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TRANSYLVANIAN PATRIMONY IN THE EUROPEAN CONTEXT

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Content

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OBSERVATIONS CONCERNING A ROMAN BRONZE IMPORT DISCOVERED IN THE DACIAN FORTRESS FROM PIATRA NEAMȚ-*BÂTCA DOAMNEI*

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Keywords: *Dacian era, Piatra Neamț type cup, Roman import, metallographic analysis, Bâtca Doamnei Fortress*
Synopsis. *This article contains a series of observations regarding a bronze cup of Italian provenance, discovered in the Dacian station at Piatra Neamț-Bâtca Doamnei during the archaeological campaign of 1958. The terminological importance of this piece comes from the fact that a new morphological type for bitronconic cups was defined around it, with few like it, either whole or fragments, being documented in pre-Roman Dacia. The stratigraphic context of the discovery is being analysed again (Eastern terrace, section J, dwelling, -20 cm) while the morphological descriptions of the object and its decorations is being re-evaluated. A hefty chapter is dedicated to the artefact's chronology, also using the results of triage and correspondence analysis. In our opinion, the archaeological and, implicitly, the chronological context of this object is tied to the second half of the Ist Century BC, specifically its end.*

The subject of this study was motivated by the possibility of detailed study on metal artefacts, discovered through archaeology, from the important Dacian station at Piatra Neamț-*Bâtca Doamnei* (fig. 1) (With due thanks to our colleagues who contributed, through analyses and bibliographical support, to the emergence of this study: dr. Dragoş Diaconescu, dr. Gh. Dumitroaia, dr. Aurel Rustoiu, dr. Iosif Vasile Ferencz).

Without insisting in this context on general information regarding the site (Gostar 1969, 9-10; Buzilă 1970, 237-238), we stopped for now on a single piece, named initially *oenochoe of gilded bronze,* discovered during the second campaign of systematic research, coordinated by Constantin Matasă in 1958 (Matasă *et al.* 1961, 339, 342, fig. 3/7; the *gilded* aspect for bronze cups was already relevant in the literature decades ago, through diverse discoveries, e.g. F. Baratte *et al*. 1984). The photography of piece was copied in diverse other publications with the description of *gilded bronze vessel* (Gostar 1965, fig. 5/7; Gostar 1969, p. 21, fig. 34; Cucoş 1970, fig. 15/6; Berciu 1972, 666; Glodariu 1974, pl. XLV/B24/b; Pippidi 1976, 94) and considered an import (Greek or Roman). A. Buzilă deserves the credit for correctly describing, through metallographic analysis, the nature of the object (*bronze vessel*) (Buzilă 1985, 719-720) and restoring it according to the most modern standards of the 80's (Buzilă 1985, 719-723). Although not particularly pretentious, nor part of

any deposit or tomb, and a rarity among Dacian finds in the Moldavian Sub-Carpathians (Carpathian foothills) the artefact can constitute a potential chronological anchor for dating a stage of the fortress's functionality, parallel to the possibility of completing some economical, commercial and aesthetic information, synthesized by Prof. I. Glodariu in his fundamental work dedicated to the commercial relations between Dacia and the Hellenistic and Roman worlds (Glodariu 1974, 52-53) and completed by various later studies (Sanie 1981, 56, nr. 1, pl. 10/1a-c, pl. 56/1; Beldiman 1988, 77-78, nr. 5, fig. 3/5).

Methodology

The first point of analysis is trying to thoroughly reconstitute the archaeological context of the piece's discovery, with the problem of its restoration as a secondary concern. The second point, the morphometric/descriptive, reflects the dimensions of the piece, the literature's data being completed with novel ones and observations on the description of all the components of the piece as well as the data on utilized paleotechnology, visible to the naked eye. The next problem was to find the vessel's

