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# Examining the relation between the shape/manufacture technique and the function of the pottery used for salt-making (*briquetages*)

## Felix-Adrian TENCARIU<sup>1</sup>

**Abstract**. The archaeological excavations across the world provided over time abundant evidence about the exploitation of salt water (sea water or inland brine), transformed into solid salt by means of a forced evaporation process involving the use of fire and clay containers, known as briquetage type vessels. Quite strange at first sight, regardless of age or location of salt making sites in the world (Neolithic, Chalcolithic and Iron Age in Poland; Chalcolithic and Bronze Age in Romania; Bronze Age and Iron Age in France, Germany, England; Bronze Age and Iron Age in China and Japan; even modern times in some areas of Africa), there is an affinity for the quasi-conical shape of the ceramic vessels used to obtain salt units. This paper examines adaptive convergence in briquetage-making, cases in which functional constraints result in similar forms in independent lineages.

**Rezumat**. Cercetările arheologice din diverse zone ale lumii au oferit, de-a lungul timpului, numeroase dovezi privind exploatarea apei sărate (apă din mări și oceane sau izvoare de saramură), transformată în sare solidă prin intermediul unui proces accelerat de evaporare realizat cu ajutorul focului și a unor recipiente de lut, cunoscute sub numele de vase de tip briquetage. Surprinzător, la prima vedere, indiferent de epoca sau localizarea pe glob a siturilor de producere a sării (neolitic, eneolitic și epoca fierului în Polonia; eneolitic în România; epoca bronzului și epoca fierului în Franța, Germania și Anglia; neolitic, epoca bronzului și epoca fierului în epoca modernă în unele zone din Africa), se observă o afinitate pentru forma cvasi-conică a vaselor ceramice utilizate pentru obținerea unităților de sare. Acest articol tratează această convergență adaptativă în manufacturarea briquetage-lor, urmărind cazurile în care constrângerile funcționale au condus la forme similare în linii descendente diferite.

Keywords: salt water exploitation, briquetage, pottery shape and function.

## 1. Introduction

It is an undeniable fact that common salt (sodium chloride) is one of the essential nutrients, needed for human consumption just as for the rations of the livestock. The complex topic of salt exploitation over time was, for the last decades, a particularly favourite

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subject of the archaeological, ethnographical and ethnoarchaeological research. The techniques of salt extraction from seawater or brine springs, the mining of the rock salt, the transportation and trade of salt, and the social and spiritual symbolism of salt are just a few issues addressed<sup>2</sup>.

The archaeological excavations across the world provided over time abundant evidence about the exploitation of salt water (sea water or inland brine), transformed into solid salt by means of a forced evaporation process involving the use of fire and clay containers, which, conventionally, are called *briquetage* type vessels. Quite strange at first sight, regardless of age or location of salt making sites in the world, there is an affinity for the conical or quasiconical shape of the ceramic vessels used to obtain salt units.

Without pretending to be exhaustive, we shall try to prove the above assertion by giving several examples throughout space and time. Hereinafter, we will examine the possibilities of finding the relation between the functional constraints and the shape/sizes/manufacture techniques of the 'salt pottery'.

## 2. The conical and quasi-conical shape of briquetages across the world — archaeological evidences

To start with, one should mention the numerous Neolithic and Chalcolithic sites (Lengyel Culture) (e.g. Barycz) from the Wieliczka area (Southern Poland), which contained numerous hearths and large amounts of pottery interpreted as briquetage vessels<sup>3</sup>. As one can see, many belong to hand built, quasi-conical vessels with pointed or widened base, of relatively small dimensions -5 to 10 cm in height and mouth opening (Figure 1/1). These were associated to the brine exploitation, namely to making salt forms by means of forced evaporation.

Going further south, the archaeological research of the Chalcolithic sites near the brine springs from the sub-Carpathian area of Moldavia, North-Eastern Romania provided significant evidence for the practice of the briquetage technique. The briquetage sherds were generally discovered in contexts of strong burning – hearths, ash piles, charred wood, but there are no complex installations (furnaces) used for the firings and neither moveable supports to raise these containers above the source of the heat. The briquetage fragments belong to hand built, quasi-conical vessels with widened base. The wide bases were designed to prevent accidental overturning of the recipients when heated, which makes perfect sense, in the absence of supporting installations (furnaces, supports etc.). In terms of sizes, they vary between 10 and 20 cm in height, 12–15 cm for the rim diameter and 7–12 cm for the base diameter (Figure 1/3). Both inside and outside surfaces are rather rough, hastily smoothed.

<sup>&</sup>lt;sup>2</sup> See HARDING 2013; BRIGAND & WELLER 2015; ALEXIANU et alii, 2015; 2016, etc.

<sup>&</sup>lt;sup>3</sup> JODLOWSKI 1969; 1971; 1977.

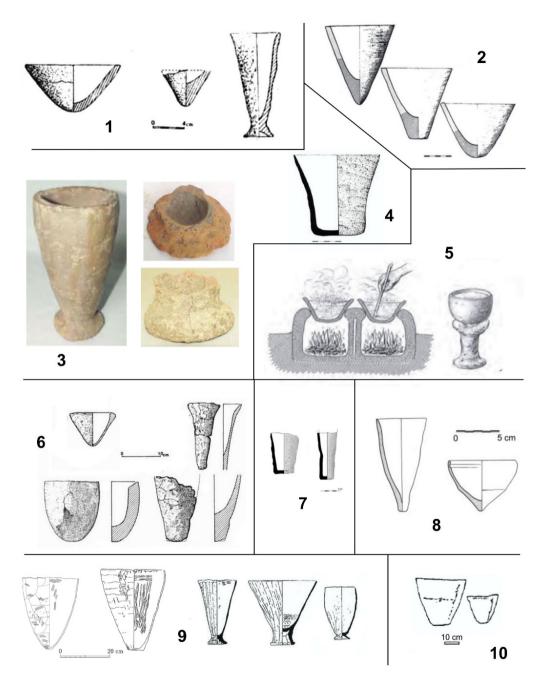


Figure 1. *Briquetage* vessels of conical or quasi-conical shape (after JODLOWSKI, 1969 – 1; SAILE 2012 – 2; CAVRUC & CHIRICESCU 2006 – 3; ARD & WELLER 2012 – 4; GUERRA-DOCE *et al.* 2010 – 5; MATTHIAS 1961 – 6; OLIVIER 2006 – 7 ; FLAD *et al.* 2005 – 8; KAWASHIMA 2015 – 9; GOULETQUER *et al.* 1994 – 10)

The clay was usually tempered with chaff and/or grog and coarse sand. Their function was also linked with the process of obtaining salt<sup>4</sup>.

Other presumed briquetage finds from the surroundings of the rock-salt deposit at Tuzla in northeastern Bosnia have been assigned to the Vinča culture (the second half of the sixth millennium cal. BC) – the vessels are conical with rounded bases<sup>5</sup> (Figure 1/2).

At Provadia (Bulgaria), in the Middle Chalcolithic period, assigned to 4700–4200 cal BC the bucket-like vessels, also quasi-conical, with rusticated surface and flat base were related to salt making. Coming in three sizes, they were apparently packed into the bottom of the pits, wood added and lit, and the whole thing allowed to boil and then cool, so that brine was turned into crystals in conical cake form; the pot would then be smashed, and the cake retrieved<sup>6</sup>.

The "Champ-Durand type" vessels found in several sites of the Late Neolithic in Central-Western France were recently taken into consideration as proves for the artificial evaporation of brine, hypothesis sustained also by technological and chemical analysis. The recipients are conical with flat base and straight walls, having relatively standardised dimensions: 12–13 cm in height, 13 to 16 cm of mouth diameter and 7 to 10 cm of base diameter<sup>7</sup> (Figure 1/4).

The archaeological site of Molino Sanchón II (Villafáfila, Zamora, Spain) is interpreted as a salt processing factory. Natural brine obtained from the saline Villafáfila Lake Complex was boiled in coarse ceramic vessels placed on supports made of raw clay, which stood over a hearth of glowing embers in order to produce hard salt cakes. Chronologically, the exploitation of salt at Molino Sanchón II took place during the second half of the 3rd millennium (approximately 2400–2000 cal. BC) – the Bell Beaker Culture<sup>8</sup>. Most important, most of the recipients were quasi-conical, with straight or rounded bottoms (Figure 1/5).

For the Bronze Age and Iron Age, the *briquetage* technique is attested almost throughout Western Europe, though at a significantly smaller scale than in later periods. It is worth mentioning the outstanding quantities of *briquetage* fragments from the sites of the Halle (Saale valley) area – the technique consists in placing over the fire clay recipients of various shapes and sizes, filled with brine, sustained by clay pedestals<sup>9</sup> (Figure 1/6). A major expansion of salt exploitation and production, including the *briquetage* technique, can be noticed in Central and Western Europe during the transition to and through the Iron Age. The industrial exploitations from the valley of the Seille River and the valley of Somme stand out

<sup>&</sup>lt;sup>4</sup> URSULESCU 2011; NICOLA et al. 2007; CAVRUC & CHIRICESCU 2006.

<sup>&</sup>lt;sup>5</sup> SAILE 2012; WELLER 2015.

<sup>&</sup>lt;sup>6</sup> NIKOLOV 2011; 2012.

<sup>7</sup> ARD & WELLER 2012.

<sup>&</sup>lt;sup>8</sup> GUERRA-DOCE *et al.* 2010.

<sup>&</sup>lt;sup>9</sup> RIEHM 1954; MATTHIAS 1961.

as major centres of salt production, with millions cubic meters of remains of salt moulds and specialized furnaces<sup>10</sup>. Also, we are talking about quasi-conical ceramic salt moulds (Figure 1/7).

Going far East, we meet similar techniques in Central China during the second and the first millennia BC. At Zhongba, a well-documented site of salt production, each of the three main phases of activity is represented by vessels used in a process that involved boiling brine to crystallization — large, pointed-bottom vessels, pointed bottom cups (Figure 1/8), rounded-bottom jarlets<sup>11</sup>. All of them present strong similarities with briquetage from archaeological, historical and ethnographic evidences from other regions of the world.

Moving to Prehistoric Japan, there are strong evidences of salt production using briquetage type vessels during the Late (c. 2500–1250 BC) and the Final Jōmon period (c. 1250–950/400 BC), as well as in the Yayoi period (c. 950/400 BC–AD 250). The recipients used were also, for the most part, conical shaped, with flat or pointed bottoms<sup>12</sup> (Figure 1/9).

At Minogahama site, of Late Kofun period and the beginning of ancient period, ca. 6–7<sup>th</sup> century AD, was attested the technique obtaining salt out of sea water and seagrass in ceramic recipients, through evaporation. Again, the vessels are of quasi conical shape, with rounded or pointed bottoms or even with small, elongated legs<sup>13</sup>.

There is also some ethnographic evidence about using conical ceramic recipients for brine evaporation, for example in Niger. Here, several methods are used for obtaining the brine, including lixiviation of salty earth and washing the ash of halophytes. Most important, this brine is boiled within simple furnaces, in clay recipients of different sizes and shapes, sometimes supported on pedestals. As the water slowly evaporates, more brine is added and mixed until the clay casts are filled with hardened salt. The salt cakes are removed by total or partial breaking of the clay vessels<sup>14</sup>. Of course, these recipients are of a conical shape (Figure 1/10).

## 3. Discussion: Shape vs. functionality of the briquetage vessels

So, one can notice an obvious adaptive convergence in *briquetage*-making, cases in which functional constraints result in similar forms in independent lineages. In their general role as containers, pots are tools, and their shape and sizes are related to their function. Also, there are four use-related properties of a vessel: capacity, stability, accessibility and

<sup>&</sup>lt;sup>10</sup> OLIVIER & KOVACIK 2006; PRILAUX 2000; WELLER 2000.

<sup>&</sup>lt;sup>11</sup> FLAD et al. 2005

<sup>&</sup>lt;sup>12</sup> KAWASHIMA 2015.

<sup>&</sup>lt;sup>13</sup> KAWASHIMA 2015.

<sup>&</sup>lt;sup>14</sup> GOULETQUER et al. 1994.

transportability<sup>15</sup>. Thinking about the *briquetage* type vessels, the first three properties may bring some light in explaining this convergence. To begin with, the capacity of a recipient (depending on its shape and size) may be related with standard units of volume or multiples of such units. Since the briquetages were intended probably to produce not only salt, but salt units, we may relate their simple conical shape to a simpler way of standardization, unlike more elaborated forms.

The stability of a vessel refers to its resistance to tipping or being upset, determined by shape, proportion, centre of gravity, and breadth of the base<sup>16</sup>. Some *briquetage* vessels had widened bases for this purpose, while the ones with pointed or rounded bottoms were inserted in other installations (pedestals, crucibles) or maybe in embers, which assured their stability during the exposure to heat.

The accessibility of the contents of a vessel—better stated, perhaps, as access to its interior—is determined by the orifice. If a vessel has a sharply restricted orifice, such as a narrow neck, it is hard to get at the contents because of the angle of access. Similarly, reaching into an especially large and deep vessel requires a certain effort<sup>17</sup>. Most of the *briquetages* above mentioned provided easy access to the content (salt water, salt slurry), by their relatively wide orifice and straight oblique walls.

The same characteristics of the ceramic moulds used for making salt cakes could be related also to the thermal efficiency. The conical shape (straight or slightly curved walls) with the tip down ensures the best and even exposure to heat of the entire surface of the vessel in open fire or placed on a pedestal.

Even if *briquetage* are to be broken after use to remove the salt cake, they aren't supposed to break during the use, for obvious reasons. One of the thermal reactions that can produce breakage of a ceramic is thermal stress, strain caused by uneven or unequal reactions to heat over the vessel body. Thermal stresses arise as a vessel and its contents are rapidly heated or cooled. Such stresses can be reduced by modifying the vessel shape to eliminate angles, which is the case of the ceramic recipients used for salt making<sup>18</sup>.

## Conclusion

To sum up, vessels intended for cooking (or to boil brine, in this case) would be expected to make efficient use of the heat from the cooking fire. They are generally likely to have rounded or straight walls rather than angled contours to avoid thermal damage, and also because the oblique straight contour permits greater exposure of the vessel base, walls, and

<sup>&</sup>lt;sup>15</sup> RICE 1987; ORTON *et al.* 1993.

<sup>&</sup>lt;sup>16</sup> RICE 1987.

<sup>&</sup>lt;sup>17</sup> RICE 1987.

<sup>&</sup>lt;sup>18</sup> RICE 1987.

contents to the heat. They can also be expected to be relatively thin walled, to conduct heat better and reduce the thermal gradient between the surfaces. Further, they are likely to be coarse textured, porous, and tempered with materials that have low coefficients of thermal expansion (calcined shell, crushed potsherd) to accommodate thermal stress<sup>19</sup>. As one can see, these are, generally, characteristics of the ceramic vessels known as *briquetages*.

The point of enumerating the above attributes is to show that, as any other tool human created, the moulds for making salt cakes quickly evolved towards the most efficient shape, independently in numerous parts of the world or eras in which this activity took place.

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## References

- ALEXIANU, M., R.-G. CURCĂ, V. COTIUGĂ (eds) 2015. Salt Effect. Proceedings of the Second Arheoinvest Symposium, 20-21 April 2012, Iași, Romania. Oxford.
- ALEXIANU, M., R.G. CURCĂ, O. WELLER, A. DUMAS (eds) 2016. Mirrors of Salt. Proceedings of the First International Congress on the Anthropology of Salt, 20–24 August 2015, "Al. I. Cuza" University, Iași, Romania. Oxford.
- ARD, V., O. WELLER 2012. Les vases de «type Champ-Durand»: témoins d'une exploitation du sel au Néolithique récent dans le Marais poitevin. In: R. Joussaume (dir.), L'enceinte néolithique de Champ-Durand à Nieul-sur-l'Autise (Vendée), Chauvigny, APC (Mémoire; XLIV), 319–343.
- BRIGAND, R., O. WELLER (eds) 2015. Archaeology of salt: approaching an invisible past. Leiden.

CAVRUC, V., A. CHIRICESCU (eds), 2006. Sarea, timpul și omul. Sfântu Gheorghe.

- FLAD, R., J. ZHU, C. WANG, P. CHEN, L. von FALKENHAUSEN, Z. SUN, S. LI 2005. Archaeological and chemical evidence for early salt production in China. Proceedings of the National Academy of Sciences 102(35), 12618– 12622. doi:10.1073/pnas.0502985102
- GOULETQUER, P.-L., D. KLEINMANN, O. WELLER 1994. Sels et techniques. In: M.-Y. Daire (ed.), *Le sel Gaulois:* Bouilleurs de sel et ateliers de briquetages armoricains à l'Age du Fer. Les Dossiers du Centre Régional d'Archéologie d'Alet Supplément Q, 123–161. Saint-Malo.
- GUERRA-DOCE, E., G. DELIBES DE CASTRO, F.J. ABARQUERO-MORAS, J.M. del VAL-RECIO, A.L. PALOMINO-LÁZARO 2011. The Beaker salt production centre of Molino Sanchón II, Zamora, Spain. *Antiquity* 85(329), 805–818. DOI:10.1017/s0003598x00068320.

HARDING, A. 2013. Salt in prehistoric Europe. Leiden.

- JODŁOWSKI, A. 1969. Problem eksploatacji soli w okolicach Krakowa w starożytności i we wczesnym średniowieczu. Archeologia Polski 14(1-2), 137–165.
- JODŁOWSKI, A., 1971. Eksploatacja sóli na terenie Małopolski w pradziejach i we wczesnym średniowieczu. In: Studia i materiały do dziejów żup sólnych w Polsce. Krakow.

<sup>&</sup>lt;sup>19</sup> RICE 1987, 237, 239-240.

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- JODŁOWSKI, A., 1977. Die Salzgewinnung auf polnischen Boden in vorgeschichtlicher Zeit und im frühen Mittelalter. *Jahresschrift fur Mitteldeutsche Vorgeschichte* 61, 85–103.
- KAWASHIMA, T. 2015. Prehistoric salt production in Japan. In: R. Brigand, O. Weller (eds), Archaeology of Salt. Approaching an invisible past, 125–138. Leiden.
- MATTHIAS, W., 1961. Das mitteldeutsche Briquetage Formen, Verbreitung und Verwendung. Jahresschrift für mitteldeutsche Vorgeschichte 45, 119–225.
- NICOLA, D., R. MUNTEANU, D. GARVĂN, C. PREOTEASA, G. DUMITROAIA 2007. Solca–Slatina Mare (Roumanie). Preuves archéologiques de l'exploitation du sel en préhistoire. In: D. Monah, G. Dumitroaia, O. Weller, J. Chapman (eds), L'exploitation du sel à travers le temps, 35–56. Piatra-Neamţ.
- NIKOLOV, V. 2011. Provadia-Solnitsata (NE Bulgaria): A salt-producing center of the 6<sup>th</sup> and 5<sup>th</sup> millennia BC. In: M. Alexianu, O. Weller, R.-G. Curcă (eds), *Archaeology and anthropology of salt: a diachronic approach*. *Proceedings of the international colloquium*, 1–5 *October 2008*, Al. I. Cuza University (Iași, Romania), 59–64. Oxford.
- NIKOLOV, V. 2012. Salt, early complex society, urbanization: Provadia–Solnitsata (5500–4200 BC). In: V. Nikolov, K. Bacvarov (eds), Salz und Gold: die Rolle des Salzes im prähistorischen Europa. Akten der internationaler Fachtagung (Humboldt-Kolleg) in Provadia, Bulgarien 30 September–4 October 2010, 11–65. Provadia–Veliko Tarnovo.
- OLIVIER, L. 2006. Le «Briquetage de la Seille» (Moselle) : bilan d'un programme de cinq années de recherches archéologiques. *Les Cahiers Lorrains* 1-2, 7–21.
- OLIVIER, L., J. KOVACIK 2006. The 'Briquetage de la Seille': proto-industrial salt production in the European Iron Age. *Antiquity* 80, 558–566.
- ORTON, C., P. TYERS, A. VINCE 1993. Pottery in archaeology. Cambridge.
- PRILAUX, G. 2000. La production de sel à l'Âge du Fer. Contributions à l'établissement d'une typologie à partir des exemples de l'autoroute A16. In: M. Mergoil (ed.), *Protohistoire européenne* 5. Montagnac.
- RICE, P.M. 1987. Pottery analysis: a sourcebook. Chicago.
- RIEHM, K. 1954. Vorgeschichtliche Salzgewinnung an Saale und Seille. Jahresschrift für mitteldeutsche Vorgeschichte, 38, 112–156.
- SAILE, T. 2012. Salt in the Neolithic of Central Europe: production and distribution. In: V. Nikolov, K. Bacvarov (eds), Salz und Gold: die Rolle des Salzes im pr\u00e4historischen Europa. Akten der internationalen Fachtagung (Humboldt-Kolleg) in Provadia, Bulgarien, 30. September-4. Oktober 2010, 225–238. Provadia–Veliko Tarnovo.
- URSULESCU N. 2011. Welcoming speech. In: M. Alexianu, O. Weller, R.-G. Curcă (eds), Archaeology and Anthropology of Salt: A diachronic approach. Proceedings of the International Colloquium, 1–5 October 2008, Al. I. Cuza University (Iași, Romania), 1–3. Oxford.
- WELLER O., 2000. Le matériel de briquetage des ateliers sauniers de Sorrus (Pas-de-Calais). In Y. Desfossés (ed.), Archéologie préventive en vallée de Canche. Les sites protohistoriques fouillés dans le cadre de la réalisation de l'autoroute A16. Nord-Ouest Archéologie 11, 272–280.
- WELLER, O. 2015. First salt making in Europe: a global overview from Neolithic times. In: R. Brigand, O. Weller (eds), Archaeology of Salt. Approaching an invisible past, 67–82. Leiden.



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# The role of salt sources in Transylvania in the process of neolithisation of Central and Southern Europe

## Gheorghe LAZAROVICI<sup>1</sup>, Cornelia-Magda LAZAROVICI<sup>2</sup>

**Abstract.** The paper examines, through the richness of salt in Transylvania, the causes that led to the migrations from Anatolia to the southern Balkans and then to central Europe, especially in Transylvania. Among the factors that led to these migrations were firstly climate changes: warming in Holocene, favourable climate in Transylvania around 6000 BC, the salt riches here that provide salt for several millennia. The Holocene warming has led to desertification (the disappearance of forests in the lowlands of Anatolia), the settlements have a shorter timespan, and most of them have only one habitation level (after 6000 BC). These have led to migrations towards the Aegean Sea (Kirokitia) and through the islands or the coasts of Thrace to mainland Greece and from there through the Balkans to the Carpathian Zone, where important salt deposits can be found. Successive migrations have also determined a great cultural unity, observable especially in the evolution of ceramics in the Early Neolithic in the Balkans and southern Central Europe, situations analysed and presented with similar developments from those areas.

**Rezumat**. Lucrarea analizează prin prisma bogățiilor de sare din Transilvania cauzele care au determinat migrațiile din Anatolia spre Balcanii de sud și apoi spre centrul Europei, în special în Transilvania. Dintre factorii care au determinat aceste migrații au fost în primul rând schimbările climatice: încălzirea din Holocen, climatul favorabil din Transilvania în jur de 6000 BC, bogățiile de sare de aici, care asigură sarea pe mai multe milenii. Încălzirea din Holocen a dus la procese de deșertizare (dispariția pădurilor din zonele joase ale Anatoliei), așezările sunt de mai scurtă durată, cele mai multe având doar un nivel de locuire (după 6000 BC). Acestea au determinat migrații spre Egeea (Kirokitia) și prin insule sau pe coastele Traciei spre Grecia continentală și de acolo prin Balcani spre Zona Carpaților, unde sunt importante zăcăminte de sare. Migrațiile succesive au determinat și o mare unitate culturală observabilă mai ales în evoluția ceramicii, în neoliticul timpuriu din Balcani și din sudul Europei centrale, situații analizate și prezentate cu evoluții similare din acele zone.

Keywords: salt, migrations, PPN, Starčevo-Criș, Anatolia, Balkans, Transylvania.

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#### Sources of salt in Europe and the connections to the first migrations

The special development of the Neolithic in Europe, after a cold period between 6300–6100 BC (Figure 2/b), was determined by the salt sources especially in the Carpathian Basin (Figures 1 & 3). They also generated the largest concentration of early Neolithic settlements in Romania<sup>3</sup>.

The most important source of salt in central Europe lies in the Carpathian arch, including the Wooded Carpathians, and is found in Romania, Ukraine, Poland, Slovakia and Hungary (Figure 1/a).

The optimal climate in Anatolia between 8000-6000 BC (Figure 2/a) favoured the emergence of stable early Neolithic (PPN) settlements, with a special religious architecture, related in the beginning especially to hunting (considering the representations in the sanctuaries).

### Ethno-archaeological comparisons

Even in the earliest PPN settlements there were round (Annex 1.1, 6–7, 9, 11), oval (Annex 1.2–3, 6–7, 9, 11) or horseshoe-shaped (Annex 1.4–5, 15–17) buildings and huts. They had a stone base and were covered with skins or vegetal remains used by shepherds, both in the Western Taurus Mountains (see Annex 1: Asikli Höyük Level 3 – 2j<sup>4</sup>; Muraibit at Nahal Oren and Jericho in Israel; Kirokithia-Cyprus; and others<sup>5</sup>) and later in our mountains.

It is known that often the functionality determines the shape of the houses. In the case of the shepherds' hut, this has some ideal forms of construction and organization. This type of *architecture* is important to understand the internal organization of the first Neolithic constructions, but also later constructions of shepherds at us (Annex 1), because in our areas the use of wood has led to a poor preservation of the inner partitions. For this reason, such traces were found only in some situations where they were thoroughly researched (e.g. Gura Baciului). We must note the small number of dwellings on one level or one phase<sup>6</sup>.

## Migrations, spreading, chronology

The lack of salt sources, the warming of the climate with its consequences (desertification, drainage of springs, drying of grasslands, etc.) caused the migration from

<sup>&</sup>lt;sup>3</sup> LUCA *et al.* 2011, 7–18; LAZAROVICI G., LAZAROVICI C.-M. 2016.

<sup>&</sup>lt;sup>4</sup> RGRUBER, TISSEN 2005; CANEW project.

<sup>&</sup>lt;sup>5</sup> MÜLLER-KARPE 1968, Taf. 103.B2, 104.B, 105.19, 110.35, 111.31-42, 113.B14 and other.

<sup>&</sup>lt;sup>6</sup> See computer modeling and seriations of the complexes at Gura Baciului: LAZAROVICI G., MAXIM 1995, figs 10–14; LAZAROVICI C.M., LAZAROVICI G. 2006, 82–85; LAZAROVICI G., LAZAROVICI C.-M. 2016; and others.

Anatolia (Konya, Cilicia and Cappadocia) to southern Central Europe and the Balkans, where at the end of the cold period between 6300–6100 BC (Ereignis) appeared the first shepherds<sup>7</sup> (Figure 1/a). The second major migration to southern Europe starts from the Mersin area on the coasts of the Mediterranean Sea, at first on the northern, but also on the southern coasts (Figure 1/b).

Although on the shores of the Aegean Sea salt could be harvested on the rocks of the shores, it does not have the same taste and qualities as the one from the Transylvanian underground salt mountains.

## The first migrations

With respect to the first migrations (according to some, colonizations<sup>8</sup>), the following work method was employed. At first, in our chronological system, we used the method of compared stratigraphy<sup>9</sup>. We continued this analysis using the databases<sup>10</sup> with connected algorithms, cluster analysis and fuzzy analyses<sup>11</sup>. We also used the <sup>14</sup>C data, but without absolutizing them, taking into account the comparative stratigraphy of the early Neolithic (FNT) in the Balkans<sup>12</sup>, which we framed in our chronological system, focused on the excavations at Gura Baciului and in Banat<sup>13</sup>, which we have constantly improved by collaborating with younger colleagues who have accepted the methodology: Zoia Maxim, Anamaria Şeulean/Tudorie, Cornelia-Magda Lazarovici, Suciu Cosmin, Sote Angeleski, Florian Dumitrescu-Chioar and others with whom we completed our databases<sup>14</sup>.

Thus, for the first phase of Neolithization, we defined three migrations of the Starčevo-Criş culture (abbreviated SC, followed by phases) SC IA, SC IB, SC IC/IIA<sup>15</sup>, subsequently completing with other migrations and diffusion the areas in the Carpatho-Danubian region<sup>16</sup>.

<sup>&</sup>lt;sup>7</sup> Upper Figure 2/a: Our processing is based on data and tables: DAIM, NEUBAUER 2005.

<sup>&</sup>lt;sup>8</sup> We opt for the more general migration term; *apud* dexonline: *coloniza/colonize* 1 Transformation into the colony. 2 Populate with settlers. 3 (Îs) ~*a vânatului/ of hunting* Introducing a species of game into a land where it did not exist. This kind of phenomenon happened later, beginning in Antiquity and in historical times: LAZAROVICI G., LAZAROVICI C.-M. 2016.

<sup>&</sup>lt;sup>9</sup> LAZAROVICI G. 1969; 1977; 1979; and others.

<sup>&</sup>lt;sup>10</sup> LAZAROVICI G., MAXIM 1995: we have seriated the complexes, when analyzing migration processes we only considered the materials at the base of the pithouses; for other themes see: CIORTEA, LAZAROVICI G. 1996; LAZAROVICI G. 2008; 2009; LAZAROVICI G. *et al.* 2015; 2015a; and others.

<sup>&</sup>lt;sup>11</sup> DUMITRESCU 1984; DUMITRESCU, TOADERE 1987; DUMITRESCU, LAZAROVICI G. 1990; and others.

<sup>&</sup>lt;sup>12</sup> LAZAROVICI G. 1995; 1996; 1998; 2000; 2006; LAZAROVICI G., LAZAROVICI C.-M. 2016; and others.

<sup>&</sup>lt;sup>13</sup> LAZAROVICI G., MAXIM 1995, 68–79, 124 ff.; LAZAROVICI G. 2008.

<sup>&</sup>lt;sup>14</sup> MAXIM 1999; LAZAROVICI C.-M. 2002; 2015; SUCIU 2009; ŞEULEAN 2012; recently colleagues from Moldova and others.

<sup>&</sup>lt;sup>15</sup> LAZAROVICI G., MAXIM 1995.

<sup>&</sup>lt;sup>16</sup> LAZAROVICI G., LAZAROVICI C.-M. 2016.

Based on these methods, we have developed our chronological system completed with new data.

A second major migration, connected especially to the Mediterranean Sea, also targets the salt areas on the shores of the Mediterranean, the Adriatic, defined as the Cardial civilization (Figure 1/b).

The first two-three migrations are also in the vicinity of these first settlements: Cristian, Băile Ocna Sibiului, Băile Miercurea Sibiului, Şoimuş, Gura Baciului etc.; on their way from the south they pass by Băile Govora and settle in the vicinity of the great sources of salt in the Carpathian Basin.

But then there is diffusion from these centres to other salt areas (Fundătura, Moruț, Vultureni in the Cluj area etc., Figure  $3/b^{17}$ ). In the first cities of the early Anatolian Neolithic there were practically no spaces for keeping the animals within them, hence the idea of "cities of worship" (Figure 2/a: Çatal Höyük, Hacilar, Aşikli Höyük, etc.). In the Near East and South of Anatolia, after the warming from 8000–6000 BC, a desertification process begins, the spring dry out, the big tells are abandoned, the settlements have fewer levels of habitation (see Figure 2/a; phenomena occurring between 6000–4500 BC).

From Greece, small communities are moving fast along the Balkan Mountains, through Serbia and Bulgaria, towards the Carpathian Basin, the treasure of salt areas (Figures 1/a; 3). They settle most of the time in the vicinity of the great salt sources, which, from the Neolithic to the present day, are salt sources exploited as springs, mines, wells, baths, permanently inhabited during the eight millennia of civilization (Figure 3).

## Sources of salt in the Carpathians related to the first processes of neolithisation. Ethno-archaeological case studies

It is said that salt sources in Romania provide reserves for another 1,000 years; depending on the surface, it would be 16.206 km<sup>2</sup>, with an average thickness of about 250 m<sup>18</sup>. The whole Carpathian Arch is surrounded by salt strips (Figure 4). Such strips, but fewer, can be also found in western Romania or in the plains. In various myths it is said that salt is the piss of the gods, and in others it is the tear of the gods.

In all historical ages salt has been used, although some say that in earlier times this mineral was not used. The <sup>14</sup>C data in Moldova, from Lunca–Poiana Slatinii (Neamţ County), where two settlements (SC and Cucuteni) and a spring were researched, show that Mesolithic communities also used the spring, because at that time Moldova had not yet been neolithised, and the ceramics published from Lunca, as well as from other discoveries in Moldova, do not

<sup>&</sup>lt;sup>17</sup> *Moruț*: LAZAROVICI C.-M., LAZAROVICI G. 2006, 79, Figure II.19a; LAZAROVICI G. *et al.* 2009; Vultureni: MAXIM 1999, 119, 194, 282.

<sup>&</sup>lt;sup>18</sup> BĂRBAT 2012a, 95–98 and bibl.

attest materials such early as in Transylvania (such as those from Cristian I, Gura Baciului, Ocna Sibiului, Miercurea Sibiului, etc.<sup>19</sup>).

As one can see, the Olt, Mureş and Someş rivers were the main ways to access salt sources throughout history (Figure 5/b).

The quality of salt and salt sources in Romania have often been studied, including several international interdisciplinary congresses on salt, ethno archaeology or archaeometry<sup>20</sup>. The curative use of salt is mentioned in the Bible<sup>21</sup>. Numerous volumes about these researches have been published lately, but there are also hundreds of studies, dozens of doctoral theses, hard to enumerate. We analyse below the main settlements during the first migrations that played an important role in the Neolithisation of the Carpathian-Danubian space. There are, of course, other important settlements, but archaeological research has not been significant.

#### Cristian I

Currently, according to the monochrome aspect of the ceramics, it is the earliest settlement in the SC IA phase, but also with the richest archaeological materials for this phase in southern Central Europe.

Monochrome ceramics have two phases, but at this point <sup>14</sup>C data are available only for Monochrome II. The area is in the centre of the salt hills of Ocna Sibiului and Miercurea Sibiului, where five Neolithic settlements all related to the first migrations were discovered and researched on the occasion of the construction of Highway A3. All five settlements are from the monochrome levels to the early stages of White painted. The term White painted is an incorrect association, like the "Gura Baciului–Cârcea horizon", those who use it mix at least three stages of migration and diffusion from different areas and on different ways of penetration.

In the area of Highway A3 at Cristian, in sites Cristian I, II, III, materials from several eras were discovered: Neolithic Starčevo-Criș<sup>22</sup>, Bronze Age and Noua Culture<sup>23</sup>, Iron Age and Basarabi culture<sup>24</sup>, Roman and medieval sporadic settlements<sup>25</sup>. <sup>14</sup>C data shows a duration of

<sup>&</sup>lt;sup>19</sup> LUCA *et al.* 2008; LAZAROVICI C.-M. 2015.

<sup>&</sup>lt;sup>20</sup> CAVRUC, CHIRICESCU 2006; MONAH *et al.* 2007; DUMITROAIA, MONAH, GARVĂN 2008; ALEXIANU, WELLER, CURCĂ 2011; ALEXIANU & WELLER 2009; ALEXIANU, WELLER, BRIGAND 2012; HARDING, KAVRUK 2013; BRIGAND, WELLER 2014; OJEDA-MESTRE, DUMAS, CURCĂ 2017; CAVRUC, HARDING 2008; MARC 2006; PORUCIUC 2008; ALEXIANU, DUMITROAIA, MONAH 1992; ALEXIANU 2017; for modern times in Moldova: VITCU 1987.

<sup>&</sup>lt;sup>21</sup> MONAH 1991; 2008; 2008a; ALEXIANU, DUMITROAIA, MONAH 1993.

<sup>&</sup>lt;sup>22</sup> The ones from Cristian I will be commented separately: LUCA 2012, Figure 19, complexes C235, C245–255, pithouses with 1–2 rooms: C243, C245, C 245a, 255, semi subterranean houses, pits C329a, 329b and others important for the architecture of the period.

<sup>&</sup>lt;sup>23</sup> LUCA 2012, Figure 11and complexes C203–210.

<sup>&</sup>lt;sup>24</sup> LUCA 2012, 202.

SC of approx. 200 years (Figure 2/d), although the beginning is not clearly mentioned: it may be earlier than the  ${}^{14}$ C data currently available because there are some features uncorrelated (Figure 7/a) and without  ${}^{14}$ C data.

The most important features belong to the Starčevo-Criş culture. It is appreciated that it was a marshy area, probably after the Roman period, we believe, otherwise the pithouses in the Cristian I area could not have functioned.

## Cristian I. The sanctuary with pits

At Cristian I (Reisdorf on the Austrian maps - "rice village") two neighbouring areas were investigated:

Cristian IA, a cult area with pits with offering deposits, pot deposits, graves near the pits or in their neighbourhood. In this area there are two stages of the Monochrome ceramics. Here, over 60 vessels were discovered in the worship area, all of them monochrome. The shapes of the pots are of a great variety. <sup>14</sup>C data are a bit later, but they are related to the first migrations (Figures 2/d & 6). As we have already said, if we gather all the vessels from this time from the Balkans (SC I), we do not find as many as were discovered at Cristian I. It must be noted that this is a cultural series determined by a certain psychology of the community based on cultic rituals.

Sabin Adrian Luca in 2015 and Anamaria Şeulean/Tudorie in their statistics and conclusions state that in the area of Dwelling L1, predominates semifine ceramic, which represents a cultic situation, serving as a place for offerings or deposition of the deceased for a larger area<sup>26</sup>, which is very probable. In the other settlements (Miercurea Sibiului I-IV), although large areas were researched, no graves were found. It is therefore a regional ritual<sup>27</sup>, unlike at Gura Baciului<sup>28</sup> or Trestiana (SC IIIB-IVA<sup>29</sup>), where some of the deceased were buried in the dwelling; only tomb M10 in the B28a feature at Gura Baciului had stones arranged over the skeleton<sup>30</sup>, but other ritual elements differ from one case to another.

<sup>&</sup>lt;sup>25</sup> LUCA 2012, Figure 9, 12, 20 and others.

<sup>&</sup>lt;sup>26</sup> LUCA 2012; ŞEULEAN 2012; they used in their analysis databases and databases of information, with cluster and seriation analyzes.

<sup>&</sup>lt;sup>27</sup> Perhaps this phenomenon also occurs in other civilizations where no more graves or cemeteries were found. In the early Middle Ages, a cemetery was found at the Cuptoare *Sfogea*, and the settlements were 4–6 km away; in Cornereva zone there were about 20 hamlets and the graves were in the center of the commune: LAZAROVICI G., UZUM 1977; LAZAROVICI G. *et al.* 2010; LAZAROVICI G. *et al.* 2015, 145.

<sup>&</sup>lt;sup>28</sup> VLASSA, PÁLKO 1965, 13; VLASSA 1972; 1976, 251; NECRASOV, ŞTIRBU-BULAI 1965, 25–26; LAZAROVICI G., MAXIM 1995, 183–188, 401–402, Figure 36 and Pl. XII/2, XIII/2, XVII–XVIII, XIX/4, XX/4, XXI.

<sup>&</sup>lt;sup>29</sup> POPUŞOI 1980.

<sup>&</sup>lt;sup>30</sup> LAZAROVICI G., MAXIM 1995, 188, Figure 36.

Most of the monochrome vessels from Cristian IA are made of semifine paste, they are different from those from Gura Baciului, which are also made of fine paste with a better firing, which shows two different ways of penetration, preserved in the next stages too, in SC IB, when there are connections through the large dot decoration on good quality ceramics between Gura Baciului, Cârcea, Donja Branjevina, the Danube Gorge<sup>31</sup>. The large dots also have a later version, on a weaker quality ceramic, as it appears at Târgu Mureş and Ajman<sup>32</sup> (phase SC IC), associated with various motifs consisting of white lines<sup>33</sup>. The findings from Cristian, through their position in the centre of the southern Transylvanian salt areas, the presence of skeletons and some elements of architecture (Figures 7/a & 8), have analogies at Ohoden, in the NW of Bulgaria (Figure 7/b), showing the road from the west of Bulgaria to the Olt Valley and from there to the salt areas of southern Transylvania (Cristian, Ocna Sibiului, Miercurea Sibiului). The pithouses from Cristian I and Ohoden are similar, in both cases pillars placed on the edge of the perimeter of the dwelling were used (Figures 7/a-b & 8).

The cultic area from Cristian (Figure 8) seems to have been covered or fenced, as evidenced by the many stones that fixed the vegetation of the roof<sup>34</sup>. In the salt areas of Provadia–Varna, on their beaches and their edges with golden sands in Bulgaria, were researched features, facilities for exploitation and drying of the salt, fortification systems with stone bastions and a series of pits. The discoverers called these a Pit-Sanctuary. Initially, we had some reservations about the term, but after the publication of Cristian I by Sabin Adrian Luca (Figure 8), we consider they are possible and archaeologists have arguments for such situations. The materials resulting from the researches from Cristian I were published by archaeological complexes, with plans, photographs, drawings, materials with synthetic descriptions<sup>35</sup>. All the pots in the cultic area are made of monochrome paste, some of them, the special ones, such as the two-mouth pot, have red engobe. In the settlement, which is a few tens of meters away, there are semi subterranean houses like those from Gura Baciului, improperly called "nests" <sup>36</sup>. In our excavations at Gura Baciului we have demonstrated that

<sup>&</sup>lt;sup>31</sup> In many studies we analyzed the chronological and cultural series from Romania, Serbia, Bulgaria, Macedonia and others: LAZAROVICI G. 1977; 1978; 1979; 1979a; 1983/1984; 1994; 1995; 1996; 1998; 2000; 2005; 2006; there are also many collaborations with other colleagues about architecture, art.

<sup>&</sup>lt;sup>32</sup> STALJO 1986; RADOSLAVLJEVIĆ-KRUNIĆ 1986; BERECZKI, HÁGO 2012 have a beautiful collection of materials from SC IC-IIB, insufficiently published, which plays an important role in the neolithisation of the Center and the Transylvanian Plain. Rescue excavations made by DMI (Historical Monuments Directorate) in 1960 at Târgu Mureş. <sup>33</sup> STALJO 1986.

<sup>&</sup>lt;sup>34</sup> For the cultic zone at Cristian I, on what has been published so far by S. A. Luca we reconstructed image from Figure 6, but some pits still need to be analyzed. We have the offer of S. A. Luca to reconstruct and interpret the complex on the basis of the details and materials discovered.

<sup>&</sup>lt;sup>35</sup> LUCA 2012, 58-61; 2015.

<sup>&</sup>lt;sup>36</sup> VLASSA 1972, 8; LUCA 2012, 58.

they are semi subterranean houses that form a series over time, often overlapping, and which are located around a central space (see below Gura Baciului).

The settlement with pithouses and semi subterranean houses from Cristian is like those from Gura Baciului, but also from other areas (Cârcea-Hanuri, Dudeștii Vechi, Fundătura, etc.)<sup>37</sup>. The housing area is separated from the cultic area that was eastward; at Baciu the tombs were found in some dwellings.

The monochrome aspect of the pottery in the cultic area is obvious and it was defined by S.A. Luca as Cristian IA. Issues that arise are related to vessel typology and <sup>14</sup>C data. Below we present other situations with salt-rich areas in Transylvania. Analysing the wealth of complete pots, more numerous than in any other settlement of the Balkan monochrome horizons, we observe two clusters:

In the first cluster, perhaps earlier, the vessels in the graves from Cristian do not correlate with each other (Figure 9/a), although there are several vessels in the same complex;

In the second cluster (Figure 9/b) they correlate with settlements in salt areas from the horizons SC IB, maybe IC.

We also notice that most of the recipients have the bottom made on the mould on which the vessel was modelled<sup>38</sup>, although vessels with ring-shaped bottom can also be found. These offer greater stability. Being amphorae, we think it is possible that they have been deposited with brine for the deceased to have salt beside him for his needs in the "afterworld" ("the hunting grounds" of the Native American peoples).

In Cristian we have two Monochrome horizons, one with vessels without ring-shaped bottom, belonging to the first migration, and those with ring-shaped bottom, which together with the globular vessel shapes indicate a later horizon in what S. A. Luca defined as Cristian IA (the cultic area, see the second cluster: Figure 9/b).

From the second cluster (Figure 9/b) we can see that Cristian is located in time between the discoveries from Gura Baciului, pithouse B1 and Seuşa, dwelling L1, the latter being determined by the globular vessels (G3, G4, G5, G10), so between SC IB-IC. These relative timeline frames coincide with the absolute chronology data ( $^{14}$ C, above Figure 6), the series ranging from Gura Baciului pithouse B1 and Cristian I  $^{14}$ C data Beta-707716, to Cristian I,  $^{14}$ C data Beta-407701.

When we will have more <sup>14</sup>C data, from other complexes too, we will be able to make further clarifications. But the monochrome aspect of the entire cultic place remains, and the

<sup>&</sup>lt;sup>37</sup> MCPHERON, SREJOVIĆ 1971; NICA 1984, 36; LICHTER 1993, kat. 27; LAZAROVICI G. *et al.* 1996; LAZAROVICI C.-M., LAZAROVICI G. 2006, 84–126.

 <sup>&</sup>lt;sup>38</sup> LAZAROVICI G., MAXIM 1995; ŞEULEAN 2011, 10, Figure 3, 109, 269 types J1–J6; 2012, 153, Figure 76; LUCA 2012, 91, 141, Figure 111, where appear between 20 and 2 fragments.

neighbouring settlement is synchronous with SC IB-IC<sup>39</sup>. Let us not forget that in the cemetery area there are some early pits that S. A. Luca regards as SC IA, as well as perhaps the first part of the graves as they appear from the series (Figure 9/a); but the data being uncorrelated, we should have some reservations. We have to say that only in Cauce Cave, settlement from SC IC, there are no sources of salt, in all other settlements there is salt, but this cave connects to the southern areas of the Oltenian Subcarpathians (e.g. Băile Govora), where there are sources of salt, but not as rich as those in Transylvania.

In the Cristian settlement, the presence of barbotine, especially from pithouse B9<sup>40</sup>, causes us to consider that this settlement may have lasted longer, until SC II.

We insisted on the findings from Cristian I, being so far the earliest in the Carpatho-Danubian region and better defining the SC IA stage (Figure 9/a with Gura Baciului, abbreviated in the tables as GB; B2A series head correlated with GB B1 in Figure 9/a). We remind that at the beginning we defined with certain reserves SC IA due to the few ceramic materials from Gura Baciului. The second cluster from SC IB, painted with large white dots, not associated with straight or wavy white lines, continues with Gura Baciului pithouse B1 (GB B1 base and GB B1 filling of the hut), correlated with three types of globular vessels (O16, O36, O35).

Cristian I is 10 km away from one of the richest salt areas in southern Transylvania, the one from Ocna Sibiului. At the moment there are over 13 lakes with salt water, as well as a great spa and tourist resort. In many of these lakes there were salt exploits (mines). In time these old mines collapsed and turned into salt lakes, some communicate, others not, on several levels, and in some cases, with all the recent arrangements in the baths and salt lakes, collapses occur. From a recent collapse one can observe the good quality salt rock.

Salt exploitations, in the form of brine or salt rock, we think have been used since the early Neolithic. The settlement at Triguri, researched by Iuliu Paul<sup>41</sup>, is on a "mountain" of salt, and the terrace on which the settlement stays chokes the salty brook that passes through Ocna Sibiului. Springs, salt lakes were everywhere. Many are located at the base of the slope, which explains the many traces of exploitation from all periods. As a result of the collapse of the steep banks, even today on the edges of the lakes transformed into touristic, rest and treatment points (sludge, salt, iodized salt), salt cliffs emerge, the whiteness of which is reflected in the lakes (Figure 10/c). The names of the lakes are related to former salt mines (Ocna Pustie, Gura Ocnei, Ocnița; later they were renamed Horea, Cloşca, Crişan).

These exploitations are marked on the first Austrian maps (Figure 10/d-e) as salt pits. Over time they have been transformed into lakes for rest and treatment. In the days of the

<sup>&</sup>lt;sup>39</sup> The material in the settlement area has not been published on complexes, so we can not refer to it.

<sup>&</sup>lt;sup>40</sup> LUCA *et al.* 2015, 168, table 5 and şi graphic 5.

<sup>&</sup>lt;sup>41</sup> PAUL 1970; 1989, 3–27; 1990; 1995, 19–70; 2009; and others.

Habsburg Empire were erected the first buildings with a beautiful architecture to function as baths on the shores of some lakes.

Ocna Sibiului - Triguri (Salzburg – De. 'Salz' = salt)

The archaeological area

At the border of the village are signalled 34 archaeological sites<sup>42</sup>. On Triguri Hill, east of the village, Iuliu Paul researched 10 archaeological features (pithouses, semi subterranean houses, dwellings and pits) from the time of Starčevo-Criș culture (named by I. Paul Precriș<sup>43</sup>) (Figure 11/b-c). There are traces of Paleolithic (Mousterian) housing in the area, seven areas with Neolithic discoveries, some isolated, six with Copper Age discoveries and others.

All this shows interest in using and exploiting salt: 10 stone axes have been discovered at Triguri, approx. 15 axes from different periods, some used to cut the salt (see also the Achim Museum collection: Figure 11/d, crushers, perforated massive axe, Neolithic, Roman era artefacts)<sup>44</sup>.

Relative and absolute chronology

Many of the archaeologists from Cluj (N. Vlassa, Gh. Lazarovici, Zoia Maxim) and colleagues from Alba Iulia and Sibiu have developed doctoral theses based mainly on the excavations from Ocna Sibiului, Şeuşa, Miercurea Sibiului and others or have made references to different materials<sup>45</sup>.

We must note that in the 19<sup>th</sup> century there were numerous lakes downstream of Ocna Sibiului, marshes, salty areas (Figure 11/c), but there are also fresh water streams and springs, as well as places favourable to fishing and hunting. The terraces on which the settlements of Triguri and Fața Vacilor are located, are flat fields, favourable to agriculture, and at the base the salt sources, essential for cattle and humans. The essential element was the salt that determined these long, steady settlements.

<sup>&</sup>lt;sup>42</sup> LUCA, PINTER, GEORGESCU 2003.

<sup>&</sup>lt;sup>43</sup> Comments on the term and chronology: LAZAROVICI G. 2005 and bibl.; 2006, 140, figs 36, 142, 143, 147–148, *sub voce* OS; and others.

<sup>&</sup>lt;sup>44</sup> PAUL 1970; 1989, 3–27; 1990; 1995, 19–70; 2009 and others; CIUTĂ 2005 and bibl.; LUCA *et al.* 2003, s.v. Ocna Sibiului and bibl.

<sup>&</sup>lt;sup>45</sup> CIUTĂ 2000; 2001; 2002; 2005 and others; DUMITRESCU-CHIOAR 2010; with references to others LUCA 2014, 8 no. 4 and others.

The earliest painted materials show that habitation begins at Ocna Sibiului with SC IB-IC (ceramic painted with small or oval dots arranged in opposite triangles, Figure 15/a-b) and lasts until SC III.

We extracted from the databases the correlations between Ocna Sibiului and Gura Baciului, for which we have close <sup>14</sup>C data (Figures 6 & 12) and those from Anzabegovo I, and on the other hand we followed the <sup>14</sup>C data that mark the communities coming through the Olt Valley from Bulgaria, through Veliko Târnovo – Džiuliunica, on the Struma valley towards south, and from there towards west. The beginnings come from Macedonia, at Strumica, which connects with Western Balkan settlements.

From Tables 12 we can see that in Ocna Sibiului there are some materials that seem earlier, but we know from most settlements that the decorative motif AP from pithouse B1 in Ocna Sibiului (OSB1) is later, and it is correlated with the larger number AP motifs with OSL4 and OSL8.

We have previously mentioned that, at Ocna Sibiului, in the deep pithouses, the soil gets compacted and materials from the upper levels penetrate the levels below of the pithouse<sup>46</sup>. We know that the AP-type pressed marks on the lip are associated with SC IC phase materials in other settlements with monochrome ceramic after large white dots too.

At Cristian, they also appear in level SC IC in the dwellings area, late stages (Figure 9). These observations are important because now along the same path from the centre of Bulgaria comes the grooved ornaments: Džiuliunica, Gălâbnik, and at us in Şeuşa (see Figure 14/a-e)<sup>47</sup>. The salt sources at Ocna Sibiu played an important role for the Veliko-Târnovo area and the SC I settlements in the eastern and southern part of Bulgaria (Gălâbnik, Figure 14/e; Krainici<sup>48</sup>, Figure 14/f, ceramic decorated with dots — compare with Figure 13, OS and MS).

We also note at some vessels the arrangement of the perforations of the handles in a vertical position (Figure 14/a-b), which serves to hang, so the liquids or the brine do not spill by mistake, perhaps having also myths related to it, the urine being considered the piss of the gods (salty water or piss destroy the vegetation).

There are also some asymmetric vessels in the SC culture that have four large handles, as wide as a backpack, allowing the transport of liquids on the back (water, brine) over long distances<sup>49</sup>. The rivers and their tributaries from Ocna Sibiului flow northwards between the Hărtibaciului Plateau and the Secaș Plateau towards the Transylvanian Plateau, whose southern side has no salt, then they flow into Târnava Mare River (Figure 5/a–b).

<sup>&</sup>lt;sup>46</sup> PAUL 1995, 31, fig. 2.

<sup>&</sup>lt;sup>47</sup> LAZAROVICI G., LAZAROVICI C.-M. 2017, fig. 5.

<sup>&</sup>lt;sup>48</sup> CHOHADZHIEV 2001, 253, Abb. 1; DEMOULE, LICHARDUS - ITTEN 1994, 608; LAZAROVICI G., LAZAROVICI C.-M. 2016, fig. 7, 23.

<sup>49</sup> LAZAROVICI G., LAZAROVICI C.-M. 2015.

The splendid ceramic painted with dots is organized in decorative motifs (Figure 15/a-b), but in the same features there is also pottery decorated with pinches and white motifs in a network, characteristic of SC IB-IC, similar to those in pithouse B1 from Gura Baciului (Figure 24).

At Miercurea Sibiului there are: salt sources and spa resort with salt; areas with salted sand, used for public roads in winter (Figure 17).

There are four early Neolithic settlements in the city's perimeter, three linked to the first migrations: one systematically researched in the Pietris point (MS1) with magnetic survey, two on the route of Highway A3, two investigated by rescue excavations and one probed (MS2 = Pustia).

These settlements show again how important salt sources were for the first Neolithic communities.

Two globular vessels (MS –  $B10^{50}$ ; Figure 9/b forms O24 and O25, Luca et al. 2008, linking to Cristian –  $C083^{51}$ ) from Miercurea Sibiului are related to the SC IB phase, but predominant is the monochrome appearance of the IB – IC horizon (with large dots, of poor quality (Figures 14/g–h & 15/e–i), and the monochrome pottery represents over 93% of the total.

Based on <sup>14</sup>C data (Figures 4 & 16), the feature would belong mostly to SC IC. So it would be the second Monochrome phase, born perhaps from the evolution of Cristian. But the association with white lines (thin or wide, small dots: Figure 15/g-h) has analogies at Vaksevo (Figure 18/b.5) and Măgura–Buduiasca (Figure 18/a.4–5, 8–9, 12), which, associated with thin curved lines, cross-shaded triangles, lines without a precise contour, large white spaces associated with red, triangles (variants of that solid style) also imply an SC IC, maybe IIA (for Figure 24/a.1, 6), characteristic elements for Gura Baciului II (SC IC/IIA).

Radiocarbon data confirms our relative chronology series according to the comparative stratigraphy and <sup>14</sup>C data (Figures 2/d, 6, 9, 12.13, 16), as well as those of other colleagues, based on other classification codes<sup>52</sup>. Characteristic is B10 (a semi subterranean house feature), but this also reaches SC IC/IIA<sup>53</sup>. These involve a southern movement along the Olt between Oltenia (Grădinile<sup>54</sup> with that Solid Style<sup>55</sup>) and western Muntenia (Măgura-

<sup>&</sup>lt;sup>50</sup> MS B10 (in fact semi subterranean house): LUCA, SUCIU 2008; LUCA *et al.* 2008, 329, plan 6 and fig. 18, C14 data, upper at fig. 4.

<sup>&</sup>lt;sup>51</sup> Cristian, LUCA *et al.* 2015, 23–24, 28, 95–96, 120 and others: they come from the pits covered with lids, at the top of the pit, and in pit G83 also in the middle: figs 82–84.

<sup>&</sup>lt;sup>52</sup> LUCA et al. 2008, 329, fig. 1, photo 1; ŞEULEAN 2012, 71, 123, 125.

<sup>&</sup>lt;sup>53</sup> LUCA *et al.* 2008, plan 5–6.

<sup>&</sup>lt;sup>54</sup> ANDREESCU et al. 2003.

<sup>&</sup>lt;sup>55</sup> NICA 1981; 1983; 1991; 1986, 38, figs 5/9; 9/1-4, 6, 8-11, 15.

Buduiasca<sup>56</sup>), which show tight connections with areas in the eastern Balkans (Džiuliunica<sup>57</sup>, Vaksevo and others<sup>58</sup>).

The painted pottery from Ocna Sibiului and Miercurea Sibiului being in the same fashion (technology, shapes, ornaments), is slightly different from that of Seuşa site, where it is in smaller proportion, perhaps because fewer features have been researched and which would relate to the phenomena coming from Serbia.

Radiocarbon data shows that at Ṣeuṣa there is another migration, on the same routes as phase SC IB from Gura Baciului or Donja Branjevina, but later. The dots from Gura Baciului in features SC IC are scarce and associated with brown painting they are organized on rows, opposing triangles (Figure 15/a–b), with analogies on the Olt Valley towards south in Cârcea, Grădinile and others. In fact, the findings from phase SC IC-IIAB in the Danube Plain (Grădinile, Cârcea, Măgura-Buduiasca, Figure 18/a) have links—as we have shown above—towards western (Gradešnica A<sup>59</sup>) and central Bulgaria (Džiuliunica<sup>60</sup>, Figure 19), but also towards south-west, at Nevestino, etc.<sup>61</sup>

We must note that since the early Neolithic, the roads of the shepherds, related to migratory pastoralism<sup>62</sup> were associated to the salt roads, being ethno-cultural communication routes, for which the mountains were not a problem but a favourable factor during the warm and dry season (May–August).

## The Middle Mureş Basin

There are no extensive researches on the middle course of the Mureş, the works at the Alba Iulia–Cluj-Napoca Highway are in progress, and the results of the research have not yet been published. The doctoral thesis of Alexandru Bărbat analyses very competently some of these settlements<sup>63</sup>.

Şeuşa

<sup>&</sup>lt;sup>56</sup> ANDREESCU, BAILEY 2002; 2003; 2004; ANDREESCU, MIREA 2008.

<sup>&</sup>lt;sup>57</sup> ELENSKI 2000; 2002; 2004; 2008, 2008a; ELENSKI, LEŠTAKOV 2006; and others.

<sup>&</sup>lt;sup>58</sup> CHOHADZHIEV 2001; CHOHADZHIEV *et al.* 2007; and others.

<sup>&</sup>lt;sup>59</sup> NIKOLOV 1974; SCHUBERT 1999, 62–63. Schubert has done a very analytical work, well documented, with broad visions. Its data was not introduced into our databases because most of the information about the painted ceramics was from the primary sources, but there are other information we did not have.

<sup>&</sup>lt;sup>60</sup> ELENSKI 2000; 2004; 2006; 2008; KRAUSS *et al.* 2014.

<sup>&</sup>lt;sup>61</sup> CHOHADZHIEV *et al.* 2007, and others.

<sup>&</sup>lt;sup>62</sup> ARNOLD, GREENFIELD 2006.

<sup>&</sup>lt;sup>63</sup> BĂRBAT 2012a; 2012b.

The settlement is not located along the communication routes, nor close to large salt sources. The settlement was not very large, few features have been researched, but they were well published<sup>64</sup>, which allowed us to include the information in our databases, but they were not processed on the computer like those from Gura Baciului, Miercurea Sibiului or Cristian I<sup>65</sup>. It is characteristic of SC IC, being at the head of the series (Figure 9/b). Bentonite and salt water with the known characteristics has been used, perhaps, for its curative role<sup>66</sup>.

### Şoimuş

In the Deva-Hațeg area there is a salt fracture that goes to Transylvania (Deva, Hațeg, Orăștie, etc.)<sup>67</sup>, and here and there salt ponds and salt lakes appear.

The settlement is north of Deva and Mureş River, on the Highway. Two areas with numerous features were investigated, with pottery and flint tools (it is the yellowish flint with whitish spots<sup>68</sup>). As sources for this type of flint are mentioned those north of the old Balkan mountains<sup>69</sup>, called Stara Planina<sup>70</sup>, which continue towards Serbia.

The pot of Soimus (Figure 21/c) has analogies at Crăciunești in the Balogu cave (Figure 21/d), with brown angobe<sup>71</sup>. At Gura Baciului this type of vessel appears in the B8, B9, G33 and B20 features, dated to SC IC-IIA<sup>72</sup>.

#### Gura Baciului

The site, through systematic excavations and the exhaustive processing of materials in databases, is important for the evolution of architecture and ceramics, but also for the

<sup>&</sup>lt;sup>64</sup> CIUTĂ *et al.* 2000a; 200b; 2002; the most important work is CIUTĂ 2005; towards Precriş terminology at PAUL 1989; PAUL *et al.* 2005 (and others), and CIUTĂ 2000; 2002; 2005 we have had some comments: LAZAROVICI G. 2001; 2005; and others.

<sup>&</sup>lt;sup>65</sup> ŞEULEAN 2012; TUDORIE 2011; 2014; and others.

<sup>&</sup>lt;sup>66</sup> BĂRBAT 2012a, 95 analyzes apud CIUTĂ 2005, 53, 72 for Ocna Sibiului.

<sup>&</sup>lt;sup>67</sup> BĂRBAT 2012a, 96–98.

<sup>&</sup>lt;sup>68</sup> BĂRBAT 2012a, pl. CXLIII–CXLIV.

<sup>&</sup>lt;sup>69</sup> BĂRBAT 2012, pl. III.2, XLVII, LVI.

<sup>&</sup>lt;sup>70</sup> NACHEV 2009, 17, 18; GUROVA 2011; 2013 groups from figs 1, 5 corelations.

<sup>&</sup>lt;sup>71</sup> Engobe is characteristic for SC IC, unlike the brown colour obtained during firing, that is earlier. BĂRBAT 2012a, 93 and notes 301–302 and bibliography at Chapter III-Repertory: there are also sources of andesite, material used for tools. Appears at Ocna Sibiului in dwelling L2: CIUTĂ 2005, 184–185.

<sup>&</sup>lt;sup>72</sup> LAZAROVICI G., MAXIM 1995, s.v. mentioned complexes.

interdisciplinary researches undertaken here (geography, geology, fauna, anthropological analyses, pedology, ceramics, tools, architecture etc.<sup>73</sup>).

The housing begins with a series of complexes with monochrome ceramics (Figure 22/a), partially affected by other, later pits, which is why there were few clear materials, and therefore we defined as hypothetical the SC IA phase in our excavations and those of N. Vlassa<sup>74</sup>. In the Balkans too there are few materials from phase SC IA, most of them found outside features<sup>75</sup>, of which about 50% are from Gura Baciului. The vessels are monochrome fired and they have no slip or engobe. They are red (Figure 22/b.1) or brown (Figure 22/b.2–3).

Phase SC IA-IB

In a later phase there is monochrome pottery painted with large white dots on the monochrome red background of the pot, defined as SC IA-IB (Figure 18) because of the monochrome aspect of the rest of the ceramics predominant in the B2A feature B2A base (Figure 22/a). At this time, there are no pinches made with the nail or incisions.

In addition to the Gura Baciului discoveries (124 fragments), from the South of central Europe we have 227 fragments in the database (but the registrations are over 10 years old, today there are more).

The white painting is organized in dots forming geometric motifs (see above on OS, Figure 15/a-b, triangles, diamonds, zigzags, etc.).

This type of motifs, spread in southern central Europe, shows the importance of migration, as well as the ethno-cultural links determined by the need for salt sources in the first place, but also the exchange of livestock, flint and others.

During the stage SC IB, in the secondary and seasonal settlements, or where there was little research and there are no features with painted ceramics, the Monochrome aspect we have called Monochrome  $II^{76}$  is maintained. It has monochrome aspect, but it retains only

<sup>&</sup>lt;sup>73</sup> LAZAROVICI G., MAXIM 1995, see also interdisciplinary studies: studies about architecture: LAZAROVICI G., LAZAROVICI C.-M. 2002; 2003; 2005; 2011; LAZAROVICI C.-M., LAZAROVICI G. 2006; and others.

<sup>&</sup>lt;sup>74</sup> VLASSA 1972, in particular pl. 15–16; LAZAROVICI G., MAXIM 1995, pithouse B2A, its base, where cca. 97% is monochrome ceramic, the rest of the material is painted, there are also some impressions, but not pinches. Soem fragments have been fired at 900°C.

<sup>&</sup>lt;sup>75</sup> Larissa Argissa Magula: HAUPTMANN, MILOJČIĆ 1969, 6.8–9; MÜLLER-KARPE 1968, 444, Taf. 126A, kat. 97; ASLANIS 1992, 535, Pl. G.2, 4; Otzaki Magula, HAUPTMANN, MILOJČIĆ 1969, 6.7; general, MÜLLER-KARPE 1968, 451–452, Texte kat. 123, and in volume 2 1968, Tafeln 127a and other materials of Balkans.

<sup>&</sup>lt;sup>76</sup> Diffusion phenomena take place on Danube and Mureş river, from the south and east, of the white and red painting and Monochrome II, in Hungaria sites at Kopancs, Zsoldos and others: MAKKAY 1965, 7–8; 1982, 35, 39; TITOV 1980, 95, pl. 47/1 and others; AP decorative motif of our codes (rare pressures on the lip) KUTZIÁN 1944, pl. XXXI.6; XXXII.3; and others.

certain elements. If there are secondary settlements formed by families coming from a main settlement, then their members bring with them the knowledge that those families have. Through direct contacts (marriages, family visits, or large celebrations of the former community: marriages, funerals), they come in contact with the main settlements and bring other elements or objects.

If there are workshops (for ceramics<sup>77</sup> or tools) in the main settlements, they can bring other objects too, that are not manufactured in those secondary settlements. Those new elements we call or define as "fashion" (reflected in ceramics technology, decoration or shapes).

To the seasonal settlements (agricultural works, hill/mountain-plain transhumance, workshops at flint sources) community members took what they needed during the season<sup>78</sup>. In some cultic areas (the case of Cristian I) a certain ritual of the great family they belong to was preserved.

## Phase IC

Now the process of neolithisation is spreading throughout the Balkans (Figure 24). In what we define as Monochrome I, we notice that communities go towards the salt sources on two ways, one through Bulgaria (then along the Olt river), another through Serbia (Axios-Vardar), which causes diffusion and migration towards Hungary (Szarvas 23 and Tiszasziget)<sup>79</sup>.

The white painting in Macedonia, Western Bulgaria, Eastern Serbia, Oltenia, Banat, Transylvania has a linear character (triangles, parallel lines, hatched lines, wavy lines, etc. as we mentioned above) and it has in all areas the same aspects. These links we believe to be primarily determined by the need for salt for humans (food, meat preservation) or human or animal health, which leads to permanent contacts, considered as "fashion" elements (especially in decoration and ceramics technology).

From the main settlements—which often control salt sources—swarmings take place, some are seasonal settlements (4–5 km distance from the main settlements) or diffusions where the dynamism and contact with the big settlements is broken and there is a process of stagnation or involution compared to the starting areas. Sometimes these are the beginning of local developments.

Due to lack of statistical analyses and publication of materials on archaeological complexes, comparative stratigraphy relationships cannot be sufficiently defined. Sometimes there are social-religious causes, such as at Cristian I, where the dynamics of evolution is

<sup>&</sup>lt;sup>77</sup> Not everyone can make a pottery fired at over 900°C temperature.

<sup>&</sup>lt;sup>78</sup> In the analysis of statistical data lacking luxury ceramics, old items are preserved.

<sup>&</sup>lt;sup>79</sup> MAKKAY 1981, 96, 100; 1982, 38–39.

different: no decorated pots are deposited in pits or graves. But the evolution of the shapes follows the SC IA – IC stages.

We do not know the social or psychological factors (relating to family or small groups) that stand behind evolution or dynamics<sup>80</sup>. In all the space we study, we find the pithouses and semi subterranean houses, with similar shapes and dimensions, with few pits for pillars.

During SC IIA, the surface dwellings appear, as we encounter in the early Sesklo culture, and in the Carpathian-Danubian region are now being used the dwellings (Gura Baciului, Donja Branjevina, etc.<sup>81</sup>).

There are two different developments in ceramics: one in eastern Serbia where white painting has not many different motifs; another in the center and west of Bulgaria (Figure 21b, 24d, f) where the pottery is decorated with large white painted spaces, defined by us as SC IC-IIA, as we have shown above.

In Oltenia stage SC IC-II appears at Grădinile, in Muntenia at Măgura-Buduiasca<sup>82</sup> (Figure 18/a.3), and in Transylvania (at Gura Baciului II there are few materials with this kind of motifs, being associated in features with motifs painted with red-brown, brown<sup>83</sup>). Motifs with large white spaces, curved, do not appear in Banat. They are spread only south of the Southern Carpathians. Their area of development is in the Basin of Maritsa, the Struma Valley and the Lower Danube Valley.

## The third migration with diffusions (SC IIB-IIIB)

The red, brown, black painting is now becoming usual, the incisions and barbotine appear, and in some areas the bitronconic shapes will spread more strongly to the south and east of the Carpathians, also linked to the salt sources, which will lead to the neolithisation of other regions<sup>84</sup>. But this is another, more complex theme, in which intervenes the exchange of other commodities (obsidian, flint) besides salt.

At the time of this migration, the centre and north of the Pannonian Plain is neolithised through a migration phenomenon found in all the Danube region, and a diffusion from these areas with a local evolution in Hungary.

<sup>&</sup>lt;sup>80</sup> Dynamics is more prominent where there are workshops. Archaeologists often define this by the "group" term, in fact a cultural series.

<sup>&</sup>lt;sup>81</sup> LAZAROVICI C.-M., LAZAROVICI G. 2006, 100 ff. and others.

<sup>&</sup>lt;sup>82</sup> NICA 1981; ANDREESCU, BAILEY 2004; MIREA 2005.

<sup>&</sup>lt;sup>83</sup> LAZAROVICI G., MAXIM 1995, color pl. PC VI–IX, there are more dots but the painting is of poor quality PC V, VI.2.4, VIII.1–6, X.5; appear and pinching ornaments.

<sup>&</sup>lt;sup>84</sup> LAZAROVICI C.-M. 2017; LAZAROVICI G. 1992: for the chronological systems see: LAZAROVICI G. 1977; 1979; 1983/1984; 1995 a. s.o.

The fourth migration occurs in SC IIIB-IV (Figure 27b), when Vinča A and the Polychromy (Developed Neolithic) evolve in Oltenia, Moldavia, Bessarabia and Northern Crişana get neolithised<sup>85</sup>, and then the neolithisation processes expand to the centre of Europe. In Transylvania the salt played an important role in the Early Neolithic, especially in the Middle Mureş Basin.

We note that during this period are discovered the salt sources in eastern Transylvania (Figure 27/a-b), and then (during SC IIIB) the ones in Moldova which were intensively exploited in the Middle Ages and recently<sup>86</sup>, and those in the western parts of Central Europe<sup>87</sup>.

These last two migrations play an important role in southern Central Europe, the early Neolithic civilization extends to: northern Hungary, southern Slovakia, SW Poland in the upper Tisza basin, eastern Austria (at Prellenkirchen, Brun at the base of LBK there are SC features<sup>88</sup>).

**Acknowledgement.** This work was supported by a grant of Ministery of Research and Innovation, CNCS–UEFISCDI, project number 151/2017, PN-III-P4-ID-PCE-2016-0759, within PNCDI III — *The Ethnoarchaeology of Salt in the Inner Carpathian area of Romania* —ethnosalro.uaic.ro/ethnosalro3.

