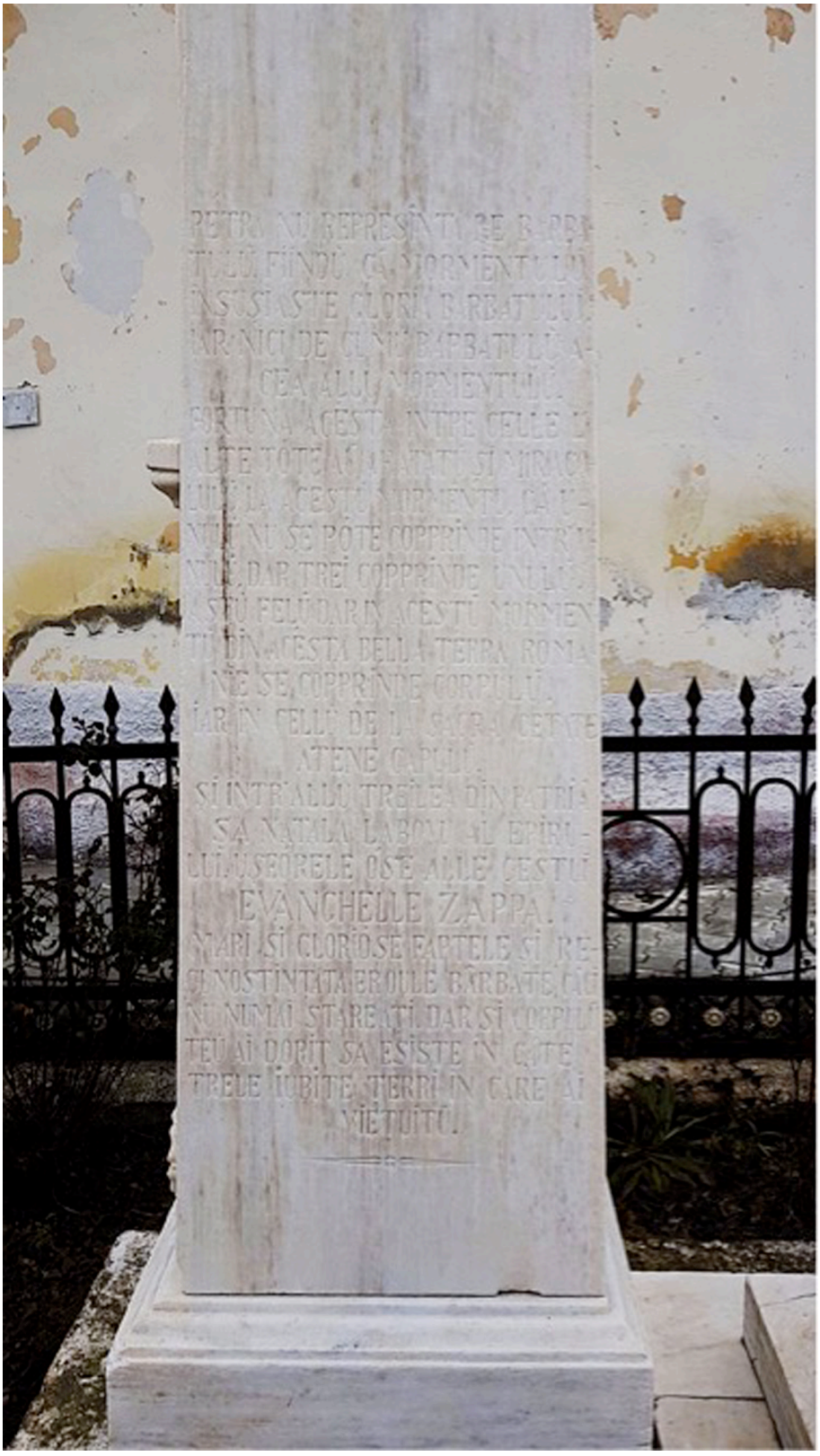
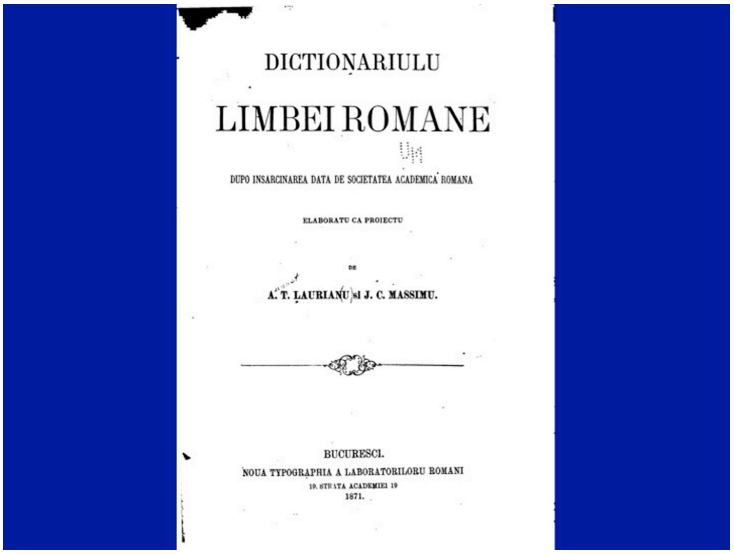


Fig. 7. Broșteni, Romania. The Romanian inscription on the tomb of E. Zappas.



DICTIONARIULU

LIMBEI ROMANE

DUPO INSARCINAREA DATA DE SOCIETATEA ACADEMICA ROMANA

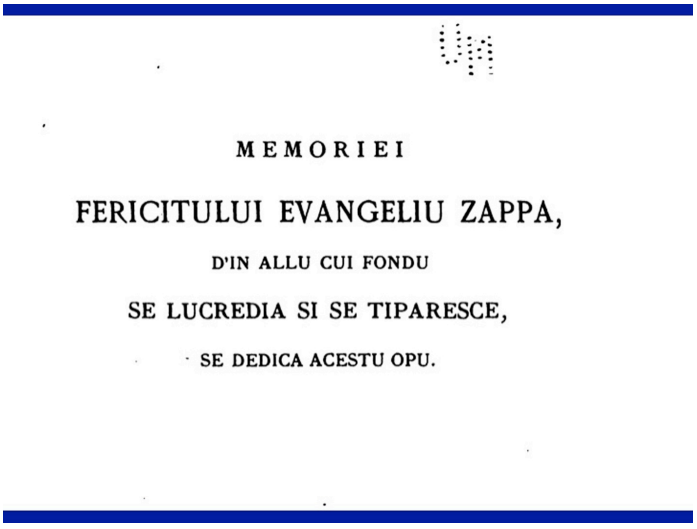
ELABORATU CA PROIECTU

DE

A. T. LAURIANU SI J. C. MASSIMU.

BUCURESCI.
NOUA TYPOGRAPHIA A LABORATORILORU ROMANI
10, STRADA ACADEMIEI 10
1871.

Fig. 8. The front page of the first Lexicon of Romanian Language.



MEMORIEI

FERICITULUI EVANGELIU ZAPPA,

D'IN ALLU CUI FONDU

SE LUCREDIA SI SE TIPARESCE,

SE DEDICA ACESTU OPU.

Fig. 9. The dedication to E. Zappas in the Lexicon.

Fig. 10. Broșteni, Romania. Zappas' School.

Fig. 11. Athens. The Zappeion Megaron.

Fig. 12. Athens. The inscription on the wall where the head of Evangelis Zappas is inserted. “Here lies the head of Evangelis Zappas”.

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