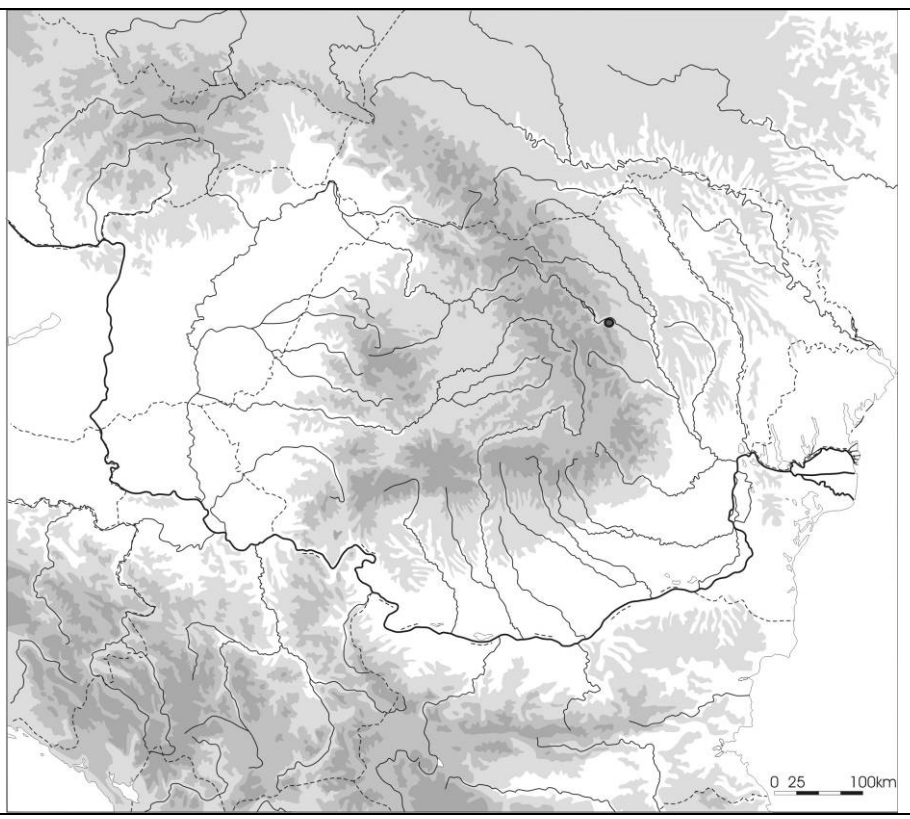

Fig. 1. Geographic location of the Piatra Neamț-*Bâtca Doamnei* site.

typological and chronological fit. Established typologies were used (ex. Eggers, Boube-Piccot, Rustoiu) and for the dating we tried to account for the site's chronology, the general data of the discovery's context as well as the internal chronology of the piece. The use and functionality of the piece constitutes the fourth point of analysis, with an eye to the route data for similar pieces, doubled with historic information on this type of artefact. The last methodological concern is the need to publish and interpret the metallographical data and integrating them in national and European databases.

The piece's archaeological context.

Turning to the initially published data (Matasă *et al*. 1961, 339, 342, fig. 3/7) and consulting the valuable documentation at the Piatra Neamț Museum (Bîtca Doamnei file, #4875), the stratigraphical position of the piece was clarified. It was found in the southern end of the eastern terrace, in the south of section J, depth of -20 cm, very close to a compact mass of burnt adobe considered by the finders to be the remains of a burned construction, found at -20 to -25 cm (it also occupied the eastern half of section I, with the rest of the adobe mass going under the eastern profile of these sections).

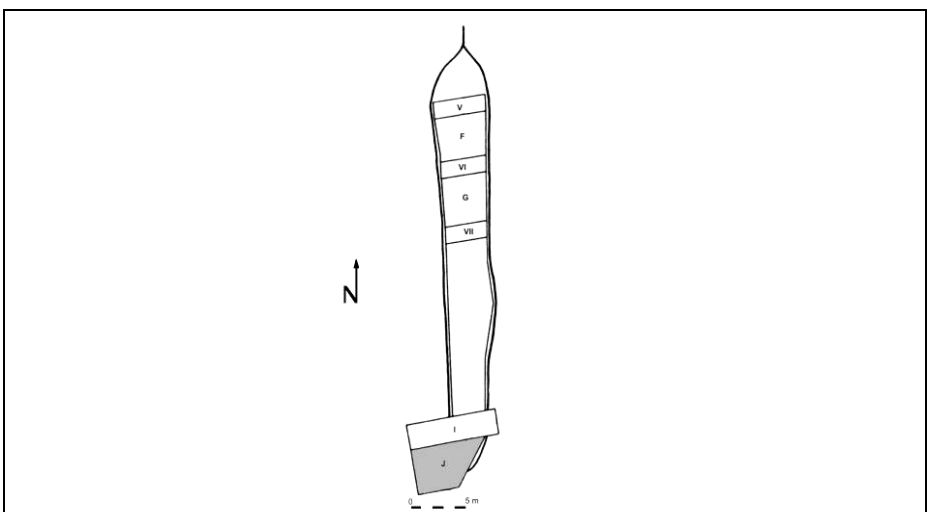

Fig. 2. Archaeological dig plan (cited from Matasă et al. 1961, processed), with the eastern terrace's southern end (section J) marked.

A. Buzilă includes it in the dwelling's inventory, to which, considering the primary data, we agree, pending the full processing and publication of the complex's inventory. Regarding the piece's position, it was discovered on its side and during excavation its bottom was broken, the handle came off and its right arm was broken. The rough texture of the metal is ascribed to the high temperatures generated by the fire (Buzilă 1985, 719-720), with the corrosive agents working mostly on the upper

side of the piece, relative to its initial position, identified archaeologically. We have no data on where the vessel's mouth was facing or any contents it might have had, with the bronze surface being marked at the time of discovery by large surfaces of varying degrees of corrosion.

The piece's morphology and description.

The vessel is bitronconic, with the a shorter lower cone (1/3 of the total height), slightly pronounced shoulder, no neck and the rim flared outward in two stages at different angles (the edge of the rim has a slightly wavy aspect), a slightly convex base, with an attached handle reaching slightly above the rim, 8.5 cm high (fig. 3-5).

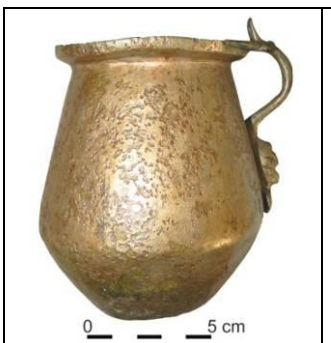

Fig. 3. Piatra Neamț-*Bâtca Doamnei*. The bronze vessel

Fig. 4. Piatra Neamț-*Bâtca Doamnei*. The bronze vessel

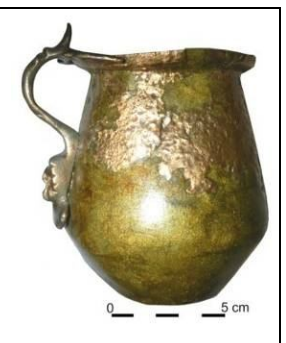

Fig. 5. Piatra Neamț-*Bâtca Doamnei*. The bronze vessel

The piece's size is as follows: height of the container, 10.5 cm, diameters of the slightly oval mouth, 8.1 and 7.8 cm (this results from a later mechanical deformation of the upper part of the vessel, around the handle, due to the abandonment of the piece's context or during excavation, manipulation and storage), maximum diameter, 9.1 cm, base's diameter, 5.1 cm, handle height, 8.5 cm, handle arms' span, 6.1 cm, total piece height 11.7 cm.