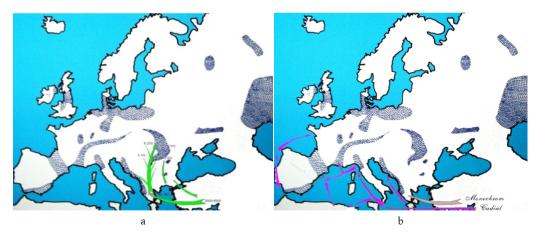


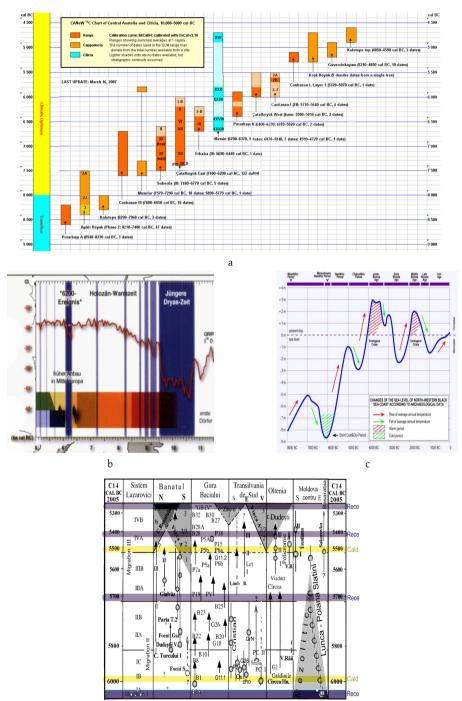
Figure 1. Salt sources in Europe and (a) the first migrations (Monochrome and Cardial), and (b) the Monochrome I migration in Southern Central Europe

<sup>&</sup>lt;sup>85</sup> Synthesis — Mexico: LAZAROVICI C.-M. 2017; LAZAROVICI G. 2017; LAZAROVICI G., LAZAROVICI C.-M. 2017; North Crișana: VIRAG 2008; Bessarabia: DERGACEV et al. 1991; LARINA 1994; DERGACEV, LARINA 2015.

<sup>&</sup>lt;sup>86</sup> About recent salt sources and exports south to Turkey and East: VITCU 1987; MONAH 1991; 2008; 2008a; WELLER, DUMITROAIA 2005; BRIGAND, WELLER 2014.

<sup>&</sup>lt;sup>87</sup> BÁNFY 2013 and bibl.

<sup>&</sup>lt;sup>88</sup> STADLER 2005; 2009; 2013; 2017.



Gheorghe Lazarovici, Cornelia-Magda Lazarovici

Figure 2. The main PPN settlements between 8000–6000 BCE from Anatolia (a). Climate changes according to DAIM, NEOGEBAUER 2005 (b) and H. TODOROVA communication at Cluj-Napoca 2007 (c). Cold and warm periods on the territory of Romania (d)

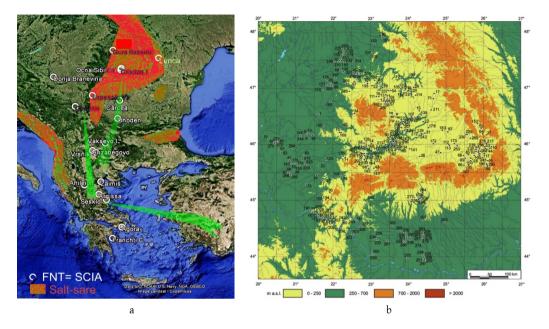


Figure 3. Transylvania and the neighbouring areas: (a) the beginning of neolithization in southern Central Europe; (b) the spread of the Starčevo-Criș culture (SC), apud LUCA & SUCIU 2011

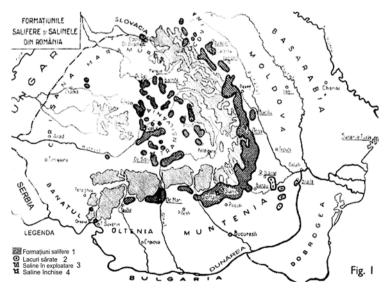


Figure 4. Salt sources in Romania, apud Gramatopol 1997, fig. 1

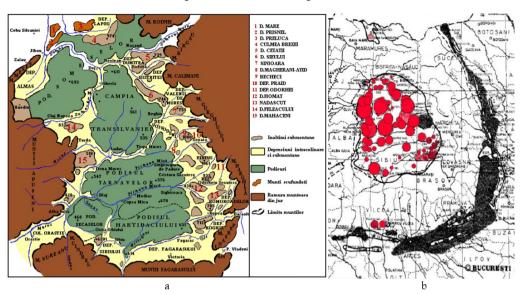


Figure 5. The geography of Transylvania (a) and the intensity of the saliferous areas (*ap.* A. BARBU; see also Figure 4)

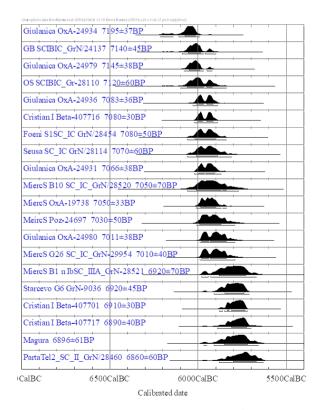


Figure 6. C14 data from settlements related to Cristian I (Giulanica = Džiuliunica)

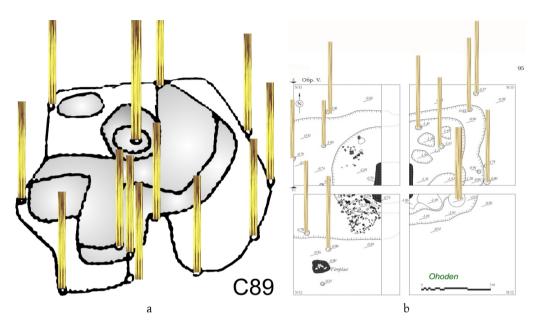


Figure 7. a – Cristian I, C89 (apud LUCA 2015); b – Ohoden (apud GANETSOVSKI 2009)

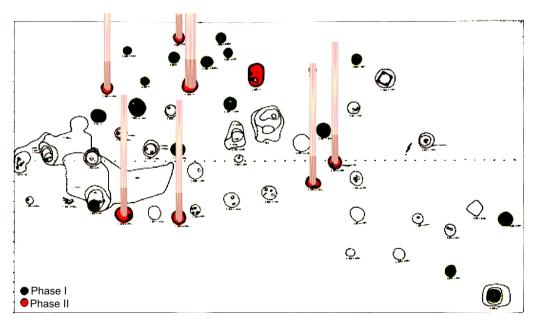


Figure 8. Cristian I, the cultic area (processing *apud* LUCA 2012)

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Cristian 93																						1												
Gura Baciului I																						1												
Cristian 37																							1	1	1									
Cristian 69																							1	1	1									
DB																									1									
ОSfig. II a																									-	2								
OSIIg. II a																						1	2		1		4	1	2					
OSL2																						-	-			~	-	•		2	1	1		

Figure 9. The series of SC I features in Transylvania:

b

Cauce

MSB10

Seusa L1

10 2

3 10 2 1 1

1

a – the first uncorrelated, perhaps early cluster, followed by Gura Baciului from SC IA;

b – the next SC IA-IB clusters, determined by the globular vessels with O.. markings, early shapes

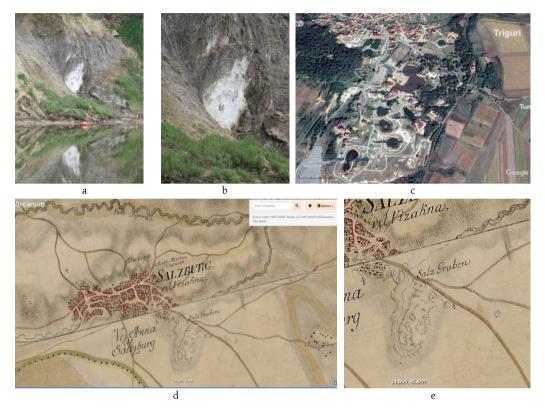


Figure 10. Ocna Sibiului: a-b — salt rocks on the shores of lakes; c — map with the names of the lakes; d-e — the first map (apud MAPIRE — Historical Maps Online — mapire.eu)

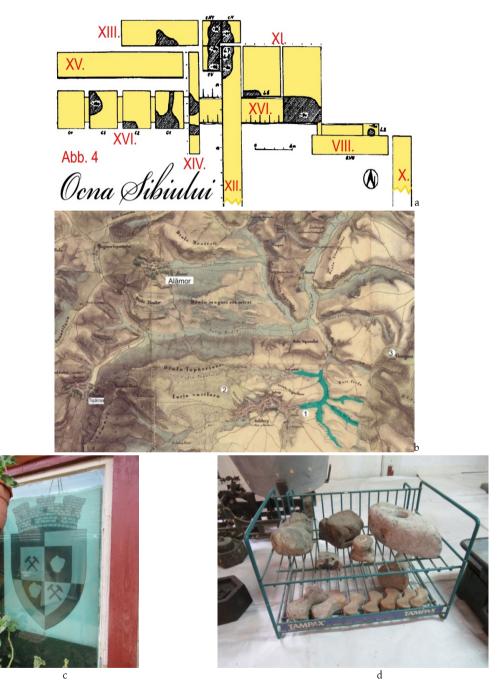


Figure 11. Ocna Sibiului: a – the plans of I. Paul's excavations at Triguri; b – the Ocna Sibiului area with the main researched prehistoric settlements: (1) Triguri (SC phases IB - III),
(2) Faţa Vacilor (Petreşti culture) and (3) Gorgan; c – emblem of the town;

 $\mathrm{d}-\mathrm{archaeological}$  artefacts, hammers for salt rocks (Achim collection)

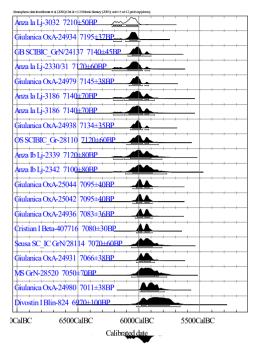
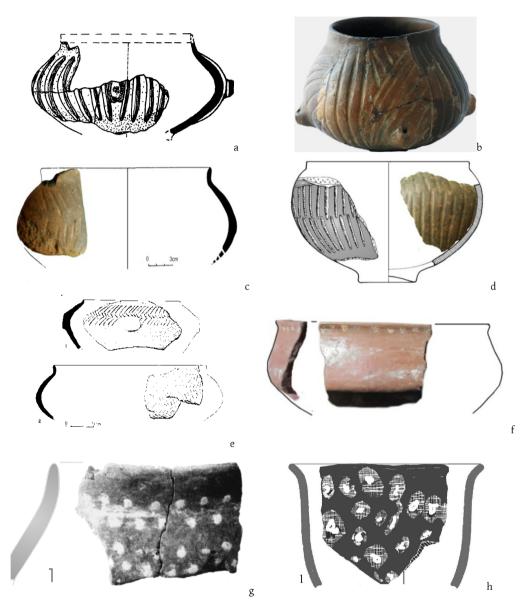


Figure 12. Radiocarbon (<sup>14</sup>C) data for early Neolithic settlements

Figure 13	OSB1	OSL4	OSL8	GBB1	Anzabegovo Ia	GBB8	Anzabegovo Ia B2	Anzabegovo Ic
AP	2	7						
IA		4						
AP, IA		6	2					
КО			2					
СМ		1		1				
ID			1		3			
KM				6				
JN				9				
FU				2				
СС				2				
BN				2				
JB				1				
JM				2	1			
VD					3			
QI					3			
QO					3			
XD					3			
XE					3			
DJ				1		2		
CD					2		1	
CF					2		1	
AL				1			1	
СР					1		1	
IG					1		1	
CL		1		1			2	I
JK		1		1	1		2	1
CE		1			1		1	1
BO								2
BP								2
GE								2
GP								2



 $\label{eq:Figure 14: Grooved pottery, SC IC-IIA: a - Ocna Sibiului; b - Ṣeuṣa; c-d - Gura Baciului (SC IC: huts B2b and B2B); e - Gălâbnik; f - Krainici; g - Grivac; h - Aiman$ 



Figure 15. SC pottery: a-b — Ocna Sibiului; c-i — Miercurea Sibiului (photo S. Odenie, S.A. Luca and Gh. Lazarovici)

Gheorghe Lazarovici, Cornelia-Magda Lazarovici

merpherie data from Reimez et al (2004 ).Ord'al vô 10 Brenk Ramrey (2005), oub 15 rd 12 prob wp[olar		IIA		
GB SCIBIC_GrN/24137 714 <u>0±45BP</u>			- '	
Giulanica OxA-24979 7145± <u>38BP</u>	<b>A</b>			
OS SCIBIC_Gr-28110_7120±60BP				T
Giulanica OxA-24936 7083±3 <u>6BP</u>			_	T
Cristian I Beta-407716 7080±30BP		<b>.</b>		t
Foeni S1SC_IC GrN/28454 7080±50BP		· ·		$\vdash$
Seusa SC_IC GrN/28114 7070±60BP		<u> </u>		$\vdash$
Giulanica OxA-24931 7066±38BP		-		$\vdash$
MiercS B10 SC IC GrN/28520 7050±70BB		· ·		$\vdash$
MiercS OxA-19738 7050±33BP		-		┢
MeircS Poz-24697 7030±50BP				$\vdash$
Giulanica OxA-24980 7011±38BP		,		$\vdash$
MiercS G26 SC_IC_GrN-29954 7010±40B		-	_,	┝
MiercS B1 n IbSC IIIA GrN-28521 6920±	_			$\vdash$
Dudesti V GrN-28111 6990±50BP		-	1	F
Dudesti V GrN-28113 6930±50BP			-,	-
Foeni Gaz GrA-25621 6925±45BP			1	F
Starcevo G6 GrN-9036 6920±45BP				-
Miercurea Petr. GrN+28521 6920±70BP			-	F
Cristian I Beta-407701 6910±30BP		-	-	-

Figure 16. The framing of the Miercurea Sibiului settlements in phases IB/1C – IIA according to  $^{14}\text{C}$  data



Figure 17. Miercurea Sibiului – Baths: piles of salty sand used to melt the ice on the roads (photo G. Lazarovici)

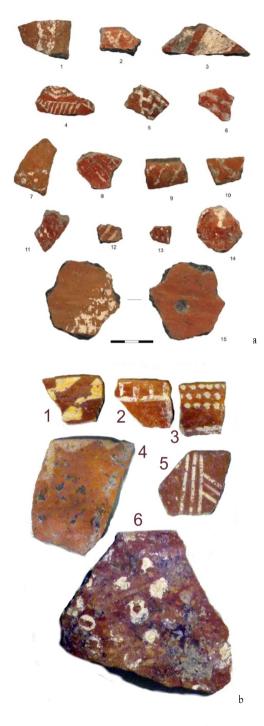


Figure 18. SC IC pottery: a — Măgura-Buduiasca (apud MIREA 2005); b — Vaksevo (apud CHODADHZIEV 2001)

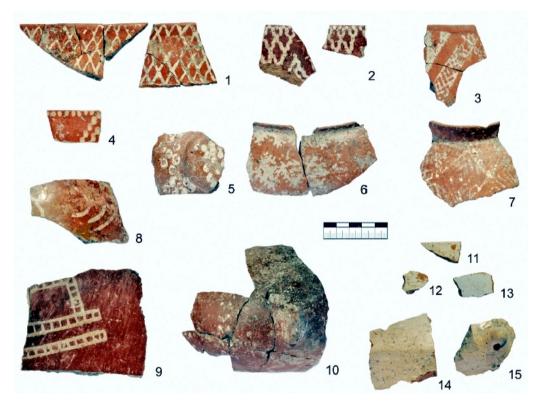


Figure 19. Džiuliunica (apud KRAUSS, ELENSKY 2011)

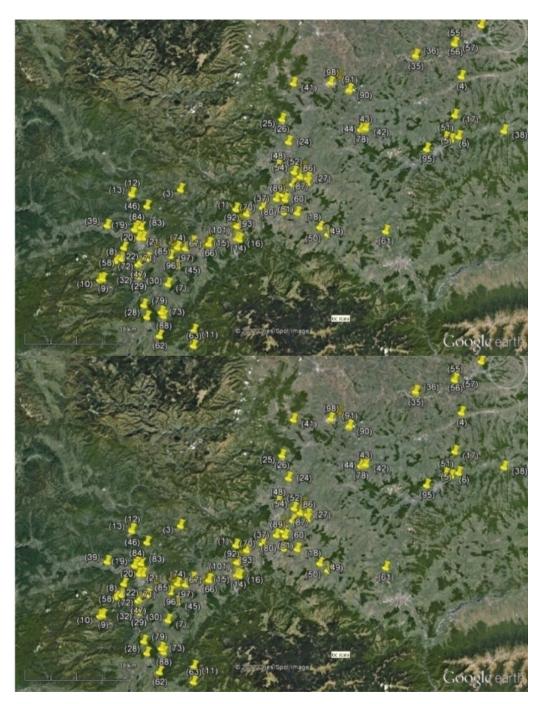


Figure 20. Neolithic settlements from the Middle Mureş basin

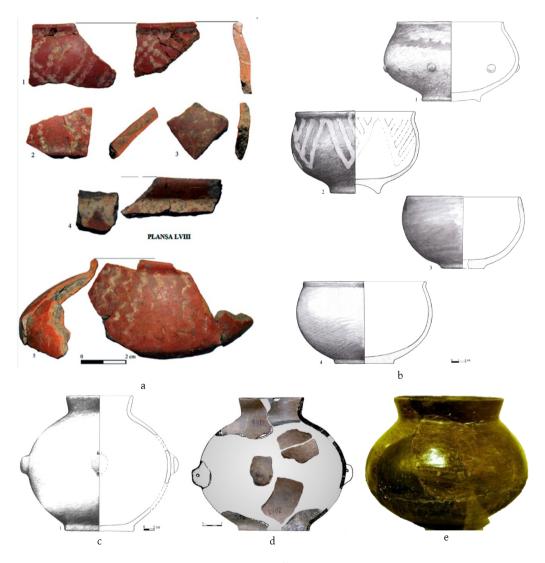


Figure 21. SC IC pots: a-c — Ṣoimuṣ (apud BĂRBAT); d — Crăciunești-*Peștera Balogu* (reconstruction Gh. Lazarovici); e — Saparevo Banja, Bulgaria

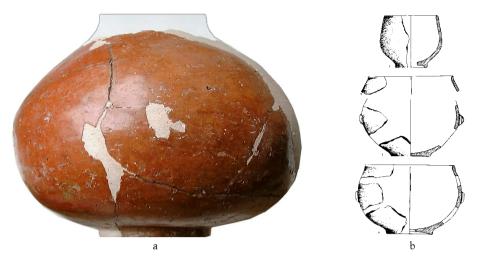


Figure 22. Gura Baciului SC IA (apud VLASSA 1972; LAZAROVICI G., MAXIM 1995)

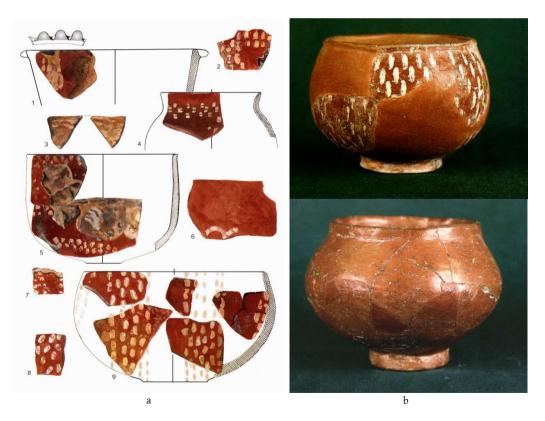


Figure 23. SC IA-IB pottery: a - Gura Baciului, B2 and surroundings; b - analogies at Donja Branjevina

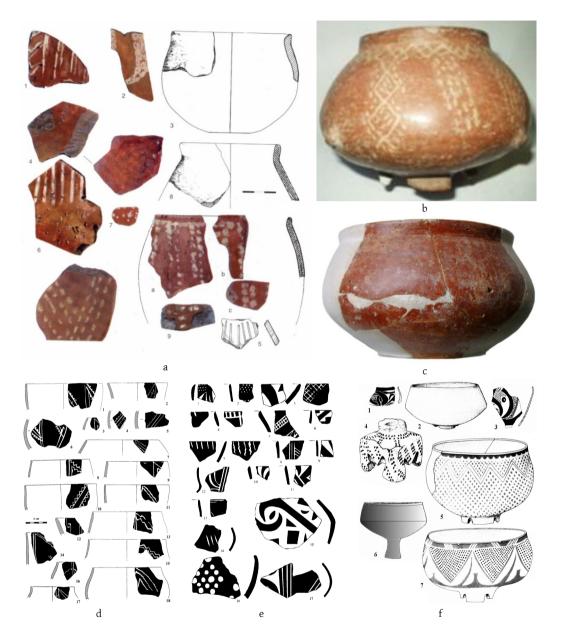


Figure 24. SC IC pottery: a & c — Gura Baciului; b — Cârcea; d-Vaksevo; e-Nevestino; f-Gălăbnik



Figure 25. The display of Monochrome and SC IA settlements: a - Neolithisation Monochrome I and Monochrome II; b - SC IA (decoration with dots)

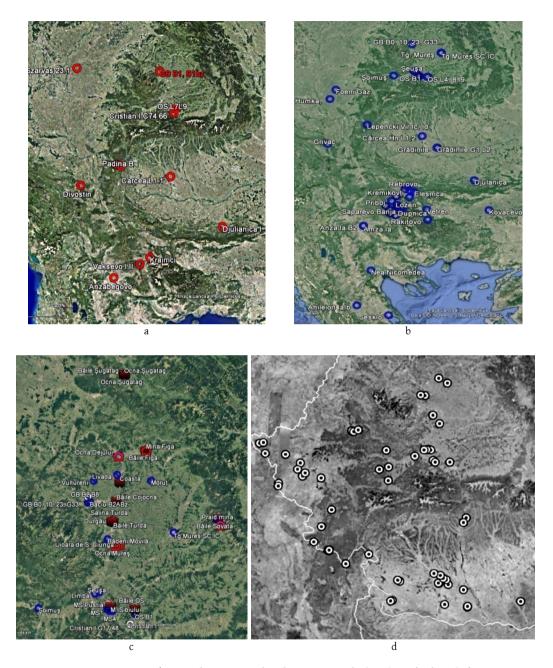


Figure 26. SC IB/IC: a — dots arranged in decoration and white lines (red circles);
b — SC IC/IIA (the technology changes, appearing grooves, slip not just engobe, pinches and impressions with the fingernail, large curved white spaces);
c — migrations and salt sources (mines, exploitations – red colour);
d — SC II in the areas of the first migrations

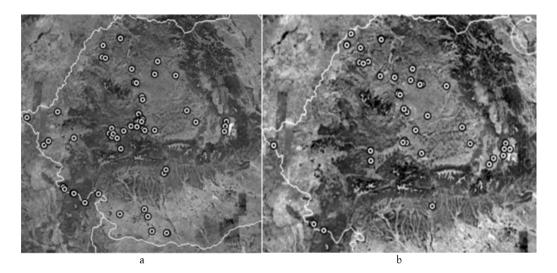


Figure 27. The spread of the Starčevo-Criş Culture in phases SC III-IV (apud LUCA, SUCIU 2011)

#### References

- ALEXIANU, M.-T., 2017. Types of salt-resources exploitation in resilient areas of Romania. In: R. Ojeda-Mestre, A. Dumas, R.-G. Curcă, (eds) Saluniversalis/ II Congreso Internacional de Antropologia del Sal, 12–16 de Octubre 2017, Los Cabos, México, Book of Abstrats, 53.
- ALEXIANU, M., G. DUMITROAIA, D. MONAH 1992. Exploatarea surselor de apă din Moldova: o abordare etnoarheologică. *Traco-Dacica* XIII, 1-2, 159–167.
- ALEXIANU, M., G. DUMITROAIA, D. MONAH 1993. L'éxploatation des sources salées dans l'est de la Roumanie. Un démarche ethnoarchéologique. *Actes XII, CISPP*, 88–92. Bratislava.
- ALEXIANU, M., O. WELLER, 2009. The Ethnosal project. Ethnoarchaeological investigation at the Moldavian salt springs. *Antiquity* 83(321).
- ALEXIANU, M., O. WELLER, R.-G. CURCĂ (eds) 2011. Archaeology and Anthropology of Salt: A Diachronik Approach, Proceeding of the International Colloqvium, 1-5 october 2008, Al. I. Cuza University (Iași, Romania). Oxford.
- ALEXIANU M., O. WELLER, R. BRIGAND 2012. EthnosalRo: An ethnoarchaeological project on Romanian salt. *The European Archaeologist* 38 (Winter 2012–2013), 17–22.
- ALEXIANU, M., O. WELLER, R. BRIGAND 2016. Romanian Salt Springs, Intangible Cultural Heritage, Archaeological Reconstruction: A Variable Geometry. In: S. Biagetti, F. Lugli (eds), The Intangible Elements of Culture in Ethnoarchaeological Research, 231–240. New York.
- ANDREESCU, R. R., D.W. BAILEY 2002. Raport asupra săpăturilor arheologice de la Lăceni-Valea Cioroaica, Măgura, Măgura-Bran, Măgura-Buduiască și Vitănești. Cronica cercetărilor arheologice din România. Campania 2001, 195–199.

- ANDREESCU, R. R., D.W. Bailey 2003. Măgura, com. Măgura, jud. Teleorman. Punct: Măgura Buduiasca, TELEOR 003. Cronica Cercetărilor arheologice din Romania, Campania 2002, 189–190.
- ANDREESCU, R. R., D.W. BAILEY, 2004. Raport asupra sapaturilor arheologice de la Măgura Buduiasca, Teleor 003. Cronica cercetărilor arheologice din România. Campania 2003, 184–189.
- ANDREESCU, R.-R., P. MIREA 2008. Teleorman Valley. The Begining of the Neolithic in Southern Romania. *Acta Terrae Septemcastrensis* 7, 57–75.
- ANDREESCU, R.-R., C. HAITĂ, A. BĂLĂȘESCU, V. RADU, P. MIREA, Ș. APOPE, P. ZAHARIA, C. LAZĂR, K. MOLDOVEANU, D. W., BAILEY, S. MILLS, L. THIESSEN & N. STONE 2003. Raport asupra săpăturilor arheologice de la Măgura–Buduiasca, Teleor 003. Cronica cercetărilor arheologice din România. Campania 2002, 189–190.
- ARNOLD, E. R., H. J. Greenfield 2006. The Origins of Transhumant Pastoralism in Temperate Southern Europe: A Zooarchaeological Perspective from the Central Balkans. Oxford.
- ASLANIS, I. 1992. E proistoria thes Makedonias. E neolithique epohi. Athena.
- BÁNFY, E. 2013. Chapter 9, Tracing 6th-5th millennium BC salt exploitation in the Carpathian Basin. In:A. Harding & V. Kavruk (eds), Explorations in Salt Archaeology in the Carpathian Zone, 201–207.Budapest.
- BĂRBAT, I. Al. 2012a. Complexul cultural Starčevo-Criș în bazinul Mureșului Mijlociu, PhD, Universitatea de Vest. Timișoara.
- BĂRBAT, I. Al. 2012b. Descoperiri aparținând neoliticului timpuriu din colecțiile de arheologie ale muzeului devean. Terra Sebvs IV, 23–64.
- BERECZKI, S., A. HÁGÓ 2012. Kora neolitikumi leletek Marosvásárhelyről. X. Erdely Magyar Régészet Conferencia 2011.
- BRIGAND, R., O. WELLER (eds) 2014. Archaeology of salt: approaching an invisible past. Leiden.
- CAVRUC, V., A. CHIRICESCU (eds) 2006. Sarea, Timpul și Omul. Sfântu Gheorghe.
- CAVRUC, V., A.F. HARDING 2008. Noi cercetări arheologice privind exploatarea sării în nord-estul Transilvaniei. Raport preliminar/New Archaeological Researches concerning Saltworking in northeastern Transylvania. The Preliminary Report. In: G. Dumitroaia, D. Monah (eds), *Sarea de la prezent la trecut*, 149–178. Piatra Neamț.
- CHOHADZHIEV, S. 2001. Vaksevo. Praistoriceski Selisca. Veliko Târnovo.
- CHOHADZHIEV, S., A. BAKAMSKA, L. NINOV 2007. Krajnici rannokeramično selišče ot basejna na reka Struma // Krajnici – An Early-poterry settlement in the Struma Valley. In: H. Todorova, M. Stefanovich, G. Ivanov (eds), The Struma/Strymon River Valley in Prehistory. Proceedings of the International Symposium Strymon Praehistoricus, Küstendil – Blagoevgrad (Bulgaria), Seres Amphipolis (Greece), 27-09-01.10.2004, 181–190. Sofia.
- CIORTEA, M., LAZAROVICI, G. 1996. Corelații între metalurgia din Transilvania și Anatolia. Prelucrări din baze de date cantitative. *Acta Mvsei Napocensis* 33(1), 647–664.
- CIUTĂ, M. 2000. Contribuții la cunoașterea celui mai vechi orizont al neoliticului timpuriu din România, cultura Precriș. *Apulum* 37(1), 51–101.
- CIUTĂ, M. 2001. Contribuții la cunoașterea celui mai vechi orizont al neoliticului timpuriu din România, cultura Precriș. *Apulum* 38(1), 9–26.
- CIUTĂ, M. 2002. O locuință neolitică timpurie descoperită în situl de la Limba Bordane (jud. Alba). Apulum 39, 1–30.
- CIUTĂ, M. 2005. Inceputurile neoliticului timpuriu în spațiul intracarpatic transilvănean. Alba Iulia.

- CIUTĂ, M., B. DAISA, M. BREAZU, S. ANDREI, 2000a. Șeușa, com Ciugud, jud. Alba, Punct La cărarea morii. Cronica Cercetărilor Arheologice din România. Campania 1999, index 139.
- CIUTĂ, M., A. GLIGOR, C. FLORESCU, M. BREAZU, B. DAISA, M. GLIGOR, D. ANGHEL, 2000b. Șeușa, com Ciugud, jud. Alba, Punct Gorgan. *Cronica Cercetărilor arheologice din Romania. Campania 1999*, indice 214 bis.
- CIUTĂ, M., C. BELDIMAN, I. FERENCZ, P. MAZĂRE, B. DAISA, M.. BREAZU, G. PATAKI, C. Truță 2002. Şeusa–La cărarea morii, com. Ciugud, jud. Alba. *Cronica cercetărilor arheologice din România. Campania* 2001, 239–242.
- DAIM, F., Neubauer, W. 2005. Zeitreise Heldenberg Geheimnisvolle Kreisgräbesn, Katalog zur Niederösterreichischen Landesaustellung. Horn–Wien.
- DEMOULE, J.-P., M. LICHARDUS-ITTEN 1994. Fouilles franco-bulgares du site néolithique ancien de Kovačevo (Bulgarie), un établissement du néolithique le plus ancien des Balkans. In: J. Guilaine (ed.), *Communautés villageoises du Proche-Orient à l'Atlantique (8000-2000 avant notre ère)*, 85–99.
- DERGACEV, V., A. SHERRATT, O. LARINA 1991. Recent results of Neolithic Research in Moldavia. Oxford Journal of Archaeology 10, 1–16.
- DERGACEV, V., O. LARINA 2015. Pamjatniki kulturî Criş Moldovî. Chişinău.
- DUMITRESCU, D. 1984. Hierarchical classification with fuzzy sets. Univ. of Cluj-Napoca, Fac. Math, res.Seminaries 4, 319–350.
- DUMITRESCU, D., G. LAZAROVICI 1990. Fuzzy divisive clustering in archaeology. *Archaeometry in Romania* 2, 87–91.
- DUMITRESCU, D., T. TOADERE 1987. Principal components of a fuzzy class. *Studia Univ. Babeş-Bolyai* 3, 24–28.
- DUMITRESCU-CHIOAR, F. 2010. Cultura Starčevo-Criș în arealul intracarpatic al României. PhD. Universitatea Lucian Blaga. Sibiu.
- DUMITROAIA, G., D. MONAH, D. GARVĂN (eds) 2008. Sarea de la prezent la trecut, Bibliotheca Memoriae Antiquitatis, XX. Piatra Neamț.
- ELENSKI, N. 2000. Ranoneolitni selišca po srednoto tecenie na Jantra. Karanovski conferencii ze praistorijama na Balkanite 1 Trakija u srednite raionu prez neolitna, xalkolitna, 21–31.
- ELENSKI, N. 2002. Sondažni proučvanija na rannoneolitnoto selišce s Džiuliunica-Smărdeš Velikotărnovsko, prez 2002 g., Arheologičeski otkritija i razkopki prez 2001 g. XLII Nacionalna arheologičeska konferencija, 17–18.
- ELENSKI, N. 2004. Cultural Contacts of North-Central Bulgaria with Thrace and the Marmara Area in the Early Neolithic. In: V. Nikolov, K. Bacvarov, P. Kalchev (eds), *Prehistoric Thrace*, 71–79. Sofia–Stara Zagora.
- ELENSKI, N. 2006. Sondažni proučvanija na rannoneolitnoto selišce s Džiuliunica–Smărdeš Velikotărnovsko, (predvaritelno săobštenie). *Arkheologija* 47, 96–117.
- ELENSKI, N. 2008. Nai-raniite fazi na neolita v baseinite ia rekite Yantra i Ruseski Lom. Problemi na kulturnata identičnost. In: M. Gurova (ed.), *Praistoričeski proučvanija v Bălgarija: Novite predizvikatelstva*, 96–105. Sofia.
- ELENSKI, N. 2008a. Keramičnija kompleks ot părvija plast na ranoneolitnoto selišce do. Pomoštica, Popovsko. *Popovo v minaloto 5*, 41–50. Popovo-Razgrad.

- ELENSKI, N., LEŠTAKOV, P. 2006. Sondažni proučvanija na ranoneolitnoto selišce s Džiuliunica–Smărdeš Velikotărnovsko, prez 2005 g. Arheologičeski otkritija razkopki prez 2005 g. XLV, Nationalna Arheologičeska konferenciya, 36–39. Sofia.
- GANETSOVSKI, G. 2009. Ohoden-selishte ot rannija neolit. Raazkopki 2002–2006. Sofia.
- GRAMATOPOL, M. 1997. Aria monedelor geto-dacice. București.
- GUROVA, M. 2011. Prehistoric Flint Assemblages from Bulgaria: A raw Material Perspective. In: M. Neagu (ed.), East and West: Culture and Civilisation at the Lower Danube, 96–115. Călărași.
- GUROVA, M. 2013. Towards the Meaning of Flint Grave Goods: A case study from Bulgaria. In: A. Comşa,
   C. Bonsall, L. Nikolova (eds), Facets of the Past. The Challenge of the Balkan Neo-Eneolithic (Proceedings of the International Symposium Celebrating the 85<sup>th</sup> Birth Anniversary of Eugen Comşa, 6-12 October 2008, Bucharest, Romania), 375–393. Bucharest.
- HARDING, A., V. KAVRUK 2013. Explorations in salt archaeology in the Carpathian zone. Budapest.
- HAUPTMANN, H., V. MILOJČIĆ 1969. Die Funde der Frühen Dimini-Zeit aus der Arapi Magula Thessalien. Bonn.
- KRAUSS, R., N. ELENSKI 2011. On the "Monochrome" Neolithic in Southeast Europe. In: R. Krauss (ed.), Beginnings — New Research in the Appearance of the Neolithic between Northwest Anatolia and the Carpathian Basin. Papers of the International Workshop 8<sup>th</sup>-9<sup>th</sup> April 2009, Istanbul. Organized by D. Ciobotaru, B. Horejs and R. Krauss., 109–125. Westfalen.
- KRAUSS, R., N. ELENSKI, B. WENINGER, L. CLARE, C. ÇAKIRLAR, P. ZIDAROV 2014. Beginnings of the Neolithic in Southeast Europe: the Early Neolithic sequence and absolute dates from Džuljunica– Smărdeš (Bulgaria). Documenta Praehistorica 41, 51–77.
- KUTZIÁN, I. 1944. A Körös Kultura. Budapest.
- LARINA, O. 1994. Neoliticul pe teritoriul Republicii Moldova. Thraco-Dacica 15(1-2), 41-66.
- LAZAROVICI, C.-M. 2002. Simboluri sacre pe altare. In: Lucrările seminarului Tiberiu Popovici de ecuații funcționale, aproximare și convexitate, 147–148. Cluj-Napoca.
- LAZAROVICI, C.-M. 2015. Capitolul I. Așezarea Starčevo-Criș de la Valea caselor. In: C.-M. Lazarovici, M. Babeș (eds), *Poienești Așezări preistorice*, 18–68. Suceava.
- LAZAROVICI, C.-M. 2017. Salt and finalization of neolithisation process on Romanian territory and in Central Europe. In: R. Ojeda-Mestre, A. Dumas, Roxana-Gabriela Curcă (eds), *Book of abstracts, Saluniversalis II Congreso Internacional de Antropologia del Sal, 12-16 de Octubre 2017, Los Cabos, México, 53.*
- LAZAROVICI, C.-M., G. LAZAROVICI 2006. Arhitectura Neoliticului și Epocii Cuprului în România. I. Neoliticul. Iași.
- LAZAROVICI, G. 1969. Cultura Starčevo-Criș în Banat. Acta Mvsei Napocensis 6, 3–26.
- LAZAROVICI, G. 1977. Gornea Preistorie. Reșița.
- LAZAROVICI, G. 1978. Civilizațiile preistorice de la Portile de Fier. In: Comori arheologice, 29-39, 62-65.
- LAZAROVICI, G. 1979. Neoliticul Banatului. Bibliotheca Mvsei Napocensis III, Cluj.
- LAZAROVICI G. 1979a. Legăturile fazei Vinča A cu zona nord thessalică și sud-balcanică. (Contribuții la originea culturii Vinča). *Tibiscus* 5, 57–66.
- LAZAROVICI, G. 1983/1984. Die Vinča-Kultur und ihre Beziehungen zur Linianbandkeramik. Nachrichten aus Niedersachsens Urgeschichte 52, 131–176.
- LAZAROVICI, G. 1992. Așezarea neolitică timpurie de la Zăuan și câteva probleme privind neoliticul timpuriu din Balcani. *Acta Musei Porolissensis* 16, 25–59.
- LAZAROVICI, G. 1994. Neoliticul timpuriu în România. Acta Musei Porolissensis 8, 49–104.

- LAZAROVICI, G. 1995. Über das Frühneolithikum im süd-Osten Europas (I. Rumänien). In: Kulturraum Mittlere und Untere Donau. Traditionen und Perspektiven des Zusammenlebens (Spațiul cultural al Dunării Mijlocii și inferioare. Tradiții și perspective ale conviețuirii), 33–55. Reșița.
- LAZAROVICI, G. 1996. The Process of the Neolithisation and the Development of the first Neolithic Civilisations in the Balkans. In: R. Gri (ed.), *The Neolithic in the Near East and Europe, Colloqvium XVII, 9, XIII ICPPS, Forli, Italia, 4–14, september, 1996, 21–38.*
- LAZAROVICI, G. 1998. About the neolithisation process of the second migration of the Early Neolithic. In: Fl. Drașovean (ed.), *International Symposium on the Problems of the Neolithic in the Middle Danube Region, June 1997*, 7–37. Timișoara.
- LAZAROVICI, G. 2000. Links between the Early Neolithic from Romania and Bulgaria. Karanovo III, Beiträge zum Neolithikum in Südosteuropa, 273–286. Wien.
- LAZAROVICI, G. 2001. Despre locul descoperirilor de la Șeușa în neoliticul timpuriu din sud-estul Europei. In: C. Cosma (ed.), Studia Archaeologica et Historica Nicolao Gudea Dicata /Omagiu Profesorului Nicolae Gudea la 60 de ani, 37–47. Zalău.
- LAZAROVICI, G. 2005. Culturile Precriș I, Precriș II și Postcriș I, post Criș II. Acta Terrae Septemcastrensis 4, 23–78.
- LAZAROVICI, G. 2006. The Anzabegovo Gura Baciului Axis and the First Stage of the neolithisation Process in the Southern – Central Europe. In: N. Tasić, C. Grazdanov (eds), *Homage to Milutin Garašanin*, 111–158. Belgrad.
- LAZAROVICI, G. 2008. Database for Signs and Symbols of Spiritual Life. *Journal of Archaeomythology* 4, 94–125.
- LAZAROVICI, G. 2009. Database for spiritual life, signs and symbols, comunicare Novi Sad. In: J. Marler, M. Robbins Dexter (eds), Sings of Civilization. Neolithic Symbol System of Southeast Europe, Collected Papers from the International Symposium in Novi Sad, Serbian Academy of Sciences and Arts, May 24-29, 2004, 63–86. Sebastopol, USA.
- LAZAROVICI, G. 2017. The role of the salt in the neolithisation process in Southeast Europe. In: R. Ojeda-Mestre, A. Dumas, R.-G. Curcă (eds), Book of abstracts, Saluniversalis II Congreso Internacional de Antropologia del Sal, 12-16 de Octubre 2017, Los Cabos, México, 53.
- LAZAROVICI, G., LAZAROVICI, C.-M. 2002. Considerații privind arhitectura neolitică timpurie. Patrimonium Banaticum I, 9–38.
- LAZAROVICI, G., C.-M. LAZAROVICI 2003. The Neo-Eneolithic Arhitecture in Banat, Transylvania amd Moldavia. In: D.V. Grammenos (ed.), *Recent Research in the Prehistory of the Balkans*, Publications of the Arcaheological Institute of Northern Greece, no. 3, 369 – 486. Thessaloniki.
- LAZAROVICI, G., C.-M. LAZAROVICI 2005. Contribuții privind arhitectura eneoliticului din Banat și Transivania. Cultură și Civilizație la Dunărea de Jos XXII. In Honorem Silvia Marinescu-Bîlcu, 399–420.
- LAZAROVICI, G., C.-M. LAZAROVICI 2011. Architecture of the Early Neolithic in Transylvania. In: S. A. Luca, C. Suciu (eds), The first Neolithic Sites in the Central/South-east European Transect, volume II, Early Neolithic (Starčevo-Criș) Sites on the territory of Romania, 19–35. Krakóv.
- LAZAROVICI, G., C.-M. LAZAROVICI 2015. New data and observations related with exploitation and transport of salt in Prehistory. In: R. Brigand, O. Weller (eds), *Archaeology of salt: approaching an invisible past*, 139–155. Leiden.

- LAZAROVICI, G., C.-M. LAZAROVICI 2016. Inceputurile procesului de neolitizare din sudul Europei centrale și Balcani. Acta Musei Tutuvensis, Istorie veche și arheologie XII.2, Histórica et Archaeologica in Honorem Eugenia Popușoi, Octogenari, 27–72. Bârlad.
- LAZAROVICI, G., LAZAROVICI, C.-M. 2017. Rolul sării în procesul de neolitizare din sud-estul Europei. Anuarul Muzeului Etnografic al Transilvaniei, 290–299.
- LAZAROVICI, G., Z. MAXIM 1995. Gura Baciului. Monografie arheologică. Bibliotheca Mvsei Napocensis XI. Including contributions from other researchers: L. Tarcea, T. Piciu, L. Ghergari, I. Mâra, G. El Dsusi, D. Bindea, E. Kessler, P. Cantemir, C. Sângerean, S. Radu, L. Mogoș, A Hosu. Cluj-Napoca.
- LAZAROVICI, G., I. UZUM 1977. Cutoare Sfogea. Banatica 4, 434.
- LAZAROVICI, G., Z. MAXIM, M. MEȘTER, A. BULBUC, S. RADU, V. CRIȘAN 1996. Șantierul arheologic Fundătura-Poderei. *Acta Mvsei Napocensis* 33.1, 301–321.
- LAZAROVICI, G., Z. MAXIM, M. MEȘTER 2009. Istoria societății. In: I. Mârza (ed.), *Monografia comunei Țaga*, 220–272. Țaga.
- LAZAROVICI, G., M. GUMĂ, E. Iaroslavski 2010. Cercetările arheologice de la Cuptoare Sfogea, Campaniile 1975-1977. Banatica 20.1, 31-48.
- LAZAROVICI, G., C.-M. LAZAROVICI, B. Constantinescu 2015. New Data and Analyses on Gold Metallurgy during the Romanian Copper Age. In: S. Hansen, P. Raczky, A. Anders, A. Reingruber (eds), *Neolithic and Copper Age between the Carpathians and the Aegean Sea. Chronologies and Technologies from the 6th to 4th Millennium BC. International Workshop Budapedst 2012, Archäologie in Eurasien*, Band 31, 325–352. Bonn.
- LAZAROVICI, G., J. NANDRIS, Z. MAXIM 2015a. Piatra Ilișovei–Cerna Vâr, mină și atelier de prelucrarea cuprului. In: G. Lazarovici, A. Ardeț (eds), *Țara Gugulanilor, Studii de etnoarheologie, etnografie și etnoistorie, vol. I, Acta Mvsei Caransebesiensis,* 139–152. Caransebeș.
- LICHTER, C. 1993. Untersuchungen zu den Bauten des südosteuropäischen Neolithikums und Chalkolithikums. Internationale Archäologie, Band 18. München.
- LUCA S.A. 1999. Cultura Vinca în Transilvania faza timpurie. Studia Universitatis "Vasile Goldiș" Arad 9, Seria B, 281–298.
- LUCA S.A. 2002. Eine zoomorphe statuette aus der Jungsteinzeitlische Siedlung von Reussmarkt/Miercurea Sibiulu/Szerdahely-Petriş (Kr. Hermannstadt/Sibiu/Nagyszeben), *Cultură și Civilizație la Dunărea de Jos* 19, 96–106.
- LUCA, S.A. (coord.) 2012. Cercetările arheologice preventive de la Cristian (jud. Sibiu). Campania 2011-2012. Bibliotheca Brukenthal 60. Sibiu.
- LUCA, S.A. 2014. Art and religious belifs in the Neolithic and Aeneolithic from Romania. Biblitheca Brvkenthal LXVII, Sibiu.
- LUCA, S.A. 2015. Viața trăită sub zei. Situl Starčevo-Criș I de la Cristian I, județul Sibiu, România. Suceava.
- LUCA, S.A., C. SUCIU 2008. Migrations and local evolution in the Early Neolithic of Transylvania. The typological analysis and the perspective of lithic industries. *Acta Terrae Septemcastrensis* 7, 39–56.
- LUCA, S.A., Z.K. PINTER, A. GEORGESCU 2003. Repertoriul arheologic al județului Sibiu. Bibliotheca Septemcastrensis 3. Sibiu.
- LUCA, S.A., D. DIACONESCU, C. I. SUCIU 2008. Archaeological research in Miercurea Sibiului Petriş (Sibiu County, Roumania): the Starčevo-Criş level during 1997–2005 (a preliminary report). Documenta Praehistorica 35, 325–343.

- LUCA, S.A., C. I. SUCIU, FL. DUMITRESCU-CHIOAR 2011. Starčevo-Criş Culture in Western Part of Romania — Transylvania, Banat, Crişana, Maramureş, Oltenia and Western Muntenia, distribution map, state of research and chronology. In: S.A. Luca, C. Suciu (eds), *The first Neolithic Sites in the Central/South-east European Transect, volume II, Early Neolithic (Starčevo-Criş) Sites on the territory of Romania*, 7–18. Krakóv.
- LUCA, S.A., A. GEORGESCU, FL. MARȚIȘ, A. LUCA 2015. Date despre un sanctuar aparținând culturii Starčevo-Criș descoperit la Cristian III, jud. Sibiu. In: I. Bolovan, O. Ghitta (coord.), *Istoria ca datorie. Omagiu academicianului Ioan Aurel Pop la împlinirea vârstei de 60 de ani, 293–306.* Cluj-Napoca.
- MAKKAY, J. 1965. Die Wichtigsten Fragen der Körös-Starčevo-Periode. Acta Universitatis Szegediensis 8, 3– 18.
- MAKKAY, J. 1981. Painted pottery of the Körös-Starèevo-culture from Szarvas, site no. 23. Acta Archaeologica Carpathica 21, 95–103.
- MAKKAY, J. 1982. Eine Kultstätte der Bodrogkeresztúr-Kultur in Szarvas und Fragen der sakralen Hügel. Mitteilungendes Archäologischen Instituts der Ungarisches Akademie der Wissenschaften 10-11, 44–57.
- MARC, D. 2006. Sisteme de transport și comercializarea tradițională a sării. In: V. Cavruc, A. Chiricescu (eds), *Sarea, timpul și omul,* 152–157. Sfântu Gheorghe.
- MAXIM, Z. 1999. Neo-eneoliticul din Transilvania. Bibliotheca Mvsei Napocensis XIX. Cluj-Napoca.
- MCPHERON, A., D. SREJOVIĆ 1971. Early Farming Cultures in Central Serbia (Eastern Yugoslavia). *National Museum of Kragujevac*, 1–26.
- MIREA, P. 2005. Considerații asupra locuirii Starčevo-Criș din sud-vestul Munteniei. *Cultură și Civilizație la Dunărea de Jos* XXII, 37–52.
- MONAH, D. 1991. L'exploitation du sel dans les Carpathes Orientales et ses rapports avec la culture Cucuteni-Tripolye. In: V. Chirica, D. Monah, (eds), *Le Paléolithique et le Néolithique de la Roumanie en contexte européen, BAI IV*, 387–400. Iași.
- MONAH, D. 2008. Arheologia preistorică a sării in România. Scurt istoric // L 'archeologie Prehistorique du sel en Roumanie. Bref Historique. In: G. Dumitroaia, D. Monah (eds), *Sarea de la prezent la trecut, Bibliotheca Memoriae Antiquitatis* XX, 13–40. Piatra Neamț.
- MONAH, D. 2008a. 0 confirmare etnografică a versetului lezechiel 16/4. Sărarea noilor născuți /Une confirmation ethnographique du verset de Ezechiel 16/4. Saler les nouveaux-nés. In: G. Dumitroaia, D. Monah (eds), Sarea de la prezent la trecut, Bibliotheca Memoriae Antiquitatis XX, 117–132. Piatra Neamţ.
- MONAH, D., G. DUMITROAIA, O. WELLER, J. CHAPMANN (eds) 2007. L'Exploitation de sel à travers le Temps. Piatra Neamț.
- MÜLLER-KARPE, H. 1968: Handbuch der Vorgeschichte, II Jungsteinzeit, Tafel- und Textband. München.
- NACHEV, C. 2009. Osnovnite tipove flint v Balgariya, kato surovini za naprava na artefakti. Interdistsiiplinarni iszledovaniya 20(1), 7–21.
- NECRASOV, O., M. ȘTIRBU-BULAI 1965. Unele aspecte ale vieții triburilor neolitice din zona Subcarpaților Orientali. *Studii și cercetări de antropologie* 2(1), 19–28.
- NICA, M. 1981. Grădinile. O nouă așezare a neoliticului timpuriu în sud-estul Olteniei. Arhivele Olteniei 1, 27–39.
- NICA, M. 1983. Obiecte de lemn descoperite în așezarea neolitică de la Grădinile (județul Olt). Arhivele Olteniei 2, 39-48.
- NICA, M. 1984. Neoliticul timpuriu și mijlociu în zona răsăriteană a Olteniei, PhD thesis. Craiova-București.

- NICA, M. 1986. Săpăturile arheologice din așezările neolitice de la Cârcea, jud. Dolj. Materiale și cercetări arheologice. A XVI-a sesiune anuală de rapoarte, Vaslui 1982, 16–21.
- NICA, M. 1991. Le grupe culturel Cârcea-Grădinile dans le contexte du néolithique Balkanique. Zbornik Radova Narodnog Muzeja, XIV/2, archélogie, 93-112. Beograd.
- NIKOLOV, B. 1974. Gradešnica. Sofia.
- OJEDA-MESTRE, R., A. DUMAS, R.-G. CURCĂ (eds) 2017. Saluniversalis| II Congreso Internacional de Antropologia del Sal, 12–16 de Octubre 2017, Los Cabos, México, Book of Abstrats.
- PAUL, I. 1970. Săpăturile din vara anului 1960 de la Ocna Sibiului. *Materiale și Cercetări Arheologice* 9, 97– 104.
- PAUL, I. 1989. Unele probleme ale neoliticului timpuriu din zona carpato-dunăreană. Studii și cercetări de istorie veche și arheologie 40(1), 3–27.
- PAUL, I. 1990. "Mitograma de acum 8 milenii". Atheneum 1, 28.
- PAUL, I. 1995. Vorgeschichtliche Untersuchungen in Siebenburgen. Alba Iulia.
- PAUL, I. 2009. About Origin and Evolution of Neo-Eneolitic Signs and Symbols Seen in the Light of Some Discoveries from the Carpato-Danubian Area. In: J. Marler, M. Robbins Dexter (eds), Sings of Civilization. Neolithic Symbol System of Sotheast Europe, Collected Papers from the International Symposium in Novi Sad, Serbian Academy of Sciences and Arts, May 24–29, 2004. Institute of Archaeomythology, Sebastopol, USA, 129–140.
- PAUL, I., M. GLIGOR, C. FLORESCU, M. BREAZU, T. BORŞAN, I. MAICAN 2005. Alba Iulia, jud. Alba. Punct Lumea Nouă (proprietatea Bogdan). Cronica Cercetărilor Arheologice din Roânia. Campania 2004, Indice 16.
- POPUȘOI, E. 1980. Săpăturile arheologice de la Trestiana, comuna Grivița, județul Vaslui. *Cercetări Istorice* 11, 105–134.
- PORUCIUC, A. 2008. Denumirile sării și implicațiile lor în plan (indo)european / Salt designations and their implications on (Indo-) European ground. In: G. Dumitroaia, D. Monah (eds), Sarea de la prezent la trecut, Bibliotheca Memoriae Antiquitatis XX, 133–148. Piatra Neamț.
- RADOSLAVLJEVIĆ-KRUNIĆ, S. 1986. Résultats de l'étude antropologique des schelettes du site Ajmana. Djerdapske Svecke III, 51–58.
- REINGRUBER A., THISSEN L. 2005. 14C Database for the Aegean Catchment Eastern Greece, Southern Balkans and Western Turkey, 10,000–5500 cal BC. In C. Lichter (ed.), *How did Farming Reach Europe?* Anatolian-European Relations from the Second Half of the 7th through the First Half of the 6th Millenium cal BC. BYZAS 2, 295–327. Istanbul.
- SCHUBERT H. 1999. Keramik des Frühneolithikums in Südoseuropa, Italien und Westanatolien. Internationale Archäologie Bd. 47.
- STADLER, P. 2005. Settlement of the Early Linear Ceramics Culture at Brunn am Gebirge Wolfholz site. Documenta Praehistorica 32, 269–278.
- STADLER, P. 2009. Die frühneolithische Fundstellen von Brunn am Gebirge, Flur Wolfholz 5640/5150 v. Chr und Enstehug der Linearbankeramik. *Archäologie Österreichs* 20(2), 48–54.
- STADLER, P. 2013. The Early LBK Site at Brunn am Gebirge Wolfholz 5670–5100. Locally Established or Founded by Immigrants from Starčevo Territory ?. In: Al. Andres, G. Kulcs with G. Kalla, V. Kiss and G. Szabó (eds), Prehistoric Studies I, Moments in Time, Papers Presented to Pál Raczky on His 60th Birthday, 259–275. Budapest.

- STADLER, P. 2017. Early Neolithic Idols showing Neolithization with support for the Migrationist Model. Map of all Idols in our project database. Currently about 507 sites with 6.098 images. From 11.01.2017. www.academia.edu/30876097/Stadler Peter 2017. Early Neolithic Idol.
- STALJO, B. 1986: La site prehistorique Ajmana à Mala Vrbica. Derdapscke Svecke 3, 447–452.
- SUCIU, C. 2009. Cultura Vinča în Transilvania. Bibliotheca Brukenthal 44. Sibiu.
- ŞEULEAN, A. 2012. Aspecte tehnologice ale ceramicii Starčevo-Criș din Transilvania, PhD thesis, Lucian Blaga University. Sibiu.
- TITOV, B. C. 1980. Erdély I. Arheologia Vengrii. Moskova.
- TUDORIE, A. 2011. Typologic Catalogues and Dictionaries for Starčevo-Criș Pottery. Acta Terrae Septemcastreansis 10, 7–18.
- TUDORIE, A. 2014. Some considerations regarding the ornamentation of the Starčevo-Criş pottery from Cristian I (Sibiu County). *Acta Terrae Septemcastrensis* 13, 7–22.
- VIRAG, C. 2008. Neoliticul din Nord-Vestul României și zonele învecinate. PhD thesis, Universitatea Lucian Blaga. Sibiu.
- VITCU, D. 1987. Salinele Moldovei în Epoca Modernă. Iași.
- VLASSA, N. 1972. Cea mai veche fază a complexului cultural Starčevo-Criș în România. Acta Mvsei Napocensis 9, 7–38.
- VLASSA, N. 1972a: Eine frühneolithischen Kultur mit bemalter Keramik der Vor- Starčevo-Körös Zeit in Cluj-Gura Baciului, Siebenbürgen. *Prähistorische Zeitschrift* 47(2), 174–197.
- VLASSA, N. 1976. Neoliticul Transilvaniei. Studii, articole, note. Bibliotheca Mvsei Napocensis III, Cluj-Napoca.
- VLASSA, N., Palkó, A. 1965. Un mormânt de înhumație aparținând culturii Criș timpurii din Transilvania. Apulum 5, 13–17.
- WELLER, O., DUMITROAIA, G. 2005. The earliest salt production in the world: An early Neolithic exploitation in Poiana Slatinei-Lunca, Romania. *Antiquity*, Vol 79, No 306, December 2005.



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# Technological issues of the shell-tempered ware from Gârcina (Neamț County, Romania)

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**Abstract.** Shell-tempered ware identified at Gârcina–Slatina Cozla II-III (Neamţ County) was analysed in terms of microscopic, mineralogical and chemical characteristics for revealing its technological parameters. The site located near Piatra Neamţ, on the Cozla hillside was used for the exploitation of saltwater resources by the Cucuteni communities and, later on, during the Early Bronze Age. Selected pottery samples were examined using optical microscopy (OM), scanning electron microscopy coupled with energy dispersive X-ray spectroscopy (SEM-EDX) and X-ray diffraction (XRD). Results show that the studied pottery samples although similar in the added temper have distinctive features in terms of raw material quality, processing and firing regime.

**Rezumat**. Caracteristicile microscopice, mineralogice și chimice ale ceramicii cu scoică descoperite în situl de la Gârcina-Slatina Cozla II-III (jud. Neamț) au fost analizate pentru identificarea parametrilor tehnologici. Situl, localizat pe dealul Cozla, în apropiere de Piatra Neamț a fost utilizat pentru exploatarea izvoarelor de apă sărată de către comunitățile Cucuteni, dar și la începutul epocii bronzului. Fragmentele ceramice selectate au fost analizate cu ajutorul microscopiei optice (OM), microscopiei electronice de baleiaj cuplată cu spectrometria de raze X (SEM-EDX) și a difracției de raze X (XRD). Rezultatele au evidențiat existența unor diferențe calitative și de procesare a materiei prime, dar și a regimului de ardere a ceramicii cu scoică în pastă.

Keywords: shell-tempered ware, microscopy, mineralogy, chemical composition, technology.

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#### Introduction

The manufacturing of the ceramic ware, besides offering valuable information on the cultural contacts and trade links between Chalcolithic communities, provides clues about their ability to select and to process variable types of raw materials. Mineralogical and chemical characterization of pottery may reveal the technology involved in the manufacturing process<sup>6</sup> or may help to identify the raw material used<sup>7</sup>.

A wide range of treatments are available to produce a workable clay paste with more appropriate qualities in terms of paste recipes and firing treatments for obtaining a certain range of physical properties which will make the desired products more suitable for a certain function<sup>8</sup>. For inferring the intended function of the vessels, first we need to understand the *technological variability* registered within the shell-tempered ware. In order to obtain a proper understanding of the technological variability we need to start by determining the morphological parameters of the vessels (form, size, decoration) and continue with the clay matrix (chemistry and mineralogy), temper type (size, quantity, chemistry and mineralogy) and firing parameters (temperature, atmosphere, firing duration and soaking time).

Analytical methods extending from macroscopic observations to mineralogical compositions determined by petrographic analysis of thin-sections combined with X-ray diffraction (XRD) analysis and to microscopic observations combined with point chemical analysis (SEM-EDX) can provide valuable information about the technological variability.

This work continues the systematic investigation of the Cucuteni C ware started with the Poduri–*Dealul Ghindaru* site<sup>9</sup>. In the previous work, we took into consideration pottery samples containing grog and shell fragments as temper, attributed broadly to the Cucuteni B phase, which have revealed a certain degree of similarity in terms of their matrix composition and morphological features.

The aim of the present study is to determine the *technological parameters* of the shelltempered ware identified at Gârcina (Neamţ County) by determining its main technological features in order to assess the degree of similarity and variation of the Cucuteni C pottery production between sites. We present the characteristics of the raw materials used, and show a correlation between pottery composition and firing temperature, combining macroscopic examination with petrographic analysis of thin-sections, scanning electron microscopy coupled with energy dispersive X-ray spectrometry (SEM-EDX) and X-ray diffraction (XRD).

<sup>&</sup>lt;sup>6</sup> RATHOSSI *et alii* 2004; BELFIORE *et alii* 2007; IONESCU, HOECK 2011; MARITAN *et alii* 2017; YIOUNI, VASILEIOU 2018.

<sup>&</sup>lt;sup>7</sup> SPATARO 2011; MARITAN et alii 2013; BAKLOUTI et alii 2014; GIURGIU et alii 2016; BRORSSON et alii 2018.

<sup>&</sup>lt;sup>8</sup> TITE *et alii* 2001; FEATHERS 2006; SKIBO 2013, 27–54.

<sup>&</sup>lt;sup>9</sup> MĂȚĂU *et alii* 2015, with a brief state of the art regarding the Cucuteni C ware investigation in Eastern Romania.

### The archaeological context

The site identified at Gârcina–*Slatina Cozla II-III* (Neamț County) is located in Eastern Romania, at the western part of the Cracău-Bistrița Lowland, on the north-western slopes of the Cozla hill, on the right bank of the Cuejdi river (Figure 1). Nowadays two modest saltwater spring are flowing nearby.

The site stratigraphy revealed by an small excavation conducted in 2011<sup>10</sup> consists in a Cucuteni A layer (0.20 m thick), superposed by an ashy sediment (0.10 m thick) and a more extended Cucuteni B layer (0.30–0.40 m thick). The last one, which is the main anthropic deposit, contains Cucuteni B and C pottery fragments<sup>11</sup>.

Most of the Cucuteni C pottery fragments were identified within the Cucuteni B layer; only two fragments with traces of secondary burning were found within the ash layer<sup>12</sup>.

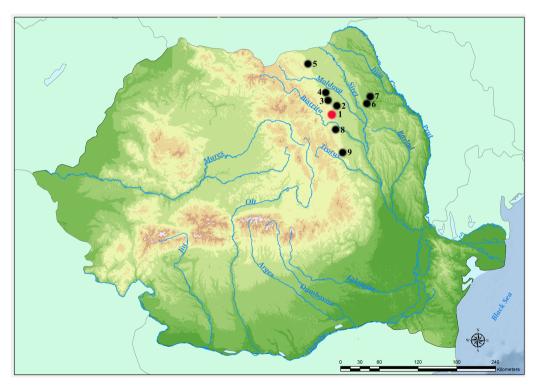


Figure 1. The location of the Gârcina archaeological site (1) and other sampling sites with Cucuteni C ware (2 – Bodești, 3 – Văleni, 4 – Lunca, 5 – Solca, 6 – Valea Lupului, 7 – Cucuteni, 8 – Piatra Șoimului, 9 – Poduri)

<sup>&</sup>lt;sup>10</sup> DUMITROAIA *et alii* 2012, 56.

<sup>&</sup>lt;sup>11</sup> GARVĂN, MUNTEANU 2012, 31.

<sup>&</sup>lt;sup>12</sup> GARVĂN, MUNTEANU 2012, 31.

We underline the particular nature of the archaeological deposit: the excavation did not reveal any defined structures such as dwelling remains, hearth or pits. The only type of artefact preserved is the pottery, which forms a highly fragmented assemblage. None of the potsherds retrieved from Trench 1 could be fitted together.

The whole archaeological feature should be seen as a midden area - a heap of soil, charcoal, ashes and potsherds accumulated sequentially, mainly throughout the 5<sup>th</sup> millennium BC.

#### Materials and methods

In the present study, we have included pottery samples (Figure 2) which are typologically and stylistically representative for the Cucuteni C ware present within the site.

All the pottery fragments were selected from known stratigraphic units. The small-scale excavation cannot offer reliable data on the extent to which the Chalcolithic inhabitants of the site used fine- and shell-tempered ware. Yet, it should be noted that the assemblage composition resembles that of the ceramic inventories discovered at Lunca and Solca (dating from the same period), where the shell-tempered potsherds amounts to 30–40 % of the earthenware.

The shell-tempered pottery represents the most striking aspect of the Gârcina assemblage. This specific inventory numbers 160 fragments. Identifying the number of pots is almost impossible due to variations in colour and wall thickness.

Only 40 % of the potsherds (from the upper end and the bases of the vessels) provided metric and morphologic data. The best-represented shape is a medium-sized pot with a curving upper body: wide-mouthed, slightly protruding shoulder and a narrow base, which usually measures less than half of the maximum diameter. The mouth diameter falls in the 18–31 cm range, and more frequently between 18 and 21 cm.



Figure 2. Shell-tempered pottery samples from Gârcina-Slatina Cozla II-III

Most likely, the specific technological features induced by the added temper and by the depositional context caused the high degree of fragmentation. No use-related alterations are visible macroscopically.

The finishing treatment of the vessels is limited sometimes to textured (grooved) surfaces or more commonly to lightly smoothed walls. The decoration covers the rim and the upper body, with plastic elements, incised or stamped patterns. The style of the ornamentation is common to Cucuteni C earthenware.

In order to understand the technological characteristics of the shell-tempered ware we have used a combined analytical approach starting with the macroscopic examination of the inner, outer and cross-section of the pottery fragments. The colour of the ceramic body was registered using Munsell Soil Colour Charts. Furthermore, we have performed compositional and textural analysis using polarized light optical microscopy (OM) analysis of thin-sections, microstructural investigations of small fresh cross-sections by scanning electron microscopy coupled with energy dispersive X-ray spectroscopy (SEM-EDX), we have determined the mineralogical content by X-ray diffraction (XRD) analysis and the chemical composition using X-ray fluorescence (XRF) measurements.

After cleaning the pottery samples with distilled water in an ultrasonic bath, we have cut the small slices across the ceramic wall for petrographic thin-section analysis using a Meiji ML9430 microscope and following the description system suggested by Whitbread<sup>13</sup>.

For the SEM-EDX analysis, the pottery fragments were sectioned and the resulting small sections were fixed on copper supports and their surface was examined using and Environmental Scanning Electron Microscope (ESEM) type Quanta 200, operating at 20 kV with secondary electrons in low vacuum mode coupled with an Energy Dispersive X-Ray (EDX) detection system for qualitative and quantitative analysis.

The mineralogical composition was identified using a Shimadzu XRD 6000 diffractometer using CuK $\alpha$  radiation ( $\lambda$ =1.54059 Å) in reflection mode. A small quantity of each pottery sample (2 g) was powdered using an agate mortar and then side-pressed into a top-loaded holder in order to minimize the preferred orientation and analysed in the range of 2 $\theta$ =4°-90° with a scan rate of 0.02° and 4s/step. Phase compositions were automatically identified by comparison with the reference powder patterns included in ICDD Powder Diffraction Files (PDF-4).

The pottery samples (10 g) were grounded into a fine powder using ball-milling technique (Fritsch Planetary Mill Pulverisette 5). Afterwards, the samples were homogenized and mixed with a lubricant (wax containing only C and H) in a 1:6 ratio (1 part wax and 6 parts pottery sample) for eliminating wear and contamination. The homogeneous samples were pressed using a Fluxana PR-25A automatic press at pressure of 20 t/cm<sup>2</sup>. The pressed pellets were

<sup>&</sup>lt;sup>13</sup> WHITBREAD 1995; 2017.

analysed using PANanlytical Epsilon 5 Energy dispersive X-ray spectrometer with certified reference materials as standards.

#### **Results and discussion**

Two of the analysed pottery fragments (GRC-2, GRC-5) presented in Figure 2 have a diffused textured surface, sample GRC-4 show a more complex incised decorative pattern, while the other two potshards (GRC-1, GRC-3) show no decoration. The surfaces of the samples have generally lighter colours (GRC-2-5), ranging from very pale brown (GRC-2-4) to light yellowish brown (GRC-5). Sample GRC-1 has a dark orange colour with dark brown spots caused by the secondary burning.

In cross-section (Figure 3), only sample GRC-1 has a homogenous dark greyish brown colour (10YR4/2), while sample GRC-5 display very pale brown (10YR7/4) hues with diffused greyish brown (10YR5/2) small areas. Sample GRC-2 show a diffused *sandwich* structure consisting in various hues of very pale brown on the outer surface (10YR7/3) and inner surface (10YR7/2) to a dark grey colour in the core (10YR4/1). Two of the analysed pottery fragments presents a *bicoloured* structure, ranging from a diffused partly greyish brown (10YR5/2) with lighter spots (10YR6/3), partly brown (10YR5/3) in sample GRC-3, to a distinctive partly grey (10YR4/1) – partly brownish (10YR6/6) in sample GRC-4.

The greyish brown colour with more diffused or more intense darker hues indicates a Ferich matrix fired mostly under reducing atmosphere<sup>14</sup>. The existence of a layered structure of *sandwich* (Figure 3/2, 3, 5) or *bicoloured* (Figure 3/4) type could be the result of the incomplete transformation of the ceramic body at the end of the firing process<sup>15</sup> or of the partial decomposition of the organic matter<sup>16</sup>.



Figure 3. Cross-sections of the shell-tempered pottery samples from Gârcina-Slatina Cozla II-III

<sup>&</sup>lt;sup>14</sup> MOLERA *et alii* 1998, 188.

<sup>&</sup>lt;sup>15</sup> MOLERA et alii 1998, 201; NODARI et alii 2004, 126–127.

<sup>&</sup>lt;sup>16</sup> NODARI et alii 2004, 127; MARITAN et alii 2006, 6.

The pottery samples selected from Gârcina present a slightly similar matrix containing various amounts of clasts (Figure 4/a–d). The matrix is homogenous with a light brown colour range observed using parallel nicols. Samples GRC\_1–3 and 5 displays a medium to low optical activity, while sample GRC-4 displays optical activity in the reducing area and shows less optical activity in the oxidizing area. Scarce rounded voids are present in the microstructure of samples GRC-1 and GRC-2, which are open-spaced distributed, without preferential orientation. The microstructure of samples GRC-3, GRC-4 and GRC-5 shows abundant planar voids, slightly preferentially oriented.

The quartz grains under 20  $\mu$ m present in all the analysed samples are considered as part of the pottery matrix<sup>17</sup>. The non-plastic clasts are represented mainly by angular, sub-angular (GRC-1, GRC-2) and sub-rounded (GRC-3, GRC-4, GRC-5) grains of quartz which often have undulatory extinction (Figure 4/a-b). Samples GRC-1, GRC-2, GRC-4 and GRC-5 contains different amounts of small red grains, unevenly distributed throughout the matrix, which represent amorphous iron oxide (Figure 4/a-c).

The clasts are relatively well sorted and no larger than 260  $\mu$ m for lithoclasts and over 1.5 mm only for bioclasts. Most of the quartz grains which composes the main part of the lithoclasts falls within the 50 and 200  $\mu$ m, which corresponds to the silt to fine sand category, according to the Wentworth scale<sup>18</sup>. Only samples GRC-1 and GRC-2 contains a small amount of quartz grains larger than 200  $\mu$ m.

All the pottery fragments contain various amounts of shells. In sample GRC-1 (Figure 4/a) the shells forms parallel oriented zones, while in the other samples are more randomly distributed. The shell temper registered a wide range of firing transformations, mainly, due to its original variety in sizes.

In samples GRC-1, GRC-2, GRC-4 and GRC-5 the small shell fragments have lost their internal microstructure, while the larger fragments still preserve, at least partially, a multilayer structure (Figure 5/1). The internal structure of the growth layer of the shell fragments embedded in the GRC-3 (Figure 5/2) ceramic paste have collapsed showing a more homogeneous internal morphology with a more dissipated frame along the lamellar border.

SEM microphotographs presented in Figure 6 exhibit the differences in terms of firing transformations between the smaller and thinner shells (Figure 6/a) and the coarser fragments (Figure 6/b). The structural disintegration of the small shell fragments (Figure 6/a) was caused by the accelerated decomposition of the organic matter followed by the decomposition of calcite, which appears in microstructural areas with low superficial tension and a higher Gibbs free energy, like the small gaps located alongside the growth lamellae<sup>19</sup>.

<sup>&</sup>lt;sup>17</sup> IONESCU *et alii* 2011, 469 with references therein.

<sup>&</sup>lt;sup>18</sup> WENTWORTH 1922, 389, 391.

<sup>&</sup>lt;sup>19</sup> MARITAN *et alii* 2007, 538.

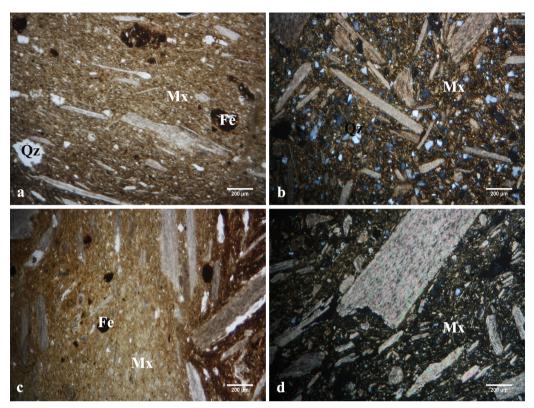


Figure 4: Polarized light microphotos of shell-tempered ware from Gârcina (a – GRC-1 matrix (Mx) with iron oxides (Fe) and quartz (Qz) grains; b – GRC-2 matrix (Mx) with quartz (Qz) grains; c – GRC-4 matrix (Mx) with iron oxides (Fe); d – GRC-5 matrix (Mx).
Images a, b and d are with crossed polarizers at 4× and image c is with plane polarizers at 4×)

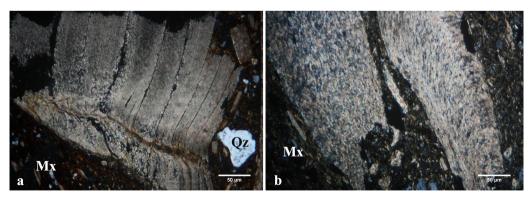


Figure 5: Polarized light microphotos of the shell temper present in the pottery samples from Gârcina (a – GRC-1 matrix (*Mx*) with quartz (*Qz*) grains; b – GRC-3 matrix (*Mx*).All images are with crossed polarizers at 20×).

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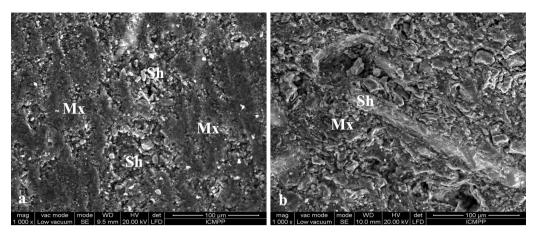


Figure 6: SEM images of pottery matrix and shell fragments observed in samples GRC-1 (a) and GRC-2 (b)

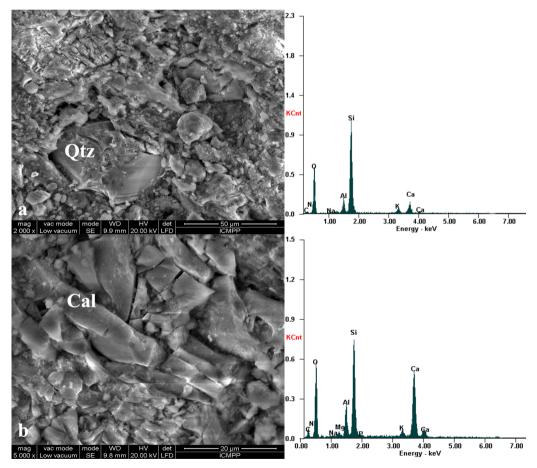


Figure 7: SEM images and EDX spectra of a quartz grain (a) and of calcite microstructure from the shell temper (b) identified in sample GRC-1

In the adjacent area, the matrix (Figure 6/a) registers a high degree of particle intertwining with low porosity causing thick reaction rims at the calcite-quartz/phyllosilicate interface<sup>20</sup>. The coarser shell fragments have preserved their layered morphology as shown in sample GRC-2 (Figure 6/b), while in the surrounding matrix no bloating pores or reaction fringe have appeared.

The quartz grain (Figure 7/a) has almost sharp edges with no reaction rims indicating that the subjected temperature was below the vitrification point. Figure 7/b reveals very well preserved calcite prisms while the inter-prismatic organic membranes were destroyed during firing.

The mineral assemblages present in the shell-tempered ware selected from Gârcina were determined by XRD and are represented in Figure 8. The main diffraction peaks corresponds to quartz and calcite, with significant amounts of phyllosilicates and feldspar. The presence of the illite/muscovite in all the samples indicates that the firing temperature did not exceed 850–900°C<sup>21</sup>. The first mineral transformation affecting the initial shells composition consists in the breakdown of aragonite between 400°C and 450°C when its main reflection peaks disappear from the XRD pattern, probably to the polymorphic transformation to calcite. The absence of newly formed calcium-aluminium (gehlenite) and calcium-magnesium (diopside) silicates from the groundmass, prompts for firing temperatures lower then 800–850°C<sup>22</sup>. The increase in intensity of the feldspars diffraction peaks is related to the increase in the firing in temperature, suggesting that these phases are produced by the reactions involving illite and calcite<sup>23</sup>, as can be stated for sample GRC-5 where we observe the disappearance of some of the adjacent peaks of illite/muscovite and calcite.

As previously stated when presenting the macroscopic features of the pottery samples, the first insights into the firing atmosphere can be obtained based on their colours. The selected potshards revealed a wide variety of colours corresponding to different firing regimes ranging from reducing (sample GRC-1) to oxidizing (sample GRC-5) conditions. Further, the thermal conditions of firing can be assessed based on variation of the optical proprieties of the matrix, the alteration of the diffraction patterns or the microtextural transformations of the shells and of the matrix identified by optical or electronic microscopy.

Based on the firing conditions, all the pottery samples falls within a low to medium fired group preserving, at least partially, the initial phyllosilicates included in the matrix as can be inferred based on the illite/muscovite diffraction peaks present in all the samples. These

<sup>&</sup>lt;sup>20</sup> CULTRONE *et alii* 2001, 626.

<sup>&</sup>lt;sup>21</sup> CULTRONE et alii 2001, 624; MARITAN et alii 2007, 533; TRINDADE et alii 2009, 348.

<sup>&</sup>lt;sup>22</sup> MARITAN *et alii* 2007, 531.

<sup>&</sup>lt;sup>23</sup> MARITAN *et alii* 2007, 533.

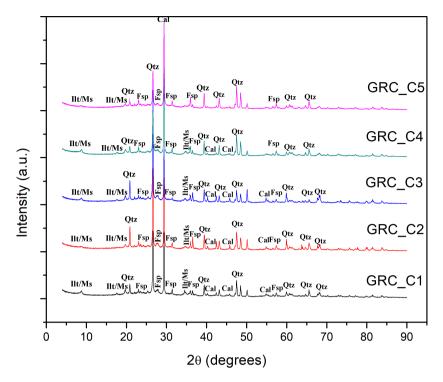


Figure 8: X-ray diffractograms of the shell-tempered pottery from Gârcina (Abbreviations: Ilt/Ms – illite-muscovite; Qtz – quartz; Cal – calcite; Fsp – feldspar)

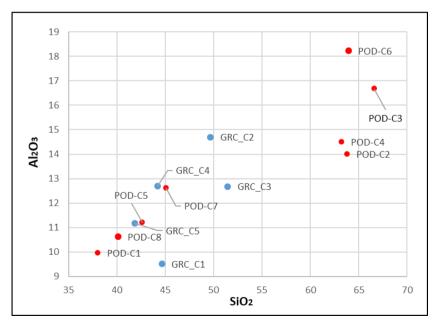


Figure 9: Bivariate SiO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> graphic for pottery samples from Gârcina (GRC) and Poduri (POD)

corresponds with the absence of newly formed mineral assemblages in the XRD pattern, combined with the presence of small red grains in the matrix corresponding to amorphous iron compounds which was not exposed to higher enough temperatures to form magnetite or hematite. The simultaneous presence of hematite and magnetite in previously analysed Cucuteni C pottery from Poduri–*Dealul Ghindaru* suggested the existence of a higher firing regime, which attained 850°C<sup>24</sup>.

Due to the absence of newly formed mineral phases during exposure at higher temperatures, we can estimate the firing conditions based on the morphological transformations of the shells present in the paste. The shells microstructure observed by optical and electron microscopy exhibits a wide range of transformations due to the firing process. The appearance of small inter-layer pores along adjacent growth layers and on the external surface<sup>25</sup> in the larger shells fragments, combined with the breakdown of the internal microstructure in the smaller shell fragments and the rise of small areas showing vitrification in the nearby matrix (Figures 5/a; 6/a) prompt for the existence of temperatures higher than 650°C. The existence of intra-layer pores, especially in the adjacent area of external wall of the shell fragments<sup>26</sup> combined with the maintenance of the prismatic layers of recrystallized calcite allows us to estimate that the firing temperature was between 750°C and 800°C.

As previously mentioned, this study is part of a larger project, which aims to determine the main technological features of the Cucuteni C ware identified in Eastern Romania. For understanding the type of raw materials used in the pottery production, we have tried to estimate the correlations of bivariate  $SiO_2/Al_2O_3$ , which may reveal the use of various raw clay materials.  $SiO_2$  represents quartz as silt or sand, while  $Al_2O_3$  exhibits the type of clay minerals <sup>27</sup> and the correlations of bivariate  $SiO_2/Al_2O_3$  assumes for the use of clays without any previous preparation or for the existence of preliminary treatment such as levigation, or the addition temper bearing quartz (e.g. coarser sand grains, grog).

In order to obtain a more accurate perspective on the type of clay used for pottery making we have plotted in Figure 9 the data obtained by X-ray fluorescence analysis for the samples selected from Gârcina with the ones from Poduri<sup>28</sup>. The pottery samples from Gârcina show a wider spread throughout the data, mainly due to the different amounts and grain sizes

<sup>&</sup>lt;sup>24</sup> MĂŢĂU et alii 2015, 138–139.

<sup>&</sup>lt;sup>25</sup> MARITAN *et alii* 2007, 540.

<sup>&</sup>lt;sup>26</sup> MARITAN *et alii* 2007, 540.

<sup>&</sup>lt;sup>27</sup> WEAVER, POLLARD 1973, 5–21; VELDE 1992, 2.

<sup>&</sup>lt;sup>28</sup> The XRF data presented in Figure 9 were obtained on the same pottery samples previously published (MĂȚĂU *et alii* 2015). In the previous study, we have included the macroscopic observations, SEM-EDX and XRD analysis, while the XRF data presented here were not included. The labels used in Figure 9 for the pottery samples from Poduri corresponds to the ones used in the previous study.

of quartz as revealed by the petrographic analysis. Four of the shell-tempered ware from Poduri falls within the same group with the ones from Gârcina (Figure 9), which prompts for the use of a related type of illitic clay. A distinctive group with a higher spread of the data is formed from one of the shell-tempered pottery sample from Poduri (POD-C2)<sup>29</sup> and three pottery samples having grog as temper, which may suggest the use of different type of clay or a different way of processing the raw material.

Even though, the graph based on the correlations of bivariate  $SiO_2/Al_2O_3$  showed a distinctive grouping of the samples, which corresponds to a certain degree of variation in the use of the same type of clay. These results agree with the presence of illite in all the pottery samples as revealed by the XRD analysis (Figure 8). Further, we have done Principal Component Analysis based on major ( $SiO_2$ ,  $Al_2O_3$ ,  $TiO_2$ , Fe2O3, MgO, MnO, CaO and  $K_2O$ )<sup>30</sup> and trace (V, Cr, Rb, Sr, Y, Zr, Nb, La, Pb, Th, U) elements. The results of the PCA analysis presented in Figure 10 shows the existence of three separate groups in the pottery samples from Gârcina and Poduri. The grog-tempered ware forms a distinctive group combined with one of the shell-tempered samples as shown, also, in Figure 9, while the shell-tempered ware form both sites spreads into separate groups. The association of the pottery samples in distinctive groups shown in Figure 10 is caused by the use of different sources of raw materials that was combined with different types of tempers.

Based on the archaeometric analysis of the shell-tempered ware from Gârcina and its comparison with the previously analysed Cucuteni C ware from Poduri, it is clear that we have some common technological trends such as the use of the same type of illitic clay with some variation in the firing characteristics. A lot more work needs to be done requiring the extension of the database with more Cucuteni C samples from the same sites, from the nearby area and the gathering of the Cucuteni painted, and unpainted ware. In addition, it is necessary to sample the available clay sources from the nearby area.

Complex technological affinities in terms of clay and temper type preferences indicate the existence of a dialogue facilitating the exchange of knowledge. This idea illustrates, also, the importance of tempering in pottery making for further understanding the social mechanisms behind this *technological choice*. Further, any specific *technological choice* relates to its performance in manufacture and use in agreement with the vessel's intended technological, economic, social or symbolic functions. Although all types of function can be

<sup>&</sup>lt;sup>29</sup> The distribution of the pottery POD-C2 shell-tempered pottery sample from Poduri in Figure 9 is consistent with the distribution of the same sample (the matrix value) in the HCA dendrogram (Fig. 3 in  $M\check{A}$ ŢĂU *at alii* 2015) obtained based on the EDX analysis.

<sup>&</sup>lt;sup>30</sup> We did not include Ca in the major elements due to the higher content induced by the shells addition which will generate an artificial spread of the data.

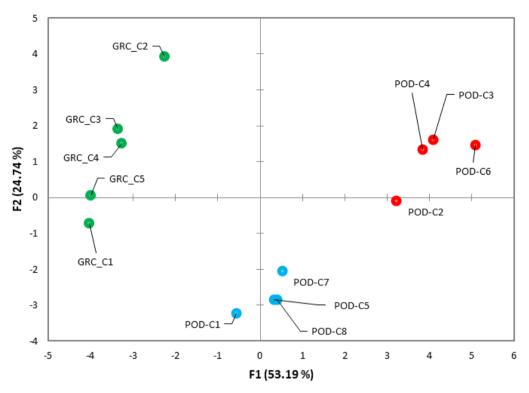


Figure 10: Principal component analysis (PCA) of the pottery from Gârcina (GRC) and Poduri (POD)

important in the design of the vessel, the overwhelming primary function of ceramic vessels, both prehistorically and ethnographically, is in processing, storing, and transporting food and liquids<sup>31</sup>. The recent use-wear analysis performed on Cucuteni C ware from several sites has revealed its use for food processing<sup>32</sup>.

Tempering represents a conscious material choice that is more controllable than the quality of clay, which is constrained by the local environment, but also potentially meaningful for understanding the possibility of combining the pottery with materials from other social spheres (e.g. shells as part of the culinary habits). The ware complexity prompts to the roe pottery played in the material worldview. Tempering traditions may even have carried a history of the potter's family heritage (e.g. the grog-tempered pottery<sup>33</sup>) while at the same time defining the potters existence in the same natural and social environment.

<sup>&</sup>lt;sup>31</sup> SKIBO 2013, 27.

<sup>&</sup>lt;sup>32</sup> MUNTEANU 2015.

<sup>&</sup>lt;sup>33</sup> The analysis performed on the grog fragments and on the pottery matrix from Poduri have revealed a similar chemical composition (MĂȚĂU *et alii* 2015).

### Conclusions

The archaeometric investigations of the shell-tempered ware from Gârcina–Slatina Cozla II-III showed the existence of a homogenous group with relatively similar composition and technological features. In terms of raw materials selection and processing, we assume the use of the same type of illitic clay, mixed with different amounts of crushed shells.

The firing regime underwent a wide variety of firing atmospheres ranging from reducing to oxidizing regimes, or to the alternation of reducing and oxidizing conditions in the same firing cycle. Based on the mineralogical and textural characteristics of the potshards, most likely the firing temperature was between 750°C and 800°C.

Comparison with previously analysed shell-tempered pottery from Poduri–*Dealul Ghindaru* indicated the use of a similar type of illitic clay which distinguishes geochemically from the one used for producing the ware from Gârcina. In a few cases, samples from Poduri Poduri–*Dealul Ghindaru* pointed out to the existence of firing temperatures higher than 800°C. The variation in the firing atmosphere registered for both sites may be related to the type of added temper. Further analysis performed on the other types of pottery identified within the sites needs to be done in order to understand if the variation in firing atmosphere may also be caused by the imperfection of the firing devices.

Although we did not work on a much-extended database on Cucuteni C ware, we can assume, at least for Gârcina and Poduri the existence of some similarities in terms of the raw materials selection and some specific features for each site in terms of firing characteristics. Finally, more detailed archaeological and archaeometric analyses are needed for explaining the function and the social significance of the Cucuteni C pottery in Eastern Romania, and further on the whole area of the Cucuteni-Trypillia civilization.

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#### References

- BAKLOUTI, S., L. MARITAN, N.L. OUAZAA, L. CASAS, J.-L. JORON, S.L. KASSAA, J. MOUTTE 2014. Provenance and reference groups of African Red Slip ware based on statistical analysis of chemical data and REE. *Journal of Archaeological Science* 50(10), 524–538. DOI: 10.1016/j.jas.2014.08.003.
- BELFIORE, C.M., M.D. DAY, A. HEIN, V. KILIKOGLOU, V. LA ROSA, P. MAZZOLENI, A. PEZZION 2007. Petrographic and chemical characterization of pottery production of the Late Minoan I kiln at Hagia Triada, Crete. Archaeometry 49(4), 621–653. DOI: 10.1111/j.1475-4754.2007.00324.x.
- BRORSSON, T., M. BLANK, I.B. FRIDÉN 2018. Mobility and exchange in the Middle Neolithic: Provenance studies of Pitted Ware and Funnel Beaker pottery from Jutland, Denmark and the west coast of Sweden. Journal of Archaeological Science: Reports 20, 662–674. DOI: 10.1016/j.jasrep.2018.06.004.
- CULTRONE, G., C. RODRIGUEZ-NAVARRO, E. SEBASTIAN, O. CAZALLA, M.J. DE LA TORRE 2001. Carbonate and silicate phase reactions during ceramic firing. *European Journal of Mineralogy* 13, 621–634. DOI: 10.1127/0935-1221/2001/0013-0621.
- DUMITROAIA, G., D. GARVĂN, R. MUNTEANU, O. WELLER, R. BRIGAND 2012. Gârcina, com. Gârcina, jud. Neamț. Punct: Slatina – Cozla II-III. Cronica cercetărilor arheologice din România. Campania 2011, 56.
- FEATHERS, J.K. 2006. Explaining Shell-Tempered Pottery in Prehistoric Eastern North America. *Journal of Archaeological Method and Theory* 13(2), 89–133. DOI: 10.1007/s10816-006-9003-3.
- GARVĂN, D., MUNTEANU, R. 2012. Un lot de ceramică *Cucuteni C* de la Gârcina, jud. Neamț. *Mousaios* 17, 31–46.
- GIURGIU, A., C. IONESCU, C., V. HOECK, T. TĂMAȘ, C. ROMAN, O.N. CRANDELL 2016. Insights into the raw materials and technology used to produce Copper Age ceramics in the Southern Carpathians (Romania). *Archaeological and Anthropological Sciences* 9(6), 1259–1273. DOI: 10.1007/s12520-016-0322-3.
- IONESCU, C., V. HOECK 2011. Firing-induced transformations in ceramics from NE Romania. European Journal of Mineralogy 23(6), 937–958. DOI: I: 10.1127/0935-1221/2011/0023-2147.
- IONESCU, C., V. HOECK, L. GHERGARI 2011. Electron microprobe analysis of ancient ceramics: a case study from Romania. *Applied Clay Science* 53 (3), 466–475, DOI: 10.1016/j.clay.2010.09.009.
- MĂȚĂU, F., V. NICA, A.-L. MATRICALĂ, A. STANCU 2015. Technological characteristics of the Cucuteni C pottery from Poduri–Dealul Ghindaru. Studia Antiqua et Archaeologica 21 (2), 123–145.
- MARITAN, L., NODARI, L., MAZZOLI, C., MILANO, A., RUSSO, U. 2006. Influence of firing conditions on ceramic products: Experimental study on clay rich in organic matter. *Applied Clay Science* 31(1-2), 1–15. DOI: 10.1016/j.clay.2005.08.007.
- MARITAN, L., C. MAZZOLI, I. FREESTONE 2007. Modelling changes in mollusc shell internal microstructure during firing: implications for temperature estimation in shell-bearing pottery. *Archaeometry* 49(3), 529–541. DOI: 10.1111/j.1475-4754.2007.00318.x.
- MARITAN, L., M. SECCO, C. MAZZOLI, V. MANTOVANI, J., BONETTO 2013. The decorated Padan *terra sigillata* from the site of Retratto Adria (north-eastern Italy): Provenance and production technology. *Applied Clay Science* 82(1), 62–69. DOI: 10.1016/j.clay.2013.05.020.
- MARITAN, L., F. TOURTET, G. MENEGHIN, C. MAZZOLI, A. HAUSLEITER 2017. Technological transfer? Comparative analysis of 2<sup>nd</sup> 3<sup>rd</sup>/4<sup>th</sup> century CE "Late Roman" pottery from Taymā, Saudi Arabia, and Petra, Jordan. *Journal of Archaeological Science: Reports* 12, 712–725. DOI: 10.1016/j.jasrep.2017.03.018.

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- MOLERA, J., T. PRADELL, M. VENDRELL-SAZ 1998. The colours of Ca-rich ceramic pastes: origin and characterization. *Applied Clay Science* 13(3), 187–202. DOI: 10.1016/S0169-1317(98)00024-6.
- MUNTEANU, R. 2015. Repere privinf funcționalitatea unor recipient ceramice Cucuteni C. Studii și Cercetări de Istorie Veche și Archeologie 66(3-4), 211–234.
- NODARI, L., L. MARITAN, C. MAZZOLI, U. RUSSO 2004. Sandwich structures in the Etruscan-Padan type pottery. *Applied Clay Science* 27(1-2), 119–128. DOI: 10.1016/j.clay.2004.03.003.
- NODARI, L., E. MARCUZ, L. MARITAN, C. MAZZOLI, U. RUSSO 2007. Hematite nucleation and growth in the firing of carbonate-rich clay for pottery production. *Journal of the European Ceramic Society* 27(16), 4665–4673. DOI: 10.1016/j.jeurceramsoc.2007.03.031.
- RATHOSSI, C., P. TSOLIS-KATAGAS, C. KATAGAS 2004. Technology and composition of Roman pottery in northwestern Peloponnese, Greece. *Applied Clay Science* 24 (3), 313–326. DOI: 10.1016/j.clay.2003.07.008.
- SKIBO, J.M. 2013. Understanding Pottery Function. Manuals in Archaeological Method, Theory and Technique, Springer.
- SPATARO, M. 2011. A comparison of chemical and petrographic analyses of Neolithic pottery from South-eastern Europe. *Journal of Archaeological Science* 38(2), 255–269. DOI: 10.1016/j.jas.2010.08.026.
- TITE, M., V. KILIKOGLOU, G. VEKINIS 2001. Strength, toughness and thermal shock resistance of ancient ceramics, and their influence on technological choice. *Archaeometry* 43(3), 301–324. DOI: 10.1111/1475-4754.00019.
- TRINDADE, M.J., M.I. DIAS, J. COROADO, F. ROCHA 2009. Mineralogical transformations of calcareous rich clays with firing: A comparative study between calcite and dolomite rich clays from Algarve, Portugal. *Applied Clay Science* 42(3-4), 345–355. DOI: 10.1016/j.clay.2008.02.008.
- VELDE, B. 1992. Introduction to Clay Minerals. Chemistry, origins, uses and environmental significance. Hong Kong.

WEAVER, C., L.D. POLLARD 1973. The Chemistry of Clay Minerals.

- WENTWORTH, C.K. 1922. A Scale of Grade and Class Terms for Clastic Sediments. *The Journal of Geology* 30(5), 377–392.
- WHITBREAD, I.K. 1995. Greek transport amphorae: a petrological and archaeological study. Athens.
- WHITBREAD, I.K. 2017. Fabric Description of Archaeological Ceramics. In: A. Hunt (ed.), *The Oxford Handbook of Archaeological Ceramic Analysis*, 200–216. DOI: 10.1093/oxfordhb/9780199681532.013.13.
- YIOUNI, P., E. VASILEIOU 2018. Production of Late Bronze-Early Iron Age handmade pottery from Central Epirus (Prefecture of Ioannina), Greece. Journal of Archaeological Science: Reports 21, 629–642. DOI: 10.1016/j.jasrep.2018.08.009.



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# Social structures and economic strategies at household level in the Chalcolithic settlement of Hăbăşești, Romania

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**Abstract.** This study is intended to be an attempt to identify the social structures associated with the dwelling in the Chalcolithic settlement from Hăbășești, Romania. Starting from the analysis of dwellings, the intention is to identify the major components of the household: social, material and behavioural, and the determination of the nature of the activities carried out within the structures. Taken into account are the size of the dwelling, the number of rooms, the presence of combustion structures and the inventory of dwellings.

**Rezumat**. Studiul de față se dorește a fi o încercare de identificare a structurilor sociale asociate cu locuințele din așezarea eneolitică de la Hăbășești. Pornind de la analiza locuințelor se încearcă identificarea componentelor majore ale gospodăriei: socială, materială și comportamentală, și stabilirea caracterului activităților desfășurate în interiorul structurilor. Sunt luate în considerare dimensiunea locuințelor, numărul de încăperi, prezența structurilor de combustie și inventarul locuințelor.

Keywords: household, economic strategies, social structures, Hăbășești.

### Introduction

The present study analyses from a social point of view the structures that occupied the dwellings from Hăbăşeşti (Strunga commune, Iași County, Romania). Researchers claim that based on spatial organisation, size and function of the settlement we can obtain information about the social nature. The spheres of social structures of a community, represented by the management of common space, the position of the individual or his family within the group, and the degree of the solidarity of the group, seems to be influenced by the quality and quantity of raw materials and the manpower available, the experience of the builders, the desire of the individual to assign a different amount of resources in the construction of houses, etc.<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> URSULESCU 2008, 212.

#### Site description

The settlement, with a surface about 1.5 ha, is situated on a hill with the west-east orientation, with good natural defensive system provided by the abrupt slopes, situated in the north-northeast side of the village and two complementary ditches, arranged almost in parallel, situated on the western side of the plateau. The settlement was dated to the Cucuteni A3 stage. The archaeological researches carried out led to the discovery of 44 dwellings, of several annexes and of 85 pits. The dwellings were laid in two nearby circles, formed by 29 and 13 constructions, respectively, each of them with another construction in the middle, of large size, which could have had a more special role in comparison to the others. The exterior ditch was 121 m long, the maximal width, in its upper part being of 7.10 m and its depth of 2.60 m, narrower to both ends, and the interior ditch, was 123 m long widely open at its mouth, narrowed toward the flat base, the width of the opening at the mouth being of about 6 m and the depth of 2.30 m. Its northern end is split in two lobes, and then it is suddenly stopped<sup>3</sup>.

#### Methodology and analysis criteria

The present study focus only on the dwellings from the settlement of Hăbăşeşti. The main source of information is the archaeological monograph of the settlement published in 1954. The emphasis will be placed on the three major components of household identified in the archaeological literature (Table 1): *the social component*, represented by the demographic unit, and the relationship between the members; *the material component*, marked by the inventory of dwellings; and *the behavioural component*, marked by the activities carried out<sup>4</sup>.

The association of structures and material found inside the dwellings can provide information about the management of resources and the economic organisation of the household<sup>5</sup>. The presence of storage area, either in the form of large vessels, clay bins or pits, suggests limited access to resources, with a distribution between the members of the household, and therefore at family level<sup>6</sup>.

The size of dwellings can be used to delineate the household space. Without being able to make an accurate estimation of this space, it is considered to represent the space where the family members were carrying out their activities<sup>7</sup>. In some cases the variations in the

<sup>&</sup>lt;sup>3</sup> LAZAROVICI, LAZAROVICI, ȚURCANU 2009, 119-121.

<sup>&</sup>lt;sup>4</sup> WILK, RATJE 1982, 619; TRIPKOVIĆ 2007, 10.

<sup>&</sup>lt;sup>5</sup> SHELACH 2006, 335.

<sup>&</sup>lt;sup>6</sup> FLANNEERY 2002, 421; 2006, 335.

<sup>&</sup>lt;sup>7</sup> URSULESCU 2008, 213-214.

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Dwelling	Social component						Material component					Behavioural component						
		No of chambers	Combustion structures			Tools		Ceramic	Plastic		Platform		Domestic activities		Ri	tual	Annex	
	Area (m <sup>2</sup> )							Ceramic							activities		AIIIEX	
			Н	0	EH	F	S		A	Ζ	yes	no	G	D	R	Ι		
1	135	1	?		1	х		х	х	х	х						1	
2	60/80	1	_			х	х	Х	Х	Х	Х		- 0		0		-	
3	60	2	2				х	х			х		2?		?		2	
4	84	1						Х			Х						1	
5	72/54	1						Х				х						
6	66	1	1	2		х	Х	Х	-	Х	Х	-	Х	1		Х		
7	40/48	1	2	1?				Х	?			?		2				
8	49?	2		2?	1			Х			Х							
9	28.6	1	1	2				Х			х							
10	60/84	1	2	1			Х	Х		Х	х							
11	50	1		3?			Х	Х		Х	Х		1				1	
12	49.5	1	1	1		х		Х		х	х							
13	38.25	1	1					х			х			1				
14	70	2	1					х	х	х	х		1		?	1		
15	150	2	1	1			Х	Х	Х		х				?		2	
16	38,5	1	?	1		х	Х	Х	Х	Х	х		1			3		
17	32.5	1	1					х			х		2					
18	58.5	1	2	1				х			х							
19		1						х	х	х			?			1		
20	31/46.7	1	1					х				?						
21	60.2	1		1		х	х	х			х						3	
22	42.8	1	1	1		х			Х	х		х	2	3				
23	70	1	1			х	х	х	Х	Х	х						1	
24	62	1	1					х			х		1					
25/25'	40/44	1	3	2				Х			х		1	2				
26	26	2?	2					Х			х		3					
27	60?	2	1		1		х	х					2?					
28	49	1	1			х	х		Х	х	х		1					
29	24	1	1					х	Х		х		3					
30	45/60	2	2	2				х		Х	х							
31	60	1	1	1				х			х							
32	75	2	1					х			х		5				2	
33	26.25	1	4					х			х		?					
34	55.25	1	1				х	х	х		х						2	
35	54	1	1	1?					х		х		1					
36	32.5	1	2	1				х	х		х		1	1				
37		1	1					х			х		2	1				
38	35	1	1	1				х			х		2				1	
40	41,25	2?	2	1	1			х			х		2					
41	18,5	1	2					х			х							
42	28	1						х			х						2	
43	35/40	1	1	1				х			х		3	2				
44	50/55	2	2			х	х	х			х						3	
		- oven; EH -		· · · · ·	1	1					. 1 4	L	. 1		1.	1		

## Table 1. Household components from Hăbășești — social aspects at the level of dwellings

dwelling size is considered the result of the ability of some families to mobilize more workforce. The expansion of the dwelling it is also associated with the need to increase the internal space in order to achieve different household activities<sup>8</sup>.

Lately, households have become increasingly important in archaeological research. By a simple definition, the household is considered to be a group of people occupying a certain space (the dwelling), linked by kinship (parent, marriage, cousin, sister, brother etc.). The composition of the household may change over time as a result of matrimonial alliances, or by abandonment of the household by mature children<sup>9</sup>. Also, the household is seen as the place of interaction between social groups and the social and economic processes, therefore the main unit of organisation, associated with the dwelling, with the essential goals of producing and distributing the goods necessary for survival, reproduction and transmission of social structures<sup>10</sup>.

However, there is no clear distinction between different forms of social organization such as family and household. There are different cases where the smallest social unit occupy several buildings or a single building accommodates several families. The difference is that family members are exclusively linked by kinship, while households are more of an economic character, therefore a different form of social organisation. As so, the family can represent a household, but the household is not always a family<sup>11</sup>. Most archaeological researches in Southeast Europe associates the household with the dwelling, the attention being placed on enhancing production and increasing reproduction. The architecture, the shapes and dimensions of the dwellings, the deposition and the character of the artefacts, the interior design, and the identification of activities, are important factors in the recognition of the household from the archaeological data, which allow us to make assumptions about internal differences within settlements<sup>12</sup>.

#### The social component

The social component largely refers to the demographic aspect, including the number and relationships between individuals. Taken into account are the surface and the subdivision of the dwellings, as indices for certifying social division<sup>13</sup>. Recent studies do not exclude the possibility of a link between the average size of the household and the size of the residential structure, and the establishment of a conversion constant to allow household estimation

<sup>&</sup>lt;sup>8</sup> BYRD 2000, 86-87; SHELACH 2006, 340.

<sup>&</sup>lt;sup>9</sup> PORČIĆ 2016, 162-163.

<sup>&</sup>lt;sup>10</sup> STEFANOVIĆ 1997, 338; WILK, RATHJE 1982, 621; DÜRING 2006, 39.

<sup>&</sup>lt;sup>11</sup> TRIPKOVIĆ 2007, 11.

<sup>&</sup>lt;sup>12</sup> STEFANOVIĆ 1997, 338-339; MÜLLER 2017, 157.

<sup>&</sup>lt;sup>13</sup> NAUMOV 2013, 67.

based on the size of the dwelling. The proposed constant value is 6-7 m<sup>2</sup> per individual<sup>14</sup>. For the Cucuteni area, the researchers accepted a value of 6-10 m<sup>2</sup>, with an average of 7-8 m<sup>2</sup>, and an estimate of the number of inhabitants in the settlement was made by multiplying the number of buildings with an average value, usually 10<sup>15</sup>. Studying the size of the dwellings in the Vinča area, from eight multi-layered sites, J. Chapman in estimation of the household size proposes a 50 m<sup>2</sup> limit between the nuclear family and the extended family. Thus, the household, as the main socio-economic unit, is associated with the nuclear family (3-5 persons) or the extended family (6-8 individuals), based on archaeological data<sup>16</sup>.

The size of the dwellings in the Hăbăşeşti settlement varied between 18.5 and 150 m<sup>2</sup> (Table 1), placed in the category of small ones (two), average (about 21 dwellings), large (about 17 dwellings) and very large (two dwellings). In the case of 11-13 dwellings there are traces of partition walls. As for the combustion structures, these were identified in about 36 dwellings, namely 49 hearths, about 26 ovens and four external hearths. The dwellings 2, 4, 5, 19 and 42, with an area over 50 m<sup>2</sup>, did not have any kind of combustion structures<sup>17</sup>.

#### The material component

The material component of household is focused on the inventory. The distribution of artefacts may offer information for understanding the nature of interpersonal relationships between households, manifested as differences between rooms, differences between the locations of fixed installations or differences between storage structures<sup>18</sup>. Taken into account are the presence of combustion structures inside the dwellings (hearths, ovens or both), the presence of tools (flint or stone), and the presence of anthropomorphic and zoomorphic plastic.

In the settlement of Hăbăşeşti, most of the dwellings had one hearth. In six cases the dwellings had two hearths (Table 1). Worth mentioning is the case of dwelling 23, small sized, with four hearths. There are also cases where we encounter a hearth and an oven in the same structure. This is the case of dwelling 18 with two hearths and an oven, dwelling 30 with two hearths and two ovens, and dwelling 41 with two hearths and one oven. In four cases the author of the excavations speaks of the existence of external hearths. Also, worth mentioning is the case of dwelling 1, with an area over 135 m<sup>2</sup>, with only one hearth<sup>19</sup>.

<sup>&</sup>lt;sup>14</sup> PORČIĆ 2016, 164-166; BROWN 1987, 490; KOLB 1985, 590; PORČIĆ 2012, 72-86.

<sup>&</sup>lt;sup>15</sup> CHAMBERLAINE 2006, 126-128; MONAH D., CUCOȘ 1985, 48; PREOTEASA 2014, 75.

<sup>&</sup>lt;sup>16</sup> CHAPMAN 1981, 52- 61; TRINGHAM, KRSTIĆ 1990, 602-607; TRIPKOVIĆ 2007, 37.

<sup>&</sup>lt;sup>17</sup> DUMITRESCU 1954, 20-1786; POPOVICI 2003, 310 .

<sup>&</sup>lt;sup>18</sup> TRIPKOVIĆ 2009, 20; 2007, 10.

<sup>&</sup>lt;sup>19</sup> DUMITRESCU 1954, 20-176.

Correlation of structures and in-house inventory with a single household can provide information on economic management and organization both at the household level and at the level of the settlement<sup>20</sup>. The pottery is present in most of the structures, with the exception of dwellings 22, 28 and 35 (Table 1). Flint tools were present in 10 dwellings, stone tools in 15 cases, bone tools in two structures, clay objects in eight dwellings, and in three cases copper objects. The presence of anthropomorphic plastic has been reported in 12 cases, and zoomorphic plastic also in 12 cases. Both categories of plastic were present in dwellings 1, 2, 16, 22, 23, 28, 34. Only in the case of the dwelling 2 the inventory consisted of all these categories of objects. Dwellings 3, 5, 7-9, 14, 17-18, 20, 24, 26, 29-33, 35-38, 41-43 except ceramics have no tools or other objects in the inventory<sup>21</sup>.

#### The behavioural component

Taken into account for the study of the third component of the household, the behavioral (Table 1), starting from the inventory discussed above, are the activities carried out inside the dwellings, possessions of ritual character (shrines, rituals, etc.), but also the existence of platforms and the presence of annexes.

The existence of platforms is supported for the most of the dwellings. Only in four cases they are not mentioned, probably does not exist. Some of them had traces of at least one layer of rebuilding. Dwelling 33 presents several layers of rebuilding<sup>22</sup>.

As far as the identification of the activities carried out within the dwellings is concerned, one possibility of approach is the division of the artefacts into their functions, and therefore the identification of the areas where they were carried out. This type of analysis can provide a possible classification of the activities carried out inside the dwellings as follows: (a) heavier activities, suggested by the presence of the stone tools; (b) easier activities suggested by the presence of flint tools; (c) food processing, suggested by the presence of grinding tools; (d) workshops; (e) cooking and consumption, suggested by the presence of ceramics; (f) storage (bins, vessels, etc.), and (g) ritual<sup>23</sup>.

For the first two categories of activity discussed above, in the settlement of Hǎbǎşeşti stone tools have been documented for 16 structures, and flint tools for ten structures. In seven cases both categories were present, in three cases only flint tools and in six cases only stone tools<sup>24</sup>.

<sup>&</sup>lt;sup>20</sup> SHELACH 2006, 335.

<sup>&</sup>lt;sup>21</sup> DUMITRESCU 1954, 20-176.

<sup>&</sup>lt;sup>22</sup>DUMITRESCU 1954, 20-176; POPOVICI, 2003, 312.

<sup>&</sup>lt;sup>23</sup> SHELACH 2006, 336.

<sup>&</sup>lt;sup>24</sup> DUMITRESCU 1954, 20-176.

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Grinding activities were documented for 20 dwellings. In 16 cases only the presence of grinders is mentioned. Four dwellings had only one grinding tool, eight structures with two grinding tools, and three dwellings with three grinding tools. Worth mentioning is dwelling 36, with at least four grinders, disposed in two different sectors of the dwelling all placed in the sector without the platform of the dwelling. Near one of the grinders calcined seeds of wheat and vetch (*Triticum compactum* and *Vicia vilosa*) were found. Also, dwelling 32 had four such structures, two in SW sector, and the other two in the ENE and ESE corners<sup>25</sup>.

Storage areas, in the form of supply vessels, were present in at least 10 dwellings. Dwelling 7 had remains from two such vessels, one carrying inside calcined wheat seeds. In the case of dwelling 22 fragments of large vessels were discovered in three points, two in the SW corner, with the bottom placed into the ground, and one in the centre. Also, a large vessel partially buried was discovered in dwelling 36 placed north of the grinding tool. A remarkable situation is found in dwelling 25, where, inside a vessel found near a hearth, four or five stones with an unknown role were discovered<sup>26</sup>.

Studying the dwelling from Hăbăşeşti we cannot talk certainly about the existence of workshops. However, the possibility of such activities being carried out at the level of the dwellings is not excluded. The discovery of a prismatic red pen in the external pit near dwelling 8 may suggest the possibility that the occupants of the structure were engaged in ceramic decoration. Also, in another pit (pit 36) associated with dwelling 14, the presence of some figurines, some rudimentary burned, may suggest a possible concern of the dwellers to this craft. A possible processing tool zone may be suggested by the presence of flint scraps originating from a fire affected core in the ENE corner of dwelling 22. Also, dwelling 27, a possible bone processing area is attested by the presence of a broken stone placed on a burnt clay frame with slightly raised edges<sup>27</sup>.

A problem raised in the study of dwellings is related to the differentiation of domestic and ritual activities. It is known that the dwellings, in addition to household functions, can also represent the space of ritual activities<sup>28</sup>. Although there is insufficient information, a possible ritual is considered to be the deposition of nine blades of black flint found in pit 1 before the construction of dwelling 1. Another discovery linked to a possible ritual, is present in dwelling 15, where in the mouth of broken vessel NNE of the oven plates, a small well processed chisel was placed, however in this case we do not have additional information.

<sup>&</sup>lt;sup>25</sup> DUMITRESCU 1954, 20-176; POPOVICI 2003, 313.

<sup>&</sup>lt;sup>26</sup> DUMITRESCU 1954, 20-176.

<sup>&</sup>lt;sup>27</sup> DUMITRESCU 1954, 20-176.

<sup>&</sup>lt;sup>28</sup> URSULESCU 2004, 7.

The presence of idols has been identified in two cases, dwelling 6 with a violin-shaped (*en violon*) idol with strings of dots and dimples, and another violin-shaped idol, found on the top of the pit associated with dwelling  $19^{29}$ .

In this analysis we included the presence of annexes, considered a good source of information in the study of economic activities carried out at household level<sup>30</sup>. Only 13 dwellings had annexes, six with one annex, five with two annexes and two with three annexes<sup>31</sup>.

#### Discussions

In archaeology, related to social structures, researchers assign small-sized dwellings to nuclear families, and large structures to extended families<sup>32</sup>. If the size of structures is taken into account as a parameter for identifying the social structure associated with dwellings, then variations in their size may suggest a structural complexity of the household. According to the researchers, the dwelling represents the place of building the identity of the new household<sup>33</sup>. Taking into account the modest dimensions of the dwellings which formed the two circles, as well as the fact that the majority had one combustion structure, the author of the excavations said they were occupied by nuclear families<sup>34</sup>. However, based on Chapman's estimation, for the settlement of Hăbăşeşti we can talk about the presence of 22 dwellings with areas under 50 m<sup>2</sup> associated with nuclear families and 19 dwellings with areas over 50 m<sup>2</sup> associated with extended families.

Regarding the economic nature, the clearest activities materialized inside the dwellings were those related to the storage, preparation and consumption of food<sup>35</sup>. In large part, except for two cases, the presence of annexes is associated with dwellings with areas over 50 m<sup>2</sup>. Storage and grinding areas, in most cases, are present in dwellings associated with nuclear families, only in four cases are documented in dwellings associated with extended families. It is not excluded, at the settlement level, the collaboration between different households in carrying out different activities.

<sup>&</sup>lt;sup>29</sup> DUMITRESCU 1954, 20-176.

<sup>&</sup>lt;sup>30</sup> SCHELAH 2006, 336.

<sup>&</sup>lt;sup>31</sup> DUMITRESCU 1954, 20-176.

<sup>&</sup>lt;sup>32</sup> GIMBUTAS 1991, 330.

<sup>&</sup>lt;sup>33</sup> TRIPKOVIĆ 2015, 390-393.

<sup>&</sup>lt;sup>34</sup> DUMITRSCU 1954, 499-501.

<sup>&</sup>lt;sup>35</sup> BURDO et alii 2013, 103.

#### References

BOGUCKI, P. 1999. The Origins of Human Society. New York.

- BROWN, B.M. 1987. Population Estimation From Floor Area: a Restudy of "Naroll's Constant". *Cross-Cultural Research* 21, 1-49.
- BURDO, N., M. VIDEIKO, J. CHAPMAN, B. GAYDARSKA 2013, Houses in the Archaeology of the Tripillia– Cucuteni Groups. In: D. Hofmann, J. Smyth (eds), *Tracking the Neolithic House in Europe. Sedentism, Architecture and Practice*, 95-116. London.
- BYRD, B.F. 2000. Households in Transition Neolithic Social Organization within Southwest Asia. In: I. Kuijt (ed.), *Life in Neolithic Farming Communities Social Organization, Identity, and Differentiation*, 63-98. New York–Moscow.
- CHAMBERLAINE, A.T. 2006. Demography in archaeology. Cambridge.

CHAPMAN, J., 1981. The Vinča Culture of South East Europe. Oxford.

DUMITRESCU, V. 1954. Hăbășești. Monografie arheologică. București.

- DÜRING, B. 2006. Constructing Commuities. Clustered Nneighbourhood Settlements of the Central Anatolian Neolithic ca. 8500-5500 CAL. BC. Leiden.
- FLANNERY, K.V. 2002. The origins of the village revisited: from nuclear to extended households. *American Antiquity* 67(3), 417–433.
- GIMBUTAS, M. 1991. The Civilization of the Goddess: The World of Old Europe. San Francisco.
- HAYDEN, B., A. CANNON 1982. The corporate group as an archaeological unit. *Journal of Anthropological Archaeology* 1, 132–158.
- KOLB, C.C. 1985. Demographic Estimates in Archaeology: Contributions From Ethnoarchaeology on Mesoamerican Peasants. *Current Anthropology* 26, 581-599.
- LAZAROVICI C.M., G. LAZAROVICI, S. ȚURCANU 2009. Cucuteni. A Great Civilisation of the Prehistoric World. Iași.
- MONAH D., Ş. CUCOŞ 1985. Aşezările culturii Cucuteni din România. Iași.
- MÜLLER, J. 2017. Inheritance, population development and social identities Southeast Europe 5200–4300 BCE. In: M. Gori, M. Ivanova (eds), *Balkan Dialogues. Negotiating Identity between Prehistory and Present*, 156-168. London.
- NAUMOV, G. 2013. Embodied Houses: the Social and Symbolic Agency of Neolithic Architecture in the Republic of Macedonia. In: D. Hofmann, J. Smyth, *Tracking the Neolithic House in Europe. Sedentism, Architecture and Practice*, 65-94. New York–London.
- PORČIĆ, M. 2012. Effects of Residential Mobility on the Ratio of Average House Floor Area to Average Household Size: Implications for Demographic Reconstructions in Archaeology. *Cross-Cultural Research* 46(1), 72-86.
- PORČIĆ, M. 2016. Paleodemografija: Kritički pregled teorije, metoda i istraživanja. Beograd.
- POPOVICI, D. N.. 2003. Area organization, arrangement and use in the Cucuteni, Phase A Culture. I, *Cercetări Arheologice* 12, 305-324.
- POPOVICI, D.N. 2008. Cultura Cucuteni (Faza A). Teză de doctorat, Universitatea "Valahia" din Târgoviște.
- PREOTEASA, C. 2014. *Habitatul culturii Cucuteni*. Teză de doctorat, Academia Română Institutul de Arheologie, Iași.

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- SHELACH, G. 2006. Economic adaptation, community structure, and sharing strategies of households at early sedentary communities in northeast China. *Journal of Anthropological Archaeology* 25, 318–345.
- STEFANOVIĆ, M. 1997. The Age of Clay: The Social Dynamics of House Destruction. Journal of Anthropological Archaeology 16, 334-395.
- TRINGHAM, R., D. KRSTIĆ 1990. Conclusion: Selevac in the Wider Context of European Prehistory. In: R. Tringham, D. Krstić, *Selevac: A Neolithic Village in Yugoslavia*, 567–616. Los Angeles.
- TRIPKOVIĆ, B. 2007. Domaćinstvo i prostor u kasnom neolitu vinčansko naselje na Banjici. Beograd.
- TRIPKOVIĆ, B. 2009. House(hold) continuitiea in the central Balkans, 5300-4600 BC. *Opuscula Archaeologica* 33, 7-28.
- TRIPKOVIĆ, B. 2015. Praistorijske "porodične zadruge": neolitska domaćinstva između tradicije i inovacije. *Issues in Ethnology and Anthropology* 10(2), 383-404.
- URSULESCU, N. 2004. Spiritual și material în viața preistorică și în concepțiile arheologiei preistorice. *Carpica* 33, 5-9.
- URSUNESCU, N. 2008, Modèles d'organisation de l'espace aux habitations de la culture Précucuteni entre Siret et Prut. In: V. Chirica, M.-C. Văleanu (eds), *Etablissements et habitations préhistoriques. Structure, organization, symbole. Actes du colloque de Iași, 10-12 decembre 2007, 207-238. Iași.*

WILK, R., W. RATHJE 1982. Household Archaeology. American Behavioral Scientist 25(6), 617-639.

WHITLE, A. 1996. Europe in Neolihic. The creation of New World. Cambridge.



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# First steps of the Roman diplomacy in the Eastern Mediterranean: development of the common political strategy

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**Abstract.** The article deals with the first diplomatic contacts of Rome in the Hellenistic world in 3<sup>rd</sup> century BC (before the beginning of the Second Macedonian War). The author attempts to discover if Roman Senate had common approach to its eastern policy in this period. In general the author agrees with those scholars who assert that Romans on their eastern diplomacy used the instrument (widespread in the interstate relations of the Hellenistic world) of "informal friendship" (amicitia –  $\varphi \iota \lambda(\alpha)$ . However, tracing the development of the Roman relations with its "friends" in the Eastern Mediterranean, the author comes to the conclusion that from the beginning of the Illyrian Wars Roman attitude towards those states which established the amicable relations with Rome started to change. Romans more and more perceived these states as clients and expected from them services, which were usually provided by the Roman socii in Italy. The only exception from such a practice was the military alliance with Aetolia during the First Macedonian War which was determined by the extraordinary circumstances of this conflict.

**Rezumat**. Autorul face referire la primele contacte diplomatice ale Romei cu lumea elenistică în secolul al III-lea a.Chr. (înainte de începutul celui de-al doilea război macedonean). El este în general de acord cu acei cercetători care susțin că romanii au utilizat în diplomația lor din răsărit instrumentul (altminteri răspândit în relațiile interstatale din lumea elenistică) "prieteniei informale" (amicitia –  $\varphi_I\lambda(\alpha)$ . Totuși, urmărind evoluția relațiilor Romei cu "prietenii" din Mediterana de est, autorul ajunge la concluzia că de la începutul războaielor illyrice atitudinea romanilor față de acele state care stabiliseră relații amicale cu Roma se schimbă treptat. Romanii percep aceste state din ce în ce mai mult în calitate de state clientelare și așteaptă servicii din partea lor, într-un mod asemănător cu al socilor din Italia. Singura excepție de la o astfel de practică a constituit-o alianța militară cu Etolia în timpul primul război cu Macedonia, alianță care a fost determinată de circumstanțele extraordinare ale conflictului.

Keywords: Rome, Hellenistic world, informal friendship, alliance, diplomacy.

Roman foreign policy in the Eastern Mediterranean has attracted the interest of modern historians for a long time. Special attention in the historiography has been dedicated to the problem of the Roman imperialism and from that point of view to the correlation between

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the Roman diplomatic and military actions with the political practice, accepted in the system of Hellenistic states in the  $3^{rd}-2^{nd}$  centuries BC.<sup>2</sup> However, still a lot of questions cause disputes among historians. Frequently new epigraphic monuments elucidate some little-known aspects of relations between Romans and Greek states and allow looking in a new fashion on the principles which determined these relations.

One of the questions of the period under consideration that face historians may be formulated like this: what motives did Romans mostly follow when they intervened in the affairs of the Hellenistic states and was there any common political strategy elaborated by the Roman Senate, which determined the Roman Eastern policy? Such statement of a question requires tracing the history of relationship between the Roman republic and Greek states in the earlier period (before the active Roman military involvement into the affairs of the Eastern Mediterranean during the Second Macedonian war) and ascertaining the kind of similarities and variations in the Roman diplomatic actions in the East during that period.

Already in the 4<sup>th</sup> century BC Greece was not totally unattainable and unknown for Romans. Diodorus and Appian tell the same story, when they describe taking of the Etruscan city Veii by Romans. After the triumph of Marcus Furius Camillus it was decided to dedicate 1/10 of the booty to the god Apollo, because his prophecy helped Romans to capture the city. As Romans had no treasury in Delphi they used the one of Massaliotes where they dedicated to Apollo golden crater on a stand and it was possible to see it until the plunder of the Delphi by Onomarchus (App. Ital., 8, 1; Diod., XIV, 93, 3–4). Diodorus and Plutarch add another interesting detail: the ambassadors sent to Delphi were captured near Lipari by pirates and liberated by the local strategos Timasipheus, when he had known about the aim of their trip (Plut. Cam., 8)<sup>3</sup>. Subsequently Romans granted to Timasipheus some honours and after the capture of Lipari during the First Punic war liberated his descendants from all taxes (Diod., XIV, 93, 5). Titus Livius also tells the story about the prophecies connected with the capture of Veii, sending ambassadors in Delphi and the donations sent to the god (Liv., V, 15, 3; 23, 8–11). Certainly, this story may be doubted and regarded as the invention of the annalists, but the early connections between Romans and Massalia in the beginning of the 4<sup>th</sup> century BC are confirmed by other evidence. In particular, Justin mentions that after the Gallic invasion the Massaliotes, who had known about the ransom Romans had to pay to Gauls for the peace, gathered the gift to Rome from private citizens and from the whole community. In order to thank Massaliotes for that Romans granted them foedus aequo iure (Justin., XLIII, 5, 8–9).

<sup>&</sup>lt;sup>2</sup> From comparatively recent works, where it is possible to find bibliography for earlier period see: HARRIS 1979, GRUEN 1984, KASCHEEV 1993, ECKSTEIN 2008, ERKSINE 2010.

 $<sup>^{3}</sup>$  F. CASSOLA (1962, 28) argues for authenticity of this evidence, linking it to other evidences on the Roman presence on the sea in the 4<sup>th</sup> century BC (for example, Diodorus' evidence on the capture and execution by Timoleon of some tirrenian Postumius, who had in his disposal twelve ships — Diod. Sic., XVI, 82, 3).

One of the earliest examples of the diplomatic relations between the Roman republic and a Greek state of Balkan Peninsula refers to the 330s BC, when the king of Epirus Alexander Molossus (invited by the Tarentines) landed in the Southern Italy to help Greeks in their struggle against the surrounding tribes of Lucani and Bruttii. Romans at this point had already been in a tended relationship with Samnites, allies of Lucani, and obviously decided to make use of the situation for their own purposes<sup>4</sup>. Livius tells that when Alexander defeated the allied army of Lucani and Samnites near Pestum Romans made "peace" with him (pax — Liv. VIII., 17, 9–10). Perhaps, the better translation here would be "alliance", considering the parallel evidence of Justin who tells that the king entered into a friendly relation with Romans and concluded an alliance (*foedus amicitiamque* — Justin., XII, 2, 12).

Incidentally, the Romans embassy to Alexander the Great mentioned by Pliny the Elder with the reference to Clitarchus (Plin. N.H., III, 57) doesn't seem absolutely impossible. In historiography this embassy was also connected with the one of Alexander to the Romans regarding the piracy of Antium's inhabitants mentioned by Strabo<sup>5</sup>. Strabo tells: «Formerly residents of Antium owned ships and together with the Tirrenians were engaged in sea piracy, although they had already been ruled by Romans. Therefore in the former times Alexander sent ambassadors complaining about that (Strab., V, 3, 5). Th. Mommsen believed that this passage dealt with the Alexander Molossus<sup>6</sup>, but this view was rejected and in the 20<sup>th</sup> century and it was overruled by the opinion that it's dealing with Alexander the Great<sup>7</sup>.

One of the first sporadic contacts between the Roman republic and the Hellenistic state may be assumed as an establishment of friendly relations with Rhodes in the end of the 4<sup>th</sup> century BC. Polybius, narrating about the Roman war with Perseus in 167 BC, tells: "So intelligent was the policy of Rhodians that almost for hundred and forty years the Rhodian people, participating in the most well-known and famous affairs of Romans, didn't conclude an alliance with them" (Polyb., XXX, 5, 6)<sup>8</sup>. So it may tell us about the relations between two republics that dates back to almost 306/5 BC. Th. Mommsen argued that in that period a commercial agreement between Rome and Rhodes was concluded<sup>9</sup>. However the expression used by Polybius (κοινωνέω τῶν ἐπιφανεστάτων καὶ καλλίστων ἔργων) implies the common military operations<sup>10</sup>. Such actions are improbable and that's the reason why there were attempts to reconsider this evidence. For example, it was proposed to delete from the text πρὸς τοῖς ἑκατὸν as an erroneous insert. In that case the text of Polybius may be read "for

<sup>&</sup>lt;sup>4</sup> E. GRUEN (1984, 61) considers that Alexander was the initiator of the agreement.

<sup>&</sup>lt;sup>5</sup> DE SANCTIS 1960, 406.

<sup>&</sup>lt;sup>6</sup> CIL, X, 1, 660.

<sup>&</sup>lt;sup>7</sup> Compare Liv., VIII, 14, 8 (about the Roman colonization of Antius and the closing of the access to the sea for its inhabitants in 338 BC). Historiography: SCHMITT 1957, 39; DE SANCTIS 1960, 406; CASSOLA 1962, 28.

<sup>&</sup>lt;sup>8</sup> Compare Liv., XLV, 25, 9: nam ita per tot annos in amicitia fuerant, ut sociali foedere se cum Romanis non inligarent.

<sup>&</sup>lt;sup>9</sup> MOMMSEN 1997, 376. The similar idea was stated by G. DE SANCTIS 1960, 406.

<sup>&</sup>lt;sup>10</sup> WALBANK 1979, 423.

almost forty years" and this chronological indication corresponds with what we know about the relations between Rome and Rhodes in the end of the  $3^{rd}$  century BC.<sup>11</sup>

According to another hypothesis, at the end of the 4<sup>th</sup> century BC between Rome and Rhodes there may have been established not more than informal relations of "amicitia". As for common military operations, Romans and Rhodians after 304 BC could have undertaken some common actions against Etruscan pirates<sup>12</sup>. The date is definitely connected with the unsuccessful siege of Rhodes by Demetrius Poliorcetes and correspondingly with the approval of the island Republic' independence<sup>13</sup>.

Incidentally, it's worth consulting once again the evidence of Strabo who, continuing the story about pirates from Antium, tells the following: "Demetrius sent back to Rome captured pirates and ordered to tell Romans that although he makes favour to them returning captives for the sake of kinship between Romans and Greeks he consider worthless that people who own the whole Italy send gangs of pirates" (Strab., V, 3, 5). This evidence deals with the situation of the beginning of the 3<sup>rd</sup> century BC, so "Demetrius" is Demetrius Poliorcetes.

F. Cassola assumed that recalling their old cooperation with the Romans Rhodians meant just those actions of Roman pirates against Demetrius Poliorcetes, with whom Rhodos was fighting for independence at that time. To confirm early and direct trade relations connecting Rhodos and Rome he quotes the dedicatory inscription to the goddess Athena on behalf of some L. Folius on the acropolis of Lindos, made on both Greek and Latin (CIL.  $I^2$ . 404)<sup>14</sup>.

Finally, the inscription found in 1976 in Rhodos dating back to the last decades of the 3<sup>rd</sup> century BC may serve as an indirect confirmation of the pretty early relations between the two states. The very beginning of this inscription refers to some official religious actions that took place at the Capitolium, while Rhodians are mentioned among the Romans and their allies though separately from the latter. The text of this inscription evidently indicates the close connection between the two states which was established before the beginning of the Second Macedonian War.<sup>15</sup>

In the 3<sup>rd</sup> century BC the contacts between Rome and Hellenistic world became broader and more diverse. There still prevailed informal friendly relations and trade connection. The catalyst for the activation of such contacts had become the Pyrrhic war after which the Hellenistic kings discovered the strong state in the West Mediterranean and Romans realized those dangers, which could come from the East.

It's not accidental that the next exchange of embassies mentioned in the sources happened with Ptolemaic Egypt, one of the most powerful Hellenistic states at that moment.

<sup>&</sup>lt;sup>11</sup> HOLLEAUX 1921, 29–46.

<sup>&</sup>lt;sup>12</sup> SCHMITT 1957, 13, 44.

<sup>&</sup>lt;sup>13</sup> NENCI 1958, 196–212.

<sup>&</sup>lt;sup>14</sup> CASSOLA 1962, 30-31.

<sup>&</sup>lt;sup>15</sup> KONTORINI 1983, 24–32.

In 273 BC Ptolemy Philadelphus sent the ambassadors with some gifts to Rome and then Romans sent Numerius Fabius Pictor, Quintus Fabius Maximus and Quintus Ogulnius "honoured as private person" (ἰδίαις τιμηθέντες) by the king. Having returned, the ambassadors delivered the king's gifts to the state treasury but the Senate decreed that they must be returned to them as a reward for their virtue (τιμὰς ἀρετῆς)<sup>16</sup>. As for the results of this exchange of embassies, the epitomator of Livius tells about the conclusion of an alliance (*societas iuncta est* – Liv. Per. XIV), Cassius Dio about some agreement (ὑμολογίαν ἐποιήσατο – Cass. Dio, X, 41 = Zon., VIII, 6), and Eutropius only about "friendly relations" (*amicitia* – Eutrop., II, 15).

Originally, in historiography prevailed the idea of trade agreement which might have had also some political significance<sup>17</sup>. The similar coin stamps of Roman and Egyptian coins in the middle of the 3<sup>rd</sup> century BC served as the main argument to prove it<sup>18</sup>. Henceforth the idea of establishment of "informal relations" (*amicitia* –  $\varphi_i\lambda(\alpha)$ ) between two states gained more support. It's possible that these relations from the mere exchange of diplomatic courtesies could steadily develop into the perception of common interests and later into the conclusion of a treaty<sup>19</sup>.

W. Harris points out that it would be naïve to think that there were no political implications in the exchange of embassies with Egypt, because at that moment Carthage was neighbour of both powers and it's indeterminate how the Carthaginians regarded the proclamation by Magas of Cyrene of his independence from Egypt about 275 BC. In any case one should consider seriously the refusal of the Egyptians to grant a loan of 2000 talents to Carthaginians during the First Punic War on the basis of friendly relations that connected the king both "to Romans and to Carthaginians" (App. Sic., 1)<sup>20</sup>.

However, the last phrase of Appian just tells that friendly relations connected Egypt also with Carthage so that in the course of the First Punic War the Ptolemies wanted to demonstrate their neutrality. According to Eutropius, after the end of the First Punic War, the Romans sent envoys to Ptolemy, promising him help in his struggle with the Syrian king Antiochus. However, Ptolemy refused because at that time the war had already been finished (Eutrop., III, 1). This evidence seems dubious not only because of the incorrect name of the king, with whom Ptolemy III Euergetes had been at war (it was Seleucus II Callinicus and not Antiochus, mentioned by Eutropius), but also because it's hard to imagine that Rome would

<sup>&</sup>lt;sup>16</sup> Dion. Hal., XX, 14. Compare: Val. Max., IV, 3. 9; Eutrop, II, 15 (about the date).

<sup>&</sup>lt;sup>17</sup> MOMMSEN 1997, 417 (common struggle against Carthage); DE SANCTIS 1960, 407 (common struggle against Pyrrhus). Trade motives: BELOCH 1926, 457–458; ROSTOVTZEFF 1941, 394–397; CASSOLA 1962, 46.

<sup>&</sup>lt;sup>18</sup> MATTINGLY 1945, 68–69; CRAWFORD 1974, 39–40.

<sup>&</sup>lt;sup>19</sup> However, the trade agreement is denied and the similarities in the mint stamps are explained by the connections between the Greek cities of Southern Italy and Egypt: GRUEN 1984, 54, 675; ERRINGTTON 2008, 81; ECKSTEIN 2008, 30, 201–202.

<sup>&</sup>lt;sup>20</sup> HARRIS 1979, 183–184, n. 6.

propose its military aid to any power in the Eastern Mediterranean, especially after the hard war with Carthage<sup>21</sup>.

It seems very probable that some real Roman embassy to Egypt in 241 BC was reflected in this evidence. It may have had an aim to thank Ptolemy on behalf of the Roman people for his refusal to help Carthage in the course of the First Punic War and report about its results<sup>22</sup>. Incidentally it's noteworthy another evidence referring to the same period. According to Suetonius, the emperor Claudius granting the exemption from taxation to Ilion, cited the ancient letter in Greek in which the Senate and Roman people offered to king Seleucus "friendship and alliance" (*amicitiam et societatem*) for granting the exemption from taxation to the people of Ilion (Suet., 25, 3)<sup>23</sup>. It may refer to the same Seleucus II, with whom Ptolemy III fought during the Third Syrian war.

The indication of Livy about "friendship and alliance" (*socium et amicum populi Romani*) between Roman people and king Antiochus III already during the negotiations of 198 BC, when Romans refused to give to Pergamum help against him (Liv., XXXII, 8, 13), may serve as an indirect evidence of the early establishment of diplomatic relations between Rome and Seleucid Empire. E. Gruen believes that period around 230s BC, when Seleucus II fought with his younger brother in Asia Minor and may have needed friends and allies, may be the appropriate context for such a contact. If the initiative came from Seleucids there is nothing surprising that the Senate could make hint about the legend of the Trojan origin of Romans in reply to this mission<sup>24</sup>.

The experience of diplomatic relations with Greek states was accumulated steadily. It was not without excesses. Valerius Maximus tells in a jocular form about the arrival of the envoys from Apollonia to Rome, who were beaten in the ensuing quarrel with them by the *edilicii* Q. Fabius and Cn. Apronius. Both disturbers were officially delivered up to the envoys through the *fetiales* (Val. Max., VI, 6, 5). Parallel evidences of this event in the *periocha* of Livy and Cassius Dio in the exposition of Zonara allow assuming that this fact took place in the beginning of 260s BC (Liv. Per., 15; Dio fr. 42 = Zon., VIII, 7). By meaning of the story of Valerius Maximus it results that already at that time there were some relations that connected Romans with the inhabitants of Apollonia<sup>25</sup>.

<sup>&</sup>lt;sup>21</sup> The story was rejected by M. HOLLEAUX (1921, 75–76), but G. DE SANCTIS recognized its authenticity (1917, 275–276).

<sup>&</sup>lt;sup>22</sup> GRUEN 1984, 676; ECKSTEIN 2008, 202.

<sup>&</sup>lt;sup>23</sup> This evidence was also rejected by M. HOLLEAUX (1921, 46–60), but the majority of researchers accepted it: MOMMSEN 1997, 530; DE SANCTIS 1917, 277; CASSOLA 1962, 48.

<sup>&</sup>lt;sup>24</sup> GRUEN 1984, 612.

 $<sup>^{25}</sup>$  E. GRUEN (1984, 63) thinks that the penetration of Romans in the south of Italy in the course of the Pyrrhic war may well have served as an impulse for developing relationships with Greek cities situated on the opposite side of the Ionic sea.

Another embassy related to the beginning of 230s BC is narrated by Pompey Trogue in the exposition of Justin (Just., XXVIII, 1, 5–2, 14). During the war of Aetolians with Epirus for Acarnania its inhabitants expecting that queen Olympias (widow of Alexander II of Epirus) couldn't protect them supposedly sent envoys to Rome asking for help. In their turn Romans attempted to intervene in the conflict and sent embassy in Aetolia requiring to "remove their garrisons from Acarnania and leave its citizens free" (*praesidia ab urbibus Acarnaniae deducerent paterenturque liberos esse*). Having listened the envoys, Aetolians boastfully rejected Roman claims reproaching them with cowardice of Carthaginians and Gauls.

It's understandable why this evidence caused doubts among the historians. First of all, Polybius didn't mention anything about these events and, secondly, here again, like in the case of the embassy to Seleucus II, Romans refer to their Trojan origin (Just., XXVIII, 1, 6)<sup>26</sup>. However, R. Errington fairly affirms that Polybius could omit this episode because of its insignificance and absence of any consequences of this Roman embassy. Moreover, if we accept the authenticity of this evidence, Roman negotiations with Aetolians in 212 BC (propraetor M. Valerius Laevinus promised that "he would return also Acarnanians in accordance with the ancient treaty under the authority of Aetolians, who badly received separation of Acarnanians from the alliance" — Liv., XXVI, 24, 6) look very unattractive and that's why in Rome they preferred to forget about the earlier contacts<sup>27</sup>.

In all this early contacts the initiative practically always issued from Greek states. At the same time it's also obvious the absence of interest of Roman Senate in acquiring the diplomatic connections in the Hellenistic world<sup>28</sup>. Simultaneously it may be noticed that Romans didn't attempt to use mechanisms that served in the relationship inside the Roman-Italian federation (particularly the institute of *foedus*) in the agreements with the states outside the Apennine peninsula.

As it was convincingly demonstrated by E. Gruen such neutral form of relationship as *amicitia* –  $\varphi \iota \lambda i \alpha$  actively used in the Hellenistic world apparently was introduced into the Roman diplomacy by Greek embassies. In the course of time it allowed Romans to explain their growing intervention into the Greek affairs, but at the same time to minimize any moral obligations towards those states which were recognized as "friends"<sup>29</sup>.

What "friendly relations" meant among the Hellenistic state in the 3<sup>rd</sup>-2<sup>nd</sup> centuries BC we may understand using the evidence of Livy about the embassy from king Antiochus to Rome in 193 BC sent for establishing "friendship with Roman people". One of the king's ambassadors Menippus said in the Senate: "And in friendship between each other cities and

<sup>&</sup>lt;sup>26</sup> HOLLEAUX 1921, 722; GRUEN 1984, 63–64. However, MOMMSEN (1997, 530) and DE SANCTIS (1917, 277–278) accepted authenticity of this evidence.

<sup>&</sup>lt;sup>27</sup> ERRINGTON 2008, 85.

<sup>&</sup>lt;sup>28</sup> CASSOLA 1962, 49.

<sup>&</sup>lt;sup>29</sup> GRUEN 1984, 94–95. See also: KASCHEEV 1993, 227–229.

kings may join only by three ways. First, when winners prescribe conditions to defeated; in this case those who won with the force of weapons receive everything and then decide according to their laws and willingness what to return back to the defeated and what to keep. Second, when forces appeared to be equal and both sides conclude an agreement on equal about peace and friendship, agree whom and what to return back and what requirements to meet... And third, when those who never before were at enmity with each other came to form an alliance and join in the friendship; here no one establish proper conditions and accept the other's because there are no winners and no defeated" (Liv., XXXIV, 57, 6–9). In the contacts with Hellenistic states described before prevailed just the last way, because Romans still didn't take military participation in the events on the Hellenistic East.

Incidentally, it's remarkable what Polybius wrote about the foreign policy of Rhodes: "They didn't want to take away the hope for their help and the alliance with them from any of the rulers and sovereigns that's why they decided not to join any government and not to bind themselves with oaths and treaties in advance but remaining independent and to turn in their favour the expectations of each state on their support" (Polyb., XXX, 5, 8). Thus, Rome establishing its first connections with Hellenistic states in the 3<sup>rd</sup> century BC was not alone in following the principle of rejection of permanent unions, requiring the enforcement of clear obligations.

Two Illyrian wars are the next important phase in the development of Roman diplomacy in the Eastern Mediterranean. Statement that Rome had no foreign policy in the East before the beginning of the First Illyrian war<sup>30</sup> is a little bit exaggerated, but it correctly reproduces a thought that before that moment Romans had no proper interests in the Eastern Mediterranean which they were ready to defend with weapons in their hands.

Polybius who described these events in detail particularly underlined their significance (Polyb., II, 2, 1–2). He called their reason the fact that "the king of Illyrians Agron, son of Pleuratus, have at his disposal more considerable land and sea forces than his predecessors" (Polyb., II, 2, 3). Thus, if we believe Polybius, Romans undertook a sort of preventive military operation fearing the strengthening of their Eastern neighbor. The immediate cause of sending of the embassy to queen Teuta (wife of Agron) Polybius considers robbing and capture of the Italic merchants during the seizure of Phoenix, the city in Epirus, by Illyrians. The murder of one of the ambassadors on their way back made the war inevitable (Polyb., II, 8).

Appian, the second major source depending most probably on some alternative to Polybian tradition, tells the following facts. When the island of Issa was attacked by Illyrians and asked Rome for help Romans sent an embassy there in order to figure out all the circumstances on the spot. The Roman embassy was attacked by the Illyrians and one of the

<sup>&</sup>lt;sup>30</sup> BADIAN 1964, 1.

ambassadors, Coruncanius, was killed. For that reason Romans began the war with Illyrians (App. Ill., 7).

In the research literature different motives that induced Romans to send their first naval expedition to the East were brought to the fore. Th. Mommsen suggests that it may be explained by the Roman wish for a good naval base in the upper part of the Adriatic Sea which they didn't have on the Italian shore<sup>31</sup>.

G. De Sanctis supposed that Romans concluded an alliance with the inhabitants of Issa that made practically impossible any compromise with Illyrians. Death of the Macedonian king Demetrius II followed by the infant Filipe's accession to the throne and weakening of Macedon (before it periodically acted in alliance with Illyrians) also played its role in these events<sup>32</sup>.

M. Holleaux suggested that the Roman embassy came to Issa to claim officially *rerum repetitio* ("satisfaction of claims") which meant that Romans had already decided to fight with Illyrians even before the murder of the ambassador<sup>33</sup>. However, in the evidence we can't find anything to prove that such decision was accepted by the Senate or the Assembly.