The handle, which was cast, is highly arced, with a round section (fig. 6-7) and welded to the rim by a part-circle attachment and to the vessel's thickest segment by an anthropomorphic representation, with no macroscopic traces of piercing the vessel's wall to affix the handle.

Fig. 6. Piatra Neamț-*Bâtca Doamnei*. The handle of the bronze vessel

Fig. 7. Piatra Neamț-*Bâtca Doamnei*. The bronze vessel, viewed from above.

Regarding the decorations on the upper part of the torch, we notice that the left arm (perpendicular view) only has a single incised line (fig. 8). The opposite arm is decorated, near its end, with 12 parallel lines and one more perpendicular to these, with two twinned half-circles. Two small sockets with a sinuous contour, near this decorative element, can be tied to the casting process and do not represent, in our opinion, part of the handle's decor. Closer to the button, another superficial line, parallel to the rim, can be spotted with some difficulty (fig. 9).

Fig. 8. Piatra Neamț-*Bâtca Doamnei*. Handle detail: left arm

Fig. 9. Piatra Neamț-*Bâtca Doamnei*. Handle detail: right arm

The top of the torch is decorated with a vertical button, slightly arced, with two small elongated lumps (fig. 6), playing a part in handling the object and representing the stylized head and neck of a swan. The lower end of the handle holds a human

bust, lightly sketched, with an oval face and beard (32 mm tall), in the Hellenistic style (fig. 10).

Fig. 10. Piatra Neamț-*Bâtca Doamnei*. Detail: lower handle

This relief represents a man with an expressively contoured bare chest, a well-marked and detailed chin with a short beard, suggested by the six vertical and superficial incisions (fig. 13). The slightly hooked nose is represented realistically and the deep-set eyes accentuate the figure's sober countenance. The hairstyle (our opinion)(fig. 11, 12) or folds of the cone-tipped hood, according to others (Sanie 1981, 56), is marked by eight main incisions, slightly oblique and placed asymmetrically, with a further three short incisions on the right of the figure to accentuate this detail (fig. 11). Macroscopic observations have found no traces of welding small metal supports to better fix handle to vessel. The vessel's volume is 350 ml.

Fig. 11. Piatra Neamț-*Bâtca Doamnei*. Right side detail (lower handle)

Fig. 12. Piatra Neamț-*Bâtca Doamnei*. Left side detail (lower handle)

The vessel is made of bronze, 1 mm thick in its body and 2 mm thick at the base. It was hammered into shape and finished with abrasive materials and polishing on a fast-spinning wheel (*lathe*) (inv. #3194). The remains of these last two processes are visible on the upper neck (a slightly deeper line)(fig. 14) and in the concave bottom of the vessel as a centring point and four superficial concentric circles (fig. 15). Initially, thanks to the polish, the vessel was brilliant in aspect. This is still partly seen on the small parts of the vessels that have escaped corrosion (Buzilă 1985, 720).

Fig. 13. Piatra Neamț-*Bâtca Doamnei*. Beard finishing detail

Fig. 14. Finishing and polish traces (vessel's neck)

This artefact documents numerous mechanical stages of the technological process (forging (?), cutting, polishing, bending, deformation), as well as casting and decoration techniques, through observation by naked eye and magnifying glass. No traces or areas of obvious use can be seen macroscopically, which would suggest long use (the sum of technological observations on this piece will be the object of a more extensive study, yet to be published, treating bitronconic bronzeware across Dacian territory).

Fig. 15. Finishing and polishing traces (base of the vessel)

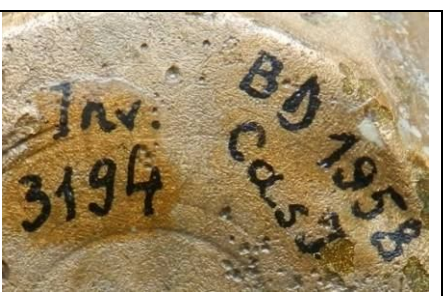

Fig. 16. Piatra Neamţ-*Bâtca Doamnei*.
The bronze vessel. Identification data on its base

The graphical illustration of the bronze vessel according to all European regulations was a necessity, given the piece's importance and to overcome certain obstacles to the publishing of black and white photos of it (fig. 17, 18).