E. Badian believed that it was the embassy and not the Senate who had made a decision about the war. The Senate sent the mission only to ascertain the circumstances reported by the Italian traders and envoys from Issa on the spot. However, having made sure that the Roman military involvement was necessary they used *rerum repetitio* to make the war inevitable. The main reason for the war was usual Roman fear based on incorrect assessments<sup>34</sup>.

N. Hammond emphasized that after the First Punic war Romans were sensitive about any neighbouring power disposing of considerable naval forces because they recognized the vulnerability of the Italian coast before attack from the sea. At the same time, the course of events led to the capture by Illyrians of the whole Adriatic coast and naval bases on the islands which would allow them to make raids to the Southern Italy<sup>35</sup>.

W. Harris underlines the aggressive character of the Roman policy whose main aim was not only to weaken the Teuta's power but also to consolidate Roman power in Illyria<sup>36</sup>.

R. Errington especially noted the weakening of Epirus after the termination of the dynasty of Aeacides. The followed capture of Phoenix where a lot of Italic merchants were killed or enslaved provoked the reaction of the Senate<sup>37</sup>.

<sup>&</sup>lt;sup>31</sup> MOMMSEN 1997, 532.

<sup>&</sup>lt;sup>32</sup> DE SANCTIS 1917, 295–298.

<sup>&</sup>lt;sup>33</sup> HOLLEAUX 1921, 99.

<sup>&</sup>lt;sup>34</sup> BADIAN 1964, 4–5.

<sup>&</sup>lt;sup>35</sup> HAMMOND 1968, 5-6.

<sup>&</sup>lt;sup>36</sup> HARRIS 1979, 195.

<sup>&</sup>lt;sup>37</sup> ERRINGTON 2008, 86-88.

E. Gruen argues that Rome had nothing to fear from Illyria but Romans took action in order to maintain the security of sea routes which played an important role for the citizens of the Magna Graecia cities. For Rome it was important not only because of the trade interests but also to support loyalty of her allies in Southern Italy<sup>38</sup>.

A. Eckstein returns again to the theme of piracy and complaints of Italic traders, noting that in the conditions of interstate anarchy, which characterized the system of international relations of ancient Mediterranean, it was very common the phenomenon of the appeal of the weak one to the strong one for protection and patronage. In this context Rome was not unique considering that already before the appeal to Romans Greek states of the region (Epirus, Kerkyra, Epidamnus, Apollonia) had appealed to the Aetolian and Achaean Leagues, which hand undertaken the joint expedition against Illyrians (Polyb., II, 6, 1; Polyb., II, 9, 8)<sup>39</sup>. The author also underlines that Roman diplomatic reaction to the complaints of the Italic merchants requiring to stop the piratic activity in Adriatic Sea is an example of the common for the international relations of the Hellenistic world practice of "compellence diplomacy". Such diplomacy meant transforming demands into ultimatums which were not to be discussed during the negotiations<sup>40</sup>.

Among the hypotheses about the reasons for Roman diplomatic and military intervention in the Illyrian case discussed above following ideas are worth mentioning: the Roman tendency not to allow the appearance of any concurrent naval power in Adriatic Sea; the aspiration for binding even more to Rome the Greek cities in the south of Italy interested in the security of navigation in this region. Undoubtedly, merely the commercial reasons couldn't be the cause for such a radical change of the foreign policy comparing to the way Romans had reacted about ten years before to the Acarnanian embassy asking protection from Aetolians.

In the context of our topic it's important to understand the kind of diplomatic relations Romans entered with the Greek cities which they liberated from Illyrian danger during their intervention. Polybius used the following terms: towards Kerkyrians, Epidamnians and inhabitants of Issa "accepted into Roman fidelity" (εἰς τὴν τῶν Ῥωμαίων πίστιν – Polyb., II, 11, 5; 11, 10; 11, 12); towards the citizens of Apollonia "given under guardianship" (εἰς τὴν ἐπιτροπὴν ἀνήχθησαν – Polyb., II, 11, 8); towards the tribes of Parfini and Atintani "accepted into friendship" (εἰς τὴν φιλίαν – Polyb., II, 11, 11).

Appian tells that after the transition of Demetrius of Pharos to the Roman side Romans entered in "friendship" ( $\varphi_i\lambda_i\alpha$ ) with Epidamnus and when Teuta sent ambassadors to Rome for the exchange of captives and peace negotiations Romans responded that Kerkyra, Pharos, Issa, Epidamnus and Atintani were already Roman subjects (Κόρκυραν μὲν καὶ Φάρον καὶ

<sup>&</sup>lt;sup>38</sup> GRUEN 1984, 366-367.

<sup>&</sup>lt;sup>39</sup> ECKSTEIN 2008, 35-37.

<sup>&</sup>lt;sup>40</sup> ECKSTEIN 2008, 40.

"Ισσαν καὶ Ἐπίδαμνον καὶ Ἰλλυριῶν τοὺς Ἀτιντανοὺς ἤδη Ῥωμαίων ὑπηκόους εἶναι – App. Ill. 7). On the basis of this evidence some researchers argued that these cities and tribes became *dediticii*, according to Roman view, but as Appian tells later among them Kerkyra and Apollonia received freedom (Ῥωμαῖοι δ' ἐπ' αὐταῖς Κόρκυραν μὲν καὶ Ἀπολλωνίαν ἀφῆκαν ἐλευθέρας – App. Ill., 8) and others became a sort of Roman protectorate<sup>41</sup>.

However, the point of view at Roman protectorate in Illyria was justly questioned in the second half of 20<sup>th</sup> century. It was marked that large areas were ceded by Rome to Demetrius, ruler of Pharos, who had chosen their side at the beginning of the war (Polyb., II, 11, 17). These territories formed a sort of buffer state between the kingdom of Ardiaei ruled by Teuta and cities which became dependent on Romans<sup>42</sup>. Moreover, the status of this dependency seems dubious if we take into consideration the following Roman withdrawal of troops and naval forces. It's most probable that they were recognized merely as "friends of Roman people" without any formal obligations towards Romans<sup>43</sup>.

Another two facts connected with diplomatic consequences of the First Illyrian war are noteworthy. First, it's a fact that from that moment appear the category of Roman "friends" (*amici*) in Eastern Mediterranean which in Roman view are not only non-hostile towards Rome like it was with all those states with whom Romans entered into  $\varphi_i\lambda$  before that (Rhodes, Egypt, Seleucid Empire), but "entrusted themselves" to Romans and so fell under Roman *fides*.

Already E. Badian marked that informal character of interstate "friendly" relations attached to this institute flexibility that allowed Rome to manipulate it for her own purposes. That's why the attitude towards those "friends" who were clearly inferior to Rome in force was similar to the attitude towards the states dependent on Rome. As a result by the 2<sup>nd</sup> century BC the very concept of *amicus populi Romani* became a euphemism for designation of dependent status of a state. Such states were called by Badian "client-states"<sup>44</sup>.

The similar idea was developed by V.I. Kascheev who sees the main difference in the approach to diplomatic relations between Rome and Greek states in the fact that for Romans in their foreign policy the main was the idea of strength and the notion of *fides* connected with it. So the actual terms of the contract interpreted in the light of *fides* always gave Romans the right to decide the degree of Roman obligations and correspondingly the obligations for another side of the contract<sup>45</sup>.

We believe that the first Roman application of this principle in their foreign policy in Eastern Mediterranean refer exactly to the results of the First Illyrian war. As a result of this

<sup>&</sup>lt;sup>41</sup> HOLLEAUX 1921, 106, n. 3; ERRINGTON 2008, 89.

<sup>&</sup>lt;sup>42</sup> HAMMOND 1968, 7–8.

<sup>&</sup>lt;sup>43</sup> BADIAN 1964, 9, n. 39; GRUEN 1984, 57; ECKSTEIN 2008, 52.

<sup>&</sup>lt;sup>44</sup> BADIAN 1958, 60–61, 68, 111.

<sup>&</sup>lt;sup>45</sup> KASCHEEV 1993, 238–239.

event a group of communities appeared whose "friendship" with Rome was evidently of unequal nature. In the course of the subsequent wars with Philip, Antiochus and Perseus Romans regularly used the harbours of Apollonia, Epidamnus and Kerkyra to disembark their troops while the cities themselves delivered ships and auxiliary units during the Roman military operations in the East (Liv., XXXIII, 3, 10; XLII, 55, 8; XLIV, 30, 10; XLII, 48, 8; XLIV, 30, 10). There is no reason to say that citizens of these communities couldn't pretend to have the same right and to require, for example, from Rome auxiliary units to participate in their local conflicts. Such "friendship" was strikingly different from that which connected Rome with big Hellenistic kingdoms or Rhodes before.

Finally, we should draw attention on sending of the embassies to Aetolians, Achaeans, Corinthians and Athenians by the consul L. Postumius to give an account of Roman reasons for war with Illyrians and conditions of the peace treaty after its conclusion with Teuta (Polyb., II, 12, 4–8). According to Polybius, Corinthians then for the first time admitted Romans to participation in the Isthmian games (apparently in 228 BC – Polyb., II, 12, 8). Obviously, Romans began to understand the significance not only of formal interstate connections but also using modern language of creating a favourable public opinion, justification of their action in the eyes of other interested states of their actions and attainment of additional propagandistic effect from their military actions<sup>46</sup>. Meanwhile Roman ambassadors avoided the Macedonian court and that was hardly casual because Roman actions in Illyria could be seen there as interference into the Macedonian sphere of interest<sup>47</sup>.

As it is well known the Second Illyrian war of 219 BC was against Demetrius of Pharos, who in the course of 220s BC steadily stepped aside from the alliance with Romans and was more and more drawn towards Macedon. In particular he fought on the side of Antigonus III Doson in the battle of Selassia (222 BC) and after that, as Polybius tells us, Demetrius openly broke the conditions of the treaty of 229 BC by organizing the naval raids to the south of Lissus reckoning on Macedonian support (Polyb., III, 16; IV, 16, 6). Appian adds that Demetrius engaged Istrians, another Illyrian tribe, into his naval robbery, and also inclined Atintani to secede from Rome ( $\dot{\alpha}\pi\dot{\alpha}$  'Pωμαίων ἀφίστη – App. Ill., 8)<sup>48</sup>.

These claims to Demetrius demonstrate the changes that happened after the First Illyrian war in Roman comprehension of her "friendly connections" with the cities of Illyrian coast. It is still a question if naval expeditions of Demetrius to the south of Lissus were the violation of the treaty considering that this treaty had been concluded with the kingdom of Ardiaei where

<sup>&</sup>lt;sup>46</sup> HARRIS 1979, 137, 161.

<sup>&</sup>lt;sup>47</sup> ERKSINE 2010, 23.

<sup>&</sup>lt;sup>48</sup> E. GRUEN (1984, 372) considers the Second Illyrian war to be the logical sequence of the campaign against Istrians, mentioned by Eutropius (Eutrop., III, 7), but in our opinion the anxiety of the Senate was mostly connected with the behavior of Demetrius towards the cities that were under Roman *fides*.

at that moment Pinneus, son of Agron, continued to rule<sup>49</sup>. But the attempts to support anti-Roman sentiments in the cities which "entrusted themselves" to Romans were now perceived as a quite serious reason for war. The result of the war was apparently the acceptance into the ranks of the "friends of Roman people" of two more cities: Dimalum and Pharos (Polyb., III, 18, 1; 18, 6).

Another interesting epigraphic evidence found in the town of Starigrad on the island of Hvar and published by L. Rober in 1960 thirty years after caused controversy because of the status of Pharos after the end of the Illyrian wars<sup>50</sup>. P. Derow assumed that the inscription was a response of the Senate and Roman people after the flight of Demetrius in 219 BC and destruction of the city to the request of the Pharians about the renewal of the alliance concluded with the island in 229 BC as a result of the First Illyrian war. It is said in the 7–9 lines that the Senate and Roman people granted to the city of Pharians "alliance and friendship" ( $\tau \dot{\eta} v \sigma \upsilon \mu \omega \chi (\alpha v \kappa \alpha) \phi \upsilon \lambda (\alpha v)$ ). On this basis the British historian came to a conclusion that not only Pharos in 229 BC but also Apollonia, Kerkyra (that Kerkyra was in alliance with Rome at least from 216 BC is proved by Appian — App. Mac., 1), Epidamnus and Issa entered into "friendly relations" with Rome, and henceforth were perceived as Roman allies (*socii*). Derow thinks that conditions of these alliances were standard and cites as an example the inscription from Maronea dating by 160s BC in which there are listed clauses of the treaty of alliance between two states: not to help the enemies of each other without fail and, on the contrary, to help each other in common actions whenever possible<sup>51</sup>.

A. Eckstein responded with an article in which he criticized this hypothesis. First of all, he questioned once again the dating of this inscription to the end of the  $3^{rd}$  century BC and brought additional arguments in favour of the later date. Then he brought numerous examples of the participation of Hellenistic states (Pergamum, Rhodes, Achaeaen and Aetolian leagues, Macedon) in the end of the  $3^{rd}$ -beginning of the  $2^{nd}$  centuries BC in military operations on the Roman side without signing any formal treaty. Also there is an evidence of Cicero who calls Dyrrachium (Epidamnus) in one of his private letters *civitas libera* (Cic. Fam., XIV, 1, 7). If there was no formal treaty with this city in the middle of the  $1^{st}$  century BC why should we assume this treaty in the  $3^{rd}$  century BC? With regard to inscription itself, according to the view of Eckstein, it was not the record of the treaty of alliance and couldn't serve as a proof of its existence. The language of the inscription didn't suggest the unambiguous interpretation: in the beginning of the inscription Romans are designated only as "friends" ( $\varphi(\lambda o_i)$  of the inhabitants of Pharos and only afterwards we may find the

<sup>&</sup>lt;sup>49</sup> For example, E. BADIAN (1964, 14) doesn't consider them as such.

 $<sup>^{50}</sup>$  HELLENICA XI/XII 1960, 505–541. L. Rober himself dated the inscription by the second half of the 2<sup>nd</sup> century BC and ascribed it to the time of the last independent Illyrian ruler, Gentius.

<sup>&</sup>lt;sup>51</sup> DEROW 1991, 261–270. Inscriptions from Maronea: SEG, 35, 823. P. Derow's hypothesis about Demetrius of Pharos received support from A. COPPOLA (1993, 123–127).

expressions τὴν συμμαχίαν καὶ φιλίαν. Comparing the text of the inscription from Pharos with parallel epigraphic evidences of the first half of the 2<sup>nd</sup> century BC. Eckstein demonstrates that this expression most often meant the close informal link but not the formal treaty. The author also marks that, according to Polybius, Pharos was the basis of the possessions of Demetrius (Polyb., V, 108, 7) until his flight to Macedon. Thus, any treaty with independent Pharos couldn't be concluded before 219 BC. As a result, the author thinks that this very year remains most probable date for the inscription because it has a hint at some events that required from Pharians requesting assistance for the "recovery" (ἐπανόρθωσις) of their city from their metropolis Paros as well as from Athens what is told in the second part of the inscription. The most logical context for these requests seem to be the destruction of the city by L. Aemilius after the flight of Demetrius mentioned by Polybius (Polyb., III, 19, 12)<sup>52</sup>.

In this case the view of Eckstein seems more convincing. Actually, we have much more parallel evidences (including epigraphic ones) that the expression  $\varphi_1\lambda(\alpha \ \kappa\alpha) \ \sigma_2\mu\alpha\chi(\alpha \ meant$  not more than the same relations of "friendship" which were discussed above<sup>53</sup>. In our view it's doubtless that this expression reflected broad interpretation of the "friendly relations" which Romans began to apply steadily in their foreign policy starting from the Illyrian wars. It doesn't mean that this expression was used exclusively towards the dependent states but it marked the closer connection with Rome than ordinary relations of  $\varphi_1\lambda(\alpha, which characterized the previous diplomatic contacts of Romans in the Eastern Mediterranean.$ 

To better understand the difference between the formal alliance and the "friendly relations" we should turn to the only case of the regarded period when Romans entered into the formal alliance with the state in the Eastern Mediterranean. We are meaning the treaty with Aetolian league concluded in the winter of the 212/211 BC<sup>54</sup> during the First Macedonian war when Romans desperately needed an ally against Philip V in the Balkans, because of the heavy war with Hannibal they waged at the same time.

The first war of Romans with Macedon also began because of Illyria. With the beginning of the War of the Allies (220–217 BC) against Aetolians Philip V allied with Scerdilaidas and Acarnanians (Polyb., IV, 29). Such alliance could have been regarded in Rome as potentially dangerous. Moreover, after the end of the Second Illyrian war Macedonian king hosted Demetrius of Pharos who fled to him after the fall of Dimala (Polyb., III, 18, 8–9). Livius tells that in 217 BC Romans sent an embassy to Philip to demand the extradition of Demetrius as well as to the king of Illyrians Pinneus to demand the payment of the tribute (Liv., XXII, 33, 3–5). The phrase used by Livius to characterize Roman foreign policy of that time is very

<sup>&</sup>lt;sup>52</sup> ECKSTEIN 1999, 395-418.

 $<sup>^{53}</sup>$  A. ECKSTEIN (1999, 406–411) cites inscriptions of the 2<sup>nd</sup> century BC from Narfacius in Thessaly (SIG<sup>3</sup>, 674) and Pergamum (SIG<sup>3</sup>, 694), of the 1<sup>st</sup> century BC from Stratonicea in Caria (OGI, 441), as well as numerous evidences of literary sources in which this expression is used just in that very sense.

 $<sup>^{\</sup>rm 54}$  On the date of this treaty see: WALBANK 1967, 11–13.

significant: "Besides, despite the fact that they carried the great war, as far as they were concerned, they didn't neglect no precautions about any case no matter how distant it was"<sup>55</sup>. Despite the war with Hannibal, Romans continued achieving their aims in Illyria with diplomatic tools<sup>56</sup>.

Break of the alliance between Scerdilaidas and Philip because the latter refused to pay for the services of Illyrians became the positive factor for Romans. Already in 217 BC Illyrian dynast started looting of the Greek states allied with Macedon (Polyb., V, 95, 1–4; 101, 1–2). It was just then that Macedonian king who learned about the defeat of Romans near Trasimene Lake decided to come to terms with Aetolians and to begin the war for Illyria (Polyb., V, 101, 6–102, 2). This moment was considered extraordinary important by Polybius for his "Histories" because it was just at that moment that "for the first time the fortunes of Hellas, Italy and Libya intertwined" (Polyb., V, 105, 4).

In the spring of 216 BC Philip attempted to attack Apollonia (Polyb., V, 109, 6), the city which was somehow or other under the Roman *fides*. Scerdilaidas when he knew about the preparations of Philip and the construction of the ships notified Romans about that. Obviously, Illyrian dynast was not interested in the Macedonian intervention in Illyria and was ready to accept Roman help to avoid that. The fact that Romans reacted immediately on the movement of Philip towards Apollonia and dispatched 10 five-deck ships from their fleet in Lilibaem for joint operations with Scerdilaidas against Philip (Polyb., V, 110) tells that they didn't lose sight of Illyria. Philip as is well known weighed anchor and in panic returned in Peloponnesus frightened that the whole Roman fleet was moving against him.

It is in that context that after the defeat of Romans near Cannae the treaty of alliance was concluded between Philip V and Hannibal. The substance of this treaty is reproduced in detail by Polybius (Polyb., III, 9)<sup>57</sup>. Among the clauses great importance has the mention that in the post-war arrangement Kerkyra, Apollonia, Epidamnus, Pharos, Dimala, tribes of Parthini and Atintani shouldn't remain under the power of Romans and the former possessions of Demetrius of Pharos should be returned him back (Polyb., III, 9, 13–14). This mention shows the pretty limited aims of Philip in his first war with Rome. The point of view that Romans were seriously frightened of Philip's landing in Italy and his joint operations with Hannibal seems erroneous to us<sup>58</sup>. Precautionary measures that were launched in connection with the news about this alliance (sending of reinforcements to the fleet in Tarentum, reconnaissance mission of Publius Valerius and transfer of praetor Marcus Valerius Laevinus over there), tell

<sup>&</sup>lt;sup>55</sup> Liv., XXII, 33, 6: Adeo, etsi bellum ingens in ceruicibus erat, nullius usquam terrarum rei cura Romanos, ne longinquae quidem effugiebat.

<sup>&</sup>lt;sup>56</sup> Considering that fact we don't share the view of E. BADIAN (1964, 18) that the main aim of the Senate's eastern policy after 219 BC was to avoid to provoking Philip.

<sup>&</sup>lt;sup>57</sup> About the exclusivity of Roman-Aetolian alliance: KASCHEEV 1993, 226.

<sup>&</sup>lt;sup>58</sup> ECKSTEIN 2008, 84-85.

just about the fact that Romans planned to defend their interests in Illyria despite their war with Hannibal (Liv., XXIII, 38, 7–11).

In 214 BC ambassadors from Oricum came to praetor Marcus Valerius in Brundisium and told about the intention of Philip to attack Apollonia. Roman fleet occupied Oricum where the ambassadors from Apollonia came with the news that their city was besieged (Liv., XXIV, 40, 1–7). It's important that the ambassadors told Roman commander that they "don't want to secede from Romans" (*deficere ab Romanis nollent* — Liv., XXIV, 40, 7). One more evidence of the new status of Illyrian "friends". During next two years Philip has made significant progress: he took Lissus and subjugated the surrounding tribes (Polyb., VIII, 15–16).

In these conditions Romans performed their memorable diplomatic manoeuvre concluding the treaty of alliance with Aetolians. Diplomatically they defeated Philip who first lost his only ally in Illyria and then all the fruits of victory in the War of the Allies. Hannibal and the Carthaginian navy couldn't help Philip in the Balkans.

If we trust Livy in this question propraetor Marcus Valerius Laevinus demonstrated outstanding diplomatic abilities in the negotiations with Aetolians. He held preliminary talks tête-à-tête with Aetolian elders and then came to their council with equipped navy to demonstrate firm intention of Romans and their military power. After that he told about the successes of Romans in their struggle against Carthage. Finally, he characterized Roman policy towards their allies in Italy: "to some of them they have given the rights of citizenship making them in that way equal with themselves, others feel themselves so happily in their positions that prefer to remain allies" (Liv., XXVI, 24, 1–3). The last phrase tell us that Romans considered the alliance concluded with Aetolians to be something new with respect to their previous politics, maybe even as *foedus*, similar to those concluded with the communities in Italy. It was the real revolution in their Eastern policy and diplomacy.

However, Aetolians considered the alliance with Rome as an ordinary treaty of συμμαχία. This is evidenced by the fact that Aetolians stipulated for the quite concrete advantage from their alliance with Romans: the return of the Acarnanians in the Aetolian League (Liv., XXVI, 24, 6; 24. 8). But Romans according to the treaty could reduce their military presence almost in half because they bind themselves to participate in the war with not more than 25 *quinquiremes* (Liv., XXVI, 24, 10). Text of the treaty of alliance is reproduced by Livy, but there is also corresponding epigraphic monument: the inscription found in Tirreum in Acarnania to the south from Acropolis in 1949<sup>59</sup>. Comparisons of these two texts allow making a conclusion that Livy on the whole very precisely reproduces the main substance of the treaty: land and cities captured in the war were to be passed to the Aetolians<sup>60</sup>, while the booty to the Romans

<sup>&</sup>lt;sup>59</sup> SEG, 13, 382.

<sup>&</sup>lt;sup>60</sup> Livy adds to that a condition: "from the borders of Aetolia to Kerkyra" (Liv., XXVI, 24, 11), but in the inscription there is no such clause. However, E. GRUEN (1984, 378, 439) rightly considers that this limit was added by Romans because they weren't interested in the Aetolian entry into the sphere of interests of Rome.

(if the city was taken jointly, the booty was divided equally). Both sides were obliged not to sign a separate treaty with Philip (the clause broken by Aetolians in 206 BC). Moreover, it was presumed that Eleans, king of Pergamum Attalus and Scerdilaidas could join the alliance (Liv., XXVI, 24, 9–13).

However, receiving the short-term profit from this alliance Romans very quickly understood that they lost a lot in Greek public opinion. Evidently, in the Senate it was recognized because the ratification of the treaty was delayed for two years<sup>61</sup>. Apparently, the alliance was considered shameful by many in Greece. At any case, the passionate exclamation of the Acarnanian ambassador Liciscus when he tried to convince Spartans not to join it: "Who can listen to these words calmly looking on the invasion of Romans, who wouldn't hate Aetolians for they in their madness decided to conclude such a treaty?" (Polyb., IX, 39, 1), characterize the attitude of one of the victims suffered from it.

It's not by chance that already in 209 BC the ambassadors of Egyptian king Ptolemy, Rhodians, Athenians and from the island of Chios<sup>62</sup> came for mediation to reconcile Aetolians with Philip (Liv., XXVII, 30, 4). The declared aim of the mediation was as Livy tells: "to deprive Romans and Attalus from the occasion to enter Greece"<sup>63</sup>. In the Polybian "Histories" these events are scarcely presented but some of his information is very important for understanding of the whole picture. Thus it seems that it was during one of the stages of these negotiations that from the side of the opponents of the Roman-Aetolian treaty it was heard the comparison of Aetolians with light infantry on the field of battle, and the Romans with phalanx. The orator asserts that in the case of the victory as well as in the case of the defeat of Aetolians they have to wait unenviable fate. In the first case the Romans would be able to step back and come out from war unharmed, and in the second they would conquer not only the winners but also other Greeks (Polyb., X, 25).

Romans couldn't prevent these negotiations by diplomatic means so they attempted to do that with military demonstration. Appearance of the Roman fleet near Naupactus became one of the reasons for Aetolians to put forward new claims during the talks and following breakdown of the negotiations (Liv., XXVII, 30, 11–14). However, mediators continued to make efforts to reconcile Aetolians with Philip in the following years. Thus, in 207 BC the Rhodian ambassador blamed Aetolians for that by their alliance with Romans they prepare the enslavement and the downfall of Hellas betraying Greeks to the barbarians for mockery and offences (Polyb., XI, 5). Finally, mediators succeeded in persuading Aetolians to conclude a peace with Philip (Liv., XXIX, 12, 1). Appearing in the situation of diplomatic isolation Romans also thought it best to reconcile with Macedonian king and used for that purpose the

<sup>61</sup> HOLLEAUX 1930, 125.

<sup>&</sup>lt;sup>62</sup> On the date and its affixment with Nemean games see: SCHMITT 1957, 194.

<sup>&</sup>lt;sup>63</sup> Liv., XXVII, 30, 10: ibi de Aetolico finiendo bello actum ne causa aut Romanis aut Attalo intrandi Graeciam esset.

mediation of the Epirotes. For the prompt signing of peace treaty they even ceded to the king Atintania from the sphere of Roman interests in Illyria (Liv., XXIX, 12, 8–15).

This diplomatic experience had big importance for the subsequent Roman politics in the Eastern Mediterranean. Romans burned themselves with Aetolians decided if possible to refuse from concluding formal treaties and at any rate to minimize their obligations if such treaty was necessary. All the subsequent Roman diplomacy basically went the same path of informal "friendship and alliance" with defeated states and those ready to accept Roman power. This approach became especially characteristic for the Greek politics where it was much easier to perform in the role of "liberators" than to try to understand its intricacies and accept any formal obligations.

To sum up, it should be noted that the view about the absence of any Eastern policy in Rome before the Second Macedonian war doesn't correspond to the reality. Romans got acquainted with the Eastern Mediterranean and tied diplomatic relations there long time before their first military intervention in the Balkans. However, before the Illyrian wars Rome engaged exclusively in informal friendly relations with Hellenistic states mainly based on the Greek diplomatic practice. From 229 BC when Roman troops and fleet for the first time appeared in the west of Balkan Peninsula diplomatic approach started to change. Romans started to understand international "friendship" even with the states which weren't defeated by them in a war in a manner that characterized the attitude of the winners towards the defeated. As far as they achieved new military and political successes in the East this type of relations began to extend more and more.

The only exception was the Roman-Aetolian treaty of alliance during the period of the First Macedonian war build on the principles of the equality of two sides and caused by the extreme circumstances of the Hannibal war. However, this alliance had temporary character and ultimately lost any importance because of the withdrawal of the Aetolian league from the war with Macedon. Henceforth, Romans were much less willing to conclude formal treaties of alliance in the Hellenistic world and returned to the practice of  $\varphi_i\lambda(\alpha \kappa \alpha) \sigma_{i}\mu_{\alpha}\alpha$  relations which were used to control increasingly bigger number of Hellenistic states. As the control became more and more difficult to keep and maintain, Roman Senate came to the conclusion about the necessity of the spreading of the provincial system in the Eastern Mediterranean.

#### References

KASCHEEV, V.I. 1993. Ellinisticheskij mir i Rim: voyna, mir i diplomatiya v 220–146 godah do n.e. Moscow. MOMMSEN, T. 1997. Istoria Rima/ Transl. from German. I. Moscow. BADIAN, E. 1958. Foreign Clientelae, 264–70 BC. Oxford. BADIAN, E. 1964. Studies in Greek and Roman History. Oxford. BELOCH, K.J. 1926. Römische Geschichte bis zum Beginn der punischen Kriege. Berlin.

CASSOLA, F. 1962. I gruppi politici romani nel III sec. A.C. Trieste.

COPPOLA, A. 1993. Demetrio di Faro. Roma.

CRAWFORD, M.H. 1974. Roman Republican Coinage. I. Cambridge.

DE SANCTIS, G. 1917. Storia dei romani. III. Torino.

DE SANCTIS, G. 1960. Storia dei romani. II. 2nda ed. Firenze.

DEROW, P.S. 1991. Pharos and Rome. Zeitschrift für Papyrologie und Epigraphik 88, 261–270.

ECKSTEIN, A.M. 1999. Pharos and the question of Roman treaties of alliance in the Greek East in the third century BCE. *Classical Philology* 94(4), 395–418.

ECKSTEIN, A.M. 2008. Rome enters the Greek East: From anarchy to hierarchy in the Hellenistic Mediterranean, 230–170 BC. Oxford.

ERKSINE, A. 2010. Roman imperialism. Edinburgh.

ERRINGTON, R.M. 2008. Rome and Greece to 205 BC. In: Cambridge Ancient History, 2nd ed., VIII, 81–106. Cambridge.

GRUEN, E.S. 1984. The Hellenistic world and the coming of Rome. 2 vols. Berkeley-Los Angeles.

HAMMOND, N.G.L. 1968. Illyris, Rome and Macedon in 229–205 BC. Journal of Roman Studies 58, 1–21.

HARRIS, W.V. 1979. War and Imperialism in Republican Rome, 327-70 BC. Oxford.

HELLENICA XI/XII 1960. Recueil d'épigraphie, de numismatique et d'antiquités grecques publié par L. Robert. Paris.

HOLLEAUX, M. 1921. Rome, la Grèce et les monarchies hellénistiques au III<sup>e</sup> siècle avant J. C. (273-205). Paris.

HOLLEAUX, M. 1930. Rome and Macedon: Philip against the Romans. In: *Cambridge Ancient History* VIII, 116–137. Cambridge.

KONTORINI, V. 1983. Rome et Rhodes au tournant du III<sup>e</sup> s. av. J.-C. d'après une inscription inédite de Rhodes. *Journal of Roman Studies* 73, 24–32.

MATTINGLY, H. 1945. The first age of Roman coinage. Journal of Roman Studies 35, 65-77.

NENCI, G. 1958. Introduzione alle guerre persiane e altri saggi di storia antica. Pisa.

ROSTOVTZEFF, M.I. 1941. Social and economic history of the Hellenistic world. Oxford.

SCHMITT, H.H. 1957. Rom und Rhodos. Geschichte ihrer politischen Beziehungen seit der ersten Berührung bis zum Aufgehen des Inselstaates im römischen Weltreich. Munich.

WALBANK, F.W. 1967. A historical commentary on Polybius. II. Oxford.

WALBANK, F.W. 1979. A historical commentary on Polybius. III. Oxford.



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## Nabis and the helots

## Larisa PECHATNOVA<sup>1</sup>

**Abstract.** This paper explores the policy of the Spartan king Nabis towards the helots. Attention is drawn to the significant differences between the social politics of Nabis and the earlier reforms of the kings Agis IV and Cleomenes III. The author concludes that Nabis followed a completely new principle of Spartan citizenship formation. He liberated a number of helots and made them full citizens. However, Nabis was not able to overcome the helotry entirely, although he sought to abandon this type of slavery. Nabis, having accepted helots and foreigners as full members of the civil community, created a completely new type of citizens whose loyalty lay not so much with the state as with him personally. The radical social reforms of Nabis abolished the archaic principles of citizenship formation at the very moment when the Lycurgan Sparta finally disappeared. It became a monarchy of Hellenistic mould.

**Rezumat**. Autoarea explorează politica regelui spartan Nabis față de hiloți. Ea își îndreaptă atenția către diferențele semnificative dintre politica socială a lui Nabis și mai vechile reforme ale regilor Agis al IV-lea și Cleomenes al III-lea. Autoarea ajunge la concluzia că Nabis a urmat un principiu complet nou al formării cetățeniei spartane. El a eliberat un mare număr de hiloți și le-a conferit cetățenie deplină. Cu toate acestea, Nabis nu a făcut să dispară întru totul această categorie, deși a căutat să abandoneze acest tip de sclavaj. Nabis, acceptând hiloții și străinii ca membri cu depline drepturi în comunitate, a creat un tip complet nou de cetățeni a căror loialitate nu era atât față de stat, cât în raport cu persoana lui. Reformele sociale radicale ale lui Nabis au abolit principiile arhaice ale formării cetățeniei chiar în momentul în care Sparta lycurgică a dispărut. Ea a devenit o monarhie de tip elenistic.

Keywords: helots, civil rights, Spartan citizen, Sparta, Nabis, Polybius, Livy.

In this paper, I set out to reconsider the existing historical testimonies that shed light on the liberation of the helots in Nabis' time. The fragmentary, and contradictory, nature of the evidence at hand makes this task somewhat challenging — a problem well reflected in the existing scholarship. There are quite a few articles which directly address the topic of helotry in Nabis' time, and they are far from new. My main task is to evaluate Nabis' reforms targeted at the creation of civil society, which, for the first time in the historical record, included a significant part of former helots. I will also suggest that, in the Hellenistic period, the social status of the helots had already changed and helots had become similar to 'classic' slaves in

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certain respects. In all likelihood, they had already been turned into objects of trade and could be freed from slavery by their private owners, rather than the state, as had been the case in earlier epochs (Ephor. ap. Strab. VIII. 5. 4, p. 365; Paus. III. 21. 6).

I should probably begin by pointing out once again that studying a topic related to Nabis' policy toward helots is a rather complex task for a number of reasons. First, the Hellenistic era in the Spartan history is quite a 'dark' period which is only scantily covered in sources (except perhaps that of the reign of the kings Agis IV and Cleomenes III). Second, the Spartan helots, who always remained in the shadow of a society obsessed with secrecy, extremely rarely feature in the narrative historical tradition. Remarkably, however, the well-known exception is the reign of Nabis (207–192 BC). Helots featured on Nabis' agenda, which is reflected in the sources and has helped the scholars to assess both the quantitative and qualitative changes introduced by Nabis into the previous structures of the Spartan polis. For the first time in the history of Sparta, the reforms affected the largest group of the Spartan population — the helots. However, despite the availability of sources, their fragmentary, problematic and ambiguous nature prevents us from gaining reliable insights and keep open a whole range of paths of historical investigation.

In what follows, I will offer my re-evaluation of the existing tradition on Nabis and helots and will start by providing an overview of the crucial scholarly literature.

Polybius and Titus Livy are our main sources on Nabis' reforms. Further comments are to be found in Diodorus, Pausanias, and Plutarch. But this apparent abundance is illusory, since it has long been proven that all the authors who mention Nabis had Polybius' work as their source<sup>2</sup>.

In the scholarly literature, the king<sup>3</sup> Nabis is usually considered as the spiritual successor of Spartan kings Agis IV and Cleomenes III<sup>4</sup>. In general, this view is correct, except that Nabis went a long way away from his predecessors in his policy towards helots. It should be remembered that the reforms of Agis and Cleomenes virtually failed to affect the helots as a large social group. The two kinds did not not see them as object of their reforms and consideration of them did not really enter their decision-making process. It was only the financial and military urgency that forced Cleomenes to draw on the helots' material resources for replenishing the treasury. Shortly before the battle of Sellasia in 222 BC, he had liberated a relatively large group of helots—six thousand people—and had charged each of

<sup>&</sup>lt;sup>2</sup> HADAS 1932, 74; OLIVA 1971, 274 f.

<sup>&</sup>lt;sup>3</sup> The fact that Nabis officially received the title of king (basileus) is confirmed in reliable, if scanty, sources, including epigraphy (IG XI. 4. 716=Sylloge<sup>3</sup>. 584). There are also coins with his name and royal title. However, in the tradition deriving from Polybius, which hostile to him, Nabis is typically called tyrant rather than king. Nabis, Polybius believed, was undoubtedly a tyrant. Therefore, in the surviving fragments, the Achaean historian only calls Nabis a tyrant, and his rule is referred to as «a long and grinding tyranny» (XIII. 6 – Henceforth translation by E. S. Shuckburgh)

<sup>&</sup>lt;sup>4</sup> HADAS 1932, 76; EHRENBERG 1935, 1473; JONES 1967, 161; OLIVA 1971, 279; BIRGALIAS 2005, 144; FORNIS 2016, 3 ff.

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those five attic minae<sup>5</sup> (Plut. Cleom. 23. 1). This transaction gave Cleomenes the significant gain of 500 talents. However, we should keep in mind that six thousand helots are only a small part of their total number<sup>6</sup>. Comprehensive manumission for the purpose of multiplying the number of citizens was of course out of question. I agree with those scholars who believe that Cleomenes, having freed some of the helots, pursued very limited goals and decided not to extend such practice to all the Laconian helots<sup>7</sup>. This was a measure caused only by a military crisis and the need to replenish the state treasury — a tactical maneuver in fact. We must admit, however, that before Cleomenes, to the best of our knowledge, such a large group of helots had never been freed in exchange for money<sup>8</sup>. This became an important precedent, soon to be followed on a much larger scale by Nabis.

Despite Polybius' extremely harsh opinion of Nabis' reforms, one can understand from the Philippics of the Achaean historian that Nabis radically changed the entire structure of Spartan citizenship by rejecting the former Lycurgan principles of his recruitment. First, like Cleomenes, he began to grant land and civil rights to foreign mercenaries (Polyb. XIII. 6. 3–4). In this manner, he sought to increase the number of new citizens who were loyal personally to him and not connected by family and friendly ties with the 'old' citizenship. Polybius is self-consciously emphatic about the radicalism and danger of such social reforms for the Achaean elite. He refers to Nabis as a patron «of murderers, housebreakers, footpads, and burglars» (XIII. 6. 4). But, as M. Hadas has correctly noted, Polybius' words that Nabis surrounded himself with scoundrels only are merely a value judgement<sup>9</sup>.

Secondly, following Agis and Cleomenes, Nabis took certain measures in favor of the vast numbers of impoverished citizens (hypomeiones)<sup>10</sup>. He entered into an open conflict with the privileged minority and went far beyond the more tentative approaches of earlier kings. Nabis turned to terror and intimidation of ones and sent into exile the others (Polyb. XIII. 6. 3–10; XVI. 13. 1). Through this 'purge', he probably sought to eliminate real or potential political opponents and seize their lands for redistribution among poor citizens, mercenaries, and helots.

<sup>&</sup>lt;sup>5</sup> While this is a rather high price, it is still within the norm for the ransom for slaves in other regions of Greece (KENNELL 2003, 85).

<sup>&</sup>lt;sup>6</sup> Within the ancient tradition there is almost no direct evidence regarding the number of helots. The idea of their huge number comes from Thucydides, who calls Sparta together with Chios the states with the largest number of slaves (VIII. 40. 2). In the modern scholarship it has become customary to understate the total number of helots rather than to exaggerate it. The consensus seems to be that the total number of helots was about two hundred thousand or less. For a review of scholarly opinions, see: OLIVA 1971, 53, n. 3; FIGUEIRA 2003, 198 ff.

<sup>&</sup>lt;sup>7</sup> FUKS 1962, 165 f.; OLIVA 1971, 52 ff.; 260; CARTLEDGE, SPAWFORTH 2002, 64.

<sup>&</sup>lt;sup>8</sup> L. Piper thinks that the Helots had the opportunity to buy their freedom already at the beginning of the 4<sup>th</sup> century BC. In my opinion, there is not enough ground to maintain that statement (PIPER 1984-1986, 75–88).
<sup>9</sup> HADAS 1932, 76.

<sup>&</sup>lt;sup>10</sup> On the hypomeiones, see: PECHATNOVA 2014-2015, 6-21.

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Thirdly, Nabis directly engaged with the helots in his reforms. In Laconia, they were the only significant human resource that Nabis could use. *Inter alia*, in 207 BC, shortly before Nabis came to power, Sparta had been practically depopulated, having lost all her army. In the battle of Mantinea, a great number of Spartans had perished (up to four thousand people), and even more had been taken prisoners (Polyb. XI. 18. 10; Plut. Phil. 10). More importantly, however, apart from the physical diminishing of the number of citizens in course of numerous wars, for a long period a process of marginalization of citizens in Sparta had been underway<sup>11</sup>. Thus, by the time of Nabis, helots were indeed the only sizeable social class that could replace former citizens in the Spartan army.

Nabis introduced the liberation of the helots into his social program<sup>12</sup>. All the sources at our disposal, especially Polybius (XVI. 1. 1) and Livy (XXXIV. 29. 9), clearly and unambiguously confirm that Livy reports Nabis' speech delivered before the Roman commander Titus Quintius Flamininus (195 BC), in which the Spartan king evokes the "slavish" theme a number of times. Nabis admits that he called the slaves to freedom and endowed the poor with land (...quod servos ad libertatem voco, quod in agros inopem plebem deduco – XXXIV. 31. 11), but in his defense states that his main goal was multiplication of the number of citizens (quod ad multitudinem servis liberandis auctam – XXXIV. 31. 13). Liby frames Nabis' speech with notable sympathy rather than with condemnation. Granted, Livy did not approve of the social innovations of the Spartan king, but, unlike Polybius, he did not burn with hatred towards Nabis.

Polybius, no doubt, perceived the liberation of the helots as part of the tyrant's policy aimed at changing the social structure of Spartan citizenship through reliance on «murderers, housebreakers, footpads, and burglars» (XIII. 6. 4). This policy was unacceptable for the Achaean elite. However, alongside Polybius' invectives picturing Nabis as a pathologically cruel tyrant pursuing his enemies everywhere, «so that there was no place of retreat, and no moment of security for the unfortunate Lacedaemonians» (XIII. 6. 5–10), and

<sup>&</sup>lt;sup>11</sup> By the 3<sup>rd</sup> century BC Sparta, due to the huge imbalance in the distribution of land between the rich and the poor, as well as the problem of debt, found itself in approximately the same situation in which most of the Greek states had been in the archaic period. The main problem for Sparta was the catastrophic decline in the number of full citizens. According to Plutarch, by the time of Agis IV «... there were left of the old Spartan families not more than seven hundred, and of these there were perhaps a hundred who possessed land and allotment; while the ordinary throng, without resources and without civic rights, lived in enforced idleness, showing no zeal or energy in warding off foreign wars...» (Agis 5. 6-7 / translation by B. Perrin).

<sup>&</sup>lt;sup>12</sup> Together with most other scholars (OLIVA 1971, 271; TEXIER 1974, 194; CARTLEDGE, SPAWFORTH 2002, 69 f.; KENNELL 2003, 90), I believe that the word "slave" ( $\delta o \partial \lambda o \varsigma$ ,  $o l \kappa \epsilon \tau \eta \varsigma$ , or servus), whenever it is used in sources in contexts dealing with Nabis' reforms, is equivalent to the word "helot" ( $\epsilon ''_{\lambda} \lambda \omega \varsigma$ ), while admittedly neither term covers a neatly defined phenomenon. Because of the ambiguity and *double-entendre* often seen in the terms as used by Polybius (XVI. 13. 1) and Liby (XXXIV. 31. 11; XXXVIII. 34. 6), we cannot say with complete certainty that it was exclusively helots who were freed by Nabis rather than slaves of the 'classic' type, who probably would also be present in Sparta.

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as a ruler who gathered around him «a number of bad characters in Sparta» (XVI. 13. 2), there are fragments that shed light on specific processes on the ground taking place in Sparta. Below I adduce the most important fragment which, apart from declarations, offers valuable factual material. According to Polybius, Nabis «drove the citizens into exile, freed the slaves, and gave them the wives and daughters of their masters...» (XVI. 13. 1).

If Polybius' account is to be believed, the inevitable conclusion is that Nabis rendered helots, who had formerly belonged to the class to exiles, not only free people, but also full citizens (Spartiates) and gave them the kleroi taken away from their former owners. He also granted them the right to marry Spartan citizens — more specifically, the wives and daughters of all those who had been sent into exile. These two aspects—the repossession of the kleroi and the marriages with Spartan women—turned the former helots into full citizens.

This interpretation is indirectly confirmed by Livy, who calls all freedmen "ascribed to the Lacedaemonians" (*Lacedaemoniis adscripti*) (XXXVIII. 34. 6). I can also invoke N. Kennell's authority who has convincingly shown that the Latin version—*Lacedaemoniis adscripti*—is the translation of the Greek phrase oi  $\pi\rho\sigma\gamma\rho\alpha\phi\epsilon\nu\tau\epsilon\varsigma$   $\pi\rho\delta\varsigma$   $\tau\sigma\delta\varsigma$   $\Lambda\alpha\kappa\epsilon\delta\alpha\mu\sigma\nu\delta\sigma\varphi$ . In his opinion, «from the epigraphical parallels, it is clear that the phrase carried no connotation of inferior or separate status with it beyond that of belonging to a group of newly-enrolled citizens»<sup>13</sup>.

Scholars typically read Livy's Lacedaemoniis adscripti as evidence that Nabis did not only liberated helots, but also granted civil rights to them<sup>14</sup>. Thus, according to J.-J. Texier, «ils (les hilotes) devinrent Lacedaemoniis adscripti, c'est-à-dire membres de la communauté lacédémonienne à part entière, avec évidemment certains devoirs, militaires et fiscaux notamment, mais aussi avec tous les droits que cela conférait»<sup>15</sup>. They were no longer Spartiates in the older sense of this word, of course. As a matter of fact, Nabis created a new social group - citizens answerable personally to him, a class which included elements with a range of social origins: hypomeiones, foreign mercenaries and, finally, former helots. The latter were most likely the largest group among new citizens. This community created by Nabis was quite different from the one formerly structured according to the Lycurgan pattern. I suggest that the social place of the former Spartiates, the remnants of whom were destroyed or expelled by Nabis, was taken over by the new citizens whose rights no longer directly depended on the observance of the previously binding requirements (ownership of land, state education /agoge/ and participation in public dinners /syssitia/). I do not wish to follow, however, J. Ducat who argues that the integration of the helots liberated by Nabis was only partial and that, as a result, they formed a separate group (like neodamodes had

<sup>&</sup>lt;sup>13</sup> KENNELL 2003, 93 f.

<sup>&</sup>lt;sup>14</sup> OLIVA 1971, 281, n. 3; BIRGALIAS 2005, 146, n. 27.

<sup>&</sup>lt;sup>15</sup> TEXIER 1974, 196.

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earlier)<sup>16</sup>. I am inclined to agree more with those scholars who think that Nabis, in his quest for similarity with Hellenistic monarchs, intended to make the rights of all citizens—both new and old—equal, therefore overthrowing statuses and former hierarchies<sup>17</sup>. According to the Spanish historian S. Fornis, «Nabis, granting land and civil rights to the helots, disturbed the social and economic structure of the Lacedaemon state»<sup>18</sup>.

It is probable that by the time when Nabis had engaged in the liberation of the helots, they already had gone some way from being helots of the 'old type', i.e. communal slaves who would belong to the entire community *in corpore*. They had long been the private property of Spartan "latifundists" — the few wealthy citizens who had monopolized the land and seized power. The kleroi, together with the helots, passed into the hands of the well-propertied citizens, including women, through various economic transactions (will-making, gifts, mortgages, dowries, etc.). This process was in full swing already in the fourth century BC and reached a truly tremendous size by the middle of the third century BC, that is, by the time of Agis IV (Arist. Pol. II. 6. 11–12, 1270a; Plut. Agis 5. 6–7). That is probably why Nabis took the trouble to expel the richest landowners and redistribute the confiscated kleroi between the former helots. In this manner, he made them free people and taxpayers.

As sources are scarce and difficult to interpret in unambiguously, offering an estimate of the actual scale of Nabis' manumission is challenging. Some scholars believe that only one group of helots was freed from slavery: they could be the helots who had formerly belonged to the wealthy aristocratic Spartans and whom Nabis had expelled<sup>19</sup>. This, however, would not have been a particularly extensive group of helots, and it is hardly likely that Nabis would limit himself to them only. His active foreign policy required a permanent source of soldiers to draw on. It is much more likely therefore that all those helots that the Spartans needed were granted freedom. It would seem their numbers would be quite big. This interpretation is corroborated by Liby's report. In his account of the urgent recruitment of troops conducted by Nabis in 195 BC, Livy mentions, alongside the Cretan mercenaries, «ten thousand of his own countrymen along with the rural guards...» (decem milia popularium cum castellanis

<sup>&</sup>lt;sup>16</sup> J. Ducat, in an attempt to prove that the ex-helots did not become full citizens, rejects Polybius' account of the helots' marriage with Spartan women on the grounds that the fragment of Polybius in the 16<sup>th</sup> book (13.1) contradicts to the fact that in the 13<sup>th</sup> (6.3), where the wives of exiles are said to marry not slaves but supporters of Nabis and his mercenaries. The version in offered the 13<sup>th</sup> book seems more plausible to J. Ducat, since Polybius, as the French scholar believes, not being an admirer of Nabis, could deliberately distort the picture by replacing helots with foreign mercenaries (DUCAT 1990, 171 f.). In fact, it is possible, and a similar metamorphosis sometimes happened (Xen. Hell. III. 5. 12; Isocr. IV. 111). In this case, however, I do not find Ducat's arguments convincing. Polybius exaggerated and negatively assessed all the initiatives of Nabis, of course, but he did not tamper with the facts themselves. The two Polybius' are not, therefore, mutually contradictory. Rather, they in their own ways complement the general picture of the granting of land to the new citizens of different origin.

<sup>&</sup>lt;sup>17</sup> TEXIER 1975, 35; MENDELS 1982, 93; BIRGALIAS 2005, 146, n. 27.

<sup>&</sup>lt;sup>18</sup> FORNIS 2016, 5.

<sup>&</sup>lt;sup>19</sup> See particularly PIPER 1984–1986, 85 ff.; BIRGALIAS 2005, 144 f.

*agrestibus in armis habuit* — XXXIV. 27. 2). In a further passage in the same chapter, however, Livy talks about the massacre which the rebels in the city suffered at Nabis' hands and explains that "castellani, agreste genus" (villagers living in fortified settlements) and "Ilotae" (helots) are the same population group (27. 9). Hence, Nabis could easily recruit a large "public" army, diverse in its composition. His army would include several thousand new citizens and a certain number of helots, for whom the military service probably guaranteed freedom and citizenship.

Apparently, in response to the military need Nabis was freeing one group of helots after another and calling them into the army. Most likely therefore, there was no manumission per saltum, and the process of helots' liberation continued throughout the reign of Nabis. The defeat of Nabis in 195 BC, which he suffered from the combined forces of the anti-Spartan coalition led by Flamininus, as well as the early death of the king in 192 BC, put an end to his actions for the liberation of the helots. Admittedly, this process never reached completion, and in Sparta, after a decade of revolutionary transformations, there were still a number of helots. That is probably how one can understand Liby's testimony that in 195 BC Nabis, in a besieged city and fearing the flight of disloyal helots to the Romans, turned to terror, the usual practice for a tyrant: «Then some of the Ilotae, rural people who had been countrydwellers from remote antiquity, were charged with trying to desert, driven with whips through all the streets, and put to death. By thus inspiring fear he stunned the minds of the crowd and prevented any attempt at revolution» (XXXIV. 27. 9). Perhaps Nabis' misgivings about helots were justified. However it may be, Strabo maintains that «Perioeci and also the Helots, at the time when Sparta was under the rule of the tyrants, were the first to attach themselves to the Romans», something for which already as «the Eleuthero-Lacones got a kind of republican constitution» (VIII. 5. 5. p. 366)<sup>20</sup>.

The fate of the new citizens of Nabis after his death in 192 BC was decided by Philopoemen, the strategos of the Achaean League, who conquered Sparta in 188 BC. *Inter alia*, he dismissed the mercenaries of Nabis from military service and expelled all those whom the Spartan king had made citizens. According to Liby, «it was first ordered... that the slaves whom the tyrants had freed—their number was large—should depart before a designated day; if any of them remained the Achaeans were to have the right to seize, carry off and sell them». Livy's mentioning of those people twice in the same chapter is noteworthy. In the first instance, he calls them «the slaves whom the tyrants had freed» (*quae servitia tyranni liberassent*) and explains that «their number was large» (*ea magna multitudo erat* — XXXVIII. 34. 2). In the second, he refers to them as "ascribed to the Lacedaemonians" (*Lacedaemoniis* 

<sup>&</sup>lt;sup>20</sup> The communities of the Perioeci, united in the alliance of "the Eleuthero-Lacones", almost certainly took in their ranks those helots who fled away from Nabis as Romans were approaching. This process could also have contributed to the disappearance of the heiloteia as a social institute (KENNELL 2010, 278).

adscriptos)<sup>21</sup> and explains that *«ita enim vocabant qui ab tyrannis liberati errant»* (34. 6). Livy thus comments on the future of those *«*ascribed to the Lacedaemonians*»: «...*the slaves whom the tyrants had freed... should depart before a designated day; if any of them remained the Achaeans were to have the right to seize, carry off and sell them*»* (*urbe excessisse et in agros dilapsos... comprehendere id genus hominum et vendere iure praedae placuit. multi comprehensi venierunt*) (34. 6–7).

Plutarch's input is about the same: «...in the case of those who had been made citizens of Sparta ( $\pi o\lambda i \tau a \tau n_S \Sigma \pi a \rho \tau n_S$ ) by the tyrants, he [Philopoemen – L.P.] removed them all into Achaia...» (Philop. 16. 4 / here and below translated by B. Perrin)<sup>22</sup>. Plutarch provides no clue as to the number of ex-helots interned in Achaia. He does, however, give indication of the number of those who refused to leave Sparta and were sold into slavery as punishment. There were three thousands of those «who would not obey him and were unwilling to go away from Sparta. These he [Philopoemen – L.P.] sold into slavery, and then, as if to mock their fate, erected a portico in Megalopolis with the money which they brought» (Philop. 16. 5–6). It follows from Plutarch's text that the «three thousand who... were unwilling to go away from Sparta» also refer to citizens.

The only source that uniquely identifies these three thousand sold into slavery with the former helots is the antiquarian Pausanias. According to him, «Philopoemen... sold some three thousand Helots» (VIII. 51. 3 / translated by W.H.S. Jones). Although Pausanias is not a perfectly reliable source, in this particular case we should not ignore his testimony. Like Plutarch, he may have derived the number he gives from Polybius. This, of course, are the same three thousand that Plutarch also reports (Philop. 16. 5–6). I would suggest that people who refused to leave Sparta were probably the ones who most valued their new status and social benefits. They were owners of vacant land plots who had acquired the wives and daughters of their former masters alongside the land (Polyb. XVI. 13. 1).

Unfortunately, there is only one exact figure that we have at our disposal: three thousand new citizens who did not obey Philopoemen's orders. Livy, referring to the number of all «slaves whom the tyrants had freed who... should leave Laconian territory...», speaks rather

<sup>&</sup>lt;sup>21</sup> K. Chrimes (CHRIMES 1952, 40) has offered a witty, if somewhat arbitrary interpretation of the expressions "castellani agrestes" and "Lacedaemoniis adscripti" (XXXIV. 27. 2; XXXVIII. 34. 6) as a Latin version of the Spartan term "neodamodeis", which, she believed, must have stood in the Greek original. This is, would be a gross anachronism, as neodamodeis was a phenomenon that had had place during the Peloponnesian War and the Spartan Hegemony (421–370 BC) and which we should not to speculatively project forth to later epochs, as is done by K. Chrimes and W. Robins. P. Oliva rightly describes similar analogies as «pure fiction». For the debate between P. Oliva and B. Shimron, K. Chrimes and W. Robins, see: OLIVA 1971, 167 f., 280; SHIMRON 1966, 1–6.

<sup>&</sup>lt;sup>22</sup> Livy, and Plutarch, and Strabo (VIII. 5. 5. p. 365) use the word "tyrant" in the plural, apparently borrowing it precisely in this form from Polybius. For Polybius, all the Spartan rulers who fought with the Achaean League were tyrants, regardless of their official title and real actions.

in terms of an abstract idea of large and small quantities, and describes their numbers as a "great multitude" (*ea magna multitudo erat*) (XXXVIII. 34. 2). A figure much greater than three thousand apparently stands behind this sort of phrasing.

A whole constellation of sources, therefore, bear witness to that fact that Nabis did indeed set free a considerable number of helots — but not their entirety, however. He did not dismantle helotry as a social institute; still, he set in motion the social mechanics of mass liberation of helots. Whatever the case, during the Roman rule, there was no more heiloteia (as this is arguably how one can understand Strabo's rather vague chronological remark that «the system of Heilote-slavery... continued... to the establishment of the dominion of the Romans» ( $\mu \epsilon \chi \rho \iota \tau \eta s' P \omega \mu \alpha \omega \nu \epsilon \pi \iota \kappa \rho \alpha \tau \epsilon (\alpha s - VIII. 5. 4. p. 365; cp. IX. 1. 20; 2. 39).$ 

The majority of historians support this well-established scholarly perspective. Thus, according to B. Shimron, «Nabis did not completely destroy heiloteia, and its continuation after 195 and very probably long after Nabis may be assumed to be a historical fact»<sup>23</sup>. P. Cartledge also believes that helotry in one form or another survived the reign of Nabis<sup>24</sup>.

Following the scholarly consensus, I would consider the liberation of the helots as a revolutionary change which was part of the general legislative package of Nabis. Here are some conclusions which a number of senior scholars have reached regarding the question of helotry. According to A. Toynbee, Nabis reduced the number of helots to such an extent that helotry ceased to be a serious social and political problem for the Spartan state<sup>25</sup>. P. Oliva is of a similar opinion: «...even if Nabis did not abolish helotry, the changes he made in the social structure of the Spartan population were sharp and far more radical than the reforms of Kleomenes in his day»<sup>26</sup>. P. Cartledge called the emancipation of helots «the death-blow he (Nabis – L.P.) dealt to Helotage, a truly archaic form of servitude... It was all of a piece with what for want of a better word I can only describe as Nabis' concerted 'modernizing' of Spartan society and economy as a whole»<sup>27</sup>.

Some scholars have even argued that Nabis destroyed helotry as an institution. I would in particular quoted J. Texier, the author of the monograph on Nabis: «Il n'est donc pas interdit de penser que, du fait des réformes opérées par Nabis, l'hilotie se trouva abolie en tant que type archaïque de dépendance, et que le terme hilote, continuant d'être employé par habitude, commodité ou méconnaissance des nouvelles réalités profondes de Lacédémone, ait dorénavant désigné—en fait—une tout autre chose»<sup>28</sup>. However, the tradition about the existence of helotry after Nabis does not confirm Texier's excessively radical conclusions.

<sup>&</sup>lt;sup>23</sup> SHIMRON 1966, 3.

<sup>&</sup>lt;sup>24</sup> CARTLEDGE, SPAWFORTH 2002, 64.

<sup>&</sup>lt;sup>25</sup> TOYNBEE 1969, 203.

<sup>&</sup>lt;sup>26</sup> OLIVA 1971, 282.

<sup>&</sup>lt;sup>27</sup> CARTLEDGE, SPAWFORTH 2002, 64.

<sup>&</sup>lt;sup>28</sup> TEXIER 1974, 199.

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Let us sum up the results of the above discussion. First, I would like to stress that Nabis, having made full members of civil society out of slaves and foreigners, created a model of the state which was entirely different from that of the classical Spartan polis (the latter had been constructed according to the Lycurgan model). The radical reorganization of the civil structure was a complete breakaway from the policies of Nabis' predecessors, even if, in his rhetoric, he proclaimed a wish to become their successor. Drawing on the previously extra societal or semi-assimilated types of population—foreigners, helots and Hypomeiones—Nabis accomplished the task of an almost entire renewal of the civic body and created a novel type of citizens who would be loyal not so much to the state as to him personally. This was to become particularly evident in the unwavering loyalty of new citizens towards Nabis. It was most likely mercenaries and former helots who gave unconditional support to Nabis; they were also the ones who benefited most from his reforms. They formed the core of his army<sup>29</sup>.

Their personal loyalty to Nabis continued to manifest itself even after the death of their benefactor in 192 BC. The new citizens massacred all the murderers of Nabis — a group of Aetolians led by Alexamenus (Liv. XXXV. 36. 9–10). We do not possess any hard evidence of conspiracies or riots directed against Nabis. If there had been such, these, of course, would have been reflected in our sources. Polybius and Livy, who portray Nabis as a cruel and ruthless tyrant, would most likely have mentioned such facts<sup>30</sup>.

The historians that positively assess Nabis reforms typically consider him as an innovator who managed to implement of coherent program of modernization of the Spartan society and economy. Thus, according to P. Cartledge, «like the boost his policies gave to artisanal and trading activities, it encouraged a more open, flexible, market-oriented social formation»<sup>31</sup>.

Upon the foundation of the new civil class he had created Nabis planted a new political regime which was monarchical in its essence. This came to a dramatic clash with traditional constitution of Sparta but was close to the models of his time — the constitutions of the Macedonian rules. As has been noted in scholarship time and again (including the most recent research)<sup>32</sup>, in the social sphere Nabis carried out deeper reforms than those of his predecessors — the Spartan kings Agis IV and Cleomenes III. Radical social reforms of Nabis abolished the archaic principles of the formation of citizenship, and with them, at last, Lycurgan Sparta passed away, having turned into a monarchy of the Hellenistic type.

<sup>&</sup>lt;sup>29</sup> PIPER 1984–1986, 86 f.

<sup>&</sup>lt;sup>30</sup> FORNIS 2016, 11.

<sup>&</sup>lt;sup>31</sup> CARTLEDGE, SPAWFORTH 2002, 64.

<sup>&</sup>lt;sup>32</sup> BIRGALIAS 2005, 150; FORNIS 2016, 3.

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# References

BIRGALIAS, N. 2005. Nabis: un prince hellénistique? Gerión Anejos 9, 139–151.

CARTLEDGE, P., A. SPAWFORTH 2002. *Hellenistic and Roman Sparta: A Tale of Two Cities*. 2<sup>nd</sup> ed. London-New York.

CHRIMES, K.M.T. 1952. Ancient Sparta. A Re-Examination of the Evidence. Manchester.

DUCAT, J. 1990. Les Hilotes. Athens-Paris.

- EHRENBERG, V. 1935. Nabis. In: Real Encyclopädie der Altertumswissenschaft XVI, 32, 1471–1474. Stuttgart.
- FIGUEIRA, Th. 2003. The Demography of the Spartan Helots. In: N. Luraghi, S.E. Alcock (eds). *Helots and Their Masters in Laconia and Messenia: Histories, Ideologies, Structures*, 193–239. Cambridge.

FORNIS, C. 2016. La basileía "revolucionaria" de Nabis. Sociedades Precapitalistas 5(2), 1–19.

FUKS, A. 1962. Agis, Cleomenes, and Equality. Classical Philology 57(3), 161–166.

HADAS, M. 1932. The Social Revolution in Third-century Sparta. The Classical Weekly 26(10), 73–76.

JONES, A.H.M. 1967. Sparta. Oxford.

KENNELL, N. 2003. Agreste Genus: Helots in Hellenistic Laconia. In: N. Luraghi, S.E. Alcock (eds). *Helots and Their Masters in Laconia and Messenia: Histories, Ideologies, Structures*, 81–105. Cambridge.

KENNELL, N. 2010. Spartans. A New History. Ancient Cultures. New York—Oxford—Chichester.

MENDELS, D. 1982. Polybius and the Socio-economic Revolution in Greece (227–146 BC). L'antiquité *Classique* 51(1), 86–110.

OLIVA, P. 1971. Sparta and Her Social Problems. Prague.

PECHATNOVA, L. 2014–2015. Zum Problem der sozialen Widersprüche in Sparta (Die spartanischen Hypomeiones). *Novyj Hermes* 7, 6–21.

PIPER, L.J. 1984–1986. Spartan Helots in the Hellenistic Age. Ancient Society 15-17, 75–88.

SHIMRON, B. 1966. Nabis of Sparta and the Helots. Classical Philology 61(1), 1–6.

TEXIER, J.G. 1974. Nabis et les Hilotes. Dialogues d'histoire ancienne 1(1), 189-205.

TEXIER, J.G. 1975. Nabis. Paris.

TOYNBEE, A. 1969. Some Problems of Greek History. III. The Rise and Decline of Sparta. London.



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# Cicero on vices

# Arina BRAGOVA<sup>1</sup>

Abstract. The article analyses Cicero's use of vices (avaritia, crudelitas, audacia, luxuria/luxuries, invidia, superbia, licentia, libido), which form the core of Cicero's ethical, philosophical, political and juridical conceptual apparatus. Avaritia ("lust for money") is often combined with libido, crudelitas, audacia and luxuria. It is opposed to the Stoic ethical categories (honestas, fortitudo, diligentia, etc.) and the Roman ethical and political categories (amicitia, imperium, lex, etc.). Crudelitas goes together with the words denoting crimes, vices, tyrants/usurpers or unjust war. Cicero contrasts crudelitas with some ethical categories (virtus, honestas, misericordia, etc.) as well as political and juridical ones (auctoritas, dignitas, lex, etc.). Audacia is used in a positive ("courage") and negative meanings ("impudence"). In the negative sense it goes together with the words designating crime or atrocity (scelus, crimen, facinus, etc.), other vices or negative emotions (improbitas, libido, impudentia, etc.), or with pecunia (in the meaning of "lust for money"). It is opposed to positive ethical, philosophical, political or juridical categories (dignitas, lex, auctorita, etc.). Luxuria as a vice designates "lust for luxury". It is combined with other vices (avaritia, licentia, superbia, etc.) and opposed to virtues (egestas, parsimonia). In the meaning of "debauch" or "lechery" it is used with libido, voluptas and cupiditas. It is used in the same context with the semantic fields of idleness (desidia, ignavia, inertia) and crime (scelus, crimen, flagitium). For Cicero, invidia is "hatred" or "envy", the most common and perpetual vice. It is interchangeable with invidentia. Cicero often links invidia with odium, misericordia, iracundia, obtrectatio, periculum and opposes to gloria. There are different types of invidia: to worthy people, tyrants, rich people. Superbia has a negative meaning of "superciliousness", as well as a positive one ("pride"). As a vice, it is used in a synonymic series with arrogantia and insolentia, can be combined with crudelitas, contumacia and contumelia, or contrasted with sapientia and liberalitas. Licentia can have a positive meaning of "liberty" (every third example). In most cases, it is a vice ("promiscuity", "self-will"). In the negative sense it is sometimes synonymous to libertas, goes together with the words denoting crime (scelus, injuria, facinus), with pecunia as a source of profit as well as other vices or negative emotions (voluntas, libido, impunitas, etc.). It is opposed to certain positive categories (judicium, libertas, lex, etc.). Cicero's antithesis of licentiaservitus means permissiveness of an official opposed to slavery of his subordinates. There are some other antitheses: licentia-libertas, licentia-lex, licentia-gloria. Libido is mostly a political category for Cicero: it is abuse of power of bad rulers (Caesar), tyrants (Targuin the Proud and his family), governors (Verres), senators (Catiline), judges. It is used together with scelus, crudelitas, audacia, etc., and contrasted with auctoritas, religio, lex, etc. In ethical and philosophical discourse libido means "lust", "excessive bodily passion", or "passionate desire" and goes together with flagitium, scelus, avaritia, etc. As a vice, libido is opposed to pudicitia, religio, temperantia, etc. In philosophical reasoning about enjoyment, Cicero uses the term in a neutral sense, referring to libido as a bodily passion opposed to spiritual pleasure.

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**Rezumat**. În articolul de față se analizează folosirea de către Cicero a termenilor care desemnează viciile (avaritia, crudelitas, audacia, luxuria/luxuries, invidia, superbia, licentia, libido), acest demers al scriitorului constituind miezul discursului său etic, filosofic, juridic și politic. Mluți dintre acești termeni sunt opuși categoriilor etice stoice (precum avaritia) sau categoriilor etice și poilitice îndeobște acceptate în societatea romană. Alți termeni, precum audacia sau licentia, sunt utilizați atât în sens pozitiv, cât și în sens negativ. Totodată, prin antiteză, Cicero face apologia virtuților romane. Un exemplu de viciu este libido, care e opus termenilor de pudicitia, religio, temperantia, constantia, industria, moderatio, pudor, sapientia, conscientia, fides, honestum, innocentia, liberalitas, modestia, prudentia. Însă, în raționamentul filosofic, Cicero îl utilizează în sens neutru, referindu-se la libido ca o pasiune trupească opusă plăcerii spirituale.

**Keywords**: Ancient Rome, Cicero, avaritia, crudelitas, audacia, luxuria, superbia, invidia, licentia, libido.

It is a known fact that Cicero wrote about human virtues and vices a lot. This explains why his interpretation of those concepts still attracts scholars' attention. We are not an exception. In this article, we try to analyse Cicero's understanding of human vices (*vitia*). For that reason we have chosen some of the vices — those which are used by Cicero the most frequently. In our opinion, they are the vices of avarice (*avaritia*), cruelty (*crudelitas*), audacity (*audacia*), lust for luxury (*luxuria/luxuries*), superciliousness (*superbia*), envy (*invidia*), licentiousness (*licentia*) and abuse of power (*libido*). Of course, we realise that the list of the given vices is not exhaustive, but we hope we will continue the research in this direction and investigate later the other vices used by Cicero.

We cannot say that the issue has not been investigated so far. There are some research papers devoted to the analysis of Cicero's use of the vices. In relation to Cicero's *avaritia* we can name the works of C.J. Berry<sup>2</sup>, N. Coffee<sup>3</sup>, T.D. Frazel,<sup>4</sup> R.J. Gorman & V.B. Gorman,<sup>5</sup> J. Patterson,<sup>6</sup> K.O. Sandnes<sup>7</sup> and H.W. Litchfield.<sup>8</sup> C.J. Berry thinks that *avaritia* is used by Cicero in the context of an individual desire to be well-off as a reason of moral corruption in the Roman Republic.<sup>9</sup> N. Coffee offers a frequency analysis of use of the words with the stem

<sup>&</sup>lt;sup>2</sup> BERRY 1994, 85.

<sup>&</sup>lt;sup>3</sup> COFFEE 2017, 52–55.

<sup>&</sup>lt;sup>4</sup> FRAZEL 2009, 125, 132–133, 137–139.

<sup>&</sup>lt;sup>5</sup> GORMAN & GORMAN 2017, 334–335.

<sup>&</sup>lt;sup>6</sup> PATTERSON 2015, 8.

<sup>&</sup>lt;sup>7</sup> SANDNES 2004, 70.

<sup>&</sup>lt;sup>8</sup> LITCHFIELD 1914, 1–71.

<sup>&</sup>lt;sup>9</sup> BERRY 1994, 85.

*avar*- in different Roman writings including Cicero's.<sup>10</sup> T.D. Frazel analyses *avaritia* in Cicero's speech "Against Verres"<sup>11</sup> and concludes that in the Roman culture avarice is closely connected with such vices as adultery and lust for luxury<sup>12</sup>. R.J. Gorman & V.B. Gorman analyses the context of Cicero's use of *avaritia* and determines its compatibility with other terms of Cicero's ethical and philosophical apparatus (*luxuria, superbia, scelus, flagitium*).<sup>13</sup>

The other vice used by Cicero, *crudelitas*, is also investigated by some scholars. Some of them think of Cicero's *crudelitas* as a tyrant's quality.<sup>14</sup> Others analyse the use of *crudelitas* in a synonymic series with the vices of *vis, superbia, libido, audacia, furor, violentia, immanitas*.<sup>15</sup> There are some scholars, who oppose Cicero's *crudelitas* to the virtues of *severitas, clementia* and *misericordia*.<sup>16</sup>

As for Cicero's *audacia*, we have found several works that contain research on the issue. Thus, one of Ch. Wirszubski's articles is devoted to the political significance of *audaces*, a single-root with *audacia*, in Cicero's writings<sup>17</sup>. R.A. Caster analyses Cicero's *pudor* and the words that blend with it, *audacia* as well.<sup>18</sup> G.O. Hutchinson focuses his attention on the political use of *audacia* and *audax* in relation to the conspirators.<sup>19</sup> L. Langerwerf writes nearly about the same as the previous scholar, considering *audacia* an attribute of a rebel's behaviour.<sup>20</sup> G. Tahin notes that Cicero's *audacia*, *maleficia*, *furor*, and *amentia* characterise an absolutely corrupted and incorrigible criminal, driven by an inexplicable rage and a desire to destroy.<sup>21</sup> A. Vasaly draws attention to the contrast between good rural and bad urban life in Cicero's speech "For Sextus Roscius of Ameria", in which it is said that *audacia*, *luxuria*, *avaritia* and other vices make city dwellers corrupted.<sup>22</sup>

We have not found any special research dedicated to analysis of Cicero's *luxuria/luxuries*. Yet, there are more general studies, for example, C.J. Berry's monograph, in which the idea of luxury in conceptual and historical terms is analysed<sup>23</sup>, or R.J. Gorman and V.B. Gorman's

<sup>&</sup>lt;sup>10</sup> COFFEE 2017, 52–55.

<sup>&</sup>lt;sup>11</sup> FRAZEL 2009, 125, 132–133, 137–139.

<sup>&</sup>lt;sup>12</sup> FRAZEL 2009, 125.

<sup>&</sup>lt;sup>13</sup> GORMAN & GORMAN 2017, 334–335.

<sup>&</sup>lt;sup>14</sup> ARENA 2010, 150, 159; Cicero, *Philippics* 3–9; Cicero's *De Provinciis Consularibus Oratio*; DUNKLE 1967, 151, 159, 165, 168; WIRZSUBSKI 1968, 40.

<sup>&</sup>lt;sup>15</sup> Cicero, Pro Sexto Roscio; DEVINE 1978, 27; POLK, 2013, 59.

<sup>&</sup>lt;sup>16</sup> DRUMMOND 1995, 27; HALL 2014, 89; STEVENSON 2015, 139; VAN DER BLOM 2010, 187.

<sup>&</sup>lt;sup>17</sup> WIRZUBSKI 1961, 12–22.

<sup>&</sup>lt;sup>18</sup> CASTER 1997, 16.

<sup>&</sup>lt;sup>19</sup> HUTCHINSON 2005, 185.

<sup>&</sup>lt;sup>20</sup> LANGERWERF 2015, 155.

<sup>&</sup>lt;sup>21</sup> TAHIN 2014, 122.

<sup>&</sup>lt;sup>22</sup> VASALY 1996, 163-165.

<sup>&</sup>lt;sup>23</sup> BERRY 1994.

book on the destructive influence of luxury on people of the ancient world<sup>24</sup>. There are other studies on luxury in Ancient Rome, the authors of which make a few comments about Cicero's attitude to luxury.<sup>25</sup>

There are some research papers on Cicero's *invidia*. G.F. de la Mora in his study of envy only briefly mentions Cicero's *invidia*<sup>26</sup>. R.A. Kaster specifies the varieties of *invidia*<sup>27</sup>. D. Konstan analyses the traces of Aristotelian influence in Cicero's arguments about emotions and feelings, about *invidia* in particular.<sup>28</sup> M. Zerba also mentions the influence of Aristotelian ethical doctrine on the formation of Cicero's views on envy and hatred. He also writes about the connection between the feelings of love and envy. The scholar concludes that envy was an integral part of oratorical education for Cicero, one of the many tests on the way to the formation of man as an orator.<sup>29</sup>

There is no special research devoted to the analysis of Cicero's superbia. Nevertheless, there are some works, in which the word is somehow considered or mentioned. I.R. Dunkle concludes that *superbia* as a vice of a tyrant goes back to the Greek concept of *hybris* – the meaningless assertion of one's rights, which was characteristic of the Greek tyrant.<sup>30</sup> Ch. Wirzsubski remarks that superbia and libido are used together with dominatio, which is characteristic of the Roman invective of the 1<sup>st</sup> c. B.C.<sup>31</sup> Y. Baraz's study is devoted to *superbia* and its synonyms (adrogantia, fastus, insolentia) in the writings of the Roman authors. With regard to Cicero's superbia, the scholar concludes that Cicero refers to superbia as a quality of a king or a tyrant, that the concept has a clear anti-republic character for him.<sup>32</sup> Other scholars also acknowledge the fact that Cicero's *superbia* is a vice, which describes a tyrant, a despot, a usurper.<sup>33</sup> H. van der Bloom draws attention to the fact that nobils (*nobiles*) are characterised by arrogance and intolerance (superbia atque intolerantia) and achieve political success only because of their noble origin.<sup>34</sup> This opinion echoes Y. Baraz's statement that the creation of a political system, which prevents the concentration of excessive power in the hands of one member of the Roman elite to the detriment of the entire elite as a whole, led to a knowingly negative perception of superbia as potentially dangerous and to suppression of the pronounced positive features of such superiority among members of the Roman elite.

<sup>33</sup> ARENA 2012, 244–245; Cicero's *De Provinciis Consularibus Oratio*; Cicero, *Philippics* 3–9; DEVINE, 1978, 27; POLK 2013, 59, 329; VASALY 2000, 453.

<sup>34</sup> VAN DER BLOM 2010, 51.

<sup>&</sup>lt;sup>24</sup> GORMAN & GORMAN 2017.

<sup>&</sup>lt;sup>25</sup> ZANDA 2011, 18, 21, 23, 25; ZARMAKOUPI 2014, 7–8.

<sup>&</sup>lt;sup>26</sup> DE LA MORA 2000, 14-15.

<sup>&</sup>lt;sup>27</sup> KASTER 2005, 100, 102.

<sup>&</sup>lt;sup>28</sup> KONSTAN 2006, 149.

<sup>&</sup>lt;sup>29</sup> ZERBA 2002, 300, 305.

<sup>&</sup>lt;sup>30</sup> DUNKLE 1967, 168.

<sup>&</sup>lt;sup>31</sup> WIRZSUBSKI 1968, 40. Cf. DUNKLE 1967, 165.

<sup>&</sup>lt;sup>32</sup> BARAZ 2008, 380–382.

Secondly, the reason, why the main political values, for example, suppression of pride (*superbia*), become dominant in the evolution of the national cultural discourse, is mainly connected with the political nature of the Roman republican elite. Thus, the alleged danger emanating from pride (*superbia*) in the midst of a quasi-egalitarian republican elite must be a fairly convincing explanation of the generally negative meaning of the concept of pride (*superbia*).<sup>35</sup> Besides, some scholars focus attention on the connection between the depravity of *superbia* for Cicero and the nickname of the last Roman king, Tarquin the Proud, who was famous for his cruelty.<sup>36</sup>

With regard to Cicero's *licentia*, we must note that scholars pay attention to the antithesis of *libertas-licentia*,<sup>37</sup> to moderation as the main feature of *libertas* and, as a consequence, immoderation inherent in *licentia*<sup>38</sup>, to the correlation of *licentia* with ochlocracy and anarchy,<sup>39</sup> to the borrowing of Plato's ideas in Cicero's arguments about freedom and arbitrariness. Nevertheless, we have not found any studies, which analyse *licentia* in the fullness of its meanings, based on the frequency of its use.

There are some publications about Cicero's *libido*, in which its political connotation and the antithesis of *libido-lex* are considered.<sup>40</sup> We have also found fragmentary arguments about certain values of *libido* and its derivatives in Cicero's works, for instance, about negative connotations of the adjective *libidinosus*,<sup>41</sup> but no such work offers any systematised knowledge of Cicero's *libido*.

Our research is based on the method of contextual analysis as well as the statistical method. It means that we take into account the context in which the terms are used and the number of their uses. Besides, we apply to the method of system analysis, which allows us to establish structural links between Cicero's words denoting vices.

We would like to start the research with the analysis of the triad of the vices used by Cicero most often. The triad includes *avaritia*, *crudelitas* and *audacia*.

We have found more than 150 uses of *avaritia* and its derivatives (*avarus, avare*) in Cicero's writings. *Avaritia* is used more often in his orations (about 100 times), especially in the invectives "Against Verres" (55 times), least of all — in his epistles (6 times). In his "Tusculan Disputations" Cicero defines avarice as a disease, which makes money the object of our desire.<sup>42</sup> Cicero's *avaritia* is combined with the vices of *libido* (25 times), *crudelitas* (21), *audacia* 

<sup>&</sup>lt;sup>35</sup> BARAZ 2008, 380–381

<sup>&</sup>lt;sup>36</sup> DUNKLE 1967, 168; BARAZ 2008, 382; Cicero, Philippics 3-9.

<sup>&</sup>lt;sup>37</sup> Latin Verse Satire: an anthology and critical reader 2009, 8; WIRZSUBSKI 1968, 7; WOOD 1988, 150.

<sup>&</sup>lt;sup>38</sup> Latin Verse Satire: an anthology and critical reader 2009, 8; Mccarter 2015, 10; WIRZSUBSKI, 1968, 7.

<sup>&</sup>lt;sup>39</sup> ARENA 2012, 167, 245; REINHARDT 2005, 172; WOOD 1988, 150.

<sup>&</sup>lt;sup>40</sup> DUNKLE 1967, 151–171; JED 2011, 227; NOVOKHATKO 2009, 159; ZARECKI 2014, 144.

<sup>&</sup>lt;sup>41</sup> L'HOIR 1992, 40-41.

<sup>&</sup>lt;sup>42</sup> Cic. Tusc. disp. 4.XI.26: Est autem avaritia opinatio vehemens de pecunia, quasi valde expetenda sit, inhaerens et penitus insita.

(19), *luxuria/luxuries* (11), as well as *vitium* (16).<sup>43</sup> Cicero cites Sulla who had three deadly vices: luxury, greed and cruelty,<sup>44</sup> Gabinius known for his avarice, arrogance, and cruelty,<sup>45</sup> viceroy of Sicily Verres, who became famous for his vices, such as voluptuousness for the part of debauchery, cruelty in terms of torments, greed for looting, arrogance for insults.<sup>46</sup> Greediness and desire for luxury are especially interrelated in Cicero's works: he notes that if we want to destroy covetousness, we should destroy its mother - luxury.<sup>47</sup> These examples allow us to assume that Cicero uses avaritia in a political sense. In the treatise "On the duties", in which Cicero dwells upon Caesar's dictatorship, greed is referred to as the most disgusting vice of the highest officials in the Republic.<sup>48</sup> In connection with the definition of Cicero's avaritia, the question of its compatibility with positively coloured ethical, philosophical and political terms (and their derivatives) is also of interest. Having carried out the statistical analysis, we have obtained such data: avaritia is opposed to honestas/honestum (15 times), lex (13), innocentia (10), fides (8), amicitia (7), ratio (7), religio (7), virtus (6), bonitas (6), fortitudo (6), imperium (6), cogitatio (5), diligentia (5), gloria (5), gravitas (5), liberalitas (5), potestas (5), salus (5), sapientia (5), etc. As we see, greed is opposed to honestas/honestum as the main term of the Stoic ethics, as well as the Stoic virtues (e.g. fortitudo, diligentia, liberalitas, sapientia) and the Roman ethical and political categories (amicitia, imperium, lex, potestas, religio, etc.). For example, in the speech "Against Verres" Cicero contrasts Lucius Papinius, the most prominent man, well-to-do and venerable Roman horseman<sup>49</sup> to avaricious Verres. Elsewhere in the same speech, we see an opposition of the courage of Heracleon, the leader of the sea brigands, and Verres's greed and vileness.<sup>50</sup> The contrast of the Stoic virtue called "knowledge of the truth" (sapientia and cogitatio) with the vice of avaritia can be illustrated with the example from the speech "Against Verres", in which Cicero notes that Verres, for all his terrible greed, which never left him and knew no limit, was neither clever nor inventive.<sup>51</sup> In his speech "For Sextus Roscius of Ameria" Cicero builds a contrast between rural and urban life on the opposition of virtues and vices: among the first-parsimonia, diligentia and justitia,

<sup>&</sup>lt;sup>43</sup> We take into account only the words, which are in the same passages with the analysed terms and are connected in meaning with them.

<sup>&</sup>lt;sup>44</sup> Cic. De fin. 3.75: ... qui trium pestiferorum vitiorum, luxuriae, avaritiae, crudelitatis, magister fuit.

<sup>&</sup>lt;sup>45</sup> Cic. De prov. cons. 11: avaritia, superbia, crudelitate Gabini.

<sup>&</sup>lt;sup>46</sup> Cic. In Caec. 3: ... luxuries in flagitiis, crudelitas in suppliciis, avaritia in rapinis, superbia in contumeliis.

<sup>&</sup>lt;sup>47</sup> Cic. De orat. 2.171: ... avaritiam si tollere vultis, mater ejus est tollenda, luxuries.

<sup>&</sup>lt;sup>48</sup> Cic. De off. 2.77: Nullum igitur vitium taetrius est, ut eo, unde digressa est, referat se oratio, quam avaritia, praesertim in principibus et rem publicam gubernantibus.

<sup>&</sup>lt;sup>49</sup> Cic. In Verr. 2.4.46: viro primario, locupleti honestoque equite Romano.

<sup>&</sup>lt;sup>50</sup> Cic. In Verr. 2.5.91: Tum praedonum dux Heracleo, repente praeter spem non sua virtute sed istius avaritia nequitiaque victor, classem pulcherrimam populi Romani in litus expulsam et ejectam, cum primum invesperasceret, inflammari incendique jussit.

<sup>&</sup>lt;sup>51</sup> Cic. In Verr. 2.2.134: nam ipsum Verrem tantum avaritia semper hiante atque imminente fuisse, ingenio et cogitatione nulla.

among the latter—*luxuria, avaritia* and *audacia.*<sup>52</sup> In another speech, "For Flaccus", Cicero praises consul Lucius Lucullus for his generosity<sup>53</sup> and does not doubt that in the process of obtaining a possible inheritance Titus Vettius will behave without deserving reproach for greed, without prejudice to his dignity.<sup>54</sup> In a passage of the speech "On Pompey's command" Cicero points to Pompey's restraint and at the same time to the fact that he does not have any lust for loot or pleasure,<sup>55</sup> i.e. Cicero opposes avarice to temperance. Finally, the opposition of *avaritia* to *lex* seems also important. Cicero repeatedly mentions that greed, especially from the leaders of the state, runs counter to law. Arguing about Verres's abuse, Cicero points out, "It is not the advantage of the cultivators which is the rule, but the will of the praetor, then the manner of valuing no longer depends on law and duty, but on the caprice and avarice of men".<sup>56</sup>

The second term, which is included by us in Cicero's triad of the worst vices, is *crudelitas*. We have found 348 examples of Cicero's use of the term and its derivatives (crudelis, crudeliter). Most often the word is used in Cicero's speeches, especially in the invectives (258 times), less often-in his ethical, political and rhetorical dialogues and treatises (48), even more rarely—in his correspondence (42). The term and its derivatives are used in the same context with the words designating different types of crimes, vices, and usurpers (cruel kings, despots, tyrants, etc.). Alongside with crudelitas, Cicero uses its synonym-acerbitasin the same context (30 times). As it has been said, *crudelitas* is regularly used together with the words denoting crime: scelus (64 times), nefarium (27), crimen (19), facinus (16), flagitium (13), injuria (12), furtum (6), rapina (5), etc. Thus, Cicero equates cruelty with crime. In his speech "On the Consular Provinces", he mentions Gabinius's and Piso's unheard-of crime and insatiable cruelty.<sup>57</sup> Besides, in Cicero's writings *crudelitas* is combined with such vices of cruel rulers and tyrants as libido (29 cases), cupiditas (23), audacia (26), superbia (20), immanitas (20), *improbitas* (20), *avaritia* (18), *perfidia* (7), etc. A vivid example of a synonymic series, containing crudelitas as well as vices and crimes, is the following quotation from Cicero's speech "Against Verres": "Do you endeavour to conceal his thefts, his rapine, his cupidity, his cruelty, his pride, his wickedness, his audacity, by dwelling on the greatness of his exploits and his

<sup>&</sup>lt;sup>52</sup> Cic. Pro Rosc. Amer. 75: In urbe luxuries creatur, ex luxuria exsistat avaritia necesse est, ex avaritia erumpat audacia, inde omnia scelera ac maleficia gignuntur; vita autem haec rustica quam tu agrestem vocas parsimoniae, diligentiae, justitiae magistra est.

<sup>&</sup>lt;sup>53</sup> Cic. Pro Flac. 85: ... L. Luculle ... pro tua eximia liberalitate maximisque beneficiis in tuos venisse hereditates.

<sup>&</sup>lt;sup>54</sup> Ibidem: ... an tuum nulla avaritia salva dignitate retinebis.

<sup>&</sup>lt;sup>55</sup> Cic. De imp. Pomp. 40: Age vero: ceteris in rebus qua ille sit temperantia considerate ... non avaritia ab instituto cursu ad praedam aliquam devocavit, non libido ad voluptatem.

<sup>&</sup>lt;sup>56</sup> Translated by C.D. Yonge. Cic. in Verr. 2.3.220: Ubi enim semel ab annonae ratione et ab aratorum voluntate res ad praetoris libidinem translata est, non est jam in lege neque in officio, sed in voluntate hominum atque avaritia positus modus aestimandi.

<sup>&</sup>lt;sup>57</sup> Cic. De prov. cons. 2: insigne scelus et importunam crudelitatem.

renown as a commander?".<sup>58</sup> We find a similar synonymic series in another passage of the same speech, in which Cicero speaks of Verres's actions as "instances of wickedness, of audacity, of perfidy, of lust, of avarice, and of cruelty".<sup>59</sup> Crudelitas is often used in the same context with *bellum* (40 times): Cicero writes about brutal war, about cruel attitude to the enemies, considering internecine and internal war the most cruel and greatest of all.<sup>60</sup> Cicero considers people cruel if they foment civil wars for the sake of illegally gaining power in the state. Among such dishonest people, who seek power, he names Cinna,<sup>61</sup> Sulla,<sup>62</sup> Marius,<sup>63</sup> Verres,<sup>64</sup> Dolabella,<sup>65</sup> Lentulus,<sup>66</sup> Catiline,<sup>67</sup> Pompey,<sup>68</sup> Gabinius,<sup>69</sup> Caesar,<sup>70</sup> Piso,<sup>71</sup> Lepid,<sup>72</sup> Antony<sup>73</sup>, and their supporters. In his discourse on cruelty Cicero also mentions the generals who participated in wars with external enemies, for example, Alexander the Great<sup>74</sup> and Hannibal,<sup>75</sup> although Cicero's mentioning of Alexander the Great in connection with cruelty is not entirely clear to us. One more conclusion concerns cruel rulers: crudelitas and tyrannus are often used together (18 cases of use). Cicero recalls the cruel tyrannies of Verres,<sup>76</sup> Mark Antony, and Dolabella.<sup>77</sup> In addition, he cites the example of the cruel Ancient Greek tyrants - the Thessalian tyrant Alexander,<sup>78</sup> the Sicilian tyrants Falarid<sup>79</sup>, and Dionysius.<sup>80</sup> Sometimes Cicero asks himself whether *he* looks like a tyrant, and this, we believe, he does for contrast,

<sup>&</sup>lt;sup>58</sup> Translated by C.D. Yonge. Cic. in Verr. 2.5.32: hujus furta, rapinas, cupiditatem, crudelitatem, superbiam, scelus, audaciam rerum gestarum magnitudine atque imperatoriis laudibus tegere conaris?

<sup>&</sup>lt;sup>59</sup> Translated by C.D. Yonge. Cic. In Verr. 2.5.189: facinora sceleris, audaciae, perfidiae, libidinis, avaritiae, crudelitatis.

<sup>60</sup> Cic. In Cat. 2.28. Cf. In Cat. 3.25. Ad fam. 4.3.1; Phil. 14.35.

<sup>&</sup>lt;sup>61</sup> Cic. De nat. deor. 3.81; in Cat. 3.24; Phil. 1.34, 11.1.

<sup>&</sup>lt;sup>62</sup> Cic. Ad Att. 9.14.2; De dom. 43; De off. 2.27; Pro Lig. 12; Pro Sul. 78.

<sup>63</sup> Cic. In Cat. 3.24.

<sup>&</sup>lt;sup>64</sup> Cic. In Caec. 3, 38; In Verr. 1.56, 2.1.9, 14, 82, 122, 2.2.9, 77, 80, 82, 91, 95, 109, 115, 117, 192, 2.3.24, 52, 126, 129, 130, 2.4.26, 86–88, 112, 2.5.21, 31, 42, 72, 106, 115, 145, 150, 152–153, 159, 161, 165, 189; Phil. 2.99.

<sup>&</sup>lt;sup>65</sup> Cic. Ad Brut. 2.3.5; Ad fam. 12.14.5, 12.15.1; In Verr. 2.1.77.

<sup>66</sup> Cic. In Cat. 4.10.

<sup>&</sup>lt;sup>67</sup> Cic. De dom. 61.

<sup>68</sup> Cic. Ad Att. 9.6.7, 10.14.1; Ad fam. 4.9.3, 8.17.2, 15.19.4.

<sup>&</sup>lt;sup>69</sup> Cic. De prov. cons. 11.

<sup>&</sup>lt;sup>70</sup> Cic. Ad Att. 10.14.1; Ad fam. 5.10a.1, 7.3.2, 9.6.3; In Cat. 4.13.

<sup>&</sup>lt;sup>71</sup> Cic. Pro Sest. 22.

<sup>&</sup>lt;sup>72</sup> Cic. Ad Brut. 1.12.2.

<sup>&</sup>lt;sup>73</sup> Cic. Ad Brut. 1.12.2; Ad fam. 10.28.3; Phil. 2.71, 3.28, 4.3, 7.27, 11.6, 12.9, 20, 14.25.

<sup>&</sup>lt;sup>74</sup> Cic. Ad Att. 13.28.3.

<sup>&</sup>lt;sup>75</sup> Cic. *De amic.* 28, *De off* 1.38.

<sup>&</sup>lt;sup>76</sup> Cic. In Verr. 2.1.34, 82, 2.5.21.

<sup>&</sup>lt;sup>77</sup> Cic. Dd fam. 12.12.2.

<sup>&</sup>lt;sup>78</sup> Cic. De div. 1.53.

<sup>&</sup>lt;sup>79</sup> Cic. De off. 3.29; In Verr. 2.4.73.

<sup>&</sup>lt;sup>80</sup> Cic. De rep. 3.43; In Verr. 2.5.143, 145.

to emphasise the virtue of his behaviour.<sup>81</sup> Further, since cruel rulers and generals evoke hatred, Cicero quite often combines crudelitas with odium and its root words (16 times). So, in 43 B.C. in a letter to Brutus he mentions public hatred for cruel enemies,  $^{82}$  and in the composition "On Friendship" he names Hannibal, whom the Roman citizens will always hate for his cruelty.<sup>83</sup> Further, in his arguments about *crudelitas* Cicero contrasts cruelty with positive ethical, philosophical, political and juridical categories and their derivatives. As we can see, *crudelitas* is most often opposed to ethical concepts, mainly virtues, for example, virtus (27 cases of use), honestas/honestum (21), misericordia (19), clementia (18), diligentia (16), innocentia (16), beneficium (13), humanitas (11), fortitudo (9), constantia (7), mansuetudo (6), magnitudo animi (2), probitas (2), etc. Let us give some examples. In Cicero's "Philippics" we can read that "on these accounts the Senate thinks and declares that the Roman people has been released from the most disgraceful and cruel slavery by the valour, and military skill, and prudence, and firmness, and perseverance, and greatness of mind and good fortune of these their generals".<sup>84</sup> Or elsewhere in the same work: "... for that purpose they shall order the city quaestors to furnish and pay money, in order that it may be witness for the everlasting recollection of posterity of the wickedness of our most cruel enemies, and the godlike valour of our soldiers".<sup>85</sup> In the following passage of the speech "Against Verres" Cicero contrasts cruelty with compassion, noting that he "could easily show by your [Verres's] cruelty towards others, that every channel of mercy from the judges to yourself [Verres] has been long since blocked up".<sup>86</sup> To illustrate the antithesis of crudelitas-clementia/humanitas/mansuetudo/ probitas, we can give examples from Cicero's correspondence, in which he remarks how odious cruelty is to everybody, and how attractive honesty and clemency are.<sup>87</sup> There is one more passage from Cicero's letter, in which he says to his brother that throughout the brother's government there is no harshness or cruelty - everywhere clemency, mildness, and kindness reign supreme.<sup>88</sup>

In the political and juridical context *crudelitas* is combined with such political and juridical terms as *auctoritas* (34 times), *consilium* (33), *judicium* (32), *dignitas* (30), *salus* (24),

<sup>&</sup>lt;sup>81</sup> Cic. De dom. 75; In Cat. 2.14.

<sup>&</sup>lt;sup>82</sup> Cic. Ad Br. 1.15.9.

<sup>&</sup>lt;sup>83</sup> Cic. De amic. 28: propter crudelitatem semper haec civitas oderit.

<sup>&</sup>lt;sup>84</sup> Translated by C.D. Yonge. Cic. Phil. 14.37: ob eas res senatum existimare et judicare eorum trium imperatorum virtute, imperio, consilio, gravitate, constantia, magnitudine animi, felicitate populum Romanum foedissima crudelissimaque servitute liberatum. Here Cicero has in mind Gajus Pansa, Aulus Hirtius and Julius Caesar.

<sup>&</sup>lt;sup>85</sup> Translated by C.D. Yonge. Cic. Phil. 14.38: ... curent quaestoresque urb. ad eam rem pecuniam dare, attribuere, solvere jubeant, ut exstet ad memoriam posteritatis sempiternam scelus crudelissimorum hostium militumque divina virtus.

<sup>&</sup>lt;sup>86</sup> Translated by C.D. Yonge. Cic. In Verr. 2.5.21: facile ostendam tua crudelitate in alios omnis tibi aditus misericordiae judicum jam pridem esse praeclusos.

<sup>&</sup>lt;sup>87</sup> Cic. Ad fam. 15.19.2: quanto sit omnibus odio crudelitas et quanto amori probitas et clementia.

<sup>&</sup>lt;sup>88</sup> Cic. Ad Q. fr. 1.1.25: toto denique in imperio nihil acerbum esse, nihil crudele, atque omnia plena clementiae, mansuetudinis, humanitatis.

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*lex* (25), *potestas* (16), *imperium* (19), *fides* (22), *gloria* (12), etc. On the opposition of cruelty to authority Cicero declares, addressing Labien, "You have been driven from that cruel, unreasonable, (I will not say tribunitian, but) tyrannical persecution, by my counsel, by my virtue, and by my influence".<sup>89</sup> Cicero contrasts Lucius Antony's cruelty with the authority of the ruling class and the dignity of the Roman people.<sup>90</sup>

The next term is audacia. We have found 350 examples of its use in Cicero's writings (including its derivatives audax and audacter/audaciter). The major part of the cases (more than a half) appears in his speeches, whereas a smaller part - in his correspondence (18 cases). It should be noted that the target group of the meanings of audacia, audax, audac(i)ter does not include their positive meanings connected with the semantic field of "courage" and "valour"<sup>91</sup> as well as the use of *audacius* in the meaning of "more courageously" with the verbs deferre, dicere, disputare, expromere, exsultare, ingredi, inguam, scribere, transferre.<sup>92</sup> Audacia and its derivatives, if Cicero assumes the negative meaning of "impudence" or "audacity", are linked in the context with the words, which also have a negative connotation and denote defects or negative phenomena of social and political life. Audacia is often employed with the words denoting crime or atrocity: scelus (81 cases), crimen (36), facinus (29), nefarium (27), flagitium (14), maleficium (12), caedes (10), insidiae (10), parricidium (10), and the following punishment: supplicium (12 cases of use). Audacia is, of course, a vice for Cicero (vitium is used together with audacia 11 times). In his arguments about audacity Cicero mentions other vices and negative states of the soul or body in the same context: improbitas/inprobitas (54 times), libido/lubido (34), cupiditas (33), impudentia (29), crudelitas (27), inimicitia (26), turpitudo (20), amentia (19), furor (18), avaritia (17), injuria (17), voluntas (16), nequitia (15), metus (14), invidia (13), acerbitas (12), indignitas (12), temeritas (12), immanitas (11), odium (9), etc. Pecunia is used together with audacia 31 times, and it is not surprising, as people often show their vices (including audacity) because of money. Audacia is opposed to the words, which have a positive ethical, philosophical, political or juridical meaning: judicium (40 times), dignitas (32), lex (28), auctoritas (23), imperium (23), virtus (22), ratio (21), fides (19), amicitia (18), consilium (17), diligentia (17), gravitas (17), honestas/honestum (17), religio (17), fortitudo (16), potestas (15), salus (15), innocentia (14), pudor (13), officia (11), bonitas/vir bonus (10), libertas (10), sapientia (10), honor (9), humanitas (9), justitia (9), prudentia (9), gratia (8), moderatio (6), modestia (5), etc. Such frequent use of judicium and lex together with audacia is

<sup>&</sup>lt;sup>89</sup> Translated by C.D. Yonge. Cic. pro Rab. perd. 17: te ex illa crudeli, importuna, non tribunicia actione sed regia, meo consilio, virtute, auctoritate esse depulsum

<sup>&</sup>lt;sup>90</sup> Cic. Phil. 14.8: quos optimos viros honestissimosque homines maxime cum auctoritate hujus ordinis populique Romani dignitate conjunctos crudelissimis exemplis interemit propudium illud et portentum, L. Antonius.

<sup>&</sup>lt;sup>91</sup> Cic. Ad fam. 15.2.6; De div. 2.114; De fin. 2.28; De orat. 2.290, 3.36, 156; De sen. 72; Orat. 81, 82; Phil. 9.3, 10.11, 13.28; Pro Caec. 1–2; Pro Rosc. Amer. 2.

 <sup>&</sup>lt;sup>92</sup> Cic. Ad fam. 5.12.1, 12.17.2, 15.2.6; De fin. 2.119; De orat. 1.193, 208; orat. 26, 202; Pro Font. 11; Pro Mur. 61; Pro Rosc. Amer.
 31; Pro Rosc. com. 16; Tusc. disp. 3.21.

explained by the fact that Cicero employs them in political discourse, to prove guilt or innocence of a defendant.

The vices of *luxuria/luxuries* and *superbia* are adjacent to the triad of the main Cicero's vices (*avaritia, crudelitas* and *audacia*). Cicero thinks that lust for luxury is a deadly defect.<sup>93</sup> He is convinced that it is vicious to live luxuriously.<sup>94</sup> For that reason, he combines *luxuria/luxuries* with *vitium*.<sup>95</sup> Cicero sometimes uses other negative ethical categories in the same context: *avaritia*,<sup>96</sup> *licentia*,<sup>97</sup> *superbia*,<sup>98</sup> *nequitia*,<sup>99</sup> *insolentia*,<sup>100</sup> *intemperantia*.<sup>101</sup> *Luxuria/luxuries* can be opposed to its antonyms – *egestas*<sup>102</sup> and *parsimonia*.<sup>103</sup> Cicero considers lust for luxury the cause of covetousness, saying that if you want to destroy avarice, you should destroy its mother – lust for luxury.<sup>104</sup> Cicero often uses *luxuria/luxuries* and *avaritia* together.<sup>105</sup> Thus, describing Sulla's way of life, he observes that he was a mentor in three deadly vices: lust for luxury (*luxuria*), avarice (*avaritia*) and cruelty (*crudelitas*).<sup>106</sup> In one of the speeches, Cicero accuses Verres, "Owing to your luxury and avarice, a fleet belonging to the Roman people was taken and burnt by pirates".<sup>107</sup>

Cicero often uses *luxuria/luxuries* in the meaning of "debauch" or "lechery" together with *libido*,<sup>108</sup> *voluptas*<sup>109</sup> and *cupiditas*.<sup>110</sup> So, Cicero remarks that, instead of going around the province and performing the duties of the praetor, Verres enjoyed his time on the shore of the Syracuse Lake in pursuit of joys and pleasures.<sup>111</sup> Or another passage from Cicero's oration: "You say nothing of those things without which this vice absolutely cannot exist: no shameless feasting, no improper love, no carousing, no lust, no extravagance is alleged;

<sup>&</sup>lt;sup>93</sup> Cic. De fin. 3.75. Cf. Cic. Pro Cael. 57.

<sup>&</sup>lt;sup>94</sup> Cic. De off. 1.106.

<sup>&</sup>lt;sup>95</sup> Cic. De fin. 2.30, 3.75; In Cat. 2.25; Pro Cael. 25, 44, 57.

<sup>&</sup>lt;sup>96</sup> Cic. De fin. 2.27, 3.75; De orat. 2.171, 3.168; In Verr. 2.2.9, 134, 2.5.87, 137; Pro Cael. 13; Pro Mur. 20; Pro Rosc. Amer. 75.

<sup>&</sup>lt;sup>97</sup> Cic. De fin. 2.70; In Verr. 2.3.106.

<sup>&</sup>lt;sup>98</sup> Cic. De leg. agr. 1.20, 2.97; In Caec. 3.

<sup>&</sup>lt;sup>99</sup> Cic. In Cat. 2.11; In Verr. 2.2.134; 2.3.22, 2.5.87.

<sup>&</sup>lt;sup>100</sup> Cic. In Verr. 2.3.106.

<sup>&</sup>lt;sup>101</sup> Cic. Post redit. in sen. 11.

<sup>&</sup>lt;sup>102</sup> Ibidem.

<sup>&</sup>lt;sup>103</sup> Cic. Pro Quinct. 30.

<sup>&</sup>lt;sup>104</sup> Cic. De orat. 2.171: avaritiam si tollere vultis, mater ejus est tollenda, luxuries.

<sup>&</sup>lt;sup>105</sup> Cic. De fin. 3.37; de orat. 2.135, 2.171, 3.168; in Caec. 3; In Verr. 2.2.9, 2.5.137; Pro Mur. 20.

<sup>&</sup>lt;sup>106</sup> Cic. De fin. 3.75.

<sup>&</sup>lt;sup>107</sup> Translated by C. D. Yonge. Cic. In Verr. 2.5.137: tua luxurie atque avaritia classis populi Romani a praedonibus capta et incensa est.

<sup>&</sup>lt;sup>108</sup> Cic. De off. 1.92, 1.123; in Cat. 2.11; in Pis. 21, 27; In Verr. 2.5.80; Post redit. in sen. 11; pro Balb. 56; Pro Cael. 25, 43, 44, 57; Pro Mur. 13.

<sup>&</sup>lt;sup>109</sup> Cic. De fin. 2.23; Pro Mur. 11, 13.

<sup>&</sup>lt;sup>110</sup> Cic. De rep. 2.IV.8.

<sup>&</sup>lt;sup>111</sup> Cic. In Verr. 2.5.80: ad luxuriem libidinesque suas.

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and when those things which have the name of pleasure, and which are vicious, are not found, do you think that you will find the shadow of luxury in that man in whom you cannot find the luxury itself?".<sup>112</sup> Here we can also see *luxuria* and *cupiditas* together: "Many pernicious excitements too to luxury, are brought over the sea to cities by commercial importation or by conquest. Even the very amenity of the situation suggests many costly and enervating allurements".<sup>113</sup>

*Luxuria* and *luxuries* are also combined with the words denoting idleness, inaction, laziness — *desidia*,<sup>114</sup> *ignavia*,<sup>115</sup> *inertia*.<sup>116</sup> Cicero leaves such a comment about elderly people: "There is nothing against which old age has to be more on its guard than against surrendering to feebleness and idleness, while luxury, a vice in any time of life, is in old age especially scandalous".<sup>117</sup> About Catiline Cicero writes that virtues of good people fight vices of bad people like Catiline, i.e. all virtues (justice, moderation, courage, prudence) struggle with all kinds of vices (injustice, depravity, sloth, recklessness).<sup>118</sup>

*Luxuria* and *luxuries* are combined with *scelus*,<sup>119</sup> *crimen*,<sup>120</sup> *flagitium*<sup>121</sup> as well. Revealing Catiline's plot to the senators, Cicero advises them to fight depravity, recklessness, crime.<sup>122</sup> In the speech "For Balba" Cicero disagrees with the accuser, who mitigates Sulla's atrocities, saying about his *luxuria*, which he branded not by any accusation of debauchery, but by vulgar scandal.<sup>123</sup> Cicero mentions *luxuries* and *libidines* when he talks about Clodia's murder, of which Marcus Caelius Rufus is undeservedly accused: "For who is there, O judges, who does not see, who is there who does not know, that in such a house as that in which the mistress of the house lives after the fashion of a prostitute,—in which nothing is done which is fit to be

<sup>&</sup>lt;sup>112</sup> Translated by C.D. Yonge. Cic. Pro Mur. 13: Nullum turpe convivium, non amor, non comissatio, non libido, non sumptus ostenditur, et, cum ea non reperiantur quae voluptatis nomen habent quamquam vitiosa sunt, in quo ipsam luxuriam reperire non potes, in eo te umbram luxuriae reperturum putas.

<sup>&</sup>lt;sup>113</sup> Translated by G.W. Featherstonhaugh. Cic. De rep. 2.IV.8: multa etiam ad luxuriam invitamenta perniciosa civitatibus subpeditantur mari, quae vel capiuntur vel inportantur; atque habet etiam amoenitas ipsa vel sumptuosas vel desidiosas inlecebras multas cupiditatum.

<sup>&</sup>lt;sup>114</sup> Cic. De off. 1.123; In Verr. 2.2.7.

<sup>&</sup>lt;sup>115</sup> Cic. De inv. 1.22; In Cat. 2.25.

<sup>&</sup>lt;sup>116</sup> Cic. De inv. 1.22; In Verr. 2.1.34.

<sup>&</sup>lt;sup>117</sup> Translated by W. Miller. Cic. De off. 1.123: Nihil autem magis cavendum est senectuti quam ne languori se desidiaeque dedat; luxuria vero cum omni aetati turpis, tum senectuti foedissima est.

<sup>&</sup>lt;sup>118</sup> Cic. In Cat. 2.25: aequitas, temperantia, fortitudo, prudentia, virtutes omnes certant cum iniquitate, luxuria, ignavia, temeritate, cum vitiis omnibus.

<sup>&</sup>lt;sup>119</sup> Cic. In Cat. 2.11.

<sup>&</sup>lt;sup>120</sup> Cic. Iro Balb. 56.

<sup>&</sup>lt;sup>121</sup> Cic. Pro Cael. 57.

<sup>&</sup>lt;sup>122</sup> Cic. In Cat. 2.2.11: cum luxuria, cum amentia, cum scelere.

<sup>&</sup>lt;sup>123</sup> Cic. Pro Balb. 56: tum luxuriam, quae non crimine aliquo libidinis, sed communi maledicto notabatur.

#### Cicero on vices

mentioned out of doors,—in which debauchery, and lust, and luxury and, in short, all sorts of unheard of vices and wickednesses are carried on, the slaves are not slaves at all?".<sup>124</sup>

It becomes clear that Cicero condemns lust for luxury because he considers it a deadly vice. Nevertheless, Cicero himself was quite a rich man. We can assume that he lived a luxurious life, having villas and estates. How can one dislike luxury in theory and love it in practice? Is not Cicero a hypocrite? We here side with M. Zarmakoupi, who notes that "in a society where villas, together with houses, were markers of social status and indicators of political aspirations, the cultural phenomenon of luxury villas was partially a product of contemporary socio-political games and became an effective part of their making".<sup>125</sup> When we dwell upon luxury in Ancient Rome, we should differentiate between the luxury associated with private life and that, associated with the socio-political sphere. As Cicero observes, the Roman people hate the luxury of private individuals, whereas they appreciate the splendour in public affairs.<sup>126</sup> Consequently, Cicero is not a hypocrite: he had numerous villas and estates not for his love of luxury, but for maintaining his high social status.

The next vice is *invidia*. Based on Cicero's context of its use, we can translate *invidia* as "hatred", "envy", "dislike", "condemnation", "ill-will", "anger". *Invidia* is used in Cicero's writings abundantly (246 examples): more often in his speeches (163), less often in his philosophical works (52), even more rarely in his correspondence (31). First of all, *invidia* means "hatred" for Cicero,<sup>127</sup> less often "envy."<sup>128</sup> There are some isolated cases of using *invidia* in the sense of ill-will,<sup>129</sup> dislike,<sup>130</sup> condemnation,<sup>131</sup> anger.<sup>132</sup> The essence of *invidia* is set forth in the second book of the treatise "On the orator", in which Cicero calls the feeling

<sup>&</sup>lt;sup>124</sup> Translated by C.D. Yonge. Cic. Pro Cael. 57: Quis enim hoc non videt, judices, aut quis ignorat, in ejus modi domo, in qua mater familias meretricio more vivat, in qua nihil geratur, quod foras proferendum sit, in qua inusitatae, libidines, luxuries, omnia denique inaudita vitia ac flagitia versentur, hic servos non esse servos...?

<sup>&</sup>lt;sup>125</sup> ZARMAKOUPI 2014, 8.

<sup>&</sup>lt;sup>126</sup> Cic. Pro Mur. 76: Odit populus Romanus privatam luxuriam, publicam magnificentiam diligit. See ZANDA 2011, 125.

<sup>&</sup>lt;sup>127</sup> Cic. Ad Att. 1.16.1, 1.16.2, 1.19.6, 2.9.1, 2.9.2, 3.23.5, 7.12.6, 10.8.7, 14.11.1, 14.21.2; Ad fam. 3.10.10, 5.17.2, 8.6.1, 10.31.3,
11.1.6, 11.28.3, 15.4.12; Ad Q. fr. 3.3.2, 1.3.1, De leg. 3.36; De off. 1.84, 1.86, 2.20, 2.58, 2.85, 3.79, 3.82; De orat. 1.228, 2.189,
2.283, 2.339, 3.8, 3.11; De rep. 1.6; Pro Balb. 16; Pro Cael. 23, 29, 30; Pro Cluent. 3, 5, 8, 9, 77, 79–81, 83, 88, 90, 93–95, 103, 130,
134, 136, 153, 160, 200–202; Pro Sest. 49, 64, 82, 93, 101, 139, 140; Brut. 54, 127, 135, 164; Pro Deiot. 33–34; De dom. 44; Pro
Mil. 40, 75, 82, 91, 98; Phil. 2.33, 2.59, 14.15, 14.17; Pro Flac. 41, 66; Pro Sul. 1, 9, 25, 79–81; De leg. agr. 2.60, 2.68–70, 3.7; In
Verr. 1.1–2, 1.4, 1.15, 2.1.5, 2.1.21, 2.1.41, 2.1.151, 2.2.45, 2.2.73–74, 2.2.137, 2.2.168, 2.3.69, 2.3.96, 2.3.98, 2.3.140, 2.3.144,
2.5.19, 2.5.21, 2.5.133; Pro Mur. 87; De har. resp. 17; In Cat. 1.22–23, 1.28–29, 2.3–4, 2.15, 3.3, 3.28–29.

<sup>&</sup>lt;sup>128</sup> Cic. Ad fam. 1.1.1, 5.9.1, 6.7.3, 9.16.5–6; De fin. 1.43, 1.67, 2.84; De off. 1.86; De orat. 2.189, 2.201, 2.206, 2.208–209, 2.214, 2.216, 2.337; Pro Balb. 18; Pro Planc. 67, 75; Pro Rab. Post. 10, 18, 48; Tusc. disp. 3.20, 4.16; De amic. 42; Top. 99; Brut. 156; De inv. 1.4, 2.37; Phil. 3.18, 14.13; Pro Quinct. 28; De leg. agr. 1.14; in Caec. 23, 46; in Verr. 2.5.181; De part. orat. 63, 66, 128; De div. 2.28.

<sup>&</sup>lt;sup>129</sup> Cic. Ad fam. 16.18.1; Pro Sest. 49; De div. 2.28; Pro Sul. 54.

<sup>&</sup>lt;sup>130</sup> Cic. Pro Sul. 1; Pro Rab. perd. 2.

<sup>&</sup>lt;sup>131</sup> Cic. Pro Cael. 15; Pro Cluen. 60; Pro Font. 20; De leg. agr. 2.38; De nat. deor. 1.123, 3.3.

<sup>&</sup>lt;sup>132</sup> Cic. Ad fam. 1.1.1; De dom. 139.

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of envy the most acute of all,<sup>133</sup> pointing out that most people envy those who are equal or lower in their position;<sup>134</sup> however, there is also envy in relation to people of a higher rank.<sup>135</sup> Cicero realises that most people are envious,<sup>136</sup> and that envy is the most common and perpetual vice.<sup>137</sup>

The next point we would like to dwell on is the use of *invidia* and *invidentia* as partial synonyms: the first word means for Cicero a strong sense of envy and hatred, while the second one implies only envy, that is, a dejected state experienced for happiness of another person, although happiness does not harm the envying.<sup>138</sup>

It is also interesting to trace the verbal environment of *invidia*, its compatibility with other words, the lexical context. Cicero often links *invidia* with the words, which mean hatred (*odium*),<sup>139</sup> miserable condition (*misericordia*),<sup>140</sup> anger (*iracundia*),<sup>141</sup> or envious hostility (*obtrectatio*)<sup>142</sup>: such combinations only reinforce the importance of strong and negative feelings transmitted by *invidia*. In the treatise "On the duties" Cicero writes that "the citizen who is patriotic, brave, and worthy of a leading place in the state … will not expose anyone to hatred or disrepute by groundless charges, but he will surely cleave to justice and honour".<sup>143</sup> Here we can see that *invidia* and *odium* are used together. *Invidia* is also combined with *periculum*:<sup>144</sup> about the conspirators and Caesar's assassins Cicero remarks that the habit of delivering unprincipled speeches is being fostered to such a pitch that our—I won't say heroes—our gods, while sure of eternal glory, will yet not escape prejudice or even danger.<sup>145</sup>

Cicero distinguishes between types of hatred towards worthy people,<sup>146</sup> to tyrants,<sup>147</sup> to rich and powerful people.<sup>148</sup> We have found several cases of opposition of Cicero's *invidia* to *gloria*. When typifying hatred (*invidia*), Cicero names two of them: the first one takes place

<sup>144</sup> Cic. Ad Att. 14.11.1; Ad fam. 15.4.12; Pro Quinct. 28; De part. orat. 66.

<sup>&</sup>lt;sup>133</sup> Cic. De orat. 2.209–210: acerrimus ... omnium motus invidiae.

<sup>&</sup>lt;sup>134</sup> Ibidem: invident autem homines maxime paribus aut inferioribus.

<sup>&</sup>lt;sup>135</sup> Ibidem: sed etiam superioribus invidetur.

<sup>&</sup>lt;sup>136</sup> Cic. *De orat.* 2.209. On envy as an innate feeling, see de la Mora, 2000, p. 14.

<sup>&</sup>lt;sup>137</sup> Cic. De orat. 2.210: plerique sunt invidi maximeque hoc est commune vitium et perpetuum. See Zerba, 2002, p. 304.

<sup>138</sup> Cic. Tusc. disp. 4.16: invidentiam esse ... aegritudinem susceptam propter alterius res secundas, quae nihil noceant invidenti.

<sup>&</sup>lt;sup>139</sup> Cic. Top. 99; In Verr. 2.5.181; De off: 1.86; Pro Marc. 29; De fin. 1.67; 2.84; De orat. 2.189, 206, 208, 216; De inv. 1.4, 22.

<sup>&</sup>lt;sup>140</sup> Cic. De orat. 2.214, 216.

<sup>&</sup>lt;sup>141</sup> Cic. De orat. 2.214, 337.

<sup>&</sup>lt;sup>142</sup> Cic. De inv. 1.16, 2.37; Ad fam. 5.9.1.

<sup>&</sup>lt;sup>143</sup> Translated by W. Miller. Cic. De off. 1.86: civis et in re publica dignus principatu fugiet ... criminibus falsis in odium aut invidiam quemquam vocabit omninoque ita justitiae honestatique adhaerescet.

<sup>&</sup>lt;sup>145</sup> Cic. Ad Att. 14.11.1: sic alitur consuetudo perditarum contionum ut nostri illi non heroes sed di futuri quidem in gloria sempiterna sint, sed non sine invidia, ne sine periculo quidem.

<sup>&</sup>lt;sup>146</sup> Cic. Brut. 135; De leg. 3.26; De dom. 69; Pro Sest. 93, 139; Pro Cael. 29; Pro Mil. 75, 91, 98; Phil. 14.13, 15–17; De off. 2.20.

<sup>&</sup>lt;sup>147</sup> Cic. Pro Deiot. 33–34.

<sup>148</sup> Cic. Pro Cluent. 77; De off. 2.85, 3.82; Ad Q.fr. 3.3.2; Brut. 154.

because of severity and courage,<sup>149</sup> the second one because of weakness and cowardice,<sup>150</sup> considering the first type of hatred to be glory.<sup>151</sup> The idea of the antithesis of *invidia-gloria* is reinforced by the fact that *invidia*, when it is used by Cicero as hatred for bad people, goes together with *infamia* ("infamy").<sup>152</sup>

The next vice, *superbia*, and its derivatives (*superbus*, *superbe*) are used in Cicero's works 93 times: 44 times in his orations (17 in the invectives), 36 times in the political, rhetorical and philosophical treatises and 13 times in his epistles. In some cases, *superbia* is used in a purely ethico-philosophical meaning, as a vice opposed to a virtue.<sup>153</sup> Such usage is characteristic of Cicero's rhetorical and philosophical writings. Twice Cicero uses *superbia* in the sense of "pride" without an obvious negative connotation.<sup>154</sup> Finally, we can conclude that in Cicero's writings the nickname of Tarquin the Proud–*Superbus*–acquires a specifically political meaning: Cicero often refers to this Roman king to illustrate the injustice of the power of one person.<sup>155</sup> In fact, the concept of *rex* is often used with *superbia*.<sup>156</sup> With the help of such references to the cruel and arrogant Tsar Tarquin the Proud and a sole ruler as a whole, Cicero probably proves that the reign of one person is associated with serious violations and abuses of power.

*Superbia* and its derivatives are used by Cicero in a synonymic series with *adrogantia/arrogantia* (6 examples) and *insolentia* (5 examples). In the treatise "On the duties" Cicero remarks, "Let us diligently avoid all arrogance, haughtiness, and pride".<sup>157</sup> This is what Cicero writes about Quinctius: "You know what a tribune-like pride and arrogance he has. How great was the animosity which he displayed! O ye immortal gods! how great was his pride! how great his ignorance of himself! how preposterous and intolerable was his arrogance!".<sup>158</sup>

<sup>&</sup>lt;sup>149</sup> Cic. In Cat. 1.29: severitatis ac fortitudinis invidia.

<sup>&</sup>lt;sup>150</sup> Ibidem: invidia inertiae ac nequitiae.

<sup>&</sup>lt;sup>151</sup> Ibidem: Quodsi ea mihi maxime inpenderet tamen hoc animo fui semper, ut invidiam virtute partam gloriam, non invidiam putarem.

<sup>152</sup> Cic. In Verr. 2.2.45, 68, 3.3.69, 144.

<sup>&</sup>lt;sup>153</sup> Cic. Ad fam. 3.7.4, 4.9.4; De amic. 50; De fat. 8; De inv. 1.22, 101, 105, 2.108, 178; De orat. 1.99, 2.165, 257, 342; De part. orat.
65, 81; Orat. 150; Top. 4; Tusc. disp. 1.17, 71.

<sup>&</sup>lt;sup>154</sup> Cic. Ad fam. 1.10; De leg. agr. 2.95.

 <sup>&</sup>lt;sup>155</sup> Cic. De amic. 28, 54; De div. 1.43; De off. 3.40; De rep. 1.58, 62, 2.28, 46; Parad. stoic. 1.2; Phil. 3.9; Pro Rab. perd. 13; Tusc. disp. 1.38, 3.27.

<sup>&</sup>lt;sup>156</sup> Cic. Ad Att. 2.8.1, 6.3.7, 13.28.3; Pro Rab. perd. 13; Pro Sul. 25.

<sup>&</sup>lt;sup>157</sup> Translated by W. Miller. Cic. De off. 1.90: superbiam magnopere, fastidium arrogantiamque fugiamus. Cf. Cic. De off. 2.165; De rep. 1.48; Pro Cluent. 109, 112; Pro Sul. 25.

<sup>&</sup>lt;sup>158</sup> Translated by C.D. Yonge. Cic. Pro Cluent. 109: Jam insolentiam noratis hominis, noratis animos ejus ac spiritus tribunicios. Quod erat odium, di immortales, quae superbia, quanta ignorantia sui, quam gravis atque intolerabilis arrogantia! Cf. Cic. De rep. 1.51; In Verr. 2.4.89; Phil. 8.21; Pro Marcel. 9.

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Superbia is combined with crudelitas 16 times. Cicero writes that after being announced a tsar, Alexander the Great was superb, cruel and immoderate.<sup>159</sup> Cicero notes about Verres, "Whatever luxury could accomplish in the way of vice, cruelty in the way of punishment, avarice in the way of plunder, or arrogance in the way of insult, had all been borne by them [Sicilians] for the last three years, while this one man was praetor".<sup>160</sup> Sicilians "were unable to endure luxury, cruelty, avarice, and pride, when they had lost by the wickedness and lust of one man all their own advantages, all their own rights, and all fruits of the kindness of the senate and the Roman people".<sup>161</sup> In this passage of the invective against Verres we should also pay attention to *luxuries*, which is characteristic of Cicero's invectives.<sup>162</sup> Another example of the joint use of *superbia* and *crudelitas* can be found in the same book of the speech against Verres, in which Cicero mentions Verres's thefts, robberies, greed, cruelty, arrogance, atrocities, audacity.<sup>163</sup> Together with *superbia* and its derivatives, Cicero also uses *contumacia* (6 examples), accusing  $Piso^{164}$  and  $Verres^{165}$  of being stubborn. *Superbia* is also combined with contumelia (5 examples): we can recall the already mentioned passage in the speech "Against Caecilius", which informs us about Verres's arrogance for insults (superbia in contumeliis).<sup>166</sup> Cicero associates the arrogance (superbia) of the politicians in the Republican Rome with crime: scelus and superbia are often used together (5 examples). Cicero writes about Mark Antony that one can notice not only his boldness and atrocities but also insolence and impudence.<sup>167</sup> We can name many other negative ethical and political categories that we have found next to superbia. The most complete list is presented in the speech "Against Piso", where Cicero defines Piso as dishonest (*improbus*), cruel (*crudelis*), thievish (*furunculus*), greedy (rapax), shameful (sordidus), stubborn (contumax), haughty (superbus), cunnung (fallax), insidious (perfidiosus), shameless (impudens), insolent (audax), greedy for luxury (luxuriosus), voluptuous (libidinosus), arrogant (protervus), or dissolute (nequam).<sup>168</sup>

Finally, *superbia* and its derivatives are contrasted with the positive traits of a Roman citizen and politician, especially *sapientia* (3 examples) and *liberalitas* (1 example). In his arguments about laws, Cicero notes that the consuls' rights must inevitably appear to the

<sup>&</sup>lt;sup>159</sup> Cic. Ad Att. 13.28.3: postea quam rex appellatus sit, superbum, crudelem, immoderatum fuisse.

<sup>&</sup>lt;sup>160</sup> Translated by C.D. Yonge. Cic. In Caec. 3: quas res luxuries in flagitiis, crudelitas in suppliciis, avaritia in rapinis, superbia in contumeliis efficere potuisset, eas omnis sese hoc uno praetore per triennium pertulisse.

<sup>&</sup>lt;sup>161</sup> Translated by C.D. Yonge. Cic. In Verr. 2.2.9: cum perferre non possent luxuriem, crudelitatem, avaritiam, superbiam, cum omnia sua commoda, jura, beneficia senatus populique Romani unius scelere ac libidine perdidissent.

<sup>&</sup>lt;sup>162</sup> Ibidem. Cf. Cic. De leg. agr. 2.97; In Caec. 3; In Pis. 27.

<sup>&</sup>lt;sup>163</sup> Cic. In Verr. 2.5.32: hujus furta, rapinas, cupiditatem, crudelitatem, superbiam, scelus, audaciam.

<sup>&</sup>lt;sup>164</sup> Cic. De prov. cons. 8.

<sup>&</sup>lt;sup>165</sup> Cic. In Verr. 2.2.192, 2.3.5, 2.4.89.

<sup>&</sup>lt;sup>166</sup> Cic. In Caec. 3. Cf. Cic. De leg. agr. 2.79; Phil. 5.24; Pro Quinct. XXXI, 97; Pro Sul. 25.

<sup>&</sup>lt;sup>167</sup> Cic. Phil. 8.21: M. Antoni non solum audaciam et scelus, sed etiam insolentiam superbiamque perspeximus. Cf. Cic. De leg. agr. 2.97; De prov. cons. 5; In Verr. 2.5.32; Post red. in sen. 17.

<sup>&</sup>lt;sup>168</sup> Cic. In Pis. 27.

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people as abusive and fraught with violence, but they were given a moderate and wise restriction.<sup>169</sup> With regard to the opposition of *superbia* to *liberalitas* in Cicero's speech "On the Consular Provinces", we should say specifically: here Cicero ironically speaks of his pseudo-conjecture and Caesar's pseudo-penitence, because even then, in 56 B.C., he feared for the safety of the Roman Republic, when such ambitious politicians as Caesar aspire to power. We read Cicero: "I must fear that they will blame rather the arrogance that I responded to his generous favours than his unfair treatment of our friendship".<sup>170</sup>

The seventh vice we are going to discuss is *licentia*. We have found 79 cases of its use in Cicero's treatises. We do not dwell on 25 cases of Cicero's use of this concept in another, not political sense: either in the sense of "liberty or freedom to write/talk about something",<sup>171</sup> or in the sense of "liberty, or arbitrary assumption, or freedom" in a religious or philosophical context.<sup>172</sup> We do it because the meaning in these cases is positive and simple: "liberty". As for the remaining cases of using *licentia*, they have negative political connotations, although the minority of them also have a positive meaning of "liberty"<sup>173</sup> and sometimes forms a synonimic series with *libertas*.<sup>174</sup> Interestingly, in the speech "For Flaccus" *libertas* and *licentia* also occur as synonyms, but already in the negative meaning, in the sense of "the immoderate liberty and licentiousness of the popular assemblies".<sup>175</sup>

Let us analyse in more detail Cicero's *licentia* in the negative political context. In this sense, *licentia* can be translated as "permissiveness", "promiscuity", "self-will", "arbitrariness", "shamelessness", "unlimited freedom". It is not used in isolation but as part of a specific conceptual apparatus. *Licentia* is combined with the words of an ethical and philosophical nature (usually denoting virtues and vices) and with the Roman political and juridical terms. *Licentia* is more often met near the words denoting crime: *scelus* (6 examples), *crimen* (4), *injuria* (4), *vis* in the sense of "violence" (3), *facinus* (2), etc. It goes together with *pecunia* as a source of profit (7 examples) as well as some other vices or negative emotions: *voluntas* (7 times), *libido* in the sense of "arbitrariness" (6), *impunitas/inpunitas* (6), *audacia* (4), *improbitas* (4), *metus* (4), *crudelitas* (3), *luxuria/luxuries* (3), *temeritas* (3), *vitium* (2), etc. *Cupiditas* is also often combined with *licentia* (9 times), designating rampant desires, including thirst for

<sup>&</sup>lt;sup>169</sup> Cic. De leg. 3.17: jus enim illud solum superbius populo, <sed> et violentius videri necesse erat ... quo ... modica et sapiens temperatio accessit. Cf. Cic. De leg. agr. 2.97; Pro Marcel. 9.

<sup>&</sup>lt;sup>170</sup> Translated by C.D. Yonge. Cic. De prov. cons. 42: est mihi verendum ne mea superbia in illius liberalitate quam ne illius injuria in nostra amicitia reprendatur.

<sup>&</sup>lt;sup>171</sup> Cic. ad fam. 12.17.2; De nat. deor. 1.123; De orat. 1.170, 3.153, 169, 185; Orat. 37, 68, 153, 155; Pro Lig. 23; Pro Mur. 20; Tusc. disp. 1.6.

<sup>&</sup>lt;sup>172</sup> Cic. Brut. 316; De div. 2.127, 150; De fat. 15, 38; De nat. deor. 1.65, 93, 107, 2.7; De off. 1.103, 148, 3.20; Tusc. disp. 4.71.

<sup>&</sup>lt;sup>173</sup> E.g. Cic. Phil. 1.34.

<sup>&</sup>lt;sup>174</sup> Cic. Pro Cael. 57; de rep. 4.4; In Verr. 2.3.3.

<sup>&</sup>lt;sup>175</sup> Translated by C.D. Yonge. Cic. Pro Flac. 16: libertate immoderata ac licentia (contionum).

glory.<sup>176</sup> The combination of *licentia* and *servitus* is also worth mentioning: in the speech "On his House" Cicero opposes permissiveness of an official to slavery of his subordinates,<sup>177</sup> while in the dialogue "On the Commonwealth" he agrees with Plato that due to extreme wilfulness, which these people consider the only freedom, a tyrant is born, so freedom itself makes these excessively free people slaves.<sup>178</sup> One more word combination attracts our attention: interdependence of permissiveness (licentia) and perdition (pernicies) of a person, state or public relations because of useless people (perditi homines). Thus, Cicero writes that, as a result of the crime of bad citizens ... his house laras were desecrated, the church of Selfwill was built in their dwelling.<sup>179</sup> Or: "That divine power; that very same divine power which has often brought incredible prosperity and power to this city, has extinguished and destroyed this mischief; by first of all inspiring it with the idea of venturing to irritate by violence and to attack with the sword the bravest of men, and so leading it on to be defeated by the man whom if it had only been able to defeat it would have enjoyed endless licence and impunity".<sup>180</sup> For completeness of the picture with respect to viciousness of permissiveness, it is important to cite the combination of *licentia* and *libido*: Cicero writes about Verres that "the licentiousness and lust of that man who thought himself king of the Sicilians, was much the same".<sup>181</sup> Our attention is also drawn to the combination of licentia and injuria: in the speech against Verres Cicero points out that many cultivators, "on account of the insults and licentiousness of the collectors, actually killed themselves".<sup>182</sup>

*Licentia* is also used with the words denoting positive ethical, philosophical, political or juridical categories: *judicium* (11 examples), *libertas* (8), *lex* (7), *potestas* (7), *auctoritas* (5), *imperium* (5), *ratio* (5), *jus* (4), *fides* (3), *fortitudo* (3), *mos* (3), *pudor* (3), *religio* (3), *sapientia* (3), etc. We would like to elaborate on the following antitheses: *licentia* vs. *libertas*, *licentia* vs. *licentia* 

<sup>&</sup>lt;sup>176</sup> Cic. Pro Sest. 134.

<sup>&</sup>lt;sup>177</sup> Cic. De dom. 131: Tu cum ferro, cum metu, cum edictis, cum privilegiis, cum praesentibus copiis perditorum, absentis exercitus terrore et minis, consulum societate et nefario foedere servitute oppressam civitatem teneres ... tu in civis optime de re publica meriti cruore ac paene ossibus simulacrum non libertatis publicae, sed licentiae conlocasti.

<sup>&</sup>lt;sup>178</sup> Cic. De rep. 1.68: ex hac nimia licentia, quam illi solam libertatem putant ... nasci tyrannum ... sic hunc nimis liberum populum libertas ipsa servitute adficit.

<sup>&</sup>lt;sup>179</sup> Cic. De leg. 2.42: Omnia ... perditorum civium scelere ... vexati nostri Lares familiares, in eorum sedibus exaedificatum templum Licentiae.

<sup>&</sup>lt;sup>180</sup> Translated by C.D. Yonge. Cic. Pro Mil. 84: Ea vis igitur ipsa, quae saepe incredibilis huic urbi felicitates atque opes attulit, illam perniciem exstinxit ac sustulit; cui primum mentem injecit, ut vi irritare ferroque lacessere fortissimum virum auderet, vincereturque ab eo, quem si vicisset habiturus esset impunitatem et licentiam sempiternam.

<sup>&</sup>lt;sup>181</sup> Translated by C.D. Yonge.Cic. In Verr. 2.3.77: Eandem istius, qui se regem Siculorum esse dicebat, licentiam libidinemque fuisse. Cf. Cic. In Verr. 2.3.210.

 <sup>&</sup>lt;sup>182</sup> Translated by C.D. Yonge. Cic. In Verr. 2.3. 129: propter injurias licentiamque decumanorum mortem sibi ipsi consciverint.
 <sup>183</sup> Cic. Pro Cael. 57; De rep. 4.4; In Verr. 2.3.3.

of the examples prove the opposition of these terms.<sup>185</sup> For example, in the dialogue "On the Commonwealth", Cicero states that if the people have the most power and everything is at their discretion, this is called freedom, but in reality, it is anarchy.<sup>186</sup> With this regard, T. Reinhardt correctly notes that licentia in this case means "the excessive freedom of the individual without regard for anything like a common cause".<sup>187</sup> We believe that *licentia* here also implies permissiveness or arbitrariness. For Cicero, the right government is not the rule of all people, but the best, i.e. optimates,<sup>188</sup> those who possess virtues.<sup>189</sup> Others may misuse power, which can lead to abuse, in particular, to arbitrariness (licentia). As Ch. Wirzsubski puts it, "it is the notion of restraint and moderation that distinguishes libertas from licentia, whose salient feature is arbitrariness; and libertas untempered by moderation degenerates into *licentia.* True *libertas*, therefore, is by no means the unqualified power to do whatever one likes; such power-whether conceded or assumed-is licentia, not libertas".<sup>190</sup> The next antithesis, licentia-lex, can be illustrated by an example from the speech "For Sestius". In it, Cicero condemns Vatinius, who disregarded the law on gladiators, but at the same time does not fear the consequences of such self-will, such disregard for the laws.<sup>191</sup> In the treatise "Cato the Elder: On Old Age" Cicero puts *licentia* and *aloria* together, citing Gajus Duellius as an example, who in his old age completely lost his head from fame, for glory inspired him with so much willfulness!<sup>192</sup>

The last vice we are going to discuss is *libido*. Cicero uses it more than 300 times. More often we see it in his speeches (*in Verr., Phil., in Pis., pro Cael., pro Cluent., pro Sul.*), especially in his invectives (*in Verr., Phil., in Pis.*). Besides, the term is met in Cicero's political, ethical and philosophical writings (*de off., de rep., de sen., de amic., Tusc. disp., de fin.*).

Libido and its derivatives (libidinosus, libidinose) have a political connotation, especially in Cicero's invectives (in Verr., Phil., in Pis., in Caec.), more rarely in his other writings (ad Att., ad fam., de dom., de inv., de leg. agr., de leg., de orat., de rep., Orat., pro Caec., pro Cluent., pro Flacc., pro Planc., pro Rab. Post., pro Sest., pro Sul., etc.). In political discourse libido means "arbitrariness", "self-will", "whim", "promiscuity". Libido is used in the meaning of abuse of power, of which Cicero accuses bad rulers (Caesar), tyrants (Tarquin the Proud and his

<sup>&</sup>lt;sup>184</sup> Cic. Pro Flac. 16.

<sup>&</sup>lt;sup>185</sup> Cic. Ad Q. fr. 1.7.22; De dom. 131; De rep. 1.67–68, 3.23; Pro Cael. 7; Pro Scaur. 38; pro Sest. 103.

<sup>&</sup>lt;sup>186</sup> Cic. De rep. 3.23: si vero populus plurimum potest, omniaque ejus arbitrio geruntur, dicitur illa libertas, est vero licentia. Cf. Cic. De rep. 1.68.

<sup>&</sup>lt;sup>187</sup> REINHARDT 2005, 172. Cf. WOOD 1988, 150.

<sup>&</sup>lt;sup>188</sup> Cic. De rep. 3.23.

<sup>&</sup>lt;sup>189</sup> Cic. De rep. 1.51.

<sup>&</sup>lt;sup>190</sup> WIRZUBSKI 1968, 7.

<sup>&</sup>lt;sup>191</sup> Cic. Pro Sest. 134. Cf. Cic. In Verr. 2.3.220.

<sup>&</sup>lt;sup>192</sup> Cic. De sen. 44: tantum licentiae dabat gloria.

family), governors (Verres), senators (Catiline), judges, witnesses in court, etc.<sup>193</sup> We have also found several cases of using *libido* as applied to enemies, in the sense of creeps (of barbarians),<sup>194</sup> demands (of Gauls),<sup>195</sup> whims (of enemies).<sup>196</sup> In our opinion, *libido* in such use can also be regarded as political. *Libido* as a political category goes together with the following negatively connotated words: *scelus* (11 times), *crudelitas* (8), *cupiditas* (6), *audacia* (5), *improbitas* (4), *avaritia* (3), *impudentia* (3), *licentia* (3), *metus* (3), *odium* (3), *crimen* (2), *infamia* (2), *invidia* (2), *luxuria/luxuries* (2), *turpitudo* (2), etc. As J.R. Dunkle rightly observes, the mentioned terms, *libido* as well, can be named "words of abuse".<sup>197</sup>

Let us say a few words about the combination of *libido* and *avaritia*. About Verres Cicero writes, "While he was praetor, everyone in Sicily owns only what has eluded the immoderate greed and arbitrariness of this man — whether because he has missed it, or because was already fed up".<sup>198</sup> Another Cicero's remark on Verres's crimes: "With respect to this matter alone (the war with the pirates), he committed all his most enormous crimes,—crimes of avarice, of treason, of insanity, of lust and of cruelty".<sup>199</sup>

*Libido* as a political term is contrasted with some positively connotated words. They can be either the Stoic virtues or categories of the Roman political practice: *auctoritas* (6 examples), *religio* (6), *prudentia* (3), *aequitas* (2), *conscientia* (2), *continentia* (2), *dignitas* (2), *fides* (2), *innocentia* (2), *officium* (2), *virtus* (2), etc. Many of Cicero's arguments about tyrants and other bad rulers are based on the opposition of *libido* to *lex*:<sup>200</sup> *libido* symbolises bad power based on arbitrariness, as opposed to good one, which is built on compliance with laws.<sup>201</sup>

As an ethical and philosophical category, *libido* implies "lust", "lasciviousness", "debauchery", "depravity", "excessive bodily passion", "love affair or connection", "voluptuousness", or "passionate desire". Cicero sees this vice in his contemporaries, especially in those who occupy high positions in the Republic, as well as young people in

 <sup>&</sup>lt;sup>193</sup> Cic. In Verr. 1.13, 35, 56, 2.1.77–78, 81–82, 120, 2.2.9, 39–41, 97, 2.3.5–6, 16, 56, 77, 82, 95, 117, 205, 208, 210, 220, 2.4.112, 115, 2.5.42, 85, 128, 145; Phil. 13.17; In Pis. 16, 21, 39; In Caec. 9, 57; Ad Att. 7.9.4; Ad fam. 9.16.3; De dom. 106; De leg. agr. 2.14, 55; De leg. 3.34; De orat. 3.4; De rep. 1.65, 2.59, 63; Orat. 167; Pro Caec. 76, 77; Pro Cluent. 61, 159; Pro Flacc. 26, 51; Pro Marc. 23; Pro Planc. 30; Pro Rab. Post. 1, 11, 22, 25, 43, 45; Pro Sest. 20, 93; Pro Sul. 16, 78, 79, etc.

<sup>&</sup>lt;sup>194</sup> Cic. Pro Font. 4.

<sup>&</sup>lt;sup>195</sup> Cic. Pro Font. 36.

<sup>&</sup>lt;sup>196</sup> Cic. Pro Font. 49.

<sup>&</sup>lt;sup>197</sup> DUNKLE 1967, 151.

<sup>&</sup>lt;sup>198</sup> Translated by C.D. Yonge. Cic. In Verr. 1.4.13: Hoc praetore ... tantum quisque habet in Sicilia, quantum hominis avarissimi et libidinosissimi aut imprudentiam subterfugit, aut satietati superfuit.

<sup>&</sup>lt;sup>199</sup> Translated by C.D. Yonge. Cic. In Verr. 2.5.42: in hoc uno genere omnis inesse culpas istius maximas avaritiae, majestatis, dementiae, libidinis, crudelitatis.

<sup>&</sup>lt;sup>200</sup> Cic. In Verr. 1.13, 56, 82, 2.2.39–41, 2.3.5, 16, 82, 117, 205, 220, 2.4.112; In Pis. 16, 39; De inv. 2.132; De leg. agr. 2.14; De rep. 2.63; Ad Att. 9.7.5; Pro Cluent. 159; Pro Marc. 23.