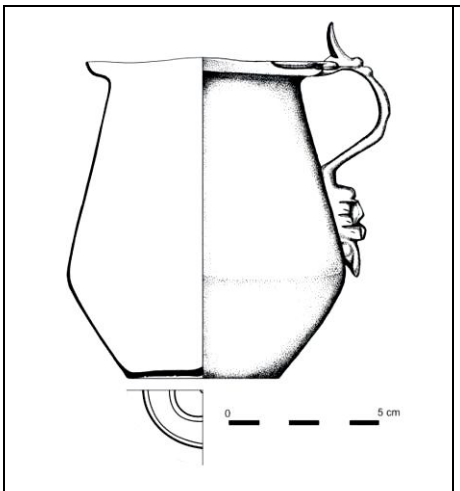

Fig. 17. Piatra Neamț-*Bâtca Doamnei*. The bronze vessel. Drawing by Silvia Trăistariu

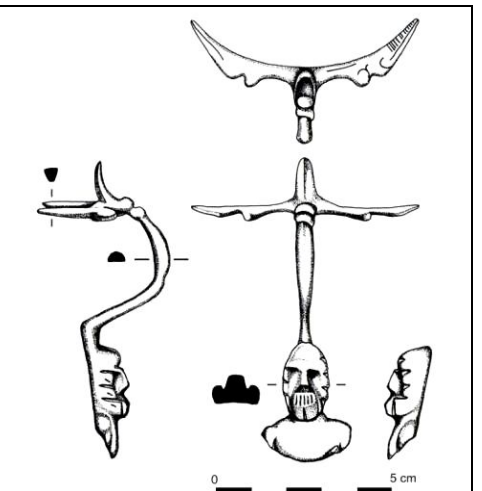

Fig. 18. Piatra Neamț-*Bâtca Doamnei*. The bronze vessel's handle. Drawing by Silvia Trăistariu

Typology and chronology of the cup

Though typological orderings and proposals for functionality have emerged in Romanian archaeological literature for many types of pieces (ceramics, fibulae, coins etc.) for the purpose of extracting chronological and historical observations and conclusions, for the category of objects analysed here, within Dacian space these approaches are limited to C. Beldiman's article (Beldiman 1988) and the extensive and valuable study by A. Rustoiu (Rustoiu 2005), in which, on the basis of this cup and especially its handle, the Piatra Neamț type is defined, which has gained acceptance in European archaeological literature as well (Boube-Piccot 1991, p. 30, n.11).

Even though the number of bitronconic cups with handles preserved is relatively small in the Balkan area, the typological palette of recipients is significant enough to discuss. We notice a degree of standardization of this shape, regarding the mouth's diameter, the maximum diameter, the height and the bronze shaping method, based on the fragments from the same typological register discovered at Bobaia, Costeşti, Pescari, Ţigăneşti, Židovar and partially Dunăreni. The first author to describe the decorations found on the Bâtca Doamnei vessel (Sanie 1981), identifies the horizontal part of the handle as a stylized bird with outstretched wings. The

argument is offered by the presence of clues suggesting plumage (Sanie 1981, pl. 10/1a, erroneous drawing, oversized for the indicated scale, with the plumage details drawn too schematical, with important elements drawn wrongly or omitted) and the button, shaped like the head of a swan. The recent publication of a Piatra Neamț type cup handle from Şimleu Silvaniei allows the authors to identify the upper horizontal part of the piece with a bird, wings outstretched (Pop, Plantos 2009, p. 125), as well as to clarify an aspect regarding the correct interpretations of the hairstyle details, our argument being the same piece, so as to cite only nearby analogies (Pop, Plantos 2009, pl. 2/1 with identical hairstyle details).

For Transylvanian space, publishing the Bobaia hoard inventory offers important data regarding bitronconic vessels, with the trove of coins it contained (Chirilă-Iaroslavschi 1987-1988) for chronological support. The link between the bronze cup (though fragmented and without handle) and the presence of a relatively large quantity of monetized silver (about 1.5 kg)(*terminus post quem*, Republican denarius C. Naevius Balbus; *serratus*, Roma), as well as the lack of Hunedoara type coins, demonstrates that this recipient is already part of the specific typology of luxury goods, dated around the end of the Ist Century BC's first quarter (Chirilă-Iaroslavschi 1987-1988, p. 85).

A. Rustoiu groups the discoveries at Ţigăneşti and Pescari in like manner, opining in favour of dating the vessels there in the first half of the Ist Century BC an toward its middle (Rustoiu 2005, 62). Summing up and discussing general aspects regarding bronze cups in the Intra-Carpathian Dacian world and its links to the centres of production was already the object of a sub-chapter in our Cluj-Napoca colleague G. Gheorghiu's doctorate thesis (Gheorghiu 2005).

In our opinion, dating this type of cup to the whole period of the IInd and Ist Centuries BC (Chirilă-Iaroslavschi 1987-1988, 69) is much too stretched, as well as tributary to the wide chronology proposed by prof. Glodariu for these Roman import pieces, although at the same time a dating is proposed only for the Ist Century BC (Glodariu 1974-1975). If we can draw formal similarities (bitronconic profile, shape of the base and rim, height, the identical handle mounting method) between the Bâtca Doamnei cup and the silver vessel of Vedea (Popescu 1937-1940, 186, 187, fig. 8), which is part of a hoard studied again by prof. Glodariu, who attributed it to the IInd and Ist Centuries BC as well. (Glodariu 1974, 64-65, 67, 70), for the Vedea cup the chronology imposed by the "little spoon" fibulae remains relevant (end of the Ist Century BC and even the start of the Ist Century CE), which was noted in relation to the possibility of longer use for this type of vessel (Rustoiu 2005, 62). The case of the bitronconic cup at Dunăreni can only be invoked from the perspective of the elements composing the upper part of its handle and its association with a hoard of Republican Denarii (the last coin being minted in 55 BC), while the vessel at Filipovici fits into the same typologies of associations (Raev 1977, 605, 637, nr. 20, pl. 27/4). While the situation in Moldova cannot enter the discussion due to the small number of pieces, discoveries in Transylvania and Banat confirm that this type of