<sup>&</sup>lt;sup>201</sup> DUNKLE 1967, 168.

general.<sup>202</sup> Sometimes, for example, in philosophical reasoning about enjoyment, Cicero uses the term in a neutral sense, referring to *libido* as a bodily passion opposed to spiritual pleasure,<sup>203</sup> or as an attraction to copulation as a natural instinct,<sup>204</sup> or as a purely philosophical category, without any negative emotions.<sup>205</sup> It is also necessary to mention Cicero's arguments about the use of passions by people during the rituals<sup>206</sup> and about the gods, which are mad about lust:<sup>207</sup> in his interpretation, religion and passions are incompatible in human life, although he admits the presence of depravity in the existence of the gods. It is also interesting to analyse Cicero's thoughts about libido in the framework of the Stoic doctrine of moral beauty and virtues: he persistently repeats the idea that "Nature and Reason, extending the analogy of this from the world of sense to the world of spirit, find that beauty, consistency, order (pulchritudinem, constantiam, ordinem) are far more to be maintained in thought and deed, and the same Nature and Reason are careful to do nothing in an improper or unmanly fashion (indecore), and in every thought and deed to do or think nothing capriciously (libidinose)".<sup>208</sup> In his "Stoic Paradoxes" Cicero writes of passion as a general philosophical category: as a passion for augmenting wealth or a passion for other vices.<sup>209</sup>

Cicero uses some other vices and negative ethical and philosophical categories in the same context with *libido* as a vice. They are *flagitium* (16 cases), *scelus* (16), *avaritia* (14), *cupiditas* (14), *vitium* (14), *audacia* (12), *crudelitas* (12), *facinus* (12), *luxuria/luxuries* (12), *nequitia* (10), *stuprum* (10), *turpitudo* (10), *dedecus* (7), *intemperantia* (7), *improbitas* (6), *vitium* (6), *petulantia* (5), etc. *Libido* as an ethical category is opposed to such virtues and positive moral categories as virtus (9 cases), *pudicitia* (5), *religio* (5), *temperantia* (5), *constantia* (3), *industria* (3), *moderatio* (3), *pudor* (3), *sapientia* (3), *conscientia* (2), *fides* (2), *honestum* (2), *innocentia* (2), *liberalitas* (2), *modestia* (2), *officium* (2), *prudentia* (2), etc.

<sup>203</sup> Cic. De fin. 3.35; De rep. 6.29; In Verr. 2.1.57; Tusc. disp. 3.46.

<sup>204</sup> Cic. De nat. deor. 2.128; De off. 1.54. Cf. Cic. Pro Sest. 110.

<sup>&</sup>lt;sup>202</sup> Cic. Ad Att. 1.16.1, 1.18.2, 1.19.8, 6.1.2, 6.3.1; De amic. 19, 35, 47, 83; De dom. 23, 93, 126; De fat. 8, 10; De fin. 1.46–47, 50–51, 59, 2.66, 73, 3.32, 5.62; De har. resp. 38, 42; De imp. Pomp. 40, 65; De inv. 1.32; De leg. 1.51, 3.31; De nat. deor. 3.71, 91; De off. 1.92, 102, 122–123; De orat. 2.342; De part. orat. 34; De prov. cons. 6, 8, 16, 24; De rep. 1.60; De sen. 7, 29, 36, 42, 49; In Cat. 2.11; In Pis. 27; In Verr. 1.14, 2.1.62–64, 68, 86, 2.2.115, 134, 192, 2.3.4, 23, 60, 76, 2.4.17, 111, 2.5.28, 30, 32, 2.5.80, 82, 137, 189; Phil. 2.15, 45, 71, 104, 115, 3.28, 35, 5.33, 6.4, 8.16, 11.9, 13.10, 13.17, 14.19; Post redit. in quir. 13; Post redit. in sen. 11, 13–15; Pro Balb. 56; Pro Cael. 1–2, 10, 12–13, 25, 30, 34–35, 38, 43, 45, 47, 49, 53, 55, 57, 70, 78; Pro Cluent. 12, 14–15, 36, 188; Pro Font. 38, 40; Pro Mil. 73, 76; Pro Mur. 13; Pro Scaur. 6, 8, 13; Pro Sul. 58, 70–71, 76, etc.

<sup>&</sup>lt;sup>205</sup> Cic. De off. 3.39, 117; De orat. 1.194; Tusc. disp. 1.72, 80, 2.12, 58, 3.4, 7, 11, 17, 23–25, 27, 4.8, 11–12, 15, 21, 24, 34, 44, 55, 57, 60, 72, 5.16, 20, 42–43, 48, 101.

<sup>&</sup>lt;sup>206</sup> Cic. De leg. 2.36–37.

<sup>&</sup>lt;sup>207</sup> Cic. De nat. deor. 1.42.

<sup>&</sup>lt;sup>208</sup> Translated by W. Miller. Cic. De off. 1.14. Cf. Cic. De sen. 39–41.

<sup>&</sup>lt;sup>209</sup> Cic. Parad. stoic. 1.1, 3.1, 5.1. Cf. Cic. Pro Quinct. IV.14; Pro Sest. 22.

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To sum up, the analysed vices form the core of Cicero's ethical, philosophical, political and juridical conceptual apparatus alongside with the positive categories mentioned in the article. Cicero's usage of them is similar, although there are some nuances in each of them. As for avaritia, Cicero defines it as a disease, lust for money. It is often combined with libido, crudelitas, audacia and luxuria. Cicero uses it both in ethical and political sense. It is opposed either to the Stoic ethical categories (honestas, fortitudo, diligentia, liberalitas, sapientia) or to the Roman ethical and political categories (amicitia, imperium, lex, odium, potestas, religio). The second term, *crudelitas*, is used by Cicero in the political context with the words denoting crimes, vices, tyrants/usurpers and unjust war. It is interchangeable with its synonym acerbitas. Cicero contrasts crudelitas with ethical categories (virtus, honestas, misericordia, clementia, diligentia, innocentia, beneficium, humanitas, fortitudo, constantia, magnitudo animi) as well as political and juridical ones (auctoritas, dignitas, lex, potestas, imperium, gloria). Cicero uses audacia in the positive meaning of "courage" and in the negative sense of "impudence" or "audacity" (the second meaning is of special interest to us). Audacia often goes together with the words, which mean crime or atrocity (scelus, crimen, facinus, nefarium, flagitium, caedes, parricidium), vices or negative emotions (improbitas, libido, impudentia, crudelitas, turpitudo, avaritia, voluntas, nequitia, metus, invidia, acerbitas, temeritas, odium), with pecunia in the meaning of "lust for money". It is opposed to the words, which possess a positive ethical, philosophical, political or juridical meaning (dignitas, lex, auctorita, imperium, fides, diligentia, honestas, religio, fortitudo, potestas, innocentia, pudor, bonitas/vir bonus, libertas, sapientia, humanitas, justitia, prudentia, moderatio, modestia). Cicero's luxuria designates lust for luxury, which is a deadly defect. It is used in the same context with other vices (avaritia, licentia, superbia, nequitia, insolentia, intemperantia, libido, voluptas). It is opposed to egestas and parsimonia. The following thesis helps to understand the meaning of Cicero's luxuria better: if you want to destroy avarice (avaritia), you should destroy its mother - lust for luxury (luxuria). Cicero often uses luxuria in the meaning of "debauch" or "lechery" together with libido, voluptas and cupiditas. Luxuria is also combined with the words denoting idleness, inaction, laziness - desidia, ignavia, inertia. Luxuria is often used in the same context with the words designating crimes (scelus, crimen, flagitium). Another question is why Cicero dislikes luxury in theory and loves it in practice? When we dwell upon luxury in Ancient Rome, we should differentiate between the luxury associated with private life and that associated with the socio-political sphere. As Cicero puts it, the Roman people hate the luxury of private individuals, whereas they appreciate the splendour in public affairs. So, Cicero had numerous villas and estates not for his love of luxury, but for maintaining his high social status. Invidia, which means "hatred" or "envy", is used by Cicero abundantly. It is the most acute feeling of all, the most common and perpetual vice. Invidia is interchangeable with invidentia. Cicero often links invidia with odium, misericordia, iracundia, obtrectatio, periculum. Cicero distinguishes between different types of *invidia*: to worthy people, or tyrants, or those who are rich and powerful. Invidia is opposed to aloria. The idea of the antithesis of invidia-aloria is reinforced by the fact that invidia, used by Cicero as hatred for bad people, goes together with infamia. Cicero often uses superbia as a negative political or ethical category (in the meaning of "superciliousness" or "arrogance"), while very rarely (two times) in the sense of "pride" without an obvious negative connotation. Cicero puts it into a synonymic series with arrogantia and insolentia. Superbia is combined with crudelitas, contumacia and contumelia many times. Superbia is contrasted with such positive traits of a Roman citizen and politician, as sapientia and liberalitas. Licentia is not used by Cicero very often. Every third of its examples is not negatively connotated and means "liberty". Interestingly, sometimes licentia is synonymous with liberty (libertas), but in this case they both convey a negative meaning (e.g. in the speech "For Flaccus"). Licentia designates "permissiveness", "promiscuity", "selfwill", "arbitrariness". Cicero uses licentia in the same context with the words, which mean crime (scelus, crimen, injuria, facinus). It goes together with pecunia as a source of profit as well as some other vices or negative emotions (voluntas, libido in the sense of "arbitrariness", impunitas, audacia, improbitas, metus, crudelitas, luxuria, temeritas, cupiditas). Cicero's antithesis of *licentia-servitus* means permissiveness of an official opposed to slavery of his subordinates. Licentia is opposed to the words designating positive ethical, philosophical, political or juridical categories (judicium, libertas, lex, potestas, auctoritas, imperium, jus, fides, fortitudo, mos, pudor, religio, sapientia). We have also analysed several antitheses: licentia-libertas, licentia-lex, licentia-gloria. The last vice under question is libido. In political discourse it means "arbitrariness", "self-will", "whim", "promiscuity", "abuse of power". Cicero uses libido in the meaning of abuse of power when he accuses bad rulers (Caesar), tyrants (Tarquin the Proud and his family), governors (Verres), senators (Catiline), judges, witnesses in court. There are several cases of *libido* as applied to enemies, in the sense of creeps of barbarians, demands of Gauls, whims of enemies. It goes together with such negatively connotated words as *scelus*, crudelitas, audacia, improbitas, avaritia, impudentia, licentia, metus, odium crimen, infamia, invidia, luxuria, turpitudo. It is contrasted with such positively connotated words as auctoritas, religio, prudentia, aequitas, conscientia, continentia, dignitas, fides, innocentia. There is an opposition of libido to lex in Cicero's writings. In ethical and philosophical discourse libido means "lust", "lasciviousness", "debauchery", "depravity", "excessive bodily passion", "love affair or connection", "voluptuousness", or "passionate desire". In philosophical reasoning about enjoyment Cicero uses the term in a neutral sense, referring to *libido* as a bodily passion opposed to spiritual pleasure, or as an attraction to copulation as a natural instinct, or as a purely philosophical category, without any negative emotions. In its negative meaning libido goes together with flagitium, scelus, avaritia, cupiditas, audacia, crudelitas, facinus, luxuria, nequitia, stuprum, turpitudo, dedecus, intemperantia, improbitas. As a vice, libido is opposed to pudicitia, religio, temperantia, constantia, industria, moderatio, pudor, sapientia, conscientia, fides, honestum, innocentia, liberalitas, modestia, prudentia.

# References

- ARENA, V. 2010. Roman oratorical invective. In: W. Dominik, J. Hall (eds), A Companion to Roman Rhetoric, 149–160. Oxford.
- ARENA, V. 2012. Libertas and the practice of politics in the late Roman Republic. Cambridge.
- BARAZ, Y. 2008. From vice to virtue: The denigration and rehabilitation of superbia in Ancient Rome. In: I. Sluiter and R.M. Rosen (eds), Kakos: Badness and Anti-Value in Classical Antiquity, 365–397. Leiden—Boston.
- BERRY, C.J. 1994. The idea of luxury: a conceptual and historical investigation. Cambridge.
- CASTER, R.A. 1997. The shame of the Romans. In: *Transactions of the American Philological Association*, vol. 127, 1–19. DOI: 10.2307/284385.

Cicero's De Provinciis Consularibus Oratio, 2015. Introduction and Commentary by L. Grillo. Oxford.

*Cicero. Philippics 3-9, 2007.* Edited with introduction, translation and commentary by G. Manuwald. Volume 1: Introduction, text and translation, references and indexes. Berlin.

Cicero: "Pro Sexto Roscio", 2010. Ed. by A.R. Dyck. Cambridge.

- COFFEE, N. 2017. Gift and gain. How money transformed Ancient Rome. Oxford.
- DE LA MORA, G.F. 2000. Egalitarian envy: the political foundations of social justice. Transl. A. T. Nicolas. San Jose-New York-Lincoln-Shanghai.
- DEVINE, A.M. 1978. A study of the Aristocratic ideal and the theme of moral decline in Latin love elegy. PhD thesis. Hobart.
- DRUMMOND, A. 1995. Law, politics and power. Sallust and the execution of the Catilinarian conspirators. Stuttgart.
- DUNKLE, J.R. 1967. The Greek tyrant and Roman political invective of the Late Republic. *Transactions and Proceedings of the American Philological Association* 98, 151–171. DOI: 10.2307/2935871.
- FRAZEL, T.D. 2009. The Rhetoric of Cicero's 'In Verrem'. Göttingen.

GORMAN, R.J., GORMAN, V.B. 2017. Corrupting luxury in Ancient Greek literature. Ann Arbor.

HALL, J. 2014. Cicero's Use of Judicial Theater. Ann Arbor.

- HUTCHINSON, G.O. 2005. Pope's spider and Cicero's writing. In: T. Reinhardt, M. Lapidge, J.N. Adams (eds), Aspects of the Language of Latin Prose, 179–194. Oxford.
- JED, S.H. 2011. Wings for our courage: gender, erudition, and republican thought. Berkeley, Los Angeles-London.
- KASTER, R.A. 2005. Emotion, restraint, and community in Ancient Rome. Oxford.
- KONSTAN, D. 2006. The concept of "emotion" from Aristotle to Cicero. Méthexis 19, 139–151.

LANGERWERF, L. 2015. 'To have daring is like a barrier': Cicero and Sallust on Catiline's audacia. *Greece and Rome* 62(2), 155–166. DOI: 10.1017/S0017383515000030.

- Latin Verse Satire: an anthology and critical reader (ed. by P.A. Miller) 2009. London–New York.
- L'HOIR, F.S. 1992. The rhetoric of gender terms: "man", "woman", and the portrayal of character in Latin prose. Leiden-New York-Köln.
- LITCHFIELD, H.W. 1914. National exempla virtutis in Roman literature. *Harvard Studies in Classical Philology* 25, 1–71.

### Cicero on vices

MCCARTER, S. 2015. Horace between freedom and slavery: the first book of Epistles. Wisconsin.

- NOVOKHATKO, A.A, 2009. The invectives of Sallust and Cicero. Berlin-New York.
- PATTERSON, J. 2015. Representing avarice in Late Renaissance France. Oxford.
- POLK, G.C. 2013. The helmsman and the charioteer in the Aeneid: emblems of power. PhD thesis. Athens, Georgia.
- REINHARDT, T. 2005. The language of epicureanism in Cicero: the case of atomism. In: T. Reinhardt, M. Lapidge, J.N. Adams (eds), *Aspects of the Language of the Latin Prose*, 151–178. Oxford.
- RICHARDS, J. 2008. Rhetoric. London–New York.
- SANDNES, K.O. 2004. Belly and body in the Pauline epistles. Cambridge.
- STEVENSON, T. 2015. Julius Caesar and the transformation of the Roman Republic. London-New York.

TAHIN, G. 2014. Heuristic strategies in the speeches of Cicero. London.

- VAN DER BLOM, H. 2010. Cicero's role models: the political strategy of a newcomer. Oxford.
- VASALY, A. 1996. Representations: images of the world in Ciceronian oratory. Berkeley-Los Angeles.
- VASALY, A. 2000. The quality of mercy in Cicero's Pro Murena. Rome and her monuments. In: S.K. Dickison, J.P. Hallett (eds), *Essays in the City and Literature of Rome in Honor of Katherine A. Geffcken*, 447–464. Wauconda.
- WIRSZUBSKI, Ch. 1961. Audaces: A study in political phraseology. Journal of Roman Studies 51(1-2), 12–22. DOI: 10.2307/298831.
- WIRZSUBSKI, Ch, 1968. Libertas as a political idea at Rome during the Late Republic and Early Principate. Cambridge.
- WOOD, N. 1988. Cicero's social and political thought. Berkeley.
- ZANDA, E. 2011. Fighting hydra-like luxury: sumptuary regulation in the Roman Republic. London–New Delhi– New York–Sydney.
- ZARECKI, J. 2014. Cicero's ideal statesman in theory and practice. London-New York.
- ZARMAKOUPI, M. 2014. Designing for luxury on the Bay of Naples: villas and landscapes (c. 100 BCE-79 CE). Oxford.
- ZERBA, M., 2002. Love, envy, and pantomimic morality in Cicero's "De oratore". *Classical Philology* 97(4), 299–321.



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# La presencia del aceite bético en *Mauretania Tingitana*. Nuevos métodos de análisis

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**Abstract**. Next 2019 will be ten years since the publication of the book "La economía de la Mauretania Tingitana (s. I-III d.C.). Aceite, vino y salazones" (Pons 2009). There we discuss the economy of the province, emphasizing the peculiarities of its food supply (imports and exports). Since then, both the scientific production of the province, with the inclusion of new data, as well as the progress in the different methods of analysis, allows us to approach the subject again, redefining some of its aspects. To carry out the following analyses, we have used the information collected in the CEIPAC online database in the framework of the EPNET project. At this point, the discovery of new data and, above all, the application of different methods of analysis can help us when dealing with complex tasks. In the present work we intend to address a series of questions about the meaning of the interprovincial food supply in Tingitana, a territory sufficiently prolific for its own supply.

**Resumen**. El próximo año 2019 se cumple una década desde la publicación de la obra «La economía de la Mauretania Tingitana (s. I-III d.C.). Aceite, vino y salazones» (Pons 2009). Allí tratamos de la economía de la provincia, haciendo hincapié en las peculiaridades de su abastecimiento en alimentos (importaciones y exportaciones). Desde entonces, tanto la producción científica de la provincia, con la inclusión de nuevos datos, así como el avance en los diferentes métodos de análisis, nos permite abordar el tema de nuevo, redefiniendo algunos de sus aspectos. Para realizar los siguientes análisis nos hemos servido de la información recogida en la base de datos online del CEIPAC en el marco del proyecto EPNET. En este punto, el descubrimiento de nuevos datos y sobretodo, la aplicación de distintos métodos de análisis puede ayudarnos a la hora de abordar tareas complejas. En el presente trabajo pretendemos abordar una serie de preguntas en torno al significado del suministro de alimentos interprovincial en la Tingitana, un territorio lo suficientemente prolífico como para su propio abastecimiento.

**Rezumat**. În 2019 se împlinește un deceniu de la publicarea lucrării "La economía de la Mauretania Tingitana (s. I-III d.C.). Aceite, vino y salazones" (Pons 2009). Noile date științifice, incluzând metode noi de analiză, ne permit o reluare a temei. Studiul de față este fondat pe informația oferită de baza de date CEIPAC din cadrul proiectului EPNET. Autorii discută semnificația aprovizionării cu alimente interprovinciale din Tingitana.

Keywords: Mauretania Tingitana, Roman economy, Roman Army, olive oil, supply, Dressel 20, network.

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"Il computer non è una macchina intelligente che aiuta le persone stupide, anzi, è una macchina stupida che funciona solo nelle mani delle persone intelligenti" — Umberto Eco, Prefazione a Cl. Pozzoli, Come scrivere una tesi di laurea con il personal computer, BUR, Milano, 1986, pp. 6–7

"We are not students of some subject matter, but students of problems. And problems may cut right across the borders of any subject matter or discipline"— Karl Popper, Conjectures and Refutations. The growth of scietific knowledge, Routledge and Kegan Paul, London, 1963, p. 88

### 1. Introducción

L. von Ranke estaría decepcionado con los historiadores de la antigüedad y arqueólogos que han intentado dar soluciones a los problemas que genera la enorme producción y distribución del aceite de la Bética en el Imperio Romano dado que no han podido contar lo que sucedió realmente, *wie es eigentlich gewesen*<sup>3</sup>. No han resuelto las incógnitas que se plantean. Naturalmente, nosotros también nos incluimos en este grupo y hacemos autocrítica. ¿Es realmente la Bética un monocultivo olivarero? ¿Existía el latifundio en la Bética o se trataba mayoritariamente de una sociedad de pequeños y medianos productores? ¿Qué porcentaje de aceite compraba el estado y cuanto ingresaba vía impuestos en natura? ¿Qué porcentaje corresponde al comercio privado y cual al estatal (annonario) en las exportaciones de aceite bético? ¿Hay una planificación en los envíos de aceite a las provincias del *limes* o a Roma, o bien se trata de decisiones aleatorias? Y por encima de todo, ¿qué es el sello?

<sup>&</sup>lt;sup>3</sup> "Man hat der Historie das Amt, die Vergangenheit zu richten, die Mitwelt zum Nutzen zukünftiger Jahre zu belehren, beigemessen: so hoher Aemter unterwindet sich gegenwärtiger Versuch nicht: er will blos zeigen, wie es eigentlich gewesen", RANKE 1885, 7. Leopold von Ranke (Wiehe, Prusia, 21/12/1795-23/05/1886) fue un historiador, considerado uno de los más importantes del siglo XIX y como uno de los padres de la historia científica y del positivismo.

Ranke basó sus teorías en documentos escritos, esencialmente filológicos<sup>4</sup>, no en unos datos tan sintéticos y contraídos en su mensaje como los sellos sobre ánforas Dressel 20. No en vano el propio H. Dressel, uno de los padres de la epigrafía anfórica, los calificó de "minuzie epigrafique"<sup>5</sup>. Aunque somos conscientes que el positivismo *per se* no resuelve todos los problemas de la historia antigua, sí es cierto que la falta de datos seriados (el Testaccio es una notable excepción) hace que deba tenerse en cuenta de modo ineludible la aportación científica procedente del ámbito de la epigrafía anfórica.

Tradicionalmente se procedió de un modo acumulativo, recogiendo, recopilando e intentando ordenar las marcas anfóricas para comprender su significado y sus implicaciones en la historia social y económica de Roma. Desde el siglo XIX se han publicado catálogos y *corpora* de sellos sobre ánforas<sup>6</sup>. La aparición de internet hizo que las bases de datos se abrieran a públicos cada vez más amplios. La base de datos del CEIPAC ha sido, de modo objetivo, con más de 43.000 registros, el culmen de esta etapa: no solamente por el número de registros sino porque su concepción permite superar la dicotomía entre corpus y/o catálogo.

La concesión de un proyecto *ERC Advanced Grant* al Prof. Remesal<sup>7</sup>, el proyecto EPNet<sup>8</sup>, creemos que ha abierto una nueva etapa. A los datos generados y estudiados de modo tradicional desde la historia antigua, se suma ahora, la informática, los sistemas de modelaje computacional<sup>9</sup> y simulaciones, la teoría de redes y los programas de visualización de *big data*. Es la entrada de las *digital humanities* en la historia de la economía del Imperio Romano.

Para evitar—en la medida de lo posible—la crítica de los colegas de metodología más tradicional, nos permitimos aludir a las citas que encabezan este trabajo: U. Eco nos recuerda que los ordenadores no piensan por si solos—aunque ciertamente sabemos que cada día lo hacen más y mejor—sino que necesitan del concurso del humano que les dirija; K. Popper, reflexiona sobre el hecho que un problema puede abarcar distintas disciplinas y, por tanto, su resolución también. Nosotros hemos intentado, por un lado, hacer preguntas inteligentes a los ordenadores y, por otro lado, trabajar en un intenso marco interdisciplinar (con físicos, informáticos y matemáticos) y en un contexto de *blue skies research*. Estas reflexiones han guiado nuestra participación en el proyecto EPNet.

<sup>&</sup>lt;sup>4</sup> *Cf.* ZERMEÑO 2002, esp. apart. 3.6. "Los problemas epistemológicos de Ranke o el arte de descifrar documentos", 99–100.

<sup>&</sup>lt;sup>5</sup> DRESSEL 1878, 189. *Cf.* REMESAL 2016.

<sup>&</sup>lt;sup>6</sup> REMESAL 2012.

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<sup>&</sup>lt;sup>8</sup> http://www.roman-ep.net.

<sup>&</sup>lt;sup>9</sup> ROMANOWSKA 2015. El trabajo pretender ser una guía para que arqueólogos e historiadores de la antigüedad entiendan los pasos técnicos que supone la confección de un modelo. Afirma que "the potencial of the technique in becoming the 'espistemological engine of our time' (...) is extremely high as simulation provides archaeologists with a much needed 'virtual lab' or 'tool to think with' for testing their ideas", ROMANOWSKA 2015.

El área de estudio escogida es la provincia *Mauretania Tingitana*, provincia norteafricana, del extremo occidente romano. Veamos su contribución a la resolución de estos problemas.

# 2. El CEIPAC en los estudios sobre economía romana

Si a alguien debe reconocerse el mérito de haber dedicado gran parte de su trayectoria científica a resolver las dudas que plantea la economía del Imperio romano y en especial todo aquello relacionado con la epigrafía anfórica es al Prof. J. Remesal. Su bibliografía y trabajos justifican esta afirmación. Desde la creación del grupo CEIPAC en 1989 orientó las distintas líneas de trabajo del mismo, por un lado, a engrosar la base de datos de epigrafía anfórica y, por otro, a realizar estudios regionales que permitieron tener una visión de conjunto de la producción y comercialización del aceite bético en el Imperio romano. Nuestra investigación sobre la *Tingitana*, por tanto, no surgió como un proyecto aislado, sino que se insertaba dentro de este fecundo marco de trabajo.

Tres líneas de investigación son básicas para analizar el fenómeno de la producción y comercialización del aceite bético: la producción de ánforas Dressel 20 en el Valle del Guadalquivir, la llegada de estas ánforas conteniendo aceite al *limes* renano-danubiano y la llegada de estas ánforas, también de modo ingente, a Roma capital, dónde eran amortizadas en el Monte Testaccio<sup>10</sup>. Otros trabajos destacables de miembros del CEIPAC<sup>11</sup> ahondan en estas líneas de trabajo<sup>12</sup>. En estos trabajos se ha puesto de manifiesto la coexistencia de un mercado dirigido y de un mercado libre a escala interprovincial. Parece ser que el Estado acaparó algunos productos de primera necesidad, pero su distribución y transporte quedó en manos de privados. Estos trabajos han permitido conocer el funcionamiento de las relaciones entre el Estado y los privados que participaron de este comercio interprovincial.

Para estudiar las importaciones y exportaciones de alimentos entre la *Tingitana* y el resto de provincias romanas nos servimos esencialmente de las ánforas con epigrafía halladas en esa provincia<sup>13</sup>. En este sentido, el análisis de las ánforas selladas permite conocer la procedencia y la fecha estimada de envasado de los alimentos contenidos (aceite, vino y salazones), básicas para examinar las diferentes dinámicas a las que la provincia estuvo sujeta. Para la investigación actual, la distribución de los sellos en Europa y el mundo circunmediterráneo es el elemento fundamental que permite establecer corrientes comerciales entre cada una de las provincias del Imperio. A pesar que la epigrafía de la

<sup>&</sup>lt;sup>10</sup> Un ejemplo de cómo la visión holística de estas tres líneas de investigación puede ser enriquecedora para el conocimiento de la economía antigua en REMESAL 2001; 2011.

<sup>&</sup>lt;sup>11</sup> REMESAL et al. 2015. FABIAO 2017, 75-88.

<sup>&</sup>lt;sup>12</sup> REMESAL 1986; 1997; REVILLA 1993; CARRERAS, FUNARI 1998; CARRERAS 2000; AGUILERA 2002; ROVIRA 2004 (T.D.); BERNI 2008; PONS PUJOL 2009; GARROTE 2015 (T.D.); MARIMON 2017 (T.D.) y BERMÚDEZ 2017 (T.D.)

<sup>&</sup>lt;sup>13</sup> PONS PUJOL 2009.

provincia estudiada en este trabajo representa un pequeño porcentaje de todo el material anfórico conocido en el imperio Romano<sup>14</sup>, no por ello deja de ser representativa y útil.

Las ánforas olearias del tipo Dressel 20 son las que mayor información pueden ofrecer ya que se hallan presentes en todo el Occidente romano y porque fueron selladas en gran número. El estudio de este tipo anfórico resulta de los más prolíficos y su bibliografía se muestra a día de hoy, casi inabarcable. Como ya sabemos las ánforas Dressel 20 provenían en su origen de más de noventa alfarerías conocidas a lo largo de las orillas del río Guadalquivir, en la *Baetica*. Muchas de ellas fueron marcadas con sellos y grafitos antes de su cocción. Su transporte—de manera continuada y por más de tres siglos—a Roma provocó el nacimiento del conocido como Monte Testaccio, un basurero controlado de cerca de 25 millones de ánforas, donde el 85 % de las ánforas son olearias de origen bético<sup>15</sup>. En él, además de sellos y grafitos se han encontrado *tituli picti*, inscripciones pintadas sobre ánforas que nos informan sobre la persona relacionada con el transporte del ánfora, la datación consular, el peso y el volumen del aceite. Además, gracias al Testaccio existen dataciones absolutas, abundantes y seriadas, que también nos dan a conocer el nombre de los personajes ligados al comercio de estas ánforas<sup>16</sup>.

Para realizar los siguientes análisis nos hemos servido de la información recogida en la base de datos online del CEIPAC y que a día de hoy supera las 43.000 fichas epigráficas. En este sentido, resulta de interés la incorporación de novedosos métodos de análisis que nos permiten abordar los datos desde un nuevo punto de vista.

#### 3. La importación del aceite bético en Tingitana

Ya ha pasado casi una década desde la publicación de la obra *La economía de la* Mauretania Tingitana (*s. I–III d.C.*). Aceite, vino y salazones (Pons 2009), basado en parte de nuestra tesis doctoral (Pons 2003). Allí tratamos de la economía de la provincia, haciendo hincapié en las peculiaridades de su abastecimiento en alimentos (importaciones y exportaciones). Desde entonces, tanto la producción científica de la provincia, con la inclusión de nuevos datos, así como el avance en los diferentes métodos de análisis, nos permite abordar el tema de nuevo, redefiniendo algunos de sus aspectos.

La suma de nuevas publicaciones ha incrementado el número de sellos conocidos en la *Tingitana*, de 402 sellos éditos<sup>17</sup>, a 513 ejemplares, según consta en la base de datos del

<sup>&</sup>lt;sup>14</sup> Si extraemos los datos de la base de datos del CEIPAC, *Mauretania* representa un 1,36% sobre el total.

<sup>&</sup>lt;sup>15</sup> RODRÍGUEZ ALMEIDA 1984; BLÁZQUEZ *et al.* 1994; BLÁZQUEZ MARTÍNEZ, REMESAL 1999; 2003; 2007; 2010; 2014.

<sup>&</sup>lt;sup>16</sup> DRESSEL 1878; RODRÍGUEZ ALMEIDA 1984; AGUILERA MARTÍN 2002; BLÁZQUEZ *et al.* 1994; BLÁZQUEZ MARTÍNEZ, REMESAL 1999; 2003; 2007; 2010; 2014.

<sup>&</sup>lt;sup>17</sup> PONS PUJOL 2009, 67–69, nota 423, con la bibliografía de la que se ha extraído la información referente a los sellos.

CEIPAC<sup>18</sup>. Si en anteriores trabajos ya destacásemos que la mayoría de estas marcas se halló sobre ánforas de tipologías diversas, también se hallaron sellos sobre *mortaria* y *dolia*. Las deducciones del presente estudio deben tomarse con prudencia debido al bajo número de sellos conocidos en la *Tingitana* se lo comparamos con las otras provincias (Figura 1), pero es

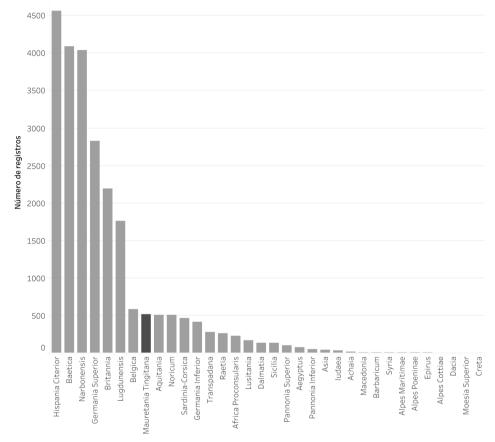


Figura 1. Epigrafía anfórica en las provincias romanas según los datos del CEIPAC<sup>19</sup>

<sup>19</sup> Quedan excluidos de la muestra los objetos hallados en Roma.

<sup>&</sup>lt;sup>18</sup> Los sellos han sido extraídos de las siguientes publicaciones. Se muestran en orden cronológico: CHATELAIN 1919; THOUVENOT 1941a; 1941b; 1949; THOUVENOT, DELPHY 1953; THOUVENOT 1954; TARRADELL 1955; EUZENNAT 1956; THOUVENOT 1956; DOMERGUE 1960; CALLU, MOREL, REBUFFAT, CALLENDER 1965; HALLIER, 1965; PONSICH, TARRADELL 1965; ZEHNACKER, HALLIER 1965; JODIN 1967; BELTRÁN LLORIS 1970; PONSICH 1970; BOUBE 1975; MARION 1976; MAYET 1978; LAPORTE 1980; GOZALBES CRAVIOTO 1982; KEAY 1984; BOUBE 1986; EDMONSON 1987; BOUBE 1988; MONKACHI 1988; PONSICH 1988; EUZENNAT 1989; RAMON TORRES 1995; BERNAL CASASOLA 1996; JUAN I BENEJAM, PONS MACHADO 1996; BERNAL CASASOLA 1997; BLANC-BIJON, CARRE, HESNARD, TCHERNIA 1998; BERNAL CASASOLA, PÉREZ RIVERA 1999; BOUBE 1999; 2000; 2001; LAGÓSTENA BARRIOS 2001; PONS PUJOL 2000a; *idem* 2000b; VILLAVERDE VEGA 2001; PONS PUJOL 2001; PONS PUJOL, BERNI MILLET 2002; ÉTIENNE, MAYET 2002; ÉTIENNE, MAYET 2004; BONET *et al.* 2005; ARAGÓN GÓMEZ *et al.* 2006; ARAGÓN GÓMEZ *et al.* 2007; HASSINI 2009; PONS PUJOL 2009; MANI 2010 y AKERRAZ, CAMPOREALE, PAPI 2013.

solamente dentro de una visión general del conjunto de marcas a nivel de todo el Imperio cuando se pueden apreciar ciertos patrones o corrientes sobre los que volveremos más tarde. Pese a ello, creemos que la suma de un mayor número de datos no debería alterar esta hipótesis, ya que, como ha demostrado ya J. Remesal, el aumento de datos no altera las proporciones previamente identificadas<sup>20</sup>.

Si en estudios anteriores vimos como el reducido número de 402 ejemplares aparecidos en la *Tingitana* hacían de las Dressel 20 el conjunto anfórico más representado, con cerca del 60%<sup>21</sup>, la suma de 111 ejemplares estabiliza la muestra, reduciendo mínimamente el porcentaje al 55%<sup>22</sup> (Figura 2). A este respecto, el aceite de oliva de la vecina Bética se muestra como el producto más importado en *Tingitana* y que ha podido dejar un rastro documental<sup>23</sup>.

La evolución de las importaciones del aceite bético, a la luz de los nuevos hallazgos, concuerdan con los estudios que ya hemos realizado con anterioridad<sup>24</sup>, destacando una primera fase del aceite importado en época inmediatamente posterior a la conquista del territorio (40–42 d.C.) y la creación de la provincia *Mauretania Tingitana*<sup>25</sup>; aumentando la diversidad y número de las marcas a mediados del s. II d.C. y disminuyendo gradualmente en el s. III d.C.<sup>26</sup>. La gran disparidad de marcas y las cronologías inferidas de otros contextos arqueológicos mejor datados, como pecios o las excavaciones del Monte Testaccio, ofrecen una variabilidad notable en las cronologías referidas. Así, al agrupar los materiales por siglos, vemos cierta similitud entre los dos primeros siglos (38,52% y 37,78%), anotando un leve descenso en el siglo tercero (23,70%)<sup>27</sup>.

Los hallazgos publicados hasta la actualidad se concentran en las cuatro ciudades más importantes de la provincia: *Banasa* (27,34%), *Volubilis* (22,47%), *Thamusida* (18,54%) y *Sala* (16,10%). Estas acaparan cerca del 84,46% del muestrario conocido<sup>28</sup>. Este hecho se debe, en primer lugar, a que la política de excavaciones en el Norte de África, desde inicios del s. XX, se ha centrado en las ciudades de urbanismo romano<sup>29</sup> y, en segundo lugar, a que es en la ciudad donde se existiría una mayor demanda de alimentos.

<sup>&</sup>lt;sup>20</sup> REMESAL 2018, 215–236 y fig. 4.

<sup>&</sup>lt;sup>21</sup> PONS PUJOL 2009, 66–67; PONS PUJOL, BERNI 2002, 1558–1558.

<sup>&</sup>lt;sup>22</sup> El porcentaje restante se divide entre ánforas de tipologías varias y un cerca de un 15% indeterminadas, reduciendo así en un 5% los casos desconocidos publicados en PONS PUJOL 2009, 67.

<sup>&</sup>lt;sup>23</sup> Otros tipos se sellaban en mucha menor proporción.

<sup>&</sup>lt;sup>24</sup> PONS PUJOL 2000a; 2000c; 2001; 2006.

<sup>&</sup>lt;sup>25</sup> PONS PUJOL 2014a.

<sup>&</sup>lt;sup>26</sup> PONS PUJOL 2009, 69.

<sup>&</sup>lt;sup>27</sup> Pese a todo, la muestra de materiales de los que conocemos la datación tan solo alcanza el 26,11%.

<sup>&</sup>lt;sup>28</sup> El 15,54% restante se reparte en: Bled Takourart (Tocolosida) (0.37%), Ile de Mogador (0.75%), Lixus (3.75%), Moulay Idriss (0.19%), Qsar el Kebir (Alcazarquivir) (0.19%), Rabat (0.94%), Sidi Slimane (0.37%), Souk-el-Arba (0.94%), Tanger (Tingi) (5,24%), *Septem* (Ceuta) (0,94%) y Rusadir (Melilla) (1,69%).

<sup>&</sup>lt;sup>29</sup> Cf. PONS PUJOL 2012, para una visión general; PONS PUJOL 2014b, para el caso concreto de Volubilis.

TR+TRI	TR-A+AFR	TR1+TRI	SIG	MOR	MA-C2B+BAE	MA-C2B	MA-C2	MA-C1B	LDC67	LA2+ITA	KE16+BAE	HA70+BAE	DR30+MCA	DR20+BAE	DR9+BAE	DR7-11+BAE	DR1	DOL	BR+BRI	BE2B+BAE	BE2A+BAE BE2B+BAE	BE2A+BAE	BE2+BAE	AMP+MCA	AMP+BAE	AMP	AL51B+LUS	AL51+LUS	AF+BYZ	AF+AFR	AF2+BYZ
4	Ц	2	9	12	ω	N	2	N	Ц	Ц	4	ω	16	285	2	14	2	ω	2	11	Ц	2	31	ω	Ц	72	ц	Ц	ω	ω	13
0,77%	0,19%	0,39%	1,74%	2,32%	0,58%	0,39%	0,39%	0,39%	0,19%	0,19%	0,77%	1,55%	3,09%	55,13%	0,39%	2,71%	0,39%	0,58%	0,39%	2,13%	0,19%	0,39%	6,00%	0,58%	0,19%	13,93%	0,19%	0,19%	0,58%	0,58%	2,51%
					se etiquecari por Tipologia Atti cos datos se tittrati eli Provincia, io que conserva matretatua Titigicana	Tipología Anf El color muestra detalles acerca de Productos. El tamaño muestra suma de Número de registros. Las marcas on otividos nor Tipología Anf. Los datos no filezos o Devincia Logia concessa Manustraia Tipolitana							2												DR20+BAE						
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Figura 2. Ánforas selladas conocidas en la Tingitana. Número, porcentaje y tipo de producto

Cabe preguntarse naturalmente por qué una provincia objetivamente productora de aceite importa este producto de su vecina, la *Baetica*. Diversas han sido las explicaciones propuestas, que hemos criticado de modo razonado<sup>30</sup>. Sobre estas explicaciones planeaba el papel de *Gades* como ciudad que pudiera haber controlado la economía de las dos orillas del estrecho de Gibraltar: se propuso la existencia de un consorcio bético-mauritano para

Nuestra propuesta es que la llegada del aceite bético a *Tingitana* estuviera vinculada al abastecimiento de las tropas en ella asentadas, tal como conocemos que sucede en otras provincias del Imperio<sup>31</sup>. Veremos si los nuevos métodos de análisis que exponemos en este trabajo corroboran esta hipótesis o la desmienten.

En cuanto al comercio de aceite protagonizado por privados en *Tingitana*, la única propuesta vino de Étienne para quién los *Ocratii* que aparecen en los *tituli delta* sobre ánforas Dressel 20 son libertos de la familia volubilitana del mismo nombre<sup>32</sup>. En nuestra opinión, el razonamiento de Étienne, siendo atractivo, ofrecía algunas dudas<sup>33</sup>.

#### 4. Nuevos métodos de análisis de los datos

Sirviéndonos de la interfaz exploratoria desarrollada en el marco del proyecto EPNet (romanopendata.eu), podemos visualizar de forma rápida los resultados sobre la epigrafía anfórica relativa a la *Tingitana*. No desarrollaremos aquí cuál es el funcionamiento interno de la tecnología semántica de esta herramienta, pero si destacaremos el valor de la misma, así "El proyecto EPNet pone énfasis en proporcionar a los historiadores herramientas computacionales para comparar, agregar, medir, geolocalizar y buscar datos acerca de inscripciones latinas y griegas sobre ánforas en el contexto del transporte de alimentos. Este enfoque se basa en el paradigma Ontology-Based Data Acces (OBDA) que permite integrar de manera virtual distintos conjuntos de datos bajo una capa conceptual (una ontología)"<sup>34</sup>.

Para obtener la visualización correspondiente a la Figura 3, la pregunta se expresa el lenguaje estandarizado de SPARQL usando un vocabulario propio de la ontología de la Web Semántica. La aquí desarrollada para conocer las ánforas selladas en el país actual de Marruecos es:

<sup>&</sup>lt;sup>30</sup> Una síntesis en PONS PUJOL 2009, 76–83.

<sup>&</sup>lt;sup>31</sup>PONS PUJOL 2004; 2009, 83–86. Sobre la captación por parte del estado del aceite, *cf* REMESAL 1986; 1997; CARRERAS MONTFORT, FUNARI 1998; TEICHNER, PONS PUJOL 2008.

<sup>&</sup>lt;sup>32</sup> ÉTIENNE 2002.

<sup>&</sup>lt;sup>33</sup> PONS PUJOL 2003, 666–667.

<sup>&</sup>lt;sup>34</sup> CALVANESE et al. 2016, 167; MOSCA et al. 2015; CALVANESE et al. 2015.

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La visualización obtenida, además de confirmar la distribución cronológica de los datos antes expuestos, testimonia la concentración de estos materiales en los núcleos urbanos. Resulta igual de interesante conocer las diferentes rutas de aprovisionamiento del aceite bético, primero, a través del comercio naval por la vertiente atlántica<sup>35</sup> y segundo, empleando las diferentes rutas terrestres<sup>36</sup> o fluviales hacia el interior del territorio de la provincia.

Gracias a los conocimientos que tenemos sobre los sellos en Dressel 20, podemos deducir el lugar de producción en la *Baetica* de estas ánforas, siendo en su mayoría aquí originarios del

<sup>&</sup>lt;sup>35</sup> Los principales puertos de la *Tingitana* eran *Lixus* (Larache) y subsidiariamente *Sala* (Rabat). En la costa Mediterránea, *Rusadir* (Melilla) y *Tingi* (Tanger) en el estrecho de Gibraltar. *Cf.* GOZÁLBES CRAVIOTO 2014, 13–33.

<sup>&</sup>lt;sup>36</sup> Sobre la trama viaria de la provincia, una síntesis en VILLAVERDE VEGA 2001, 66–74.

conventus hispalensis (83,54%)<sup>37</sup>. Sorprende el muy elevado número de ánforas presentes en la *Tingitana* procedentes de este *conventus*, ya que, por norma general, en el resto de provincias del Imperio (incluyendo las regiones de Italia), la media del conventus hispalensis es la más elevada, del 66,36%, por una sexta parte procedentes del conventus cordubensis (16,84%), y/o del conventus astigitanus (15,95%). ¿A qué responde este hecho?, ¿tuvo la Tingitana una preeminencia en la distribución de este conventus? o simplemente cuando se amplíe la muestra ¿variarán estos datos o por el contrario se mantendrán?<sup>38</sup>. En este sentido sabemos por los materiales hallados en las prospecciones de la Baetica y en las excavaciones realizadas en el Testaccio que estos dos ámbitos muestran una dinámica similar a la general del Imperio: la mitad de los ejemplares procedenten del conventus hispalensis (52,31% en la Baetica y 47,24% en el Testaccio), casi un tercio proceden del conventus cordubensis (33,82% en la Baetica y 36,19% en el Testaccio) y una sexta parte del conventus astigitanus (13,43% en la Baetica y 15,21% en el Testaccio) (Figura 4). Por lo tanto, la visualización de los datos en su conjunto mostraría un patrón de similitud entre las provincias productoras de ánforas olearias y el aceite consumido en Roma, mientras que para el resto de provincias esta información diverge. Creemos que el desarrollo de estos planteamientos puede ser interesantes de cara a futuros trabajos<sup>39</sup>.

Como siempre, el hilo conductor de nuestra investigación en la provincia *Tingitana* tiende a plantearse una serie de preguntas en torno al significado del suministro de alimentos interprovincial en un territorio lo suficientemente prolífico como para su propio abastecimiento. En este punto, el descubrimiento de nuevos datos y sobretodo, la aplicación de distintos métodos de análisis puede ayudarnos a la hora de abordar tareas complejas. Así, poder formular nuevas cuestiones a nuestros datos puede ser determinante para su comprensión histórica.

Sabemos que el mundo que nos rodea está cambiando constantemente y que la era de la información ha cambiado la forma en la que pensamos y nos comunicamos. Lo mismo pasa con nuestros datos. Si bien a lo largo de los años los investigadores en historia antigua, los arqueólogos y los epigrafistas han ido atesorando datos con motivaciones científicas, tal ha sido el volumen recogido que, sin apercibirnos de ello, se han transformado en *Big Data*. En este punto, ya es imposible para una sola persona la reflexión racional con estos datos de

<sup>&</sup>lt;sup>37</sup> Del *conventus* de *Corduba* procede el 12,03% de los materiales y del *conventus* de *Astigi* el 4,43%. En este sentido, solo conocemos la procedencia del 40,72% sobre el total de los hallados en *Tingitana*.

<sup>&</sup>lt;sup>38</sup> REMESAL 2017, fig. 4.

<sup>&</sup>lt;sup>39</sup> Este hecho puede entenderse como un testimonio de la existencia de un mercado libre en la distribución del aceite de oliva, según comunicación oral de J. Remesal. *cf*: RUBIO-CAMPILLO *et al.* 2017, 1241–1252.

#### La presencia del aceite bético en Mauretania Tingitana. Nuevos métodos de análisis

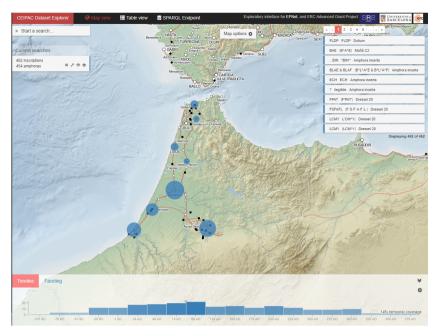


Figura 3. Visualización de las ánforas selladas en el país de Marruecos (romanopendata.eu)

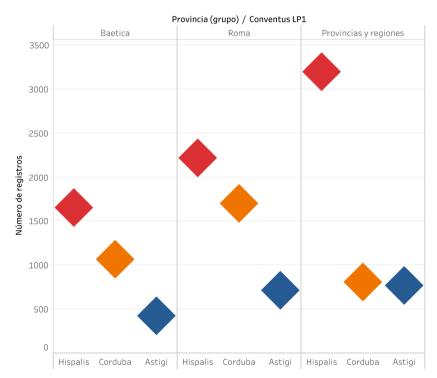


Figura 4. Distribución de sellos procedentes de los Conventus de la Baetica

modo simultáneo. Nos ayudan los instrumentos que proporcionan las *digital humanities*: una revisión de los datos sirviéndonos de nuevos métodos de análisis permite abordarlos desde un nivel de granulación menor (y con mayor rapidez), hasta poder analizar la abundancia de datos en su totalidad<sup>40</sup>. Estas dos escalas de estudio son las que deseamos destacar aquí, pasar de la visión *micro* a la visión *macro* según nuestra necesidad. Para ello, resulta indispensable obtener correctas visualizaciones de nuestra información. De esta forma ganamos perspectiva, comprendemos mejor la información y somos más eficaces como científicos<sup>41</sup>.

En base a estas premisas hemos construido un sistema de redes de la provincia donde las relaciones entre los lugares y los sellos se representan a través de las uniones de sus nodos<sup>42</sup>.

### Construcción de las redes

- *Objetivo*: representar la importancia relativa y las conexiones entre los principales lugares de hallazgo de los sellos, las familias de los sellos o los lugares en los que fueron producidos o hallados estas marcas en la Bética.

– Data cleansing/data scrubbing: el primer paso es limpiar de errores todos aquellos datos del conjunto original y eliminar todas las inscripciones poco claras a fin de evitar los nodos duplicados y mejorar la fiabilidad general.

- *Nodos*: representan las inscripciones o el lugar donde han encontrado. En esta representación, se usa un color para los sellos y otro para cada lugar de hallazgo (en el segundo caso, los colores de los LH varían también según la provincia romana).

- *Aristas*: se crean entre los sellos o los lugares de hallazgo/producción en la Bética asociados a estas marcas y los lugares donde se halló, siempre y cuando exista un testimonio de ambos, generando un gráfico bipartito entre los dos tipos de nodos. El peso de las aristas en forma de línea se define entonces como el número de ocurrencias de los sellos en sus correspondientes lugares de hallazgo.

- *Filtros*: En la primera red de *Tingitana*, los sellos fueron unificados bajo el criterio de familias, por lo tanto, proporcionar resultados más homogéneos. En la segunda red con las provincias de *Mauretania Tingitana*, *Britannia*, *Germania Inferior* y *Germania Superior*, solo se representó el componente principal de la red filtrada con pesos de aristas > 2.

La red elaborada para la provincia africana muestra una distribución de las marcas muy dispar y de mucha variabilidad entre los diversos lugares donde se halló, o dicho de otro modo, los sellos presentes en cada una de las ciudades tingitanas son distintos, no llegan los mismos sellos a todas las ciudades. Si bien es cierto que este ejercicio ya se ha realizado con

<sup>&</sup>lt;sup>40</sup> SCHMARZO 2014, 16ss.

<sup>&</sup>lt;sup>41</sup> LANKOW, RITCHIE, CROOKS 2012, 12ss.

<sup>&</sup>lt;sup>42</sup> MILGRAM 1967, 61–67; CALDARELLI, CATANZARO 2012; CANALS *et al.* 2012.

otras provincias del Imperio<sup>43</sup>, las conexiones entre los lugares resultaban mayores, es decir había sellos que se hallaban en muchas ciudades. Entonces, ¿a qué se debe este número tan bajo de relaciones entre las ciudades mauritanas?, ¿tiene que ver con el reducido número de datos conocidos hasta la fecha?, ¿indica esta heterogeneidad una importación variada de muchas *figlinae* distintas?, ¿o simplemente se constatan las diversas rutas de aprovisionamiento por sus diferentes periodos?

En consecuencia, una de las problemáticas al elaborar este tipo de redes radica en la falta de un gran conjunto de datos. Por este motivo la comparativa con otras regiones similares puede ayudarnos a destacar hechos singulares antes imperceptibles.

Recientemente se ha defendido mediante el análisis de hipótesis nulas la existencia de una organización en el comercio de aceite de oliva ligada al peso y carácter de la estructura provincial<sup>44</sup>. Para evaluar estas teorías se eligió como proxy la ruta comercial de los sellos encontrados en las ánforas olearias aquí estudiadas. De esta forma, con un dataset que supera los 8700 sellos sobre Dressel 20 se analizó la similitud de los grupos de sellos encontrados en cada yacimiento con la medida de similitud estadística conocida como coeficiente Jaccard<sup>45</sup>. Los resultados vendrían a confirman un patrón de similitudes entre las provincias del limes renano. Parece que "hay una agrupación clara de provincias con fuerta presencia de guarniciones militares. Este patrón rompe la mencionada correlación entre disimilitud de sellos y distancia geográfica. En concreto las Germanias, Britania y curiosamente Mauretania *Tingitana* comparten sellos pese a la enorme distancia espacial entre la última provincia y el resto. Si el abastecimiento de las legiones romanas hubiera sido organizado de manera centralizada entonces esperaríamos este resultado, ya que los sellos encontrados en estas provincias serían más similares que la media pese a no proceder de zonas adyacentes"<sup>46</sup> (Figura 5). Debemos puntualizar que la Tingitana, provincia imperial de rango ecuestre, fue tradicionalmente defendida por tropas auxiliares: entre 18 y 20 unidades auxiliares<sup>47</sup> o entre 7500 y 9000 soldados<sup>48</sup>. No hemos de olvidarnos que el número de reclutas auxiliares crecía año a año<sup>49</sup>. Así, confiada la provincia a los auxiliares para su control (interno) y su defensa

<sup>&</sup>lt;sup>43</sup> PRIGNANO et al. 2017.

<sup>&</sup>lt;sup>44</sup> RUBIO-CAMPILLO et al. 2018a; RUBIO-CAMPILLO et al. 2018b.

<sup>&</sup>lt;sup>45</sup> JACCARD 1901.

<sup>&</sup>lt;sup>46</sup> RUBIO-CAMPILLO *et al.* 2018°, 246. Otro trabajo que intenta comprender la economía romana usando un modelo computacional es el de BRUGHMANS, POBLOME 2016. En este caso, intenta descubrir los patrones de distribución de Terra Sigillata en el Imperio romano y llega a la conclusión de que existía una economía de mercado y que la información económica circulaba libremente. Recientemente una propuesta de AYLLÓN, PÉREZ GONZÁLEZ, REMESAL (forthcoming) analiza la distribución de aceite bético en la frontera britana del conocido como Muro de Adriano. <sup>47</sup> REBUFFAT 1998.

<sup>&</sup>lt;sup>48</sup> KUHOFF 2004, 1648.

<sup>&</sup>lt;sup>49</sup> En el año 23 d.C. se estiman 25 legiones, sumando unos 125.000 legionarios, por 250 unidades auxilares, sumando unos 125.000 soldados auxiliares según Tác. *Anales* IV. 5, mientras que a mediados del reinado de Nerón el número de auxiliares había ascendido a 200.000 hombres, cerca de 400 regimientos. *Cf.* KEPPIE 1996, 391.

(externa) la presencia de aceite exógeno a su producción en momentos puntuales de la historia de la provincia debe entenderse como el resultado del libre comercio entre privados desde la—no hay que olvidarlo—vecina *Baetica* y también como el resultado del suministro annonario (estatal) de la tropa allí asentada<sup>50</sup>. Los resultados expuestos muestran una similitud entre las provincias con una fuerte presencia militar (activa) en la vertiente atlántica<sup>51</sup>, por lo que entendemos que la *Tingitana*, pese a su distancia con las provincias de rango imperial más septentrionales, se valdría de los mismos mecanismos estatales para abastecer a sus tropas.

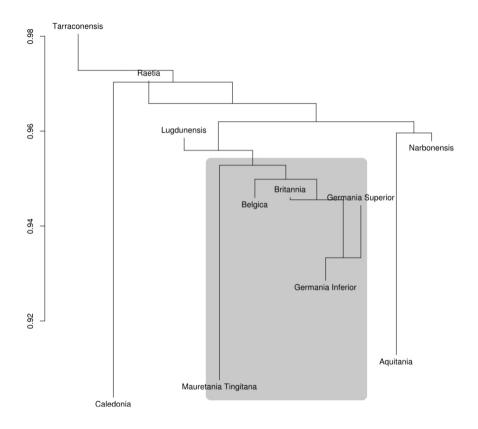


Figura 5. Clustering jerárquico de provincias en base a la similitud de su epigrafía. El análisis se ha realizado con todas las provincias en las que hay dos o más yacimientos con un mínimo de 9 sellos distintos (Rubio *et al.* 2018, fig. 4). En color gris se han destacado la agrupación que nos interesa

<sup>&</sup>lt;sup>50</sup> PONS PUJOL 2009, 125–127.

<sup>&</sup>lt;sup>51</sup> Hay discusión historiográfica general sobre si los alimentos que llegaban al *limes* renano-danubiano llegaban a través de la ruta atlántica o del río Ródano. Sobre ello: REMESAL 1986; CARRERAS MONTFORT, FUNARI 1998; CARRERAS MONTFORT 2000; CARRERAS, MORAIS, 2012; MORILLO *et al.* 2016. SCHÄFER 2017. Recientemente en RUBIO-CAMPILLO *et al.* 2018a y 2018b confirmarían matemáticamente el valor de la ruta atlántica.

Al destacar en la red cuáles fueron los lugares de producción de estas marcas, se observa un pequeño grupo más notorio entre los asentamientos tingitanos. Entre ellos están los sitios de Arva, Azanaque-Castillejo, Villar de Brenes, Huerta de Belén y La Catria. Gracias a J. Remesal y a estudios posteriores de las *figlinae* de La Catria, sabemos que de ella proceden la mayoría de Dressel 20 conocidas a lo largo de todo el Imperio, es decir, su producción anfórica se difundió

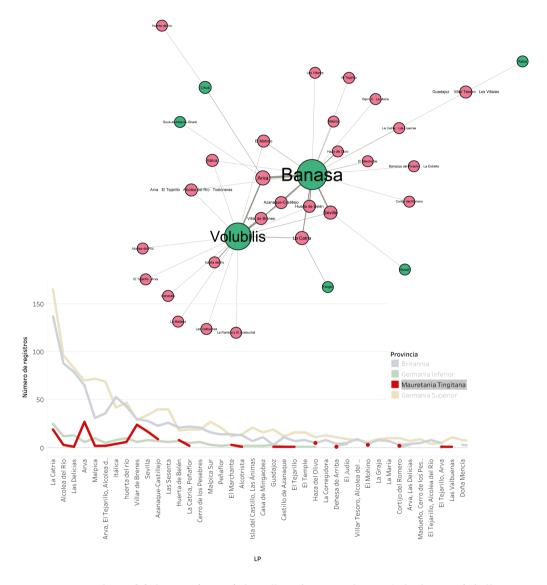


Figura 6. Arriba: Red de la procedencia de los sellos sobre Dressel 20 según los lugares de hallazgo en Mauretania. Abajo: Gráfico comparativo de los centros de producción más notorios (<20) en las provincias romanas de Germania Inferior, Germania Superior, Britania y Mauretania, esta última destacada en rojo

enormemente<sup>52</sup>. Esta norma, si bien parece repetirse en la provincia africana, también es cierto que al comparar la provincia con las dos Germanias y Britania, se acentúa una mayor distribución de las ánforas producidas en Arva y Villar de Brenes (Figura 6). ¿A qué se puede deber esto? A día de hoy todavía resulta complicado conocer el por qué de estas distribuciones puntuales dentro del complejo sistema de abastecimiento interprovincial, pero quizás, deba entenderse como una medida tomada por el Estado para garantizar el abastecimiento a los auxiliares romanos en la provincia. Si en anteriores trabajos ya vimos como las producciones de la Virginensis destacaron en la Tingitana en cronologías del siglo II d.C. en sus tres fases productivas<sup>53</sup>, la producción olearia del *Municipium Arvense* destacó en un periodo justamente anterior, desde época flavio-trajaneo a mediados del s. II d.C., con marcas como CCR vel GCR, MAEME o MAEMRVS. No pensamos que la producción del aceite mauritano fuera puntualmente interrumpida hasta el punto de no poder cubrir las necesidades de la población y de las tropas. Pero sí es cierto que la gran presencia de sellos procedentes de Arva y Villar de Brenes indica la voluntad expresa del estado romano de asegurar la satisfacción de la demanda militar en la zona con aceite procedente de dos de los centros productivos más próximos a la desembocadura del Guadalquivir y por lo tanto, de fácil y rápido acceso a las costas de Tingitana. Podría aducirse contra esta hipótesis que en los campos militares se han hallado un número reducido de ejemplares<sup>54</sup>. Y es del todo cierto, pero como hemos dicho antes, también lo es que éstos se encuentran casi sin excavar pues se priorizó la excavación de ciudades representativas del modus vivendi romano. Creemos que cuando se excaven los campos militares tingitanos aparecerán un mayor número de sellos en ánforas olearias béticas, ya que el modus operandi de la annona militaris era similar en todo el Imperio.

#### 5. Conclusiones

En primer lugar, una conclusión de tipo metodológico. La colaboración con las llamadas ciencias "puras", alejadas de la visión tradicional de la historia antigua y sus disciplinas auxiliares es deseable y necesaria por el simple hecho que los datos acumulados durante varios siglos solamente pueden estudiarse de modo integral mediante su concurso. El caso de la epigrafía anfórica es paradigmático, pero también otras temáticas de la historia social y económica de la antigüedad pueden estudiarse a través de este prisma.

En segundo lugar, las similitudes halladas entre la distribución de los sellos de la Bética en las provincias del *limes* renano y la *Tingitana*, por un lado, refuerzan nuestra hipótesis sobre la importancia del abastecimiento militar a los efectivos asentados en ella como modelo explicativo de la llegada del aceite bético a una provincia eminentemente productora. Por

<sup>&</sup>lt;sup>52</sup> REMESAL 1986. Recientemente, *cf.* PÉREZ GONZÁLEZ 2017, 80, fig. 3.

<sup>&</sup>lt;sup>53</sup> PONS PUJOL, BERNI 2002, 1548–1564.

<sup>&</sup>lt;sup>54</sup> Como ya advertimos en PONS PUJOL 2001, 933.

otro lado, somos de la opinión que estas similitudes llevan a pensar que los envíos del aceite bético annonario estaban centralizados y el estado romano entendía que las provincias fronterizas del *limes* renano y la fronteriza *Tingitana* era análogos, a pesar de la distancia y a pesar de no haber ésta última un solo legionario en ella asentado, sí *auxilia*. Si las decisiones sobre estos envíos se tomaban en *Hispalis* o en Roma, no somos capaces hoy en día de determinarlo a partir de los datos disponibles.

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# Bibliografía

- AGUILERA MARTÍN, A. 2002. El monte Testaccio y la llanura subaventina. Topografía extra portam trigeminam. Roma.
- AKERRAZ, A., S. CAMPOREALE, E. PAPI 2013. Sidi Ali Ben Ahmed-Thamusida. vol. 3.1 (materiali). Roma.
- ARAGÓN GÓMEZ, M., M.C. LECHADO GRANADOS, P. SÁNCHEZ BANDERA, A. CUMPIÁN RODRÍGUEZ 2006. Aportación al conocimiento de la ciudad púnico-rusaditana. Excavaciones en los jardines del Gobernador. IV Fase (Melilla). *Akros* 5, 81–92.
- ARAGÓN GOMÉZ, M., P.J. SÁNCHEZ BANDERA, C. CUMPIÁN RODRÍGUEZ, F.J. ÁLVAREZ RUIZ, S. RAMÍREZ BERENGUER 2007. Rusaddir y su integración en la órbita de Roma. Excavaciones en el yacimiento "Jardines del Gobernador". Avances de los resultados de la quinta campaña 2006 (Melilla). Akros 6. 107-118.
- AYLLÓN, R., J. PÉREZ GONZÁLEZ, J. REMESAL RODRÍGUEZ (forthcoming). Olive Oil at the Border of the Roman Empire. Stamps on Baetican Dressel 20 Found on the Tyne-Solway Isthmus. In: *Marburger Beiträge zur Antiken Handels-, Wirtschafts- und Sozialgeschichte.*
- BELTRÁN LLORIS, M. 1970. Las Ánforas Romanas en España. Institución Fernando el Católico (CSIC). Zaragoza.
- BERMÚDEZ LORENZO, J.M. 2017. Raetia: las relaciones socioeconómicas de una provincia romana centroeuropea con las provincias mediterráneas. PhD thesis, Universitat de Barcelona.
- BERNAL CASASOLA, D. 1996. Le anfore tardo-romane attestate a Ceuta (Septem Fratres Mauretania Tingitana). In: M. Khanoussi, P. Ruggeri, C. Vismara (eds), L'Africa romana. Atti dell'XI convegno di studio. Cartagine 15–18 dicembre 1994, Il Torchietto, 1191–1233. Ozieri.
- BERNAL CASASOLA, D. 1997. Las ánforas romanas bajoimperiales y tardorromanas del Museo Municipal de Ceuta. In: *Ánforas del Museo de Ceuta*, 61–129. Ceuta.
- BERNAL CASASOLA, D., J.M. PÉREZ RIVERA 1999. Un viaje diacrónico por la historia de Ceuta. Resultados de las itervenciones arqueológicas en el Paseo de las Palmeras. Ceuta.

- BERNAL CASASOLA D., J.M. PÉREZ RIVERA 2001. Las ánforas de Septem Fratres en los ss. II y III d. C. Un modelo de suministro de envases gaditanos a las factorías de salazones de la costa tingitana. In: Congreso Internacional ex Baetica Amphorae, Conservas, aceite y vino de la Bética en el Imperio Romano (Écija y Sevilla, 17 al 20 de Diciembre de 1998) Actas vol. IV, 861–887. Écija.
- BERNAL CASASOLA D., J.M. PÉREZ RIVERA 2000. La factoría de salazones romana de Septem Fratres: novedades de las excavaciones arqueológicas en el Paseo de las Palmeras, núms. 16–24. In: *Homenaje al Profesor Carlos Posac Mon*, 249–263. Ceuta.
- BERNI, P. 2008. Epigrafía anfórica de la Bética. Nuevas formas de análisis. Barcelona.
- BLANC-BIJON, V., M.B. CARRE, A. HESNARD, A. TCHERNIA 1998. Recueil de timbres sur amphores romaines II (1989-1990 et compléments 1987-1988). Aix en Provence.
- BLÁZQUEZ MARTÍNEZ, J.M., J. REMESAL RODRÍGUEZ, E. RODRÍGUEZ ALMEIDA 1994. Excavaciones arqueológicas en el monte Testaccio (Roma). Memoria campaña 1989. Madrid.
- BLÁZQUEZ MARTÍNEZ, J.M., J. REMESAL RODRÍGUEZ (eds) 1999. Estudios sobre el Monte Testaccio (Roma) I. Barcelona.
- BLÁZQUEZ MARTÍNEZ, J.M., J. REMESAL RODRÍGUEZ. (eds). 2001 . Estudios sobre el Monte Testaccio (Roma). II. Barcelona.
- BLÁZQUEZ MARTÍNEZ, J.M., J. REMESAL RODRÍGUEZ (eds). 2003. Estudios sobre el Monte Testaccio (Roma) III. Barcelona.
- BLÁZQUEZ MARTÍNEZ, J.M., J. REMESAL RODRÍGUEZ (eds). 2007. Estudios sobre el Monte Testaccio (Roma) IV. Barcelona.
- BLÁZQUEZ MARTÍNEZ, J.M., J. REMESAL RODRÍGUEZ (eds). 2010. Estudios sobre el Monte Testaccio (Roma) V. Barcelona.
- BLÁZQUEZ MARTÍNEZ, J.M., J. REMESAL RODRÍGUEZ (eds). 2014. Estudios sobre el Monte Testaccio (Roma) VI. Barcelona.
- BONET ROSADO, H., I. FUMADÓ, I. ORTEGA, C. ARANEGUI GASCÓ, J. VIVES-FERRÁNDIZ SÁNCHEZ, H. HASSINI, M. KBIRI ALAOUI 2005. La ocupación mauritana. In: C. Aranegui Gascó (ed.), Lixus-2. Ladera Sur. Excavaciones arqueológicas marroco-españolas en la colonia fenicia. Campañas 2002-2003. Saguntum, 87– 153. Valencia.
- BOUBE, J. 1975. Marques d'amphores découvertes à Sala Volubilis et Banasa. Bulletin d'archéologie marocaine 9, 1973-75, 163-230.
- BOUBE, J. 1986. Un timbre amphorique de P. Veveius Papus à Sala. Bulletin d'archéologie marocaine 16, 1985-1986, 401-404.
- BOUBE, J. 1988. Les amphores de Sala à l'époque mauretanienne. *Bulletin d'archéologie marocaine* 17, 1987-1988, 183-207. Rabat.

BOUBE, J. 1999. Les nécropoles de Sala. Paris.

- BRUGHMANS, T., J. POBLOME 2016. Roman bazaar or market economy? Explaining tablewarw distributions in the Roman East through computational modelling. *Antiquity* 350, 393–408.
- CALDARELLI, G., M. CATANZARO 2012. Networks. A very Short Introduction. First Edition. Oxford. Traducción de María Hernández Díaz. 2014. Redes: Una breve introducción. Madrid.
- CALLENDER, M. H. 1965. Roman Amphorae (with an Index of Stamps). London.
- CALLU, J.-P., J.-R. MOREL, R. REBUFFAT, G. HALLIER 1965. Thamusida. Fouilles du Service des Antiquités du Maroc I. Paris.

CALVANESE, D., A. MOSCA, J. REMESAL RODRÍGUEZ, M. REZK, G. RULL 2015. A 'Historical Case' of Ontology-Based data Access. In: *Digital Heritage* (DH 2015). Granada.

CALVANESE, D., P. LIUZZO, A. MOSCA, J. REMESAL RODRÍGUEZ, M. REZK, G. RULL 2016. Ontology-based data integration in EPNet: Production and distribution of food during the Roman Empire. In: *Engineering Applications of Artificial Intelligence.* 

CANALS, A., A. DÍAZ-GUILERA, J.L. MOLINA, B. PATRARCA 2012. Xarxes socials. Fonaments i aplicacions. Barcelona.

CARRERAS MONTFORT, C. 2000. Economía de la Britania romana: la importación de alimentos. Barcelona.

CARRERAS MONTFORT, C., P.P.A. FUNARI 1998. Britannia y el Mediterráneo. Estudios sobre el comercio de aceite bético y africano en Britannia. Barcelona.

CARRERAS MONTFORT, C., R. MORAIS 2012. The Atlantic Roman trade during the Principate: new evidence from the western façade. *Oxford Journal of Archaeology* 31(4), 419–441.

CHATELAIN, L. 1919. Deux rapports. BCTH 1919, 179–186. Paris.

COLTELLONI-TRANNOY, M., V. BRIDOUX, V. BROUQUIER-REDDÉ 2016. (sous la dir.) Le cercle du Détroit dans l'Antiquité: l'héritage de Miguel Tarradell. Revue d'histoire et d'archéologie africaines Karthago xxix, 2014–2015.

DOMERGUE, C. 1960. Volubilis: un four de poitier. Bulletin d'archéologie marocaine 4, 491–505.

DRESSEL, H. 1878. Ricerche sul Monte Testaccio. Annali dell'Instituto di Corrispondenza Archeologica 50, 118–192.

EDMONSON, J.C. 1987. Two industries in Roman Lusitania: mining and garum production. Oxford.

ÉTIENNE, R. 2002. Prosopographie monumentale, prosopographie amphorique. Le cas des Ocrati. In: L. Rivet, M. Sciallano (éds.), Vivre, produire et échanger: reflets méditerranéens. Mélanges offerts à Bernard Liou, 119–120. Montagnac

ÉTIENNE, R., MAYET, F. 2002. Salaisons et sauces de poisson hispaniques. Paris.

ÉTIENNE, R., MAYET, F. 2004. L'huile hispanique. Corpus des timbres amphoriques sur amphores Dressel 20. Paris.

EUZENNAT, M. 1956. Rapport sur les fouilles de Volubilis en 1955. Bulletin archéologique du Comité des Travaux historiques et scientifiques, 1955-1956, 259–272.

EUZENNAT, M. 1989. Le limes de Tingitane. La frontière méridionale. Paris.

FABIAO, C. 2017. La contribución del CEIPAC a la historia económica del Imperio Romano. In: J. Remesal Rodríguez (ed.), Economía Romana. Nuevas Perspectivas / The Roman Economy. New Perspectives, 75–88. Barcelona.

GARROTE SAYÓ, E. 2015. La presència de l'oli bètic a la Gallia Narbonensis. Tesis doctoral, Universitat de Barcelona.

GOZALBES CRAVIOTO, E. 1982. Atlas arqueológico del Marruecos mediterráneo. Granada.

GOZALBES CRAVIOTO, E. 2014. Los puertos en el marruecos antiguo. Hesperis Tamuda, 49.

HASSINI, H. 2009. Nouvelles marques sur amphores au Maroc.