artefact is part of that special category only found in hoards, associated with other pieces (Bobaia, Lupu, Pescari etc.) and fortified settlements or fortifications (Costeşti). A fragment of handle belonging, from our point of view, to a Piatra Neamț cup was recently published (Costea 2010). The stratigraphic context (Section III/2001, quadrant 24, -28 cm, "in the north-western part of the edifice, in the pavement then resulted" (Costea 2010, 155), ensures a relative dating of this fragment, according to its discoverer, to a chronological interval before the sanctuary with limestone column bases (Costea 2010, 156), respectively, the end of the first half of the Ist Century BC or around its halfway point.

Considering the archaeological discoveries and the comparative analysis methods of the first half of the XXth Century, Rádnoti fixes the time around the halfway point of the Ist Century CE as a superior chronological reference point for the appearance of the latest pieces of this type (Rádnoti 1938, 23). According to the typology of H. J. Eggers, this type of bitronconic cups are dated across the Ist Century BC (late La Tène) and the Ist Century CE (late La Tène, early imperial period) in the Germanic areas (Eggers 1951, pl. 11/122). In the context of analysing bronzeware from Noricum, H. Sedlmayer assigns the Piatra Neamț type of vessel to the first half of the Ist Century BC (Sedlmayer 1999, Taf. 1/3). Along with the synthesis dedicated to the Roman civilization east of the Carpathians, S. Sanie, having the associations between the recipe's shape and the swan handles to hand, opts to place the Bâtca Doamnei vessel in the Ist Century BC (Sanie 1981, 56).

The contexts and stratigraphical situations on Romanian territory containing the same type of piece (Țigăneşti, Bobaia, Vedea, Costeşti, Pescari) have been recently discussed by P. Popović as well, with all being placed, for the majority in view of the coinage present, in the Ist Century BC (Popović 1992, 71-72), with the Piatra Neamț cup being committed, by mistake, we believe. A different chronological position has been recently expressed, with the Piatra Neamț cup type placed between 125/120 and 50 BC. (Boube-Piccot 1991, 26), to which opinion A. Rustoiu rallies as well (Rustoiu 2005, 52).

We generated a database and loaded all types of bronzeware in it (as reunited in by A. Rustoiu in his 2005 study, without any addition from us save to include the handle discovered at Şimleu Silvaniei), along with artefacts discovered in the context of other pieces (coins, mainly). Regarding the analysis of contexts in which the pieces were discovered, most most (58%) come from stratigraphic contexts with low or no chronological relevance and with those originating in uncertain contexts or chance finds (15%) form a majority. Artefacts from archaeological complexes which allow tight dating is low (12%), followed by hoards (10%)(fig. 19).

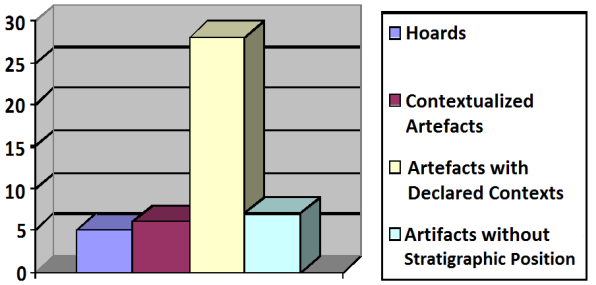

Fig. 19. Analysis for the type of contexts of Roman imports in Dacia (situation in 2005)

The types of vessels and other associated artifacts were given the following indicatives: **E18**=the Eggers E18 situla Eggers, **E20.1**=Eggers E20 situla (with trapeze attachments), **E20.2**=Eggers E20 situla (cu with perforated attachments), **E21**=Eggers E21/22 situla, **EB**=Beaucaire type situla, **EC1**= Costeşti-Tilişca type situla (Tilişca variant), **EC2**=Costeşti-Tilişca type situla (Costeşti variant), **CA**=Piatra Neamț cup, **CB**=Gallarate cup, **CC**=bitronconic cup, undetermined type (generally, fragmentation of recipients motivated the creation of this category, although the possibility that some of the recipients and fragments belong to another type is statistically low, **CP**=goblet, **MA**=Mastos, **FN**=knotted fibula, **DO**=ornamental disc, **DD**=Dyrrhachium Drachma, **DA**=Apollonia Drachma, **TT**=Thasos Tetradrachm, **DR**=Republican Denarius, **FS**=fibula with rhombic shield, **FL**=small spoon fibula, **OR**=Orbavasso-Ruvo cup, **CI**=Idria cup, **SP**=Pescate type simpula, **SS**=strainer, **TA**=Aylesford type skillet.

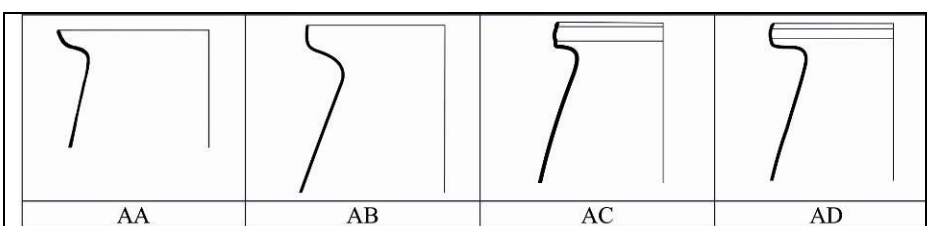

Fig. 20. Typology of the rims of bitronconic cups in pre-Roman Dacia

From an analytical perspective, the morphology of these bronze cups' rims (fig. 20) can serve as a future criterion for analysis, along with the typology of bases, handles and the relation between the diameters of the base and rim, and the vessel's

height. Thus, 4 types (AA-AD) were resolved for Dacian territory, with varying degrees of inclination for the rim's wall.

Although very few metal vessels have been discovered in enclosed contexts, their baggage of information, along with the totality of pieces reviewed by A. Rustoiu (Rustoiu 2005) can be analysed from several points of view without making the role of these results an absolute, regarding the chronology of these Roman imports. Considering the mentioned inconvenience, an already classical method of analysis was used (seriation/combinatory analysis)(Babeş 1993; Sîrbu *et al*. 2007; Măndescu 2010), with a small number of attributes, doubled by correspondence analysis.

By processing the data through these two methods, some useful elements to our study could be observed. Firstly, the seriation reveals an association between certain analysed elements and a possible chronological ordering (table 1). Secondly, the results of correspondence analysis were analysed, where the minimal sum of objects (*sites*) is 1 and the minimal sum of variables (bronzeware components, bronzeware, coins, fibulae, goblets etc., expressed through codes, excepting ceramics) is 2 (table 2). Regarding associations, both seriation and correspondence analysis confirm a distinct cluster grouping the discoveries from Bobaia, Pescari, Ţigăneşti, Vedea, and respectively the relation between the coins struck by the towns of Dyrrhachium, Apollonia, Thasos and probably the recipients from Gallarate, Piatra Neamţ or new (!) types. In this series logic lie also the Vedea cup, the similar discoveries at Costeşti and Židovar, not being seriated. The Costeşti materials, as suggested, come from different archaeological contexts and suggest different chronological evolutions (the eccentric group within cluster 2), The Costeşti-Tilişca situla (Costeşti variant), not seriated, is found close to the bronze ladles with horizontal, detachable handles (Pescate), the last category of objects with a certain chronology within the Ist Century BC. The discovery of a bronze attachment from a type E20 (Eggers) situla at Brad (L1, S V, level 3; archaeological context: second half of the Ist Century BC to first decades of the Ist Century CE) suggest a later dating, specifically the second half of the Ist Century BC for the other materials with stratigraphy (Tilişca, Pietroasele) as well as those without (Craiva). The situla attachment (Eggers E18) discovered at Bâtca Doamnei, revisited recently in the archaeological literature (Rustoiu 2005, 54-55) deserves an aside. This piece (inv. #5457, Neamţ County Museum Complex) was discovered in section X/1967, m. 3 at -70 cm, its stratigraphic context without any other metal pieces. Its placement at the end of the series, without a direct connection to the rest of the studied elements and close to the E20 sites (the variant with trapeze attachments) confirm previous observations that, chronologically and by association, through the complexes at Brad and Tilişca, it dates between the second half of the Ist Century BC and the first decades of the Ist Century CE (Rustoiu 2005, 55).

Site	DD	DA	TT	CC	EC2	E21	CI	SP	EC1	TA	E20.2	SS	E20.1	E18	CA
Bobaia	1	1	1	1											
Pescari	1	1		1											
Tiganesti			1	1											
Vedea				1											
Zidovar				1			1								
Gusterita					1										
Bucuresti						1									
Costesti				1	1	1		1	1						
Banita								1							
Carlomanesti								1							
Luncani								1							
Poiana								1							
Radulesti								1							
Ocnita							1	1		1					
Divici						1		1		1		1			
Suncuius												1			
Racatau											1				
Tilisca								1	1		1			1	
Pietroasele								1				1		1	
Brad													1		
Craiva										1		1	1	1	
Berghin														1	
Popesti														1	
Piatra Neamț														**1**	**1**
Şimleu Silvaniei															1

Table 1. Data processing after seriation.

The Piatra Neamț-*Bâtca Doamnei* cup, through its stratigraphic context (which we provisionally name *the last level of Dacian epoch architecture*), its lack of association with other published metallic pieces and its eccentric position regarding cluster 2 (table 2, diagram 1) leads us to propose a later chronological placement than that generally attributed to this type of vessel, respectively the end of the Ist Century BC.

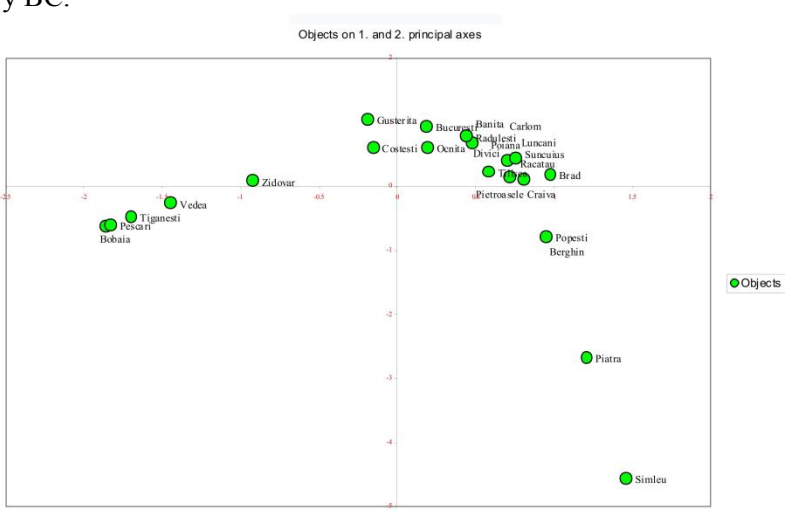

Table 2. Correspondence analysis diagram.