JACCARD, P. 1901. Étude comparative de la distribution florale dans une portion des Alpes et des Jura. Bulletin de la Société Vaudoise des Sciences Naturelles 37, 547–579.

JODIN, A. 1967. Les etablissements du roi Juba II aux Iles Purpuraires (Mogador). Tanger.

JUAN I BENEJAM, G., O. PONS MACHADO 1996. Le commerce de l'huile à Minorque dans l'anttiqué. In: M. Khanoussi, P. Ruggeri, C. Vismara (eds.) *L'Africa romana. Atti dell'XI convegno di studio. Cartagine 15-18 dicembre 1994, Il Torchietto.* 629–641. Ozieri.

- KEAY, S.J. 1984. Late Roman Amphorae in the Western Mediterranean. A Typologic and Economic Study: the Catalan Evidence. Part I & II. Oxford.
- KEPPIE, L. 1996. The Army and the Navy. In: Cambridge Ancient History 2nd Ed Vol X (The Augustan Empire 30BC-69 AD).
- KUHOFF, W. 2004. La politica militare degli imperatori romani in Africa (I–VI sec. d.C.). In: M. Khanoussi,
   P. Ruggeri, C. Vismara (eds), L'Africa romana. XV Convegno Internazionale di Studi. Ai confini dell'Impero: contatti, scambi, conflitti. Tozeur, 12-15 dicembre 2002, vol. 3, 1643–1662. Roma.
- LAGÓSTENA BARRIOS, L. 2001. La producción de salsas y conservas de pescado en la Hispania romana (II a. C.-VI d. C.). Barcelona.
- LAPORTE, J.-P. 1980. Les amphores de Tubusuctu et l'huile de la Maurétanie Césarienne. Bulletin Archéologique du Comité des Travaux historiques et scientifiques 12-14B (1976-1978), 131–157.

LANKOW, J., J. RITCHIE, R. CROOKS 2012. Infographics: The Power of Visual Storytelling. Hoboken, N.J.

- MANI, T. 2010. Timbres sur amphores africaines mentionnant la cité d'Hadrumentum (Tunisie). *Synergies* 2, 153–170. Tunisie.
- MARIMON, P. 2017. Entre el Mediterráneo y el limes germánico: el río Ródano como factor de comunicación e integración económica. Tesis doctoral, Universitat de Barcelona.
- MARION, J. 1976. Inscriptions sur objets métalliques en Maurétanie Tingitane. *Antiquites africaines* 10, 93–105.
- MAYET, F. 1978. Marques d'amphores de Maurétanie Tingitane (Banasa Thamusida Volubilis). *Mélanges de l'École française de Rome* 90, 357–406.
- MILGRAM, S. 1967. The Small-World Problem. Psychology Today 1(1).
- MONKACHI, M. 1988. Eléments d'histoire économique de la Maurétanie tingitane de l'époque préclaudienne à l'époque provinciale à partir des amphores: le cas de Volubilis. Thèse, Univ. de Aix-en-Provence.
- MORILLO, A., J. SALIDO DOMÍNGUEZ, C. FERNÁNDEZ OCHOA 2016. Hispania and the Atlantic Route in Roman Times: new Approaches to Ports and Trade. *Oxford Journal of Archaeology* 35(5), 267–284.
- MOSCA, A., J. REMESAL RODRÍGUEZ, G. RULL, M. REZK 2015. Knowledge Representation in EPNet. In: T. Morzy, P. Valduriez, L. Bellatreche (eds), *New Trends in Databases and Information Systems. Communications in Computer and Information Science*, 539. Poitiers.
- PÉREZ GONZÁLEZ, J. 2017. Nuevos ejemplares de marcas sobre ánforas Dressel 20 en el territorio del Conventus Hispalensis: Villar Tesoro, Azanaque y La Catria. Onoba. Revista de Arqueología y Antigüedad, [S.l.], n. 5, jun. 2017.
- PONS PUJOL, Ll. 2000a. Nuevos sellos y grafitos hallados en la Mauretania Tingitana. In: Antiquites africaines 30, 109-136.
- PONS PUJOL, Ll. 2000b. La economía de la Mauretania Tingitana y su relación con la Baetica en el Alto Imperio. In: A. Khanoussi, P. Ruggeri, C. Vismara (eds), L'Africa Romana. Atti del XIII Convegno di studio di Djerba 10–13 dicembre 1998, 1251–1289. Sassari.
- PONS PUJOL, Ll. 2000c. La economía de la Mauretania Tingitana y su relación con la Baetica en el Alto Imperio. In: M. Khanoussi, P. Ruggeri, C. Vismara (eds), L'Africa romana. XIII Convegno Internazionale di Studi. Geografi, viaggiatori, militare nel Maghreb: alle origini dell'Archeologia nel Nord d'Africa. Djerba, 10-13 dicembre 1998, vol. 2, 1251–1289. Roma.
- PONS PUJOL, Ll. 2001. La presencia de la Dressel 20 en la Mauritania Tingitana. In: Congreso Internacional ex Baetica Amphorae, Conservas, aceite y vino de la Bética en el Imperio Romano (Écija y Sevilla, 17 al 20 de Diciembre de 1998) Actas vol. IV, 925–933. Écija.

- PONS PUJOL, Ll. 2003. Prosopografía monumental, prosopografía anfórica. Las élites tingitanas y el comercio del aceite bético. In: J. M. Blázquez Martínez, J. Remesal Rodríguez (eds), *Estudios sobre el Monte Testaccio (Roma) III*, 663–671. Barcelona.
- PONS PUJOL, Ll. 2004. La annona militaris en la Tingitana: observaciones sobre la organización y el abastecimiento del dispositivo militar romano. In: L'Africa Romana XV, Tozeur 2002, 1663–1688. Roma.
- PONS PUJOL, Ll. 2006. L'importation de l'huile de Bétique en Tingitane et l'exportation des salaisons de Tingitane (Ier–IIIe siècle après J.-C.). *Cahiers du Centre Gustave Glotz* 17, 61–77.

PONS PUJOL, Ll. 2009. La Economía de la Mauretania Tingitana (s. I-III d.C.). Aceite, vino y salazones. Barcelona.

- PONS PUJOL, Ll. 2012. Quae sunt Caesaris, Caesari, et quae sunt Dei, Deo (Mt. 22, 21). El Imperio colonial francés en el Norte de África y la recogida de datos arqueológicos. In: B. Cabouret, A. Groslambert, C. Wolff (eds), Visions de l'occident romain. Hommages à Yann Le Bohec, 309–320. Paris.
- PONS PUJOL, Ll. 2014a. El urbanismo de Volubilis (Marruecos). Construcción de la imagen de una ciudad romana. *Scripta Nova. Revista Electrónica de Geografía y Ciencias Sociales*, vol. 18, no. Online: www.ub.es/geocrit/sn/sn473.htm.
- PONS PUJOL, Ll. 2014b. Umbonius Silio y el abastecimiento militar de la Tingitana (Dión Casio, LX, 24.5). In : M. Coltelloni-Trannoy, Y. Le Bohec (eds), *La guerre dans l'Afrique romaine sous le Haut-Empire*, 167– 176, Paris.
- PONS PUJOL, Ll. 2015. La invención de un concepto geopolítico: el Estrecho de Gibraltar en la Antigüedad (s. I–III d.C.). Scripta Nova. Revista Electrónica de Geografía y Ciencias Sociales, vol. 19, no 513. Online: www.ub.es/geocrit/sn/sn-513.pdf.
- PONS PUJOL, Ll., P. BERNI 2002. La figlina Virginensis y la Mauretania Tingitana. In: L'Africa romana 14, Sassari 2000. Roma.
- PONS PUJOL, Ll., E. GARROTE SAYÓ, X. SORIA RINCÓN 2008. La captación del aceite annonario en Bética y África, un análisis comparativo. In: L'Africa romana XVII, Sevilla 2006, 1221–1246. Roma.
- PONSICH, M. 1970. Recherches Archéologiques à Tanger et dans sa Région. Paris.
- PONSICH, M. 1988. Aceite de oliva y salazones de pescado: factores geo-económicos de Bética y Tingitania. Madrid.
- PONSICH, M., M. TARRADELL 1965. Garum et industries antiques de salaison dans la Méditerranée Occidentale.
- PRIGNANO, L., I. MORER, S. LOZANO, J. PÉREZ GONZÁLEZ, F. FULMINANTE, A. DÍAZ-GUILERA 2017. The weird, wired past. The challenges of applying network science to archaeology and ancient history. In: J. Remesal Rodríguez (ed.), *Economía Romana. Nuevas perspectivas. The Roman Economy.* Barcelona.

RAMON TORRES, J. 1995. Las ánforas fenicio-púnicas del Mediterráneo central y occidental. Barcelona.

RANKE, L. Von 1885. *Sämtliche Werke*, Bd. 33/34. Leipzig.

REBUFFAT, R. 1998. L'armée de la Maurétanie tingitane. Mélanges de l'École Française à Rome 110, 193–242. REBUFFAT, R., MARION, J. 1977. Thamusida. Fouilles du Service des Antiquités du Maroc III.

- REMESAL RODRÍGUEZ, J. 1986. La annona militaris y la exportación del aceite bético a Germania. Madrid.
- REMESAL RODRÍGUEZ, J. 1997. Heeresversorgung und die wirtschaftlichen Beziehungen zwischen der Baetica und Germanien. Materialen zu einem Corpus der in Deutschland veröffentlichten Stempel auf Amphoren der Form Dressel 20. Stuttgart.

- REMESAL RODRÍGUEZ, J. 2001. Oleum Baeticum. Consideraciones y propuestas para su estudio. In: Congreso Internacional Ex Baetica Amphorae. Conservas, aceite y vino de la Bética en el Imperio Romano (Écija y Sevilla, 17 al 20 de Diciembre de 1998), 373–392. Écija.
- REMESAL RODRÍGUEZ, J. 2011. La Bética en el concierto del Imperio Romano. Madrid.
- REMESAL RODRÍGUEZ, J. 2012. Corpus versus Catalog, propuestas sobre una vieja cuestión. In: M.E. Fuchs, R. Sylvestre, C.S. Heidenreich (eds), *Inscriptions mineures: nouveautes et reflexions. Actes du premier colloque Ductus (19-20 juin 2008, Université de Lausanne)*, 83–93. Bern–Wien.
- REMESAL RODRÍGUEZ, J. 2016. Minuzie epigrafiche. In: L. Ungaro, M. Milella, S. Pastor (eds), Made in Roma. Marchi di produzione e di possesso nella società antica. Roma.
- REMESAL RODRÍGUEZ, J. 2018. El valor estadístico de la epigrafía sobre ánforas Dr. 20. In J. Remesal Rodríguez, V. Revilla Calvo, J.M. Bermúdez Lorenzo (eds), *Cuantificar: qué, cómo y para qué. Quantification in Classical Archaeology: objects, methodologies and aims.* 215–236. Barcelona.
- REMESAL RODRÍGUEZ, J., A. AGUILERA MARTÍN, M. GARCÍA SÁNCHEZ, D.-J. MARTÍN-ARROYO SÁNCHEZ,
   J. PÉREZ GONZÁLEZ, V. REVILLA CALVO 2015. Centro para el Estudio de la Interdependencia
   Provincial en la Antigüedad Clásica (CEIPAC). *Pyrenae*, número Especial 50è Aniversari, 245–275.
- REVILLA CALVO, V. 1993. Producción cerámica y economía rural en el Bajo Ebro en época romana. El alfar de l'Aumedina, Tivissa (Tarragona). Barcelona.

RODRÍGUEZ ALMEIDA, E. 1984. Il Monte Testaccio. Ambienti, storia e materiali. Roma.

- ROMANOWSKA, I. 2015. So you think you can Model? A Guide to Building and Evaluating archeological Simulation Models of Dispersals. *Human Biology Open Access Pre-Prints*, 79.
- ROVIRA GUARDIOLA, R. 2004. Las Relaciones comerciales entre Hispania y las provincias orientales durante el Alto Imperio Romano. Tesis doctoral, Universitat de Barcelona.
- RUBIO-CAMPILLO, X., M. COTO-SARMIENTO, J. PÉREZ GONZÁLEZ, J. REMESAL RODRÍGUEZ 2017. Bayesian analysis and free market trade within the Roman Empire. *Antiquity* 91(359), 1241–1252.
- RUBIO-CAMPILLO, X., J.M. BERMÚDEZ LORENZO, J.-M. MONTANIER, J. MOROS DÍAZ, J. PÉREZ GONZÁLEZ, G. RULL, J. REMESAL RODRÍGUEZ 2018a. Provincias, sellos e hipótesis nulas: la identificación de rutas de comercio a través de medidas de distancia cultural. In: J. Remesal Rodríguez (ed.) *Cuantificar: qué, cómo y para qué. Quantification in Classical Archaeology: objects, methodologies and aims,* 237–249. Barcelona.
- RUBIO-CAMPILLO, X., J.M. BERMÚDEZ LORENZO, J.-M. MONTANIER, J. MOROS DÍAZ, J. PÉREZ GONZÁLEZ,
   G. RULL, J. REMESAL RODRÍGUEZ 2018B. The ecology of Roman trade. Reconstructing provincial connectivity with similarity measures. *Journal of Archaeological Science* 92, 37–47.
- SCHÄFER, C. 2017. The debate on the ancient economy as a "battlefield" and the question of transport routes to the Rhine region. In: J. Remesal Rodríguez (ed.), *Economía romana. Nuevas perspectivas / The Roman economy. New perspectives.* Barcelona.
- SCHMARZO, B. 2014. Big Data. El poder de los datos. Anaya multimedia.
- TARRADELL, M. 1955. La necrópolis púnico-mauritana del Cerro de San Lorenzo, en Melilla. In: Actas del I Congreso Arqueológico del Marruecos Español. Tetuán 1953, 253–266. Tetuán.
- TEICHNER, F., Ll. PONS PUJOL 2008. Roman amphora Trade across the Straists of Gibraltar: an ancient 'anti-economic' practice?. *Oxford Journal of Archaeology*, 303–314.
- THOUVENOT, R. 1941a. Marques d'amphores romaines trouvées au Maroc. Publications du Service des Antiquités du Maroc 6, 95–98.

THOUVENOT, R. 1941b. Une Colonie Romaine de Mauritaine Tingitane. Valentia Banasa. Paris.

- THOUVENOT, R. 1949. Note sur des marques d'amphores trouvées à Volubilis. Bulletin archéologique du Comité des travaux historiques et scientifiques, 1947–1949, 526–529.
- THOUVENOT, R. 1954. Marques d'amphores romaines trouvées au Maroc. Publications du Service des Antiquités du Maroc 11, 126–134.
- THOUVENOT, R. 1956. Rapport sur l'activité de l'inspection des Antiquités du maroc pendant l'année 1953. Bulletin archéologique du Comité des travaux historiques et scientifiques 1954, 46–57. Paris.
- THOUVENOT, R., DELPHY, A. 1953. Sepultures romaines à Rabat. Hesperis 40, 543ss.
- VILLAVERDE VEGA, N. 2001. Tingitana en la Antigüedad Tardía (siglos III-VII): Autoctonía y romanidad en el Extremo Occidente Mediterráneo. Madrid.
- ZEHNACKER, H. M., HALLIER, G. 1965. Les premiers thermes de Volubilis et de la Maison à la Citerne. Mélanges de l'école française de Rome 77, 87–152.
- ZERMEÑO PADILLA, G. 2002. La cultura moderna de la historia. Una aproximación teórica e historiográfica. México.



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# Cult associations on the northern shore of the Black Sea: three centuries of research

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**Abstract.** The present article represents a survey of the literature concerning the cult associations from the northern shore of the Black Sea, from the early publications, to the most recent works. The endeavour attempts to draw not only on the evolution of the research, but also to bring up some of the inscriptions which have been edited. The need for such an approach lies in the rich bibliographical publications from the last decades, but also in the rich information they provide, and in the advantage of placing/ and contextualising it in the larger research.

**Rezumat**. Articolul de față își propune să examineze literatura privitoare la asociațiile de cult atestate pe litoralul nordic al Mării Negre, de la publicațiile de început, până la cele mai recente lucrări. Inițiativa are ca scop să traseze nu doar evoluția cercetării, ci și să aducă în discuție unele dintre inscripțiile care au fost editate. Necesitatea unei astfel de abordări e dată de bogatele apariții bibliografice din ultimele decade, dar și de conținutul informațional abundent pe care îl pun la dispoziție, precum și de avantajul contextualizării acestora în orizontul mai larg al cercetării.

Keywords: historiography, northern shore of the Black Sea, cult associations.

The private associations<sup>2</sup> have been researched beginning with the 18<sup>th</sup> century<sup>3</sup> (especially from a juridical perspective), but it is only at the end of the 19<sup>th</sup> century,<sup>4</sup> that the topic became more popular, and this due to the publishing of the epigraphic *corpora*. Along with the publishing of the *corpora*, at the end of the 19<sup>th</sup> century, and at the beginning of the

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<sup>&</sup>lt;sup>2</sup> The expression "private associations" is used as modern synonym for the ancient terminology ( $\delta o \tilde{\nu} \mu o \zeta / dumus$ , έργασία, θίασος, κοινόν, οἶκος, συναγωγή, συνέδριον, σύνοδος, σπεῖρα, τέχνη). The modern terminology used to encompass the ancient realities is versatile itself, besides "private associations", the researchers use also the term "voluntary associations", the latter stressing the unconstrained nature of the grouping, while the former define itself in opposition to the public sphere and the *polis*. In the following lines we have opted for the "private associations" due to the fact that the term "voluntary" has a much more contemporary meaning. <sup>3</sup> HEINECKE 1747.

<sup>&</sup>lt;sup>4</sup> PLATNER 1809; BOURGUET 1894; HUBERT 1897; 1899; DRERUP 1899; FOUCART 1864; 1873; LIEBENAM 1890; 1894; MARTIN SAINT-LEON 1899; POLAND 1895; TOURNON 1895; WALTZING 1890; 1892; 1895-1900; 1898.

20<sup>th</sup> century, the associative movements were in full development in Europe,<sup>5</sup> therefore the interest for this topic is to be understood also through the social movements of that time. If at the beginning the topic was approached from a more general perspective, in the last decades the research started to narrow down to specific research topics, and to a variety of geographical areas; thus, some works have focused on the associations from a specific geographical area,<sup>6</sup> or they focused on some specific types of associations,<sup>7</sup> while others focused on specific issues related to the topic.<sup>8</sup> Among the works which set the grounds of the research we mention those of Paul Foucart,<sup>9</sup> Erich Ziebarth<sup>10</sup> and Franz Poland,<sup>11</sup> even though the latter was the subject of M. Rostovtzeff critique who considered that "the treatment of the corporations in existing works is wholly inadequate, being merely systematic and not historical".<sup>12</sup> Since those early researches, the methodology changed, and it was the subject of many interpretations.

While both the associations from the Greek East and the Latin West were the object of research, due to the quality and quantity of information, researchers focused on Athens,<sup>13</sup> Delos,<sup>14</sup> Rhodes,<sup>15</sup> Asia Minor,<sup>16</sup> but also on Rome and the Roman provinces,<sup>17</sup> in an attempt to reconstruct the puzzling associative universe of antiquity. Besides dealing with cult associations, the research also included the professional associations,<sup>18</sup> which did not usually lack a religious component, and which were also highly present in the ancient world.

The number of inscriptions from the area of our present focus is 113,<sup>19</sup> which represents a majority of 48.91% from the overall number of associations attested in the Greek cities of the

<sup>&</sup>lt;sup>5</sup> FRÖLICH, HAMON 2013, 15.

<sup>&</sup>lt;sup>6</sup> ROHDE 2012; ZAVOYKINA 2013a.

<sup>&</sup>lt;sup>7</sup> JACCOTTET 2003; KOESTER 1999; PETZL, SCHWETHEIM 2006; VÉLISSAROPOULOS 1980; etc.

<sup>&</sup>lt;sup>8</sup> HARLAND 1996; 2000; 2003; 2007; 2012; 2015; VAN NIJF 1997; 2003; etc.

<sup>&</sup>lt;sup>9</sup> FOUCART 1864; FOUCART 1873a; FOUCART 1873b.

<sup>&</sup>lt;sup>10</sup> ZIEBARTH 1896; ZIEBARTH 1907.

<sup>&</sup>lt;sup>11</sup> POLAND 1895; POLAND 1909; POLAND 1911.

<sup>&</sup>lt;sup>12</sup> ROSTOVTZEFF 1957, 619, n. 43.

<sup>&</sup>lt;sup>13</sup> ARNAOUTOGLOU 1998; 2003; 2011; 2015; BASLEZ 1996; 2004; CALHOUN 1964; ELTER 1916; FERGUSON 1944; GEAGAN 1972; ISMARD 2010; JONES 1999; LE GUEN 2007; LEIWO 1997; STEINHAUER 2014; THOMSEN 2014; TOD 1906-1907; etc.

<sup>&</sup>lt;sup>14</sup> BASLEZ 2013; BRUNEAU 1978; HASENOHR 2001; MCLEAN 1996; 1999; MEYER 1988; PICARD 1920; TRÜMPER 2006; 2011; etc.

<sup>&</sup>lt;sup>15</sup> ENGELMANN 1970; GABRIELSEN 1994; WESCHER 1864.

<sup>&</sup>lt;sup>16</sup> THOMAS 1994; KOESTER 1999; HARLAND 2000; 2014; 2015; DITTMANN-SCHÖNE 2001; ARNAOUTOGLOU 2002; 2016; PETZL, SCHWERTHEIM 2006.

 <sup>&</sup>lt;sup>17</sup> HEINECKE 1747; PLATNER 1809; LIEBENAM 1890; WALTZING 1895-1900; MOMMSEN 1843; 1850; 1907; TORRI 1938;
 1941; DE ROBERTIS 1955; 1973; AUSSBÜTTEL 1982; MACMULLEN 1974; ALFÖLDY 1958; 1966; PERRY 2001; 2006; 2011;
 TRAN 2001; 2006; 2011; 2012; DONDIN-PAYRE, TRAN 2012.

<sup>&</sup>lt;sup>18</sup> MARTIN SAINT-LEON 1899; CALDERINI 1934; VAN NIJF 1997; MENNELLA, APICELLA 2000; DITTMANN-SCHÖNE 2001; ZIMMERMANN 2002; DIOSONO 2007; LIU 2009; VERBOVEN 2011.

<sup>&</sup>lt;sup>19</sup> The article does not includes the Judean associations.

Black Sea.<sup>20</sup> Out of these 113 inscriptions there are only two professional association attested,<sup>21</sup> the rest being cult associations.<sup>22</sup> From a chronological perspective, only Olbia provides evidence of associations coming from the Classical period,<sup>23</sup> while from Pantikapaion<sup>24</sup> and Tanais<sup>25</sup> we have attestations from the Hellenistic period, but it is in the Roman period that we observe an associative bloom.

Besides the 19<sup>th</sup> and the early 20<sup>th</sup> centuries monographic works which address in a unifying manner the associations from all the Greek world, we have only a few articles which try to synthetize the information on the associations of the northern Black Sea.<sup>26</sup> Most of the information derives from newly published inscriptions<sup>27</sup> related to associations, which the editors contextualise. Among these early works, there was a position which considered that the associations from the Bosporus were part of the same association,<sup>28</sup> fact which lacks clarity and truthfulness when one is confronted with the inscriptions. Understanding the associative phenomenon in its complexity, and placing it in a geographical and chronological context came later, especially in the second half of the 20<sup>th</sup> century, and in the 21<sup>st</sup> century, after the publishing of IOSPE I<sup>2 29</sup> and CIRB.<sup>30</sup>

Both the works which fall under the category of early works, and those which fall under the category of more recent works tend to cover especially information regarding the widely disputed cult of Theos Hypsistos, along with the characteristic of the divinity.<sup>31</sup> When addressing the issues of Theos Hypsistos and the associations devoted to him, one of the reference points is the monograph of Yulia Ustinova.<sup>32</sup> The book is a study of religion in the

<sup>&</sup>lt;sup>20</sup> PÁZSINT 2018.

 <sup>&</sup>lt;sup>21</sup> θέασος ναυκλήρων which is probably attested by 11 inscriptions: SEG 29 707; CIRB 1230 = IGR I 912 = IOSPE IV 433;
 CIRB 1134; SEG 36 700; CIRB 1129 = IosPE IV 434; CIRB 1135; CIRB 1130; CIRB 1131; CIRB 1119 = SEG 36 700note; SEG 36 705; SEG 3 607 = IGRR I 893 = CIRB 77 + CIRB 1136, Κοινὸν ναυτικῶν: Solomonik 1984, 87, n. 436 = SEG 38 749.8.

<sup>&</sup>lt;sup>22</sup> Άδελφοὶ εὐξάμενοι, Ἰσποιητοὶ {ἀ}δελφοὶ σεβόμενοι, Ἰσποιητοὶ ἀδελφοὶ σεβόμενοι, Θεασεῖται, Θιασεῖται, Θιασῖται, Θιεσεῖται Θέασος, Θίασος, Θίεσος, Θίεσος ἀδελφῶν, Κοινόν, Κοινὸν τῶν θιασιτῶν, Μύσται, Νεομηνιασταί, Ὀρφικοί, Σπεῖρα, Συνοδεῖται, Σύνοδος.

<sup>&</sup>lt;sup>23</sup> IGDOlbia 96a, b, c, d; IGDOlbia 94abc = SEG 28 659–661; IGDOlbia 92 = SEG 50 699.1

<sup>&</sup>lt;sup>24</sup> CIRB 75 = IosPE II 19; CIRB 263 = IosPE IV 293; SEG 2 482

<sup>&</sup>lt;sup>25</sup> IVANTCHIK 2008, 94 - 95, n. 1 = AVRAM 2015, 122, n.1 = SEG 58 782; IVANTCHIK 2008, 96 - 100, n. 2 = AVRAM 2015, 123 n. 2 = SEG 58 783; IVANTCHIK 2008, 100-103, n. 3 = AVRAM 2015, 123, n. 3 = SEG 58 784.

<sup>&</sup>lt;sup>26</sup> POMIALOVKI 1888; NOVOSADSKI 1928.

<sup>&</sup>lt;sup>27</sup> VON STERN 1900; 1902; MARTI 1904.

<sup>&</sup>lt;sup>28</sup> KOLOBOVA 1933, 75 apud USTINOVA 1999, 199.

<sup>&</sup>lt;sup>29</sup> LATYSHEV 1885; 1890; 1901; 1916.

<sup>&</sup>lt;sup>30</sup> STRUVE *et al.*, 1965.

 $<sup>^{31}</sup>$  Theos Hypsistos and its cult will not be addressed in this article. The object of our focus will be only the associations devoted to him.

<sup>&</sup>lt;sup>32</sup> USTINOVA 1999. Before publishing this monograph, Ustinova wrote also an MA thesis on the private associations in classical Athens (under the supervision of Frolov): USTINOVA 1984, and a PhD thesis on the private cult associations from both Greece and the Black Sea Littoral (under the supervision of Andreyev): USTINOVA 1988. Unfortunately, we could not access them

complex Bosporan Kingdom, where local and Greek religions intertwine. In this setting, the author focuses only partially on cult associations, as manifestations of the cult of Theos Hypsistos. Among others, her contribution concerning the study of associations consists in suggesting that despite the fact that in Tanais there were associations with different names which existed simultaneously, they were part of the same type of organisation, which explains the occurrence of some individuals in associations which bear four different names.<sup>33</sup> The author also tried to provide an outlook on the internal hierarchy of the associations and their particularities, the order of acquiring it, as well as the observation that no officials were demoted.<sup>34</sup> Regarding the number of members, Ustinova sees in the integration of the male citizens in the associations devoted to Theos Hypsistos the Iranian tradition of warrior societies, since the associations might have "served as military divisions of the city", <sup>35</sup> which might be also seen in their care for fitness as pointed by the offices of  $y v u v \alpha \sigma (\alpha \rho x \sigma c)$  and νεανισκάρχης.<sup>36</sup> The familial language used to name several offices among the associations of the northern Black Sea have been discussed besides Ustinova also by Avram,<sup>37</sup> Harland,<sup>38</sup> and Pázsint;<sup>39</sup> two of the offices ( $\mu \alpha \tau \eta \rho$ , and  $\pi \alpha \tau \eta \rho$ ) are seemingly honorific positions, and together with the appellative  $\dot{\alpha}\delta\epsilon\lambda\phi\delta\varsigma$ , they seem to bring a certain degree of familiarity among the members. At Tanais, the inscriptions differentiate between  $\dot{\alpha}\delta\epsilon\lambda\phi oi$  and  $\epsilon i\sigma\pi oi\eta\tau oi$   $\dot{\alpha}\delta\epsilon\lambda\phi oi$  $\sigma \epsilon \beta \delta \mu \epsilon vol,$  which is to be explained, according to Zhebelyov, through the prior existence of family members inside the association.<sup>40</sup>

Besides the publications of Ustinova, and some publications of other researchers,<sup>41</sup> the works of N.V. Zavoykina<sup>42</sup> complete the outlook on the associations coming from the Bosporus. The author's interest has culminated in a monograph, which covers the topic from the 1<sup>st</sup> to the 3<sup>rd</sup> century AD.<sup>43</sup> The main contribution of her book represents the interpretation of the associations in relation to the monarchy.<sup>44</sup> The work is structured in two parts, the first is a geographical epigraphic interpretation,<sup>45</sup> while the second approaches the topic from the relation with the monarchical power.<sup>46</sup> The annexes include an epigraphic

<sup>&</sup>lt;sup>33</sup> USTINOVA 1999, 188.

<sup>&</sup>lt;sup>34</sup> USTINOVA 1999, 188–189.

<sup>&</sup>lt;sup>35</sup> USTINOVA 1999, 185, citing SHKORPIL 1908, 43–44 and BLAVATSKIY 1964, 213–214.

<sup>&</sup>lt;sup>36</sup> USTINOVA 1999, 200.

<sup>&</sup>lt;sup>37</sup> AVRAM 2015, 122–135.

<sup>&</sup>lt;sup>38</sup> HARLAND 2005, 491–513; HARLAND 2007, 57–79.

<sup>&</sup>lt;sup>39</sup> PÁZSINT 2018, 79-90.

<sup>&</sup>lt;sup>40</sup> ZHEBELYOV 1940, 47-49.

<sup>&</sup>lt;sup>41</sup> KALASHNIK 1972; SAPRKYKIN, CHEVELYOV 1996; YAILENKO 2002; SAPRKYKIN 2009.

<sup>&</sup>lt;sup>42</sup> ZAVOYKINA 2003; 2004; 2007; GABELKO, ZAVOYKINA, SHAVYRINA 2006.

<sup>&</sup>lt;sup>43</sup> ZAVOYKINA 2013a.

<sup>&</sup>lt;sup>44</sup> The relation between the associations and the king Sauromates II is also addressed by SAPRKYKIN 2009, 328–347.

<sup>&</sup>lt;sup>45</sup> ZAVOYKINA 2013a, 25–132.

<sup>&</sup>lt;sup>46</sup> ZAVOYKINA 2013a, 133–230.

*corpus* with the corresponding texts, some reinterpreted in a disputed manner,<sup>47</sup> and a complete list of the citizens of Tanais (570).<sup>48</sup> The key points of her book are: a) the categorisation of associations in religious associations, associations based on age, associations based on comradeship, and professional associations; b) the interpretation of associations as keepers and promoters of the *polis*' values. Besides her works which are synthetized in the volume, most publications which discuss aspects regarding the associations are publications of new inscriptions, which contextualize the topic.

Another important contribution is the publication signed by R.S. Ascough, P.A. Harland, and John S. Kloppenborg, who gathered a corpus of inscriptions, papyri and literary references on the private associations from the "Greco–Roman" world, the sourcebook being geographically structured. For the Bosporan Kingdom the evidence brought forward is rather scanty, comprising only ten inscriptions, and lacking any comments on the informational content, but providing bibliographical reference for each inscription. P.A. Harland<sup>49</sup> continued the series by publishing another volume of inscriptions, this time coming only from the northern shore of the Black Sea and Asia Minor and pertaining to the associations, and this time providing commentaries to the inscriptions, as well as a comprehensive bibliographical list. Neither this time did the author include all the inscriptions, only five were from the north while the rest were from Asia Minor. Even so, the volume is a useful research tool, which provides the grounds for anyone interested in this subject. Complementary to the volume is also the web page 'Associations in the Greco-Roman World (AGRW)<sup>'50</sup>, administered by the same scholar, and which comprises not only the inscriptions which were already published in the volumes, but also those which were not, being frequently updated. The usefulness of the page consists in gathering in a single space the thematic inscriptions, with the corresponding bibliography as well as in the existence of research filters, and specific sections, which allow the user to browse based on a variety of items. Both approaches provide a valuable input to the research, being a point of reference for anyone who is interested in discovering the world of private associations.

#### Close-up look on some inscriptions

Not many new inscriptions have been published in the last years regarding cult associations, therefore in the following lines we will address those inscriptions which either bring important contributions to the topic, or they bring interpretations of already published inscriptions, or inscriptions which bring a wider perspective on the informational content.

<sup>&</sup>lt;sup>47</sup> ZAVOYKINA 2013a, 252–267.

<sup>&</sup>lt;sup>48</sup> ZAVOYKINA 2013a, 268–285.

<sup>&</sup>lt;sup>49</sup> HARLAND 2015.

 $<sup>^{50}</sup>$  Associations in the Greco-Roman World (AGRW) — philipharland.com/greco-roman-associations.

The evidence from Tanais is rich, attesting a significant number of associations and the most numerous members.<sup>51</sup> Among the published inscriptions from Tanais we have three which were initially published by Askold Ivantchik,<sup>52</sup> and then republished by Alexandru Avram.<sup>53</sup> The main contribution has been the dating of the inscriptions to the Hellenistic period, important aspect since the epigraphic evidence up to then pointed only to a Roman period dating. At the same time, the identification of the worshipped divinity is also an important aspect: as opposed to Ivantchik, the editor of the inscription who believes that the divinity might be Theos Hypsistos, or the river God Tanais, Avram brings forward another possible divinity: Dionysos. However, the interpretation is not certain since up to this day we have no attestations of associations devoted to Dionysos in the cities north of the Black Sea, and this neither in the Hellenistic, nor in the Roman times. The fragmentary state of the inscription made the latter author ponder on the character of the association, which he believes might have even been public, not private. The inscription is important also due to the fact that it mentions the position of  $v \epsilon \omega \kappa \delta \rho \sigma \zeta$  inside associations, which is uncommon, especially in the Hellenistic age.<sup>54</sup> This series of inscriptions also possibly show that the position of  $\delta \lambda \eta \nu \alpha \rho \chi \eta \zeta$  dated from the Hellenistic period, and not from the Roman period.<sup>55</sup>

Professional associations are also attested in Gorgippia and Chersonesos Taurike, but the example coming from Gorgippia illustrates for sure an association ( $\theta \epsilon \alpha \sigma \sigma \zeta \nu \alpha \nu \kappa \lambda \eta \rho \omega \nu$ ) which had also a religious component, and which is very well represented. Based on the already existing *alba*, Saprykin<sup>56</sup> assigned the text of an inscription published in 1986 to a  $\theta \epsilon \alpha \sigma \sigma \zeta \nu \alpha \nu \kappa \lambda \eta \rho \omega \nu$ , completing the outlook on this type of association. The presence of a professional association at Gorgippia is not surprising considering the importance of the wheat trade for the city. The choice of Poseidon as patron of the association is to be understood in connection with the profession they practice: being a  $\nu \alpha \nu \kappa \lambda \eta \rho \sigma \zeta$  implied sea-related dangers, which could be appeased by worshipping the god of the sea. In the Bosporan Kingdom, Poseidon was an important divinity not only due to the economic activities carried out through the help of the sea, but also due to the fact that the kings saw themselves as related to the god.<sup>57</sup> Interesting in this case is the mentioning of several officials as members of the association (the governor

<sup>&</sup>lt;sup>51</sup> As proposed by USTINOVA 1999, 185, there are four attested designations for the associations: 1) ἡ σύνοδος ἡ περὶ θεὸν ὕψιστον καὶ ἱερέα [---]καὶ [---]: CIRB 1278, CIRB 1279, CIRB 1280, CIRB 1282; 2) ἡ σύνοδος ἡ περὶ ἱερέα [---]καὶ [----]: CIRB 1260, CIRB 1262, CIRB 1263, CIRB 1264, CIRB 1277, CIRB 1287, CIRB 1288; 3) εἰσποιητοὶ ἀδελφοὶ σεβόμενοι θεὸν ὕψιστον περὶ πρεσβύτερον: CIRB 1281, 1283, 285, 1286; 3) θί[ησος τῶν] ἀδελφῶν]: CIRB 1284.

<sup>&</sup>lt;sup>52</sup> IVANTCHIK 2008, 93–107.

<sup>&</sup>lt;sup>53</sup> AVRAM 2015, 122–135.

<sup>&</sup>lt;sup>54</sup> IVANTCHIK 2008, 95.

<sup>&</sup>lt;sup>55</sup> IVANTCHIK 2008, 97.

<sup>&</sup>lt;sup>56</sup> SAPRYKIN 1986, 62–75.

<sup>&</sup>lt;sup>57</sup> USTINOVA 1999, 122; ZAVOYKINA 2014, 331 citing CIRB 53 = IosPE II 41; CIRB 1048 = IosPE II 358 = SEG 50 694.

of Gorgippia was the  $\sigma \nu \nu \alpha \gamma \omega \gamma \delta \zeta$ , and the manager of the royal land was the  $i\epsilon \rho \epsilon \nu \zeta$ ), with other members of the elite as members,<sup>58</sup> such as commanders and administrators.

Besides Tanais, and Gorgippia, Pantikapaion also attests a great number of associations and members. As opposed to Tanais, the inscriptions from Pantikapaion concerning associations are mostly funerary, only two being votive.<sup>59</sup> It is here that we find a spectacular inscription found in 1894, published a few decades later,<sup>60</sup> and recently reassessed:<sup>61</sup> the inscription records a posthumous honorific text inscribed on a golden frontlet of a crown. The crown was offered to Ἰούλιος Καλλισθένης, who was a παραφιλάγαθος inside an unknown type of association.<sup>62</sup> Besides occupying this private office, the character was possibly also part of the military personnel, and, most importantly, he was, according to the editor, a respected member of Pantikapaion's elite, being part of a Hellenized Sarmatian family.<sup>63</sup> The publishing of the inscription is significant because it provides one more example of the variety of social statuses among the members of associations, and in this particular case we see that despite being an important member of the society, the individual did not have the most important position inside the association, being however honoured with a  $\delta i \dot{\alpha} \beta i \omega$ position. Therefore,  $iO(\lambda)$  Kalling Kalling joins in social standing other members such as Δάφνος son of Ψυχαρίων,<sup>64</sup> and Ἰούλιος son of Σαμβίων,<sup>65</sup> both occupying a position inside the royal administration. The inscription is also valuable for its information on the internal hierarchy, which lacks the uniformity of Tanais' associations.<sup>66</sup>

Three inscriptions which are not part of the epigraphic *corpus* of Phanagoreia are worth mentioning: one was written on a reused monument, which at first was used as a building inscription belonging to the temple of Herakles, and later on used as a funerary inscription of an individual named  $\Pi \dot{\alpha} \lambda \alpha \zeta$ , who was a member of an association grouped around a priest  $\Delta \dot{\alpha} \delta \alpha \zeta$ , son of  $K \alpha \lambda \lambda \dot{\omega} v$ .<sup>67</sup> The inscription *per se* does not bring much information on the characteristics of the associations (the editors assume the mention of a  $\sigma \dot{\nu} v \delta \delta \alpha \zeta$ ), but it brings out some rarer aspects, such as the existence of the position *iepoµάστωp* which is attested twice at Phanagoreia,<sup>68</sup> and which might be regarded as the person in charge of performing the sacrifices.<sup>69</sup> From an onomastic perspective, almost all of the personal names are Greek,

- <sup>64</sup> CIRB 78.
- <sup>65</sup> CIRB 98.
- <sup>66</sup> USTINOVA 1999, 196.
- <sup>67</sup> YAILENKO 2002, 229–242.

 $^{68}$  CIRB 1016 (3<sup>rd</sup> century AD): spelled as ήρομάστωρ, and CIRB 988 (4<sup>th</sup> century AD), and once at Hermonassa CIRB 1054.

<sup>&</sup>lt;sup>58</sup> ZAVOYKINA 2014, 331.

<sup>&</sup>lt;sup>59</sup> CIRB 75; CIRB 76.

<sup>&</sup>lt;sup>60</sup> SHKORPIL 1908, 43; MATSULEVITCH 1941, 61.

<sup>&</sup>lt;sup>61</sup> ZAVOYKINA 2013b.

<sup>&</sup>lt;sup>62</sup> MATSULEVITCH 1941, 61–80; ZAVOYKINA 2003a, 120–137.

<sup>&</sup>lt;sup>63</sup> MATSULEVITCH 1941, 71–79.

<sup>&</sup>lt;sup>69</sup> GABELKO, ZAVOYKINA, SHAVYRINA 2006, 342.

however with one being Scythian ( $\Pi \alpha \lambda \alpha \varsigma$ ). Published a few years later was another inscription which was considered by the editors,<sup>70</sup> as registering the existence of a cult association<sup>71</sup> (gathered around a certain ' $O\mu\psi\alpha\lambda\alpha\kappa\varsigma\varsigma$ ) with lower social status members (slaves, freedmen); assumption based on the lack of patronymics and on the quality of the text, and of the monument.<sup>72</sup> The third inscriptions was published in 2016,<sup>73</sup> and just as the latter inscription it has some linguistic particularities, it is a very succinct epitaph which records only two types of positions ( $i\epsilon\rho\epsilon \omega \varsigma$ ,  $\varphi \iota\lambda \dot{\alpha}\gamma \alpha \theta o \varsigma$ ) and it points to the existence inside the associations of both locals and Greeks, and of citizens and non-citizens.<sup>74</sup> Overall, the number of inscriptions coming from Phanagoreia is small (7), therefore the publishing of these two inscriptions is fundamental in reconstructing parts of the associative phenomenon in this city. These two inscriptions point that the juridical status of the individuals in the associations could be heterogenic, if the first attests the membership of citizens,<sup>75</sup> the second attests the presence of possible slaves or freedmen, while the third points to citizens and noncitizens. In what concerns the internal structure, we have in Phanagoreia a more uncommon position, that of *iερομάστωρ*, which is recorded only here and in its surrounding area.

At Olbia even though the associations are attested from an early time, the finds are limited to only five inscriptions. One of the inscriptions<sup>76</sup> which was discussed by Jeanne and Louis Robert,<sup>77</sup> and more recently by Vladimir F. Stolba,<sup>78</sup> gets our attention due to its uniqueness; it attests an association which records members coming from two families: seven of the members are the sons of  $\Lambda \epsilon \omega \kappa \rho \dot{\alpha} \tau \eta \varsigma$ , while other four individuals are relatives (son and grandsons) of  $\Lambda \epsilon \omega \pi \rho \dot{\epsilon} \pi \eta \varsigma$ .<sup>79</sup> The evidence comes from a fourth century statue dedicated to Zeus Soter, while the associations seem to worship a local hero named Heuresibios, who is said to have liberated Olbia from a tyrant.<sup>80</sup> The family members are priests among the  $\theta i \alpha \sigma \sigma \varsigma$ , but they probably did not occupy the position simultaneously.<sup>81</sup> The presence of family members among associations is not uncommon, rather it is a defining characteristic of the associative phenomenon in the Greek cities of the Black Sea.

<sup>&</sup>lt;sup>70</sup> GABELKO, ZAVOYKINA, SHAVYRINA 2006, 334–344.

<sup>&</sup>lt;sup>71</sup> GABELKO, ZAVOYKINA, SHAVYRINA 2006, 337.

<sup>&</sup>lt;sup>72</sup> GABELKO, ZAVOYKINA, SHAVYRINA 2006, 338–340.

<sup>&</sup>lt;sup>73</sup> VOROSHILOVA, ZAVOYKINA 2016, 24–33.

<sup>&</sup>lt;sup>74</sup> VOROSHILOVA, ZAVOYKINA 2016, 32.

<sup>&</sup>lt;sup>75</sup> GABELKO, ZAVOYKINA, SHAVYRINA 2006, 343.

<sup>&</sup>lt;sup>76</sup> IGDOlbia 11 = IOlbia 71 = SEG 18 304.

<sup>&</sup>lt;sup>77</sup> ROBERT, ROBERT 1959, 216, n. 270.

<sup>&</sup>lt;sup>78</sup> STOLBA 2013, 293–302.

<sup>&</sup>lt;sup>79</sup> STOLBA 2013, 293–302. See the *stemma* of these two families at page 299.

<sup>&</sup>lt;sup>80</sup> STOLBA 20133, 299.

<sup>&</sup>lt;sup>81</sup> STOLBA 2013, 300.

From Myrmekion (or Pantikapaion) there is a sole fragmentary inscription,<sup>82</sup> which sets light on the positions inside associations and their reflection of the Greek *modus vivendi*; a *νεανισκάρχης* is mentioned, and its attestation supports along with the position of  $\gamma v \mu v \alpha \sigma i \alpha \rho \chi o \varsigma$  the idea according to which some of the Bosporan associations tried to maintain the Greek culture and traditions through the physical education of the youth.<sup>83</sup> These positions are more common in the inscriptions from Tanais than Pantikapaion due to the fact that the latter are funerary inscriptions.<sup>84</sup>

Among the few inscriptions from Sudak there is one edited by Saprykin and Baranov,<sup>85</sup> which according to the SEG editors register a list of members of an association.<sup>86</sup> The inscription is rather fragmentary, and even though the first editors proposed a possible reconstruction of the text, they excluded the possibility of it recording an association. The personal names which appear are frequently attested among the members of private associations from the area, but at the same time these personal names ( $\Pi \dot{\alpha} \pi \alpha \zeta$ ,<sup>87</sup>  $\Phi \alpha \rho \nu \dot{\alpha} \kappa \eta \zeta$ ,<sup>88</sup>  $\Phi \alpha \rho \nu \alpha \kappa (\omega v^8)$ ) are common for the geographical space under focus, just as the editors sustain themselves.<sup>90</sup> Consequently, we take the same position as the editors, being reluctant to the interpretation provided in the SEG.

As follows, the inscriptions brought under discussion confirm the rooting of the professional and cult associations in the Greek cities situated on the northern shore of the Black Sea, most of them coming from the Bosporan Kingdom, and with an exception most are attested in the Roman period. The associations from this area cannot be analysed as a whole since due to the particularities of each cities, they revealed characteristics of their own, especially regarding the type of association developed, their internal structure, as well as the juridical status of the members. As we can see most of the discussion has been focused on classifying the associations, and on trying to understand their connectivity, as well as their different internal structure. Naturally, the intricate nature of the cult and of the divinities worshipped by the members of the associations was also an important part of the discourse.

<sup>&</sup>lt;sup>82</sup> CIRB 870 = IosPE II 58.

<sup>&</sup>lt;sup>83</sup> SAPRYKIN, CHEVELYOV 1996, 161–167.

<sup>&</sup>lt;sup>84</sup> SAPRYKIN, CHEVELYOV 1996, 163–164.

<sup>&</sup>lt;sup>85</sup> SAPRYKIN, BARANOV 1995, 137–140; SAPRYKIN, BARANOV 1997, 249–258.

<sup>&</sup>lt;sup>86</sup> SEG 45 1017.

<sup>&</sup>lt;sup>87</sup> 69 hits in the clas-lgpn2.classics.ox.ac.uk database.

<sup>&</sup>lt;sup>88</sup> 142 hits in the clas-lgpn2.classics.ox.ac.uk database.

<sup>&</sup>lt;sup>89</sup> 55 hits in the clas-lgpn2.classics.ox.ac.uk database.

<sup>&</sup>lt;sup>90</sup> SAPRYKIN, BARANOV 1997, 251–252.

# Contextualisation in the wider research on cult associations

From an epigraphic perspective one can see that compared to other geographical areas, such as Asia Minor, or the western Roman Provinces, the professional associations are a much lighter presence. As the literature points out, the cult associations from this area are of a wide variety, including among its members not only citizens, but also non-citizens,<sup>91</sup> and possibly slaves or freedmen, which is a feature characteristic for the associations from the other areas as well. Overall, following the contribution brought by all researchers, we now know that cult associations from the norther littoral of the Black Sea implied exclusive male membership, being associations mostly devoted to Theos Hypsistos (one of the two most important divinities in the Bosporan Kingdom),<sup>92</sup> but also to divinities such as Aphrodite, Zeus and Hera Soteres, and lastly Poseidon. The associations in Tanais have some particularities which differentiate them from the ones in the rest of the Greek world, not to mention to those of the Roman west. First of all, they seem to be all dedicated to Theos Hyspistos, and they appear to comprise all free male among its members;<sup>93</sup> another distinctive aspect being the internal hierarchy, which includes positions that are not to be found elsewhere, not even in the other cities of the Bosporan Kingdom. Specific for these associations is also the connection to the monarchy, which is visible not only through the dedications made in their honour, but also through the joining of some royal courtiers inside associations.

## Conclusion

The research of cult associations has received greater attention in the last decades, and it focused on a wider variety of topics than in the early days. The associations coming from the northern shore of the Black Sea are mostly cultic, but the economic and geographic coordinates of the area have lead also to the existence of some professional associations. Most of the early works focus on distinguishing the character of the worshipped divinity, but the most recent ones try to tackle various aspects regarding the associations, such as the reason of their creation, the internal structure, the characters involved and their connection to the monarchy. Despite of the publishing of disparate works, which are generally based on the information around new inscriptions, the area has been thoroughly researched, and its characteristics and particularities have been brought to light, revelling a series of similarities with the associations from the western and southern coast (i.e. the heterogenic social and juridical composition of the members, the interaction with the elite), but also dissimilarities which are influenced by the political and social evolution of the area.

<sup>&</sup>lt;sup>91</sup> For Pantikapaion see ZAVOYKINA 2013a, 73–75.

<sup>92</sup> USTINOVA 1999, 184.

<sup>93</sup> USTINOVA 1999, 184.

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# References

- ALFÖLDY, G. 1958. Collegium-Organisationen in Intercisa. Acta Antiqua Academiae Scientiarum Hungaricae 6, 177–198.
- ALFÖLDY, G. 1966. Zur Inschrift des collegium centonariorum von Solva. Historia 15, 433-444.
- ARNAOUTOGLOU, I. 1998. Between Koinon and Idion: Legal and Social Dimensions of Religious Associations in Ancient Athens. In: P. Cartledge, P. Millett, S. von Reden (eds), *Kosmos: Essays in Order, Conflict, and Community in Classical Athens*, 68–83. Cambridge–New York.
- ARNAOUTOGLOU, I. 2002. Roman Law and Collegia in Asia Minor. Revue internationale des droits de l'antiquité 49, 27–44.
- ARNAOUTOGLOU, I. 2003. Thysias Heneka Kai Synousias: Private Religious Associations in Hellenistic Athens. Athens.
- ARNAOUTOGLOU, I. 2011. Ils étaient dans la ville, mais tout à fait en dehors de la cité. Status and Identity in Private Religious Associations in Hellenistic Athens. In: O.M. van Nijf, R. Alston, C.G. Wiliamson (eds), *Political Culture in the Greek City After the Classical Age*, 27–48. Leuven–Paris–Walpole.
- ARNAOUTOGLOU, I. 2015. Cult associations and politics. Worshipping Bendis in classical and Hellenistic Athens. In: V. Gabrielsen, Chr. A. Thomsen (eds), *Private Associations and the Public Sphere*, 25–56. Copenhagen.
- ARNAOUTOGLOU, I. 2016. Hierapolis and its Professional Associations: A Comparative Analysis. In: A. Wilson, M. Flohr (eds), *Urban Craftsmen and Traders in the Roman World*, 278–300. Oxford.
- ASCOUGH, R., P.A. HARLAND, J.S. KLOPPENBORG 2012. Associations in the Greco-Roman World. A Sourcebook. Waco.
- AUSBÜTTEL, F.M. 1982. Untersuchungen zu den Vereinen im Westen des römischen Reiches. Kallmünz.
- AVRAM, A. 2015. Newly Published Documents Concerning Cult Associations in the Black Sea Area: Some Remarks. In: V. Gabrielsen, C.A. Thomsen (eds), *Private Associations and the Public Sphere*, 122–135. Copenhagen.
- BASLEZ, M.F. 1996. Les immigrés orientaux en Grèce: tolérance et intolérance de la cité. *Cahiers du Centre Gustave Glotz* 7, 39–50.
- BASLEZ, M.F. 2004. Les notables entre eux. Recherches sur les associations d'Athènes à l'époque romaine. In: S. Follet (ed.), L'Hellénisme d'époque romaine. Nouveaux documents, nouvelles approches (1<sup>er</sup> s. a.C. – III<sup>e</sup> s. p.C.). Actes du colloque international à la mémoire de Louis Robert, Paris 7–8 juillet 2000, 105–120. Paris.
- BASLEZ, M.F. 2013. Les associations à Délos: depuis les débuts de l'Indépendance (fin du IVe siècle) à la période de la colonie athénienne (milieu du IIe siècle). In: P. Frölich, P. Hamon (eds), Groupes et associations dans les cités grecques (III<sup>e</sup> s. av. J.-C.-II<sup>e</sup> s. apr. J.-C.). 227–250. Geneva.
- BLAVATSKIY, V.D. 1964. Pantikapey [Panticapaeum]. Moscow.

BOLTUNOVA, A.I. 1971. Nadpisis Gorgippii (iz sluchajnykh nakhodok). Numizmatika i Epigrafika 9, 3–15.

BOLTUNOVA, A.I. 1986. Nadpisi Gorgippii iz nakhodok 1971–1981 gg. *Vestnik Drevney Istorii* 176.1, 43–61. BOURGUET, E. 1894. Décret des Orgéons d'Amynos. *BCH* 18, 491–492.

- BRAVO, B. 2007. Testi iniziatici da Olbia Pontica (VI e V sec. a. C.) e osservazioni su orfismo e religione civica. *Palamedes* 2, 55–92.
- BRUNEAU, P. 1978. Deliaca (II): 19. L'établissement des Poseidoniastes de Bérytos: contributions récentes. *BCH* 102.1, 109–171.
- CALDERINI, A. 1934. Le Associazioni Professionali in Roma Antica: Conferenza detta all'Associazione per lo sviluppo dell'alta cultura. Milan.
- CALHOUN, G.M. 1964. Athenian Clubs in Politics and Litigation. Austin.
- DIOSONO, F. 2007. Collegia. Le associazioni professionali nel mondo Romano. Rome.
- DITTMANN-SCHÖNE, I. 2001. Der Berufsvereinen in den Städten des kaiserzeitlichen Kleinasiens. Regensburg.
- DONDIN-PAYRE, M., TRAN, N. 2012. Collegia. Le phénomène associatif dans l'Occident romain. Bordeaux Paris.
- DRERUP, E. 1899. Ein antikes Vereinsstatut. Neue Jahrbücher für das Klassische Altertum Geschichte und deutsche Literatur 3, 356–370.
- ELTER, A. 1916. Die Statuten Des Vereins der Jobacchen in Athen. Ostergruss der Rheinischen Friedrich-Wilhelms-Universität zu Bonn an ihre Angehörigen im Felde, 87–94.
- ENGELMANN, H. 1970. Ehreninschrift Eines Rhodischen Vereins. ZPE 6, 279–282.

FERGUSON, W.S. 1944. The Attic Orgeones and the Cult of Heroes. Harvard Theological Review 37, 61–140.

FOUCART, P. 1864. Un décret des thiasotes. Revue archéologique 10, 399-405.

- FOUCART, P. 1873. De collegiis scenicorum artificum apud Graecos. Paris.
- FOUCART, P. 1873. Des associations religieuses chez les Grecs: Thiases, èranes, orgéons, avec le texte des inscriptions relatives à ces associations. Paris.
- FRÖLICH, P., HAMON, P. 2013. Groupes et associations dans les cités grecques (III<sup>e</sup> s. av. J.-C.-II<sup>e</sup> s. après J.-C.). Geneva.
- GABELKO, O. L., ZAVOYKINA, N.V., SHAVYRINA, T.G. 2006. "Stella Ompsalaka" und fiasy Fanagorii v pervye veka n.e ["The Stela of Ompsalakos" and the Thiasoi from Phanagoreia in the first centuries CE]. Antichnyj Mir I Arkheologija 12, 334–344.
- GABRIELSEN, V. 1994. The Rhodian Associations Honouring Dionysodoros from Alexandria. *Classica et mediaevalia* 45, 137–160.
- GEAGAN, D.J. 1972. Hadrian and the Athenian Dionysiac Technitai. *Transactions of the American Philological Associations* 103, 133–162.
- GOODENOUGH, E.R. 1956-1957. The Bosporus Inscriptions to the Most High God. Jewish Quarterly Review 27, 221–245.
- HARLAND, P.A. 1996. Honours and Worship: Emperors, Imperial Cults and Associations at Ephesus (First to Third Centuries C.E.). *Studies in Religion* 25, 319–334.
- HARLAND, P.A. 2000. Honouring the Emperor or Assailing the Beast: Participation in Civic Life Among Associations (Jewish, Christian and Other) in Asia Minor and the Apocalypse of John. *Journal for the Study of the New Testament* 77, 99–121.
- HARLAND, P.A. 2003. Imperial Cults Within Local Cultural Life: Associations in Roman Asia. Ancient History Bulletin 17, 85–107

- HARLAND, P.A. 2005. Familial Dimensions of Group Identity: 'Brothers' (ἀδελφοί) in Associations of the Greek East. *Journal of Biblical Literature* 124, 2005, 491–513.
- HARLAND, P.A. 2007. Familial Dimensions of Group Identity (II): 'Mothers' and 'Fathers' in Associations and Synagogues of the Greek World. *Journal for the Study of Judaism in the Persian, Hellenistic, and Roman Period* 38, 57–79.
- HARLAND, P.A. 2012. Banqueting Values in the Associations: Rhetoric and Reality. In: D.E. Smith, H.E. Taussig (eds), *Meals in the Early Christian World: Social Formation, Experimentation, and Conflict at the Table*, New York. 73–85.
- HARLAND, P.A. 2014. Greco-Roman Associations. Texts, Translations, and Commentary. II. North Coast of the Black Sea, Asia Minor. Berlin.
- HARLAND, P.A. 2015. Associations and the Economics of Group Life. A Preliminary Case Study of Asia Minor and the Aegean Islands. *Svensk Exegetisk Årsbok* 80, 1–37.
- HASENOHR, C. 2001. Les monuments des collèges italiens à Délos. In: J.-Y. Marc, J.-C. Moretti (eds),
   Constructions publiques et programmes édilitaires en Grèce entre le II<sup>e</sup> siècle av. J.-C. et le I<sup>er</sup> siècle après J.-C.:
   Actes du colloque international organisé à l'École Française d'Athènes et le CNRS, Athènes 14-17 Mai 1995.
   329–348. Paris.
- HEINECKE, J. 1723. De collegiis et corporibus opificum. Magdeburg.
- HUBERT, D. 1897. Les collegia iuvenum dans l'empire romain. *Le Musée belge. Revue de philologie classique* 1, 114–136.
- HUBERT, D. 1899. Encore les collegia iuvenum. Le Musée belge. Revue de philologie classique 3, 177–192.
- ISMARD, P. 2010. La cité des réseaux: Athènes et ses associations, VI<sup>e</sup> I<sup>er</sup> siècle av. J.-C. Paris.
- IVANTCHIK, A. 2008. Greeks and Iranians in the Cimmerian Bosporus in the Second/First Century BC: New Epigraphic Data from Tanais. In: S.M.R. Darbandi, A. Zournatzi (eds), Ancient Greece and Ancient Iran. Crosscultural Encounters, 93–107. Athens.
- JACCOTTET, A.-F. 2003. 2003. Choisir Dionysos. Les associations dionysiaques ou la face cachée du dionysisme; Vol. 1, Texte; Vol. 2, Documents. Zürich.
- JONES, N.F. 1999. The Associations of Classical Athens: The Response to Democracy. New York.
- KALASHNIK, Ju. P. 1972. Nadpis fiasa iz Gorgippii [An Inscription of a Thiasos from Gorgippia]. Soobshchenija Gosudarstvennogo Ermitazha 35, 50–52.
- KOESTER, H. 1999. Associations of the Egyptian Cult in Asia Minor. In: P. Scherrer, H. Taeuber, H. Thür (eds), Steine und Wege: Festschrift für Dieter Knibbe zum 65. Geburtstag, 315–318. Vienna.
- KOLOBOVA, K.M. 1933. K voprosu o sudovladenii v drevney Gretzii. Izvestiya Gosudarstvennoy Akademii Istorii Materialnoy Kultury 61.
- KREUZ, P.-A. 2012. Die Grabreliefs aus dem Bosporanischen Reich. Leuven-Paris-Walpole.
- LATYSHEV, B. 1885. Inscriptiones orae septentrionalis Ponti Euxini. I. Petropoli.
- LATYSHEV, B. 1890. Inscriptiones orae septentrionalis Ponti Euxini. II. Petropoli.
- LATYSHEV, B. 1901. Inscriptiones orae septentrionalis Ponti Euxini. IV. Petropoli.
- LATYSHEV, B. 1916. Inscriptiones orae septentrionalis Ponti Euxini. I<sup>2</sup>. Petropoli.
- LE GUEN, B. L'association des technites d'Athènes ou les ressorts d'une cohabitation réussie. In: J.-C. Couvenhes (ed.), *Individus, groupes et politique à Athènes de Solon à Mithridate*, 339–364. Tours.
- LEIWO, M. 1997. Religion, or Other Reasons? Private Associations in Athens. In: Jaakko Frösén (ed.), Early Hellenistic Athens: Symptoms of a Change, 103–117. Helsinki.

- LIEBENAM, W. 1890. Aus dem Vereinswesen im römischen Reiche. Zeitschrift für Kulturgeschichte 4, 112–138.
- LIEBENAM, W. 1890. Zur Geschichte und Organisation des römischen Vereinswesens: Drei Untersuchungen. Leipzig.
- LIU, J. 2009. Collegia Centonariorum: The Guilds of Textile Dealers in the Roman West. Leiden-Boston.

MACMULLEN, R. 1974. Roman Social Relations 50 B.C. to A.D. 284. New Haven-London.

- MARTI, J.J. 1906. Novaja nadpis' religioznogo obščestva, najdennaja v Kerči. Zapiski Imperatorskogo Odesskogo Obščestva Istorii i Drevnostej 26, 60–62.
- MARTIN SAINT-LEON, E. 1899. Les anciennes corporations de métiers et les syndicates professionnels. Paris.
- MATSULEVICH, L.A. 1941. Kto byl Kallisfen, nazvannyj v nadpisi otkrytoj v Kerch v 1894 g.?. Sovetskaja Arkheologija 7, 61–80.
- MCLEAN, B.H. 1996. The Place of Cult in Voluntary Associations and Christian Churches on Delos. In: J.S. Kloppenborg, S.G. Wilson (eds), *Voluntary Associations in the Graeco-Roman World*, 186–225. London-New York.
- MCLEAN, B.H. 1999. Hierarchically Organized Associations on Delos. In: Atti XI Congresso Internazionale di Epigrafia Greca e Latina, Roma, 18-24 settembre 1997, 361–370. Rome.
- MENNELLA, G., G. APICELLA 2000. Le corporazioni professionali nell'Italia romana: un aggiornamento al Walzing. Naples.
- MEYER, H. 1988. Zur Chronologie des Poseidoniastenhauses in Delos. Mitteilungen des Deutschen Archäologischen Instituts Athenische 103, 203–220.
- MOMMSEN, T. 1843. De collegiis et sodaliciis Romanorum, accedit inscription lanuvina. Keil.
- MOMMSEN, T. 1850. Römische Urkunden IV: Die Lex Iulia de Collegis und die lanuvinische Lex Collegii Salutaris, Zeitschrift für Geschichtliche Rechtswissenschaft 15, 353–364.
- MOMMSEN, T. 1907. Zur Lehre von den römischen Korporationen. Gesammelte Schriften 3. Juristische Schriften, 53–68. Berlin.
- NOVOSADSKI, N.I. 1928. Bosporskiye fiasy. In: Trudy sektzii arkheologii Rossiyskoy assotziatzii Nauchnoissledovatel'skikh institutov obshchestvennyjh nauk, 55–70. Moscow.
- PÁZSINT, A I., The Kindred Dimension of the Black Sea Associations: Between Fictive and Real Meaning (3<sup>rd</sup> century BC – 3<sup>rd</sup> century AD). In: R. Varga, G. Cupcea (eds), Social Interactions and Status Markers in the Roman World, 79–88. Oxford.
- PERRY, J.S. 2001. Ancient Collegia, Modern Blackshirts? The Study of Roman Corporations in Fascist Italy. *International Journal of the Classical Tradition* 8, 205–216.
- PERRY, J.S. 2006. The Roman Collegia: The Modern Evolution of an Ancient Concept. Leiden-Boston.
- PERRY, J.S. 2012. Organized Societies: Collegia. In: M. Peachin (ed.), *The Oxford Handbook of Social Relations in the Roman World*, 499–515. Oxford.
- PETZL, G., E. SCHWERTHEIM. 2006. Hadrian und die dionysischen Künstler: Drei in Alexandria Troas neugefundene Briefe des Kaisers an die Künstler-Vereinigung. Bonn.
- PICARD, C. 1920. Fouilles de Délos (1910): Observations sur la société des Poseidoniastes de Bérytos et sur son histoire. *Bulletin de Correspondance Hellénique* 44, 263–311.
- PLATNER, E. 1709. De collegiis opificum. Klaubarthia.
- POLAND, F. 1895. De Collegiis Artificum Dionysiacorum. Dresden
- POLAND, F. 1909. Geschichte des griechischen Vereinswesens. Leipzig.
- POLAND, F. 1911. Zum Griechischen Vereinswesen. Philologus 70, 520-28.

### Annamária-Izabella Pázsint

POMIALOVSKI, I.V. 1888. O tanaitskikh kollegiyakh. Trudy IV Arkheologischeskogo s'yezda, 24–28. Odessa.

- POVALAHEV, N. 2011. Eine Bauinschrift aus Phanagoreia von 220/1 n. Chr. und ihr historischer Hintergrund. Text und Kommentar. Zeitschrift für Papyrologie und Epigraphik 177, 141–156.
- ROBERT, J., L. ROBERT 1959. Bulletin épigraphique. Revue des Études Grecques 72.339–342, 1959, 149–283.
- DE ROBERTIS, F.M. 1955. Il fenomeno associativo nel mondo romano: dai collegi della repubblica alle corporazioni del Basso Impero. Naples.
- DE ROBERTIS, F.M. 1973. Storia delle corporazioni e del regime associativo nel mondo romano. Bari.
- ROBERTS, C., T.C. SKEAT, A.D. NOCK 1936. The Gild of Theos Hypsistos. *Harvard Theological Review* 29(1), 39–88.
- ROHDE, D. 2012. Zwischen Individuum und Stadtgemeinde: Die Integration von collegia in Hafenstädten. Studien zur Alten Geschichte. Mainz.
- ROSTOVTZEFF, M. 1957. The Social and Economic History of the Roman Empire, 2<sup>nd</sup> edition, revised by P.M. Fraser. Oxford.
- RUSJAEVA, A.S. 2010. Graffiti Ol'vii Ponticheskoj. Simferopol.
- SAPRYKIN, S.Y. 1986. Iz epigrafiki Gorgippii. Vestnik Drevney Istorii 176, 62–75.
- SAPRYKIN, S.Y. 2000. Lex sacra iz Gorgippii. In: M. Tacheva-Hitova, D. Bojadzhiev (eds), *Studia in Honorem Borisi Gerov*, 203–213. Sofia.
- SAPRYKIN, S.Y. 2009. Sauromat II i fiasy Bospora. Drevnosti Bospora 13, 328-347.
- SAPRYKIN, S.Y., I.A. BARANOV 1995. A Greek Inscription from Sudak. Archeologija 2, 137–140.
- SAPRYKIN, S.Y., O.D. CHEVELYOV 1996. Fragment grecheskoy nadpisi iz Pantikapeya: k voprosu ob organizatzii bosporskikh religioznykh soyuzov. *Rossiyskaya Arkheologiya* 2, 161–167.
- SAPRYKIN, S.Y., I.A. BARANOV 1997. A Greek Inscription from Sudak. Thracia Pontica 6(1), 249–258.
- SAPRYKIN, S.Y., MASLENNIKOV, A.A. 1999. Grecheskie nadpisi s mysa Zjuk. Drevnosti Bospora 2, 193-202.
- SHKORPIL, V.V. 1908. Bosporskiye nadpisi, naydennye v 1907 g. IAK 27, 42–54.
- SMIRNOVA, N. V. 2001. Namestniki Gorgippii. Drevnosti Bospora 4, 350-367.
- SOLOMONIK, E.I. 1984. Graffiti s khory Khersonesa. Kiev.
- STEINHAUER, J. 2014. Religious Associations in the Post-classical Polis. Stuttgart.
- STOLBA, V.F. 2013. A Prosopographical Note on IOlbia 11. *Mnemosyne* 66, 293–302.
- STRUVE, V.V. et al. 1965. Corpus Inscriptionum Regni Bosporani. Leningrad.
- TACHEVA-HITOVA, M. 1978. Dem Hypsistos Geweihte Denkmaler in den Balkanlander. *Balkan Studies* 19, 59–75.
- TACHEVA-HITOVA, M. 1978. O kul'te theos hypsistos na Bospore. Vestnik Drevney Istorii 2, 111–117.
- THOMAS, S.K. 1994. A Sociological Analysis of Guilds in First-century Asia Minor as Background for Revelation 2:18-29. New Orleans.
- THOMSEN, C.A. 2014. The Eranistai of Classical Athens. Greek, Roman and Byzantine Studies 55, 154–175.
- TOD, M.N. 1906-1907. A Statute of an Attic Thiasos. Annual of the British School at Athens 13, 328-338.
- TORRI, A. P. 1938. Le corporazioni ostiensi. L'Urbe 3(9), 1-8.
- TORRI, A. P. 1941. Le corporazioni romane. Cenno storico giuridico economico. Rome.
- TOURNON, E. 1895. De la personnalité civile des sociétés et des associations. Bordeaux.
- TRAN, N. 2001. Le collège la communauté et le politique sous le Haut-Empire romain. Historiographie du droit à la fin du XIXe siècle, 'tradition sociologique' et quelques recherches contemporaines. *Cahiers du Centre Gustave Glotz* 12, 181–198.

- TRAN, N. 2006. Les membres des associations romaines. Le rang social des collegiati en Italie et en Gaules, sous le Haut-Empire. Rome.
- TRAN, N. 2011. Les collèges professionnels romains: «clubs» ou «corporations»? L'exemple de la vallée du Rhône et de CIL XII 1797 (Tournon-sur-Rhône, Ardèche). *Ancient Society* 41, 197–219.
- TRAN, N. 2012. Associations privées et espace public. Les emplois de publicus dans l'épigraphie des collèges de l'Occident romain. In: M. Dondin-Payre, N. Tran (eds), Collegia. Le phénomène associatif dans l'Occident romain, 63–80. Bordeaux–Paris.
- TRÜMPER, M. 2006. Negotiating Religious and Ethnic Identity: The Case of Clubhouses in Late Hellenistic Delos. *Hephaistos* 24, 113–140.
- TRÜMPER, M. 2011. Where the Non-Delians Met in Delos. The Meeting-places of Foreign Associations and Ethnic Communities in Late Hellenistic Delos. In: O.M. van Nijf, R. Alston, C.G. Wiliamson (eds), Political Culture in the Greek City After the Classical Age, 49–100. Leuven–Paris–Walpole.
- USTINOVA, Y. 1984. Private Associations in Classical Athens. Leningrad.
- USTINOVA, Y. 1988. Chastnye kul'tovye soobshchestva u grekov Attika (VI–IV vv. do n. e.). In: G.S. Knabe (ed.), *Byt i istoriya v antichnosti*, 192–218. Moscow.
- USTINOVA, Y. 1991. The Thiasoi of Theos Hypsistos in Tanais. History of Religions 31, 150–180.
- USTINOVA, Y. 1999. The Supreme Gods of the Bosporan Kingdom. Celestial Aphrodite and the Most High God. Leiden-Boston-Köln.
- VAN NIJF, O.M. 1997. Les élites comme patrons des associations professionnelles dans l'Orient romain.
   In: M. Cébeillac-Gervasoni, L. Lamoine (eds), Les élites et leurs facettes. Les élites locales dans le monde hellénistique et romain, 307–321. Paris.
- VAN NIJF, O.M. 1997. The Civic World of Professional Associations in the Roman East. Amsterdam.
- VÉLISSAROPOULOS, J. 1980. Les nauclères grecs. Recherches sur les institutions maritimes en Grèce et dans l'Orient hellénisé. Geneva–Paris.
- VERBOVEN, K. 2011. Professional Collegia: Guilds or Social Clubs. Ancient Society 41, 187-195.
- von STERN, E.R. 1900. Dva nadgrobija iz Kerči, postavlennye ot imeni religioznogo obščestva v pamjať usopšich členov. Zapiski Imperatorskogo Odesskogo Obščestva Istorii i Drevnostej 22, 128–132.
- von STERN, E.R. 1902. Nadpis' religioznogo Obščestva iz Feodosii. Zapiski Imperatorskogo Odesskogo Obščestva Istorii i Drevnostej 24, 29–35.
- VOROSHILOVA, O., ZAVOYKINA, N.V. 2016. In: A.A. Zavoykin (ed.), Fanagoriya. T.4. Materialy po arkheologii i istorii. Vyp.2. IV. 2, 24–33. Moscow.
- WALTZING, J.P. 1890. Une Inscription du Collegium Negotiantium Corariorum de la Ville de Rome. *Revue de l'Instruction Publique en Belgique* 33, 9–20.
- WALTZING, J.P. 1892. L'épigraphie Latine et les corporations professionnelles de l'empire Romain. Gand.
- WALTZING, J.P. 1895-1900. Étude historique sur les corporations professionnelles chez les Romains depuis les origines jusqu'à la chute de l'empire d'occident. Louvain.
- WALTZING, J.P. 1898. Les collèges funéraires chez les romains. Le musée belge. Revue de philologie classique 2, 281–294.
- WESCHER, C. 1864. Inscriptions de l'île de Rhodes relatives à des sociétés religieuses. *Revue archéologique* 10, 460-473.
- WEST, M.L. 1982. The Orphics in Olbia. Zeitschrift für Papyrologie und Epigraphik 45, 17–29.
- YAILENKO, V. P. 2002. Opistograf iz Fanagorii so stroitel'noj nadpis'ju I epitafiej fiasota. *Problemy Istorii Filologii Kultury* 12, 229–242.