Thirdly we interpreted results obtained from correspondence analysis where the minimal sum of objects (localities) is 1 and the minimal sum of variables (the elements to compare enumerated above, expressed through codes) is 1. We preferred to present only the diagram, considering the type of analysis. We remark that, for bitronconic vessels, the discovery at Lupu, made unique by the nature of its associated content (mastos, a pair of knotted fibulae, ornamental disks) and chronology (end of the IInd Century BC to the Ist Century BC)(Rustoiu 2005, 62), makes the link, through the compact grouping of the other discoveries, with the cup at Piatra Neamț-*Bâtca Doamnei* (table 3). Lacking more data, which can be obtained by introducing all criteria that can be analysed (type of bronze/ceramic recipient or other analysed element, type of the characteristic fragmentary element such as situla attachments, rim profile, base profile, type of handle, chronology of coin series within the inventory of some discoveries); the profile and mass of these categories could not be followed.

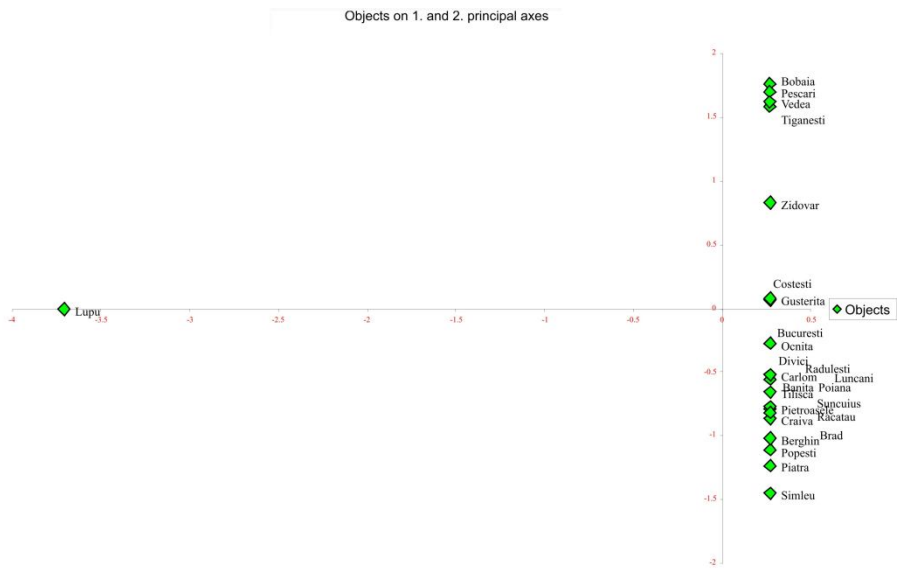

Table 3. Correspondence analysis diagram.

Use/functionality of the artefact.

Both when it was discovered and later, the bronze cup was not associated with an *extended functionality,* within the context of its discovery, although the analogies on hand (which were limited to some fragments) could have suggested a special purpose for the dwelling. Undoubtedly, this piece of *prestige furniture* can be preserved and passed down through multiple generations. Within the literature, the use of this type of cup in household chores (preparing wine or heating up water) has

been proposed, with varying degrees of justification, considering its modest volume. If the mineral compounds inside the cup would have been analysed up to the moment of the first restoration intervention, they could have suggested something in this regard.

Quantitative and qualitative metallographic analysis.

Considering the fact that, for this type of import, the technological aspect is very important, we insisted firstly on the republication of the metallographic data obtained from the metallographic analysis of the piece (Creating a national database of metallographic data for iron and bronze Roman imports is a necessity, derived from the need to obtain relevant results regarding the relation between majority elements as well as the structure of the native ore and the origin-related adjacent elements. Older literature also reflects on the importance of metallographic research for archaeological discoveries in Romania: Wollmann 1967, Wollmann 1971). We wish this task, though for an age where most metallic pieces are iron, to follow in the spirit of the specifics of research projects started in the '80s (prof. Gh. Lazarovici's team), regarding samples and pieces of bronze and copper, analysed at the macro and microstructural levels (metallographic and spectrographic). The morphological aspect can constitute only an analysis criterion for the category of these objects, with numerous aspects regarding the evolution of production workshops being extremely relevant for physical and chemical investigations (Ramin 1977; Riederer 1996). The qualitative element (16 elements) showed the major metallic components of the vessel (Cu=87,10%, Sn=6,48%), as well as resulting elements from spectrographic qualitative determinations (analysis done at the Metallurgic Research Institute in Bucarest, or ICEM, Analysis section, Analysis Bulletin no. 1151/1976)(Al ≤ 0,01%, Pb ≤ 1%; Zn ≤ 0,001%; Sb = 0,1-1%, Fe ≤ 0,1%, Mn ≤ 0,001%, Mg ≤ 0,001%, As ~ 0,01%, Bi ~ 0,001%, P ≤ 0,01%, Ni = 0,01-1%, Ag = present, Au = absent, Cr ≤ 0,01%)(A. Buzilă 1985). Regarding the main elements in the production "recipe" we remark the association of copper and tin (*tin bronze*), but also the presence of a very low amount of lead(less than 1%) and traces of de zinc. In Europe, for decades now, the importance of metallographic analyses within the study of bronzeware production was evidenced by diverse studies, some of which remain fundamental (Wielowiejski 1988), one of the stressed ideas being the link between the type of alloy and the techniques employed in producing the handles (Wielowiejski 1988, 40-42). Although the piece in question is an import, going over the literature on Dacian bronze metallurgy (IInd Century BC – Ist Century CE) reveals preoccupations tangential to the subject, with this period receiving the least amount of metallographic studies and observations (e.g. the finds at Cugir-Tumulus II, Pecica, Ludeşti, Grădiştea, synthesized by A. Rustoiu (Rustoiu 1996, 45), Ardeu-*Cetățuie* (Information amiably provided by I. V. Ferencz, of the Dacian and Roman Civilization Museum, Deva, to whom we send our warm thanks in this way as well), Bădeni (Sanie 1981, 60), Ormeniş (Costea 2010), as against the previous periods

(Copper, Bronze and First Iron Ages) or the following (Roman and medieval periods). Identifying and analysing the few component parts, without any standardised procedure, impedes the gathering of vital paleometallurgic information, such as the source of the copper and the relation between its chemical composition and the analysis of ore samples discovered in archaeological digs or modern and contemporary mining).

Final considerations

The fact that most Roman bronzeware on Dacian territory was *imported* is derived from the sum of pertinent opinions regarding it (Glodariu 1968; Glodariu 1974, 52-64; Rustoiu 1996, 165), our piece being a serialized product found within and without the Roman Empire (Rustoiu 2005, 61, note 62 also citing the most important bibliographical sources on the subject), with units found Eastwards into the former Soviet Union and published for a half a century already (Кропоткин 1970, nr. 808, fig. 53/3, 60/6). A. Rustoiu justly insists on the functions these import goods served in the Dacian world, emphasizing their early presence in some centres of power (fortresses), aristocratic tombs and/or hoards (Rustoiu 2005, 72, fig. 17).

The statement that this type of piece is poorly represented in Moldova, compared to the other territories occupied by the Dacians, remains valid. The analysed vessel's type, together with amphorae, form a category of objects with low frequency among bronzeware originating in North Italy, a situation that holds for other areas bordering the Roman Empire (Glodariu 1974, 58-59).

Although the number of whole pieces, and those that can be made so, is relatively low, our analysis will emphasize other aspects as well, some of them methodological. The first question ties to the situation in which these imports can offer clear dating elements on their own (the pieces' internal chronology) or they can be dated by analysing the contexts in which they are found, with an eye on their chronological relevance. The quality of the answer will have to keep in mind both these concrete situations; creating databases being one solution to analytically relate these pieces with similar ones with clearer chronology, both within the Roman Empire and from Barbaricum (Glodariu 1974, 53). Another element to consider is the fragmented pieces (shards of a vessel or a handle) which belong, typologically, to this series. In this case, we can begin to make statements about the technology with which these vessels were produced and observations on the types of handles and the decors placed on them.

Another relevant aspect is offered by the findings in Scordisci space, Roman imports in general and bronze cups in particular (roughly dated to around the turn of the Ist Centuries BC and CE) (Popović 1992, 64-66, 69-73; Rustoiu 2005, p. 62, opining for an earlier dating of these finds, in the La Tène D1 context), being tied to a fundamental funerary component of representing social status. Through the quality and relevance of associations, the discoveries published from Mala Vrbica-*Ajmana* (M2)(Stalio 1986, 33, fig. 46), Vajuga-*Pesak* (M3)(Popović 1990, p. 171, fig. 4/4),

but also those that are only referred to or which come without stratigraphical data, demonstrates that communities on the right bank of the Danube have a differentiated funeral identity with its own traits. Discoveries on the left Danube bank use many Roman imports in the area of settlements and fortified settlements, their associated funeral grounds, defined as necropoles belonging to the community, part of it or just a family, being furnished with other types of elements (weapons, harness pieces, swords, with ceramics and jewellery being less common). This aspect is completed by another way of funerary manifestation for the tops of the military aristocracy (e.g. Cugir, Costeşti, Ardeu, Popeşti), with Roman imports mentioned among the significant attributes (situla, strainer, bronze case etc.)

The geographical repartition of Roman bronze imports, including our type of vessels, does not change the general image of transport routes (Glodariu 1968, 365; Berciu 1972, 665-666; Popović 1992, 73-74). The progress of the last years regarding the relative chronology of bronzeware penetration in the space north of the Balkans (Rustoiu 2005, 73-83; Popović 1987) are completed by the possibility of correlation with dates associated with other pieces within hoards and deposits, with the import of bitronconic vessels throughout the Balkans from Apollonia and Dyrrhachium placed roughly between the end of the IInd Century BC and the first half of the Ist Century CE (Rustoiu 1996, 180-182; Rustoiu 1997, 79; Rustoiu 2005, 73-74).

Publishing the late Roman Republic bronzeware by item and those specific to the Augustan period from Piatra Neamţ-*Bâtca Doamnei* is a necessity, imposed by tone of some historical observations and conclusions regarding the territory of Moldova, throughout the Ist Centuries BC and CE, relating to the Italian production centres and the commerce and diffusion routes of their products.

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