YAILENKO, V. P. 2010. Tysjacheletnij Bosporskij Rejkh. Moscow.

- ZAVOYKINA, N.V. 2003. [The Private Associations of Panticapaeum in the first centuries AD]. Drevnosti Bospora 6, 120–137.
- ZAVOYKINA, N.V. 2004. Ταναεῖται v istorii Bosporskogo carstva. Drevnosti Bospora 7, 163–198.
- ZAVOYKINA, N.V. 2007. Castnye soobscestva Tanaisa (104–244 gg. n.e.). Problemy Istorii Filologii Kultury 17, 299–315.
- ZAVOYKINA, N.V. 2013a. Bosporskie fiasy. Mezhdu polisom i monarkhie]. Moscow.
- ZAVOYKINA, N.V. 2013b. Iz istorii bosporskoj elity II-III vv n.e. Julij Menestrat I Khofrazm, syn Fargobaka. Problemy Istorii Filologii Kul'tury 40(2), 250–262.
- ZAVOYKINA, N.V. 2014. Polis and Monarchy in the Bosporan Kingdom in the 1<sup>st</sup> 3<sup>rd</sup> Centuries AD. In: Nikolai Povalahev (ed.), *Festschrift für Vladimir Kuznetzov*, 317–343. Göttingen.
- ZHEBELYOV, S.A. 1940. Tanaidskiye brat'ya-priyomyshi. Kratkiye Soobshcheniya Instituta Istorii Material'noy Kul'tury 5, 47–49.

ZIEBARTH, E.G.L. 1896. Das griechisches Vereinswesen. Stuttgart.

ZIEBARTH, E.G.L. 1907. Ἐρανος, Pauly-Wissowa Realencyclopädie der Classischen Altertumswisschenschaft, 328– 330.

ZIMMERMANN, C. 2002. Handwerkervereine im griechischen Osten des Imperium Romanum. Mainz.



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# Roman imperial coin finds from Tăcuta (Vaslui County, Romania)

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**Abstract**. The Roman coins discovered in various points across the commune of Tăcuta (Vaslui County, Romania) are presented: Tăcuta-"Dealul Miclea" (a possible coin hoard, of which four denarii were recovered: 1 AR Traianus, 3 AR Marcus Aurelius (1 AR Faustina)); Focșeasca-"Pietrăria"(?) (1 AR Traianus, 1 AR Hadrianus) and Cujba (?) (2 AE Constantius II, 1 AE Valens). No information was available for the rest of the coins (1 AR sub., 1 AE Gordianus III, 1 AE Constantius II, 1 AE Valens). They are part of private collections (Șt. Ciudin), public collections (The "Ștefan cel Mare" Museum of Vaslui) or their traces were lost. The monetary items are correlated with the numerous archaeological vestiges of the "Poienești" or "Sântana de Mureș-Chernyakhiv" type, known to have been found in this area. In addition, this work interprets the monetary finds of Tăcuta in the broader context of the presence of Roman coins in the "barbarian" territory east from the Carpathians, throughout the 2<sup>nd</sup>-4<sup>th</sup> centuries AD.

**Rezumat.** Sunt prezentate monedele romane descoperite în diferite puncte de pe teritoriul comunei Tăcuta (jud. Vaslui): Tăcuta-"Dealul Miclea" (un posibil tezaur monetar, din care s-au recuperat patru denari: 1 AR Traianus, 3 AR Marcus Aurelius (1 AR Faustina)); Focșeasca-"Pietrăria" (?) (1 AR Taianus, 1 AR Hadrianus) și Cujba (?) (2 AE Constantius II, 1 AE Valens). Pentru alte monede nu s-au păstrat nici un fel de informații (1 AR sub., 1 AE Gordianus III, 1 AE Constantius II, 1 AE Valens). Ele se află în colecții private (Șt. Ciudin), publice (Muzeul "Ștefan cel Mare" din Vaslui) sau li s-a pierdut urma. Piesele monetare sunt corelate cu numeroasele vestigii arheologice de tip "Poienești" sau "Sântana de Mureș-Chernyakhiv", cunoscute în această zonă. De asemenea, se încearcă interpretarea descoperirilor monetare de la Tăcuta în contextul mai larg al prezenței monedelor romane în teritoriul "barbar" de la răsărit de Carpați, în cursul veacurilor II-IV p.Chr.

Keywords: Tăcuta, Roman coins, coin hoard, Barbaricum, Moldavia.

The Roman coins, especially the imperial ones, represent an artefact category well represented and studied in the territory east from the Carpathians. Their list enriches regularly, through new finds or information on older finds, but their inclusion in the scientific circuit must be accompanied every time by critical appraisals and rigorous assessments.

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On the territory of the commune of Tăcuta—situated in the north of the Vaslui County, at the border with the Iasi County (Figure 1)-several monetary finds from the Roman period were discovered. The oldest numismatic information from this area may be found in a remarkable archaeological synthesis work for the entire Romanian territory of Moldavia. It mentions the discovery of three Roman imperial coins, in the locality of Mircesti (the commune of Tăcuta, Vaslui County), in the point "Dealul Miclea (Dealul Mare)" (Figure 2). The coins would have been discovered after the field surveys conducted by St. Ciudin and C. Buraga, in 1959 or maybe a year later by N. Zaharia<sup>3</sup>. The information concerning the discovery place was amended and completed in subsequent works. Thus, the monograph of the commune features the important mention that the items were discovered in the southeast part of "Dealul Miclea"<sup>4</sup>. The archaeological repertory of the county establishes that the slope of the "Miclea" promontory where the coins were found actually belongs to the locality of Tăcuta, being situated at the SSW limit, above the confluence of the Rediu and Valea Largă creeks<sup>5</sup>. Even after this rectification, the scientific literature has falsely perpetuated the locality of Mircești (situated 5 km to the west) as the place of origin for the coins<sup>6</sup>.

"Dealul Miclea" ("Paic") is an area very rich in archaeological vestiges, from various historical periods. On its eastern lobe, an impressive prehistoric settlement was discovered as early as mid-20<sup>th</sup> century<sup>7</sup>. After the recent systematic research (of 2011–2013; 2015–2017), two habitation levels were identified, belonging to the Cucuteni culture (phase A3) and to the Bronze Age (Noua culture)<sup>8</sup>. In the western extremity of this prehistoric settlement, artefacts of the 2<sup>nd</sup>–3<sup>rd</sup> century AD were discovered, too: a small bronze cauldron, a socketed iron spearhead<sup>9</sup>, as well as numerous local and Roman ceramic fragments (amphorae)<sup>10</sup>. They may belong to a habitation level dated to this period. Unfortunately, recent archaeological research conducted in this site failed to confirm it. We believe that the three imperial coins—discovered in the same area where the artefacts were harvested—are related to the presumptive "Poieneşti" settlement<sup>11</sup>.

<sup>&</sup>lt;sup>3</sup> ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 325, no. 353b.

<sup>&</sup>lt;sup>4</sup> CIUDIN 1980, 27.

<sup>&</sup>lt;sup>5</sup> COMAN 1980, 241, fig. 63; 242, no. LXII/1.

<sup>&</sup>lt;sup>6</sup> DEPEYROT, MOISIL 2008, 119, no. 72; MUNTEANU 2017a, 928, fig. 1.

<sup>&</sup>lt;sup>7</sup> ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 325, no. 353b; ZAHARIA, BURAGA 1979, 261–263; COMAN 1980, 241–242, no. LXII/1; CIUDIN 1980, 25.

<sup>&</sup>lt;sup>8</sup> The research was conducted by D. Boghian ("Ștefan cel Mare" University of Suceava), and the outcomes were published in *Cronica Cercetărilor Arheologice din România* (2012–2017) and in various studies and papers within scientific journals.

<sup>&</sup>lt;sup>9</sup> ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 325, no. 353b; COMAN 1980, 242, no. LXII/1.

<sup>&</sup>lt;sup>10</sup> SANIE 1968, 348; COMAN 1980, 242, no. LXII/1.

<sup>&</sup>lt;sup>11</sup> MUNTEANU 2017b, 95.

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Figure 1. The map of Moldavia with the position of the commune of Tăcuta (Vaslui County, Romania)

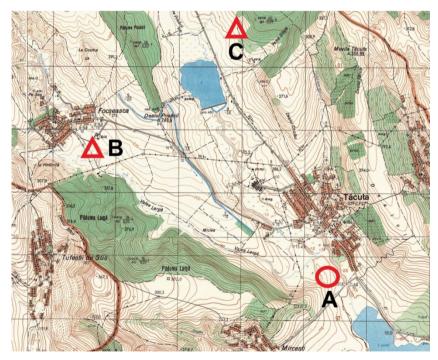


Figure 2. Roman imperial coin finds from Tăcuta: A. Tăcuta-"Dealul Miclea" (Cat. nos. 1–4); B. Focșeasca-"Pietrăria" (?) (Cat. nos. 5–6); C. Cujba (?) (Cat. nos. 9–10, 13)

Up to this point, there has been no accurate identification of these coins and there is no information concerning the place where they are preserved. There is no description or outline of the technical data, (weight, dimension, axis) but fortunately, they were illustrated by the first authors<sup>12</sup>. Based on those images, only the issuers of the coins were identified by B. Mitrea<sup>13</sup> and V. Mihailescu-Bîrliba<sup>14</sup>. With the help of the same photographs, we managed to determine the chronology of these emissions correctly (Cat. nos. 2–4). All of them date to the reign of Marcus Aurelius, the last of them being minted for his wife, Faustina Minor.

Regarding the character of the find on "Dealul Miclea", most specialists registered the coins as isolated finds<sup>15</sup>. In the territory east from the Carpathians, there are numerous isolated finds of Roman imperial coins, made of silver, most of them belonging to the Antonine emperors. The majority are stray finds; they originate in the coin hoards of the time. Only a small part belongs to the "Poienesti" or "Sântana de Mures-Chernyakhiv" sites. In such cases, the number of coins discovered is extremely small, rarely counting more than two or three items<sup>16</sup>. This is a natural situation for a space situated beyond the *limes*, where the Roman coin has specific functions: guaranteeing the value; a means to show the social status, the political prestige; or a ritual item used in magical-religious practices<sup>17</sup>. It is more likely for the three *denarii* to have belonged to a coin hoard<sup>18</sup>, from which they were separate under unknown circumstances. Photographs suggest that the coins were preserved quite well; they have no visible traces of wear and tear. Unfortunately, we could not identify the existence of a patina on their surface. It appears significant that they form a narrow chronological series, focusing throughout a decade, which is characteristic to the Roman coin hoards. Furthermore, all these monetary types are frequently encountered in the composition of the imperial *denarii* hoards on the Moldavian territory, belonging to various periods. Often, they were discovered within "Poienesti" sites or in their vicinity<sup>19</sup>.

In the year 2015, throughout the systematic archaeological excavations in the prehistoric site of "Dealul Miclea", another silver coin was discovered, dating to Traianus's reign (Cat. no. 1). Unfortunately, the item has no context, being retrieved from the vegetal layer<sup>20</sup>. The coin comes from the western part of the site, from the area where the "Carpic" artefacts were

<sup>&</sup>lt;sup>12</sup> ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 634, pl. CCLVIII/2-4.

<sup>&</sup>lt;sup>13</sup> MITREA 1971a, 130, no. 82; 1971b, 409, no. 82.

<sup>&</sup>lt;sup>14</sup> MIHAILESCU-BÎRLIBA 1980, 271, no. 152.

 <sup>&</sup>lt;sup>15</sup> ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 634, pl. CCLVIII/2-4; MITREA 1971a, 130, no. 82; 1971b, 409, no. 82; BICHIR 1973, 131, no. 22; 1976, 120, no. 22; CIUDIN 1980, 27; COMAN 1980, 242, no. LXII/1; MIHAILESCU-BÎRLIBA 1980, 271, no. 152;

<sup>&</sup>lt;sup>16</sup> MIHAILESCU-BÎRLIBA 1980, 155, 161, 167, 177, 184–192, tab. XXXIII–XXXVI; 194–196, tab. XXXVII–XXXVIII; 198–200, tab. XXXIX; 205–206, 241, 245–246; MUNTEANU 2017a, 926, 929, fig. 2.

<sup>&</sup>lt;sup>17</sup> BURSCHE 2008, 395–416.

<sup>&</sup>lt;sup>18</sup> DEPEYROT, MOISIL 2008, 119, no. 72; MUNTEANU 2017a, 928, fig. 1; 2017b, 96.

<sup>&</sup>lt;sup>19</sup> MIHAILESCU-BÎRLIBA 1980, 161, 167, 177; MUNTEANU, MIHAILESCU 2018, 222.

<sup>&</sup>lt;sup>20</sup> BOGHIAN *et al.* 2016, 93; MUNTEANU 2017b, 98, no. IV/1.

discovered, along with the three Roman *denarii*. The piece was preserved in a good state and when it was dug out, it had a layer of bluish-green oxide, representing corrosion products of the copper within the alloy. The deposits in question were quite consistent, which is a commonplace for the silver coins within hoards<sup>21</sup>. We believe it is highly likely for this coin, along with the three others within the same area, to belong to the presumptive hoard of Tăcuta–"Dealul Miclea". Almost all the Roman imperial coin hoards discovered in Moldavia comprise consistent cores of *denarii*, dated to the reigns of Traianus–Marcus Aurelius<sup>22</sup>. Such a core is the present find, which may belong to a larger group of imperial hoards east from the Carpathians, concluded during Marcus Aurelius–Septimius Severus. Unfortunately, due to the small size of the sample studied, it is difficult to determine a more accurate chronology.

Two other Imperial silver coins, unpublished thus far, are part of the St. Ciudin collection, in Tăcuta. It is a denarius from Traianus (Cat. no. 5) and another one from Hadrianus (Cat. no. 6). The latter is highly worn and damaged, featuring numerous superficial and irregular cuts on the reverse. In the monograph of the commune of Tăcuta, there is a mention of two Roman silver coins, discovered in the locality of Focseasca (Tăcuta commune, Vaslui County), in the place called "Pietrăria". They were found in the rock layer at the surface, along with "a grey metal statuette, representing the miniature face of a man"<sup>23</sup>. They may very well be our coins, which were purchased by the author from the locals, ending up in his personal collection. Repeated contact with a hard surface (i.e. rock) may explain the unintentional scratches on the coin dated to Hadrianus's reign. It is impossible to determine whether the two denarii are isolated finds or they belonged to a hoard. The statuette's head, associated with the coins, represents an exceptional artefact, probably of a Roman origin, about which no other information is available. Other archaeological items-a small chisel and a pestle, dated to the same period (the "La Tène Getian-Dacian culture")-were found nearby, on the eastern slope of "Pietrăria"<sup>24</sup>. All of these finds may indicate the existence of a settlement of the  $2^{nd}-3^{rd}$  century (or later) in this point.

The last of the silver coins presented is a *denarius subaeratus*, of the Imperial period, with unidentified issuer (Cat. no. 7). The only information available about this coin is that it was found in the commune of Tăcuta<sup>25</sup>. The item was minted, but the silver foil at the surface has disappeared completely; only the bronze core was preserved. In the territory east from the Carpathians, the *denarii subaerati* are found almost exclusively within hoards<sup>26</sup>. In some of

<sup>&</sup>lt;sup>21</sup> MIHAILESCU-BÎRLIBA, MITREA 1977, 24–26; MUNTEANU, MIHĂILESCU, DUMITROAIA 2017, 94, 128, fig. 3.

<sup>&</sup>lt;sup>22</sup> MIHAILESCU-BÎRLIBA 1979, 320–321; 1980, 81, 87, 97, 100, 103, 109; 1991, 58; MITREA, MIHAILESCU-BÎRLIBA 2003, 200.

<sup>&</sup>lt;sup>23</sup> CIUDIN 1980, 27.

<sup>&</sup>lt;sup>24</sup> CIUDIN 1980, 27.

<sup>&</sup>lt;sup>25</sup> MUNTEANU 2017b, 98, no. IV/2.

<sup>&</sup>lt;sup>26</sup> MUNTEANU, POPUȘOI 2014, 5–6.

them—e.g. of Bozieni <sup>27</sup> and Stănița<sup>28</sup> (Neamț County), within local settlements—they are even predominant.

The issuers of these counterfeit coins are mostly emperors of the Antonine dynasty<sup>29</sup>. With very few exceptions<sup>30</sup>, all of these items were made by striking. Such coins must also be featured among the isolated finds within Moldavian sites, but they have not been identified as such. Moreover, in other "barbarian" territories like those in central Europe, the *denarii subaerati* account for around 20% of all coins discovered in settlements<sup>31</sup>. Regarding the origin of *fourrées* coins east from the Carpathians, some authors believed they were minted locally<sup>32</sup>, but most specialists ascribed them to the official/semi-official mints across the Empire, destined to "barbarian" populations<sup>33</sup>. Beyond any doubt, they come from the border provinces of the Empire, where such finds are common (in Dacia, too)<sup>34</sup>, but there is no plausible reason to assume they represented an element of the Roman foreign policy, part of the relations with the "barbarian" neighbours.

The Catalogue at the end of this work features six coins made of common metal. One of them dates to the 3<sup>rd</sup> century (Cat. no. 8), while the others to the subsequent century (Cat. nos. 9–13). The early coin is a *sestertius* belonging to Gordian III, minted at Viminacium. It is part of a collection in the Museum of Vaslui being donated by Ghenuță Coman, who noted just that it was found in the commune of Tăcuta<sup>35</sup>. The mint of Viminacium functioned for a short period, in 239–255; bronze coins were minted here regularly, according to the system of official nominal coins (*sestertii, dupondii, asses*)<sup>36</sup>. They are very common in the monetary circulation within the Roman provinces of the Middle and Lower Danube, where they compensated for the pause in the supply from central mints, due to the crisis of mid-3<sup>rd</sup> century<sup>37</sup>. In the territory east from the Carpathians, such finds are known at Bacău<sup>38</sup>, Hârlău (Iași County)<sup>39</sup>, Huși (Vaslui County)<sup>40</sup>, Poienești (Vaslui County)<sup>41</sup>, and Târgu Frumos (Iași

<sup>&</sup>lt;sup>27</sup> CHIŢESCU, URSACHE 1966, 705, nos. 1–3, 7–13; CHIŢESCU 1968, nos. 1–3, 7–13.

<sup>&</sup>lt;sup>28</sup> CHIȚESCU, URSACHI 1969, 147–148, nos. 1–3, 5–8, 10–12.

<sup>&</sup>lt;sup>29</sup> MUNTEANU, POPUȘOI 2014, 6.

<sup>&</sup>lt;sup>30</sup> MUNTEANU, POPUȘOI 2014, 18–19, nos. 21, 24–25.

<sup>&</sup>lt;sup>31</sup> BURSCHE 1997, 34–39.

<sup>&</sup>lt;sup>32</sup> CHIŢESCU, URSACHI 1969: 150.

<sup>&</sup>lt;sup>33</sup> MIHAILESCU-BÎRLIBA, MITREA 1977: 24; MIHAILESCU-BÎRLIBA 1979: 321.

<sup>&</sup>lt;sup>34</sup> GĂZDAC 2010, 150–151, 177; MUNTEANU 2017c, 87–92.

<sup>&</sup>lt;sup>35</sup> BUTNARIU 2007, 98, no. 8/17.

<sup>&</sup>lt;sup>36</sup> MARTIN 1992, 13-83.

<sup>&</sup>lt;sup>37</sup> GĂZDAC 2010, 105–106, 156–158; GĂZDAC, ALFÖLDY-GĂZDAC 2008, 135–171; MUNTEANU 2017c, 102–108, 139–141.

<sup>&</sup>lt;sup>38</sup> MIHAILESCU-BÎRLIBA, BUTNARIU 1988, 313, no. 11.

<sup>&</sup>lt;sup>39</sup> MIHAILESCU-BÎRLIBA, BUTNARIU 1993, 290, no. 22.

<sup>&</sup>lt;sup>40</sup> BUTNARIU 2007, 96, no. 2/7.

<sup>&</sup>lt;sup>41</sup> MITREA 1977, 379, no. 87.

County)<sup>42</sup>. Their presence in this area outside the Roman world may be explained, in our opinion, in the context of the numerous incursions of the Carpi, alone and then along with the Goths, in the territories of the Empire<sup>43</sup>.

The coins of the 4<sup>th</sup> century belong to the emperors Constantius II (*Fel Temp Reparatio* type) (Cat. nos. 9–11) and Valens (*Gloria Romanorum* type) (Cat. nos. 12–13), being minted in the Oriental mints of the Empire. Three of these pieces are preserved in the Ștefan Ciudin collection (Cat. nos. 9–10, 13). Information about their origin may probably be found in the work written by the same author. It features the discovery of three Roman coins (two made of bronze, "unidentified" and one made of silver), on the plateau north from the village of Cujba (Tăcuta commune, Vaslui County), approximately 450 m away<sup>44</sup>. It may seem tempting to assume these are actually the coins that ended up in the Ciudin collection. Thus, the illegible ("unidentified") bronze issues could be the two items in the Catalogue, poorly preserved and extremely damaged, which raised identification problems (Cat. nos. 10, 13). Another bronze coin (Cat. no. 9), dark-coloured and with an even patina, could have been easily misidentified with a silver issue. Of course, these are mere assumptions, impossible to confirm, unfortunately. As for the two other coins of the same period, one of which is part of a Vaslui Museum collection (Cat. no. 11), we only know they were located on the territory of the commune of Tăcuta.

The file of the late Roman imperial coin finds made of bronze, on the Moldavian territory, is rather brief. The number of such items, many of them isolated, is the lowest among all Romanian historical regions<sup>45</sup>. In only a few cases, they may be correlated with sites of the "Sântana de Mureș-Chernyakhiv" type<sup>46</sup>. The situation of hoards is rather similar. We know of only one small deposit with bronze coins from Traian (Neamţ County), ending in the Valentinian period<sup>47</sup>. Another possible find of the same category, from Târgu Frumos, is questionable<sup>48</sup>. The origin of the late Roman bronze coins, on the territory east from the Carpathians, should be sought in the Roman provinces situated on the right bank of the Danube (Scythia Minor, Moesia Secunda)<sup>49</sup>. Reaching this side of eastern *Barbaricum*, mainly through non-commercial relationships, they had no economic role and they did not participate in a real monetary circulation at the time<sup>50</sup>.

<sup>&</sup>lt;sup>42</sup> MIHAILESCU-BÎRLIBA, MIHAI 1996, 254, no. 12.

<sup>43</sup> PETOLESCU 2010, 279-286, 300-304.

<sup>&</sup>lt;sup>44</sup> CIUDIN 1980, 27.

<sup>&</sup>lt;sup>45</sup> MIHAILESCU-BÎRLIBA 1980, 208-209, tab. XLI; BUTNARIU 1988, 151-191; MOISIL 2009, 281-282, tab. 1; MUNTEANU, ONEL 2012, 182-183; LĂZĂRESCU 2014, 220-225.

<sup>&</sup>lt;sup>46</sup> MOISIL 2009, 262.

<sup>&</sup>lt;sup>47</sup> MIHAILESCU-BÎRLIBA, URSACHI 1988.

<sup>&</sup>lt;sup>48</sup> MIHAILESCU-BÎRLIBA, MIHAI 1996, 253–254.

<sup>&</sup>lt;sup>49</sup> MIHAILESCU-BÎRLIBA, URSACHI 1988, 122–123; MOISIL 2009, 265, 283–284, tab. 2.

<sup>&</sup>lt;sup>50</sup> MIHAILESCU-BÎRLIBA 1980, 217; MIHAILESCU-BÎRLIBA, URSACHI 1988, 122.

Under these circumstances, the great number of late Roman coins discovered at Tăcuta may seem surprising. They grouping pattern by issuers would suggest they belonged to a hoard, from which they were separated at a certain point. The existence of the two cores of pieces from Constantius II and from the Valentinian I–Valens condominium, respectively, is a characteristic of the Dobrudjan deposits, concluded in the Valentinian period<sup>51</sup>. The one found at Traian has a similar structure, given its southern origin<sup>52</sup>, but we do not believe that our bronze coins come from the same reservoir. Upon a more thorough examination, it is obvious that the patinas are significant and their wearing degree is very different, even in case of contemporary coins. Most probably, they represent isolated finds from various points of the commune. Some of them may have been associated with the numerous "Sântana de Mureş-Chernyakhiv" vestiges discovered in this area at Mircești ("Silişte"<sup>53</sup>), Tăcuta ("Saivane"<sup>54</sup>, south of the village, in the dam area<sup>55</sup>) or Dumasca (the N limit of the village)<sup>56</sup>.

The Roman monetary finds on the territory of the commune of Tăcuta are numerous and diverse. The most important of them is the imperial coin hoard of "Dealul Miclea", the existence of which was confirmed through the recent research conducted in this area. However, most of them are isolated finds with diverse origins. This picture of the Roman monetary finds—within hoards or isolated—represents a common image for the "barbarian" territory east from the Carpathians, in this period.

## CATALOGUE<sup>57</sup>

### I. Coins from the hoard of Tăcuta-"Dealul Miclea" (Tăcuta commune)

AR (*denarius*); 2.79 g; 18 mm; well preserved;
 Obv. IMPCAESNERVATRAI ANAVGGERM
 Rv. P•M•TR•P•COS•III•P[•P•]
 Traianus, Rome, year 100 (RIC II, 247, no. 40 var.; BMC III, 39, no. 63 var.) or 1 January–end of 100 (MIR 14, 229, no. 81e)
 or 1 January/28 February (?)–October 100 (MER IV, 42, nos. 80–81 var.);
 Findind place/date: Tăcuta "Dealul Miclea" (Tăcuta commune), in the vegetal layer/ year 2015;
 Bibl.: BOGHIAN *et al.* 2016, 93; MUNTEANU 2017b, 98, no. IV/1;
 Keeping place: CMV; no inv. number.



<sup>57</sup> The following abbreviations were used in the Catalogue: for metals (AR – silver; AE – bronze), metrological data (g – gram, mm – milimeter, h – ax/hour) and collections (CMV – County Museum "Ștefan cel Mare" of Vaslui).

<sup>&</sup>lt;sup>51</sup> OCHEȘEANU 2006, 328-329, 415-416, 418.

<sup>&</sup>lt;sup>52</sup> MIHAILESCU-BÎRLIBA, URSACHI 1988, 118, 122.

<sup>&</sup>lt;sup>53</sup> ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 325, no. 353c; CIUDIN 1980, 27–28; COMAN 1980, 243, no. LXII/15.

<sup>&</sup>lt;sup>54</sup> CIUDIN 1980, 27–28; COMAN 1980, 242, no. LXII/2; IONIȚĂ 1997, 95–104.

<sup>&</sup>lt;sup>55</sup> COMAN 1980, 242, no. LXII/4.

<sup>&</sup>lt;sup>56</sup> COMAN 1980, 242, no. LXII/8.

2. AR (*denarius*); well preserved;
Obv. [MAN]TONINVSAVG [ARMPARTHMAX]
Rv. FORTREDTRPXXII·IMPV/ COSIII (in exergue)
Marcus Aurelius and Lucius Verus, Rome, February-December 168 (RIC III, 228, no. 185) or December 167-December 168 (BMC IV, 449, nos. 459-461 var., 2<sup>nd</sup> issue) or February 168-9.12.168 (MIR 18, 112, no. 170-4/30, 16<sup>th</sup> issue);
Findind place/date: Tăcuta "Dealul Miclea" (Tăcuta commune)/ years 1959-1960;
Bibl.: ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 325, no. 353b, 634, pl. CCLVIII/2; MITREA 1971a, 130, no. 82; MITREA 1971b, 409, no. 82;
COMAN 1980, 242, no. LXII/1; MIHAILESCU-BÎRLIBA 1980, 271, no. 152;
CIUDIN 1980, 27; DEPEYROT, MOISIL 2008, 119, no. 72/1.



3. AR (*denarius*); well preserved;
Obv. IMPMANTONINVS [AVGTRPXXV]
Rv. VOTASOL DECENN /COSIII (in exergue)
Marcus Aurelius, Rome, December 170–December 171 (RIC III, 232, no. 248;
BMC IV, 463, nos. 551–552, 2<sup>nd</sup> issue)
or July 171–September 171 (MIR 18, 120, no. 221–4/30, 22<sup>th</sup> issue);
Findind place/date: Tăcuta "Dealul Miclea" (Tăcuta commune)/ years 1959–1960;
Bibl.: ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 325, no. 353b, 634,
pl. CCLVIII/3; MITREA 1971a, 130, no. 82; MITREA 1971b, 409, no. 82;
COMAN 1980, 242, no. LXII/1; MIHAILESCU-BÎRLIBA 1980, 271, no. 152;
CIUDIN 1980, 27; DEPEYROT, MOISIL 2008, 119, no. 72/2.
Keeping place: unknown.



**4.** AR (*denarius*); well preserved; Obv. FAVSTINA AV[GVSTA] Rv. IVNONI [REGINAE]

Marcus Aurelius: Faustina II, Rome, undated (RIC III, 270, no. 694) or years 161–176 (BMC IV, 401, nos. 118–119; MIR 18, 169, no. 19–4(b)); Findind place/date: Tăcuta "Dealul Miclea" (Tăcuta commune)/ years 1959–1960; Bibl.: ZAHARIA, PETRESCU-DÎMBOVIȚA, ZAHARIA 1970, 325, no. 353b, 634, pl. CCLVIII/4; MITREA 1971a, 130, no. 82; MITREA 1971b, 409, no. 82; COMAN 1980, 242, no. LXII/1; MIHAILESCU-BÎRLIBA 1980, 271, no. 152; CIUDIN 1980, 27; DEPEYROT, MOISIL 2008, 119, no. 72/3. Keeping place: unknown.



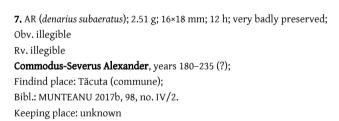
# II. Other roman imperial coin finds fom Tăcuta commune

5. AR (*denarius*); 2.87 g; 18×20 mm; well preserved; Obv. IMPCAESNERVATRA IANAVGGERM Rv. P·M·TR·P·COS· III - P·P·

**Traianus**, Rome, year 100 (RIC II, 247, no. 41; BMC III, 41, no. 78 var.) or 1 January–end of 100 (MIR 14, 230–231, no. 85a) or 1 January/28 February (?)–October 100 (MER IV, 42, no. 82 var.); Findind place: Focşeasca–"Pietrăria" (?) (Tăcuta commune); Bibl.: unpublished; Keeping place: Collection Ștefan Ciudin (Tăcuta).



6. AR (*denarius*); 2.83 g; 17×18 mm; very badly preserved; scratches on the reverse; Obv. HADRIANVS AVGVSTVSPP
Rv. COS [III]
Hadrianus, Rome, years c. 128–132 (BMC III, 302, nos. 500–500A)
or July 138–beginning of 139 (posthumous issue) (RIC II, 380, no. 345, var.; for chronology, see 317, 328) or year 128 (HILL 1970, 162, no. 379, 16<sup>th</sup> issue);
Findind place: Focşeasca-"Pietrăria" (?) (Tăcuta commune);
Bibl.: unpublished;
Keeping place: Collection Ştefan Ciudin (Tăcuta).



8. AE (*sestertius*); 15.66 g; 28 mm; badly preserved;
Obv. IMPGORDIANVSPIVSFELAVG
Rv. PMSC [OL]VIM/ ANIIII (in exergue)
Gordianus III, Viminacium, July-October 242–July-October 243 (MARTIN 1992, 35, no. 1.31.1);
Findind place: Tăcuta (commune);
Bibl.: BUTNARIU 2007, 98, no. 8/17.
Keeping place: CMV inv. no. 8/AE/1 (6) (Ghenuță Coman collection).







Lucian Munteanu, Sergiu-Constantin Enea

9. AE3; 2.22 g; 17×19 mm; badly preserved;
Obv. DNCONSTAN TIVSPFAVG
Rv. FELTEMP REPARATIO/ SMHB (in exergue)
Constantius II, Heraclea, 2<sup>nd</sup> officina, years 351–354 (LRBC II, 83, no. 1900)
or 15 March 351–6 November 355 (RIC VIII, 436, no. 90);
Findind place: Cujba (?) (Tăcuta commune);
Bibl.: MUNTEANU 2017b, 98, no. IV/3;
Keeping place: Collection Ștefan Ciudin, Tăcuta.

10. AE3; 1.76 g; 14×15 mm; very badly preserved;
Obv. [DN]CONST[AN] [TIVS]PFAVG
Rv. illegible
Constantius II, Thessalonica (?), years 351–361 (LRBC II, 78)
or 25 December 350-summer of 361 (RIC VIII, 418–419, 421);
Findind place: Cujba (?) (Tăcuta commune);
Bibl.: MUNTEANU 2017b, 99, no. IV/4;
Keeping place: Collection Ștefan Ciudin, Tăcuta.

11. AE3; 2.48 g; 15 mm; badly preserved;
Obv. DNCONSTAN [TIVSPFAVG]
Rv. [FELTEMP R]EPARATIO/ M (in left field)/ SMTSΔ (in exergue)
Constantius II, Thessalonica, 4<sup>th</sup> officina, years 355–361 (LRBC II, 78, no. 1684)
or 6 November 355–summer of 361 (RIC VIII, 421, no. 208);
Findind place: Tăcuta (commune);
Bibl.: BUTNARIU 2007, 99, no. 8/18;
Keeping place: CMV inv. no. 8/AE/2 (1198).

12. AE3; 2.34 g; 16×17 mm; 6 h; well preserved;
Obv. DNVALEN SPFAVG
Rv. GLORIARO MANORVM/ TESГ (in exergue)
Valens, Thessalonica, 3<sup>rd</sup> officina, years 364–367 (LRBC II, 79, no. 1705)
or 25 February 364–24 August 367 (RIC IX, 176, no. 16(b));
Findind place: Tăcuta (commune);
Bibl.: MUNTEANU 2017b, 99, no. IV/5;
Keeping place: unknown.

13. AE3; 1.96 g; 16×17 mm; very badly preserved; broken;
Obv. [DNVALENS] PFAVG
Rv. [GLO]RIARO MANORVM/ [C]ON[S?] (in exergue)
Valens, Constantinopolis, years 364–375 (LRBC II, 87–88)
or 25 February 364–17 November 375 (RIC IX, 214, no. 16(c) or 220, no. 41 (b))
Findind place: Cujba (?) (Tăcuta commune);
Bibl.: MUNTEANU 2017b, 99, no. IV/6;
Keeping place: Collection Ștefan Ciudin, Tăcuta.











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# References

BICHIR, G. 1973. Cultura carpică. București.

- BICHIR, G. 1976. Archaeology and History of the Carpi from the Second to the Fourth Century A.D., I-II. Oxford.
- BMC = Coins of the Roman Empire in the British Museum. III. MATTINGLY, H. 1936. Nerva to Hadrian. London; IV. MATTINGLY, H. 1940. Antoninus Pius to Commodus. London.
- BOGHIAN, D., S.-C. ENEA, C.-C. LAZANU, A. ASĂNDULESEI, D.-I. STIGLEȚ, L. SÎRBU, G. SÎRBU 2016. Tăcuta, com. Tăcuta, jud. Vaslui. Punct: Dealul Miclea/Paic. In: Cronica Cercetărilor Arheologice din România. Campania 2015, 93–94. Târgu-Jiu.
- BURSCHE, A. 1997. Denarii subaerati from the Jakuszowicze settlement in north Małopolska. Wiadomości Numizmatyczne 50(1-2), 155–156 / Polish Numismatic News 6, 31–42.
- BURSCHE, A. 2008. Function of Roman coins in Barbaricum of Later Antiquity. An anthropological essay.
   In: A. Bursche, R. Ciołek, R. Wolters (eds), Roman Coins outside the Empire. Ways and Phases, Contexts and Functions. Proceedings of the ESF/SCH exploratory Workshop, Radziwiłł Palace, Nieborów (Poland), 3–6 September 2005, 395–416. Wetteren.

BUTNARIU, V.M. (ed.) 2007. Monnaies et parures du Musée Départemental "Ștefan cel Mare" de Vaslui. Iași.

- BUTNARIU, V.M. 1988. Monedele romane postaureliene în teritoriile carpato-dunăreano-pontice (anii 275-491). II. Perioada 324-383. Arheologia Moldovei 12, 131-196.
- CHIȚESCU, M. 1968. Unele considerații pe marginea contrafacerii monedei romane în Dacia, bazate pe o recentă descoperire din Moldova. *Studii și Cercetări de Numismatică* 4, 127–137.
- CHIȚESCU, M., V.URSACHE 1966. Notă asupra unui mic tezaur de monede romane de la începutul Imperiului, descoperit la Bozieni (r. Roman). *Studii și Cercetări de Istorie Veche* 17(4), 703–707.
- CHIȚESCU, M., V. URSACHI 1969. Două tezaure romane imperiale descoperite în Moldova. *Carpica* 2, 145–156.
- CIUDIN, Ş. 1980. Monografia comunei Tăcuta. București.
- COMAN, G. 1980. Statornicie, continuitate. Repertoriul arheologic al județului Vaslui. București.
- DEPEYROT, G., D. MOISIL 2008. Les trésors de deniers de Trajan à Balbin en Roumanie. Wetteren.
- GĂZDAC, C. 2010. Monetary Circulation in Dacia and the Provinces from the Lower Danube from Trajan to Constantine I (AD 106–337)<sup>2</sup>. Cluj-Napoca.
- GĂZDAC, C., Á. ALFÖLDY-GĂZDAC 2008. The management of a monetary crisis?: the 'P M S Col Vim' and 'Provincia Dacia' coinages in the Roman monetary policy of the 3<sup>rd</sup> century AD. In: M. Alram, H. Winter (eds), *Festschrift für Günther Dembski zum 65. Geburtstag*, I / *Numismatische Zeitschrift* 116-117, 135–171. Wien.
- HILL, P.V. 1970. The dating and arrangement of the undated coins of Rome. A.D. 98-148. London.
- IONIȚĂ, I. 1997. Sondajul arheologic de la Tăcuta (județul Vaslui). Arheologia Moldovei 20, 89–106.

- LĂZĂRESCU, V.-A. 2014. Is there a meaning behind the distribution patterns of the Late Roman coins found in Barbaricum? A comparative approach between the inner- and extra Carpathian areas. In:
   S. Cociş (ed.), Archäologische Beiträge. Gendenkschrift zumn hundertsten Geburtstag von Kurt Horedt, 207–242. Cluj-Napoca.
- LRBC = Late Roman Bronze Coinage A.D. 324–498. II. CARSON, R.A.G., KENT, J.P.C. 1965. Bronze Roman Imperial Coinage of the Later Empire, A.D. 346–498. London.
- MARTIN, F. 1992. Kolonialprägungen aus Moesia Superior und Dacia. Budapest-Bonn.
- MER = Catalogue des monnaies de l'Empire romain. IV. BESOMBES, P.-A. 2008. Trajan (98-117 après J.-C.). Paris/Strasbourg.
- MIHAILESCU-BÎRLIBA, V. 1979. La découverte monetaire de Davideni (dép. de Neamț) et les trésors de deniers s'achevant par des deniers de Marc Aurele. *Dacia* N.S. 23, 319-322.

MIHAILESCU-BÎRLIBA, V. 1980. La monnaie romaine chez les Daces orientaux. Bucarest.

- MIHAILESCU-BÎRLIBA, V. 1991. Tezaurul de denari imperiali romani de la Gherăieștii Noi, jud. Neamț. Arheologia Moldovei 14, 57–65.
- MIHAILESCU-BÎRLIBA, V., BUTNARIU, V. 1988. Descoperiri monetare din Moldova. I. Arheologia Moldovei 12, 311–320.
- MIHAILESCU-BÎRLIBA, V., BUTNARIU, V. 1993. Descoperiri monetare din Moldova. II. Arheologia Moldovei 16, 289–294.
- MIHAILESCU-BÎRLIBA, V., MIHAI, C. 1996. Descoperiri monetare la Tîrgu Frumos, jud. Iași. Arheologia Moldovei 19, 253–259.
- MIHAILESCU-BÎRLIBA, V., MITREA, I 1977. Tezaurul de la Măgura. Bacău.
- MIHAILESCU-BÎRLIBA, V., V. URSACHI 1988. Tezaurul de monede descoperit la Traian, județul Neamț. Arheologia Moldovei 12, 117–130.
- MIR = Moneta Imperii Romani. 14. WOYTEK, B. 2010. Die Reichsprägung des Kaisers Traianus (98–117), Bd. I-II. Wien; 18. SZAIVERT, W. 1986. Die Münzprägung der Kaiser Marcus Aurelius, Lucius Verus und Commodus (161–192). Wien.
- MITREA, B. 1971a. Descoperiri recente și mai vechi de monede antice și bizantine în Republica Socialistă România. *Studii și Cercetări de Istorie Veche și Arheologie* 22(1), 115–134.
- MITREA, B. 1971b. Découvertes récentes et plus anciennes de monnaies antiques et byzantines en Roumaine. *Dacia* N.S. 15, 395-413.
- MITREA, B. 1977. Découvertes monétaires en Roumanie (1976) XX. Dacia N.S. 21, 375-381.
- MITREA, B., MIHAILESCU-BÎRLIBA, V. 2003. Tezaurul de monede romane de la Bălănești (jud. Neamț). Arheologia Moldovei 23-24, 199-208.
- MOISIL, D. 2009. Distribuția numerarului roman târziu în Barbaricum: România studiu de caz. In:
   O. Ţentea, I.C. Opriş (eds), Near and beyond the roman frontiers. Proceedings of a colloquium held in Târgoviște, 16-18 october 2008 / Supplementum Cercetări Arheologice 16, 257–294. Bucharest.
- MUNTEANU, C. 2007. Repertoriul descoperirilor monetare de tip P M S COL VIM. Apulum 44, 271–286.
- MUNTEANU, L. 2017a. Some considerations of the Roman coin finds in the hinterland of the provinces of Dacia and Moesia Inferior. In: M. Caccamo Caltabiano, B. Carroccio, D.Castrizio, M. Puglisi, G. Salamone (eds), XV International Numismatic Congress Taormina 2015. Proceedings, 1, 925–929. Roma/Messina.
- MUNTEANU, L. 2017b. Descoperiri monetare în Moldova. IX. Arheologia Moldovei 40, 95-108.
- MUNTEANU, L. 2017c. Moneda în așezările Daciei romane. Iași.

- MUNTEANU, L., MIHĂILESCU, D. 2018. Tezaurul monetar roman de la Gârcina (jud. Neamţ). In: L. Munteanu, D. Nicola, G. Talmaţchi (ed.), *Studia numismatica et archaeologica in honorem V. Mihailescu-Bîrliba oblata*, 213–258. Bucureşti–Piatra-Neamţ.
- MUNTEANU, L., D. MIHĂILESCU, G. DUMITROAIA 2017. Tezaurul de monede romane imperiale de la Dragomirești (jud. Neamț). In: L.-E. Istina (ed.), *In honorem magistri Ioan Mitrea octogenarii*, 93–132. Onești.

MUNTEANU, L., C. ONEL 2012. Descoperiri monetare din Moldova. IV. Arheologia Moldovei 35, 181–189.

MUNTEANU, L., E. POPUȘOI 2014. The Roman Coin Hoard from Iezer. In: A. Mihalache, D. Aparaschivei, G. Cliveti, A. Simon (ed.), Inovație și interdisciplinaritate în cercetarea arheologică și istorică: teorii, metode, surse / Anuarul Institutului de Istorie "A.D. Xenopol" 51, 1–34. Iași.

OCHEȘEANU, R. 2006. Les monnaies en Dobroudja de 270 à 498 (Scythie Mineure, Mésie Seconde). Wetteren. PETOLESCU, C. 2010. Dacia. Un mileniu de istorie. Bucuresti.

- RIC= The Roman Imperial Coinage. II. MATTINGLY, H., SYDENHAM, E.A. 1926. Vespasian to Hadrian. London;
  III. MATTINGLY, H., SYDENHAM, E.A. 1930. Antoninus Pius to Commodus. London; VIII. KENT, J.P.C. 1981. The family of Constantine I. A.D. 337-364. London; IX. PEARCE, J.W.E. 1951. Valentinian I-Theodosius I. London.
- SANIE, Ș. 1968. Două mici depozite de amfore romane descoperite în Moldova. *Studii și Cercetări de Istorie Veche și Arheologie* 19(2), 345–350.
- ZAHARIA, E., C. BURAGA 1979. Cercetări arheologice de suprafață în comunele Dănești, Rebricea și Tăcuta (județul Vaslui). Acta Moldaviae Meridionalis 1, 241–267.
- ZAHARIA, N., M. PETRESCU-DÎMBOVIȚA, E. ZAHARIA 1970. Așezări din Moldova. De la paleolitic pînă în secolul al XVIII-lea. București.



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# Late Roman tableware from Argamum

# Marian MOCANU<sup>1</sup>

**Abstract**. The late Roman fine pottery presented in this article was discovered after the archaeological research carried out in the late Roman fortress of Argamum between 1998 and 2001, in the Basilica 2 and Basilica 1 areas, by F. Topoleanu and I. Vizauer. A sample of 84 ceramic fragments was analysed, the typology being based on the geographical area of origin. The 84 shards were divided into three groups: North African pottery, wares made in Asia Minor and wares produced in the Black Sea Basin. The present article represents a first step in the knowledge of Argamum's archaeological realities, both from the perspective of tableware and the historical evolution of the site, especially during the last two centuries of its existence.

**Rezumat**. Ceramica fină romană târzie prezentată în acest articol a fost descoperită în urma cercetărilor arheologice efectuate în fortificația de la Argamum între anii 1998 și 2001, în zona Bazilicii II și a Bazilicii I, de către F. Topoleanu și I. Vizauer. A fost analizat un lot format din 84 de fragmente ceramice, tipologia fiind realizată pe baza ariei geografice de proveniență a acestora. Cele 84 de exemplare au fost împărțite în trei grupe: veselă nord-africană, veselă produsă în Asia Mică și veselă produsă în bazinul pontic. Articolul de față reprezintă un prim pas în cunoașterea realităților arheologice de la Argamum, atât din perspectiva ceramicii de masă cât și din perspectiva evoluției istorice a sitului, în special în ultimele două secole ale existenței sale.

Keywords: Red Slip Pottery, Late Antiquity, Western Black Sea, Argamum.

The fortification of Argamum is located at Cape Dolojman, on a rocky promontory on the shores of Lake Razelm. In ancient times the settlement had direct access to the Black Sea, because the current lagoon was a former golf. The nearest modern settlement is the locality of Jurilovca, which is about eight kilometres west. The oldest evidences of habitation found in the site's perimeter are dated in the first Iron Age<sup>2</sup>. The urban settlement was founded by Greek colonists from Miletus, the toponym associated with it being *Orgame*<sup>3</sup>, which in Roman times is Latinised into *Argamum*. The existence of the fortress ceases in the context of the

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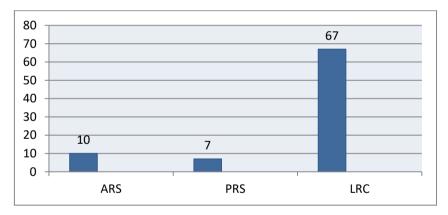
<sup>&</sup>lt;sup>2</sup> AILINCĂI, MIRIȚOIU, SOFICARU 2006.

<sup>&</sup>lt;sup>3</sup> MĂNUCU-ADAMEȘTEANU 1992.

diminution of political power of the Late Roman Empire at Lower Danube at the beginning of the  $7^{\text{th}}$  century<sup>4</sup>.

Archaeological research at Argamum began in 1965, led by Maria Coja and continues today. Over the years more areas of the city have been investigated<sup>5</sup>, but unfortunately in terms of publishing the results, especially those related to the Roman times, is deficient. About roman ceramic discoveries resulting from archaeological research the only results published so far are about discoveries outside the fortified perimeter, the Extramuros research area. One of them is about amphorae<sup>6</sup> and the other is dedicated to kitchenware<sup>7</sup>.

The late Roman fine pottery presented in this article was discovered after the archaeological research carried out in the late Roman fortress of Argamum between 1998 and 2001, in the Basilica 2 and Basilica 1 areas, by F. Topoleanu and I. Vizauer<sup>8</sup>. A sample of 84 ceramic fragments was analysed, the typology is based on the geographical area of origin. The 84 shards were divided into three groups: North African pottery, wares made in Asia Minor and wares produced in the Black Sea Basin. From the point of view of the forms, the ceramic fragments were framed based on the Hayes's typology for the wares from North Africa and Asia Minor<sup>9</sup>, while for the wares from the Pontic basin was used the typology drown by T.M. Arsen'eva and K. Domzalski<sup>10</sup>.



Graph 1. The pottery sample from Argamum – the workshops

<sup>&</sup>lt;sup>4</sup> MĂNUCU-ADAMEȘTEANU 2001.

<sup>&</sup>lt;sup>5</sup> Concerning archaeological research in the Basilica 2 area, a preliminary report was published by F. TOPOLEANU (1999).

<sup>&</sup>lt;sup>6</sup> PARASCHIV 2006.

<sup>&</sup>lt;sup>7</sup> HONCU 2016.

<sup>&</sup>lt;sup>8</sup> The fine ceramics for this article were given to us by F. Topoleanu,.

<sup>&</sup>lt;sup>9</sup> HAYES 1972; 2008.

<sup>&</sup>lt;sup>10</sup> ARSEN'EVA, DOMZALSKI 2002.

## African Red Slip

Of the 84 ceramic fragments from Argamum, ten are imported from North Africa. Forms discovered in the ancient settlement from Jurilovca circulated in the chronological range between the half of the 5th century and the end of the 6th century.

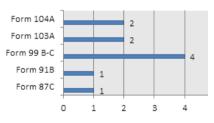
A ceramic fragment from the rim and the upper part of the bowl was discovered inside Basilica 2 and features the characteristic of Hayes Form 87, variant C. In West-Pontic area Form 87 is present at Topraichioi<sup>11</sup>, Halmyris<sup>12</sup>, Ibida<sup>13</sup> and Capidava<sup>14</sup>. The shard discovered in Basilica 2 dates back to the first half of the sixth century.

Form Hayes 91 is present in our sample trough a ceramic fragment from the rim and the upper part of the body of a small bowl, characteristic to variant B. Apart from the Argamum specimen, Form 91 is little known in Dobrogea, analogies are encountered at Histria, where three shards were discovered inside the Episcopal Basilica<sup>15</sup> and Ibida, where such type of pottery were found in Extramuros West 3 area<sup>16</sup> and Sector X area<sup>17</sup>. The Form 91, variant B is dated in the second half of the 5<sup>th</sup> and the beginning of the 6<sup>th</sup> century.

At Argamum, Hayes Form 99 is the most common form of North African red slip ceramics, a specific situation for all the late Roman settlements in the Western Black Sea. Four pottery fragments discovered between 1998 and 2001 within Basilica 2 belong to Form 99. Two of them are specific to the variant B and the other two have the features of variant C. The Form

99 is present at Histria<sup>18</sup>, Capidava<sup>19</sup>, Halmyris<sup>20</sup>, Tropaeum Traiani<sup>21</sup>, Ibida<sup>22</sup> and is dated to the  $5^{th}$  century.

Two pottery shards discovered inside Basilica 2 presents the characteristics specific to Hayes Form 103, variant A, dated during the sixth century. In the Western Black Sea area the presence of this type of ceramics are certified in settlements like Capidava<sup>23</sup>, Halmyris<sup>24</sup> and Tropaeum Traiani<sup>25</sup>.



Graph 2. African Red Slip at Argamum

<sup>14</sup> OPRIŞ 2003, 145–146, pl.50/339, pl.54/340.

<sup>18</sup> SUCEVEANU 1982, 97, fig.14/8; 2007, pl.75/32-35.

<sup>&</sup>lt;sup>11</sup> OPAIȚ 1985, 158, fig.4/9.

<sup>&</sup>lt;sup>12</sup> TOPOLEANU 2000, 73–74, pl.18/151–152.

<sup>&</sup>lt;sup>13</sup> MOCANU 2011, 228, pl.2/13.

<sup>&</sup>lt;sup>15</sup> SUCEVEANU 2007, 208–209, pl.75/29–31.

<sup>&</sup>lt;sup>16</sup> MOCANU 2011, 228, pl.2/4.

<sup>&</sup>lt;sup>17</sup> MOCANU 2014, 287, fig.2/4.

<sup>&</sup>lt;sup>19</sup> COVACEF 1999, 164, pl.15/1a-b.

<sup>&</sup>lt;sup>20</sup> TOPOLEANU 2000, 75–76, pl.18/157–160.

<sup>&</sup>lt;sup>21</sup> GĂMUREAC 2009, 267, pl.13/112.

<sup>&</sup>lt;sup>22</sup> MOCANU 2014A, 151–152, fig.3/13.

The last two north-African shards belong to the Hayes Form 104, variant A. The first one was found inside Basilica 2, while the last one was discovered around Basilica 1. Like Form 99, Form 104 circulated on large areas in the west-Pontic basin, being encountered at Tropaeum Traiani<sup>26</sup>, Halmyris<sup>27</sup>, Capidava<sup>28</sup> or Ibida<sup>29</sup>.

## Pontic Red Slip

Although the presence of ceramic produced in Pontic workshop is quantitatively reduced in the Western Black Sea, in the last decade a series of samples have been identified in several late Roman settlements in northern Dobrogea. In the case of Argamum fine ceramics, Pontic workshops are represented by two distinct forms.

A ceramic fragment of the rim and the upper third of a small bowl belong to Form 4. As far as we know the specimen from Argamum is the first attestation of Form 4 in Dobrogea. Analogies for the wares specific to Form 4 are known at Tanais, where it appears in archaeological contexts dated between the end of the 4th century and the middle of the 5th century<sup>30</sup>.

Form 7 of the Pontic workshops along with Form 3 is the most common in the Western Black Sea basin. In the sample at Argamum, we find six specimens, two of them found inside Basilica 2, and the other six in the vicinity of Basilica 1. In Dobrogea similar wares appear at Topraichioi<sup>31</sup> or Ibida<sup>32</sup>. In the north of the Black Sea, analogies are known in Tanais, where form 7 is dated in the second half of the 5<sup>th</sup> century<sup>33</sup>.

### Phocaean Red Slip/Late Roman C

Since the 5<sup>th</sup> century, the Asia Minor workshops have experienced considerable expansion in the Western Black Sea region. As a result of the demographic development of Constantinople<sup>34</sup>, in the second half of the 4<sup>th</sup> century, one of the most important centres of fine pottery production in late antiquity is developing in Phocaea, the wares from there being

<sup>&</sup>lt;sup>23</sup> OPRIŞ 2003, 149–150, pl.53/348–349

<sup>&</sup>lt;sup>24</sup> TOPOLEANU 2000, 76–77, pl.19/163.

<sup>&</sup>lt;sup>25</sup> GĂMUREAC 2009, 267, pl.13/113.

<sup>&</sup>lt;sup>26</sup> BOGDAN-CĂTĂNICIU, BARNEA 1979, 189, fig.167/2.2.

<sup>&</sup>lt;sup>27</sup> TOPOLEANU 2000, 76-77, pl.19/163.

<sup>&</sup>lt;sup>28</sup> OPRIŞ 2003, 149, pl.53/345.

<sup>&</sup>lt;sup>29</sup> MOCANU 2011, 228–229, pl.2/5.

<sup>&</sup>lt;sup>30</sup> ARSEN'EVA, DOMZALSKI 2002, 427, fig.13/568–574.

<sup>&</sup>lt;sup>31</sup> OPAIȚ 1985, 155(Type 4), fig.1/7-9, 11.

<sup>&</sup>lt;sup>32</sup> MOCANU 2011, 230/9, pl.2/9.

<sup>&</sup>lt;sup>33</sup> ARSEN'EVA, DOMZALSKI 2002, 427, fig.13/575–577.

<sup>&</sup>lt;sup>34</sup> HAYES 1972, 368-369.

exported throughout the Roman Empire. In the sample studied from Argamum we identified 69 specimens imported from West Asia Minor. They are grouped into two distinct forms, Hayes Form 1 with two ceramic fragments and the remaining 67 belong to the Hayes Form 3.

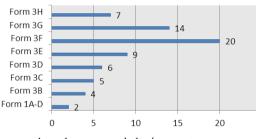
As said in the previous lines, two specimens are framed in the Hayes Form 1. The first of them, discovered at Basilica 2, belongs to Variant A, dated in the second half of the 4<sup>th</sup> century. The earliest variant of Form 1 is attested in Dobrogea at Topraichioi<sup>35</sup> or Halmyris<sup>36</sup>. The second ceramic fragment also found in Basilica 2 is characteristic of Variant D, dated to the 5<sup>th</sup> century. Analogies for Variant D are known in Ibida<sup>37</sup>.

Of the 67 specimens falling in the Hayes Form 3, four belong to Variant B. Two of them were discovered in Basilica 1 while the other two were found in Basilica 2. Variant B is specific to the second half of the 5th century and is known in Dobrogea in many late Roman settlements such as Tropaeum Traiani<sup>38</sup>, Halmyris<sup>39</sup> or Capidava<sup>40</sup>.

Five specimens have the characteristics of Form 3, Variant C, two being discovered at Basilica 1, and the rest at Basilica 2. Chronologically, Variant C is dated to the second half of the 5<sup>th</sup> century, being one of the most widespread variants of Form 3 in the West of the Black Sea, with analogies at Histria<sup>41</sup> or Murighiol<sup>42</sup>.

Variant D is present in the studied sample trough six ceramic fragments, one found in Basilica 1, the rest in Basilica 2. Like the two previous variants, it dates back to the second half of the 5<sup>th</sup> century. Similar wares are known among others at Ibida<sup>43</sup>.

Nine ceramic fragments are framed in Form 3, E variant, specific to the end of the  $5^{\text{th}}$  century and the beginning of the  $6^{\text{th}}$ century. With the exception of two specimens from around Basilica 1, the remaining seven were found in Basilica 2. Just as in the case of Variant C, Variant E is well known in the west-Pontic area, with analogies at Halmyris<sup>44</sup>.



Graph 3. Phocaean Red Slip/LRC at Argamum

<sup>&</sup>lt;sup>35</sup> OPAIȚ 1996, 137, pl.56/11, 13.

<sup>&</sup>lt;sup>36</sup> TOPOLEANU 2000, 44–45, pl.1/8–9, pl.2/10–13.

<sup>&</sup>lt;sup>37</sup> MOCANU 2011, 232, pl.2/10.

<sup>&</sup>lt;sup>38</sup> BOGDAN-CĂTĂNICIU, BARNEA 1979, 187, fig.160/2.11.

<sup>&</sup>lt;sup>39</sup> TOPOLEANU 2000, 48-49, pl.3/23-26.

<sup>&</sup>lt;sup>40</sup> OPRIŞ 2003, 151.

<sup>&</sup>lt;sup>41</sup> SUCEVEANU 2007, 204, pl.74/2–3.

<sup>&</sup>lt;sup>42</sup> TOPOLEANU 2000, 49–50, pl.3/27–30, pl.4/31–34.

<sup>&</sup>lt;sup>43</sup> MOCANU 2011, 235–236, pl.4/40–43.

<sup>&</sup>lt;sup>44</sup> TOPOLEANU 2000, 50–51, pl.4/39–14, pl.5/42–46.

Descending variant E, variant F was identified in the sample studied by no less than 20 ceramic fragments, 19 in Basilica 2 and only one around Basilica 1. This version dates back to the first half of the sixth century and is widely spread in Dobrogea, with analogies at Tropaeum Traiani<sup>45</sup>, Halmyris<sup>46</sup>, Capidava<sup>47</sup>, Histria<sup>48</sup> and Ibida<sup>49</sup>.

Fourteen specimens belong to the G Variant, four of which were discovered near Basilica 1, and ten were found in Basilica 2. Chronologically Variant G is dated to the first half of the 6<sup>th</sup> century, besides Argamum being certified at Histria<sup>50</sup>, Murighiol<sup>51</sup> and Ibida<sup>52</sup>.

Variant H is present in the Argamum sample by seven ceramic fragments, all of which are found in Basilica 2. Like previous variants and Variant H is specific to the first half of the 6<sup>th</sup> century. The presence of the Variant H in the late Roman settlements in the Western Black Sea is less well known than E and F, analogies being known at Halmyris<sup>53</sup> and Ibida<sup>54</sup>.

Argamum's fine pottery sample is broadly in line with the known pattern for the late Roman settlements in the Western Black Sea. However, a number of peculiarities are derived from the fact that the studied ceramic group is certainly incomplete. In the case of the pottery imported from Asia Minor, the presence of only two shapes produced in the Phocaean workshops (Hayes Form 1 and 3) is totally atypical. Also, the lack of Light Coloured ceramics is noticeable. The African Red Slip ware and the Pontic Red Slip ware fall within the limits known for this geographic area.

Compared to other late Roman settlements in Dobrogea, the ceramics produced in Phocaean workshops represent 80 percentages of the total finds, while at Halmyris it occurs at 90%, and in the sector Extramuros West 3 from Ibida is registered with 87%. In second place is the fine pottery imported from North Africa, with 12 percentages of the total. This value is significantly higher than the situation known at Ibida and Halmyris. The fine pottery produced in the Black Sea basin is in last place with 8 percentages of the total and being recorded at Ibida with a value of 4 percentages<sup>55</sup>, and at Halmyris with only 2%<sup>56</sup>.

<sup>48</sup> SUCEVEANU 2007, 205–206, pl.74/4–13.

<sup>&</sup>lt;sup>45</sup> BOGDAN-CĂTĂNICIU, BARNEA 1979, 189, fig.167/2.6.

<sup>&</sup>lt;sup>46</sup> TOPOLEANU 2000, 51–52, pl.5/47–52, pl.6/53–56.

<sup>&</sup>lt;sup>47</sup> OPRIŞ 2003, 151, pl.54/363.

<sup>&</sup>lt;sup>49</sup> MOCANU 2011, 238–239, pl.6–7/67–74.

<sup>&</sup>lt;sup>50</sup> SUCEVEANU 2007, 206, pl.74/15–16.

<sup>&</sup>lt;sup>51</sup> TOPOLEANU 2000, 53, pl.6/57–61, pl.7/62.

<sup>&</sup>lt;sup>52</sup> MOCANU 2011, 239–240, pl.7/81–84.

<sup>&</sup>lt;sup>53</sup> TOPOLEANU 2000, 53–54, pl.7/63.

<sup>&</sup>lt;sup>54</sup> MOCANU 2011, 240, pl.7/88.

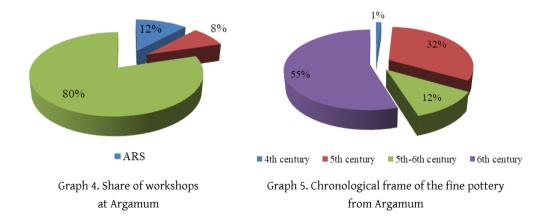
<sup>&</sup>lt;sup>55</sup> MOCANU 2011, 242, graphic 4.

<sup>&</sup>lt;sup>56</sup> TOPOLEANU 2000, 87, graphic 4.

From a chronological perspective, the ceramic sample from Argamum is unitary and this fact is due to the method of archaeological research. The archaeological excavation aimed to investigate the late Roman habitation levels contemporary with the two basilicas. This fact is conditioned at Argamum, especially in the case of the Central Sector, by the fact that the rock of the promontory on which the fortification was built is on the surface, and the anthropic levels preserved are relatively thin. This explains the lack of earlier habitation levels, because with the reconstruction process of the fortification which probably occurred in the second half of the 5<sup>th</sup> century, earlier levels were removed.

Referring strictly to the studied ceramic sample we find that a single ceramic fragment (Hayes Form 1, Variant A) is specific to the second half of the 4<sup>th</sup> century. 32 percentages of the total studied shards are dated to the 5<sup>th</sup> century, while 12 percentages are framed chronologically between the last decades of the 5<sup>th</sup> and the first part of the next century. The tableware specific to the sixth century are most prevalent with 55 percentages. We note the lack of forms dated at the end of the 6<sup>th</sup> and the beginning of the 7<sup>th</sup> century (especially the Hayes Form 10), but at the current stage of research it is preferable not correlate this reality that can be misleading with certain historical events.

The present article represents a first step in the knowledge of Argamum's archaeological realities, both from the perspective of tableware and the historical evolution of the site, especially during the last two centuries of its existence. Reconstitution of the entire ceramic sample discovered in the Central Sector and in the area of Basilica 1, along with the publication of archaeological material discovered in other fortification sectors, will further expand the area of knowledge about the archaeological site of Cape Dolojman.



# Catalogue

# African Red Slip

— Hayes Form 87, Variant C

1. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼1.15 m. Hp: 2.2.

Pale reddish orange clay (2.5 YR 7/4) with granular aspect and few impurities, orange slip (5 YR 7/6). The exterior of the rim is covered with dark paint.

— Hayes Form 91, Variant B

2. Fragment of rim and upper part of the body. Argamum 2000, Basilica 2, *passim.* Hp: 2. Bright brown clay (2.5 YR 5/8) with particles of limestone and granular aspect, orange slip (5 YR 7/8).

— Hayes Form 99, Variant B

3. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼0.60 m. Hp: 1.9. Bright brown clay (2.5 YR 5/6) with granular aspect and particles of limestone, orange slip (5 YR 8/8).

4. Fragment of rim and part of the body. Argamum 1999, Basilica 2, southern annexes. D: 18.2, Hp: 4. Reddish brown clay (2.5 YR 4/6) with granular aspect, orange slip (5 YR 8/8).

— Hayes Form 99, Variant C

5. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Square C ▼1.90–2.30 m. Hp: 4. Bright brown clay (2.5 YR 5/8) with particles of limestone and silvery mica, orange slip (5 YR 8/8).

6. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 8, ▼0.40 m. Hp: 2.4.

Bright brown clay (2.5 YR 5/6) with particles of limestone, orange slip (5 YR 6/8).

— Hayes Form 103, Variant A

7. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Square α, ▼1 m. Hp: 3.4. Dull reddish brown clay (2.5 YR 4/4) with limestone and other impurities, bright brown slip (2.5 YR 5/8).

8. Fragment of rim and upper part of the body.

Argamum 1999, Basilica 2, Square α, ▼0.7 m. Hp: 2.4.

Dull reddish brown clay (2.5 YR 5/4) with impurities, bright reddish brown slip (5 YR 5/8).

— Hayes Form 104, Variant A

9. Fragment of rim and upper part of the body. Argamum 1999, Basilica 2, passim. Hp: 3.3. Reddish brown clay (2.5 YR 4/6) with limestone and insufficiently fired, bright reddish brown slip (5 YR 5/8).

10. Fragment of rim and upper part of the body.
Argamum 1999, Basilica 1, ▼0.80 m.
Reddish brown clay (2.5 YR 4/6) with particles of limestone and insufficiently fired, reddish brown slip (5 YR 4/8).

# Pontic Red Slip

– Form 4

11. Fragment of rim and upper part of the body. Argamum 1999, Trench  $\alpha$ ,  $\mathbf{\nabla}$  0.4 m. D: 15.2, Hp: 5.1. Bright brown clay (2.5 YR 5/6) with limestone and other impurities, reddish brown slip (2.5 YR 4/8).

— Form 7

12. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Trench 1, Square 5. D: 31, Hp: 3.4. Reddish brown clay (2.5 YR 4/6) with particles of limestone, bright brown slip (2.5 YR 5/8).

13. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Trench 1, Square 5. Hp: 2.9. Reddish brown clay (2.5 YR 4/6) with impurities and particles of limestone, bright brown slip (2.5 YR 5/8).

14. Fragment of rim and upper part of the body.Argamum 2000, Basilica 1, Trench 2, Square 1. Hp: 4.4.Bright reddish brown clay (5 YR 5/8) with some impurities, bright brown slip (2.5 YR 5/8).

15. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Trench 2, Square 1, ▼0.5 m. Hp: 3.9. Bright reddish brown clay (5 YR 5/8), bright brown slip (2.5 YR 5/8).

16. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench α, ▼1.1–1.4 m. D: 20.1, Hp: 3.4. Reddish brown slip (5 YR 4/6) with particles of limestone and silvery mica, bright brown slip (2.5 YR 5/6) on the interior surface.

17. Fragment of rim and upper part of the body Argamum 1998, Basilica 2, Trench C, ▼1.80 m. Hp: 2.9. Bright brown slip (2.5 YR 5/8) with particles of limestone and silvery mica, orange slip (5 YR 6/6).

### Late Roman tableware from Argamum

# Phocaean Red Slip / Late Roman C

– Hayes Form 1, Variant A

18. Fragment of rim and upper part of the body. Argamum 2000, Basilica 2, Trench α ▼1.20–1.30. D: 25.7, Hp: 3.4 Dark reddish brown clay (2.5 YR 3/6) with impurities, dark reddish brown slip (5 YR 3/4).

— Hayes Form 1, Variant D

19. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench 8, ▼0.85 m. Hp: 2.8. Bright reddish brown (5 YR 5/8) with particles of limestone, orange slip (5 YR 6/8).

— Hayes Form 3, Variant B

20. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Trench 2, Square 2. D: 36, Hp: 4. Reddish brown slip (2.5 YR 4/6) with particles of limestone, dark reddish brown slip (2.5 YR 3/6). The exterior part of the rim is decorated with toothed wheel in three register.

21. Fragment of rim and upper part of the body. Argamum 1999, Basilica 2, annex north-west. Hp: 3. Bright reddish brown slip (5 YR 5/8) with impurities, reddish brown slip (2.5 YR 4/8).

22. Fragment of rim Argamum 1998, Basilica 2, Trench 8, ▼0.35–0.45 m. Hp: 2.6. Orange clay (5 YR 6/8), bright brown slip (2.5 YR 5/8).

23. Fragment of rim. Argamum 2000, Basilica 1, Trench 1, Square 1, ▼ 1.4 m. Hp: 2.4. Bright brown clay (2.5 YR 5/8) with particles of limestone, orange slip (5 YR 7/8). The exterior of the rim is decorated with toothed wheel in tow registers and painted in black.

— Hayes Form 3, Variant C

24. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 2, ▼0.90–1.40 m. D:26.4, Hp: 4.3. Bright brown clay (2.5 YR 5/8) with particles of limestone, bright reddish brown slip (5 YR 5/8).

25. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Trench 1, Square 5. D: 27.5. Hp: 4.7. Reddish brown clay (2.5 YR 4/6), bright brown slip (2.5 YR 5/6).

26. Fragment of rim and the upper part of the body. Argamum 1999, Basilica 2, Square T1, ▼0.2 m. Hp: 3.8. Reddish brown clay (2.5 YR 4/6) with impurities, bright reddish brown slip (5 YR 5/6).

27. Fragment of rim. Argamum 2001, Basilica 2, Square 2, ▼0.90–0.40 m. Reddish brown clay (2.5 YR 4/8) with limestone and impurities, dark reddish brown slip (2.5 YR 3/6).

28. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Trench 1, Square 1, ▼1.4 m. Hp: 3.1. Bright reddish brown clay (2.5 YR 5/8) with particles of limestone, reddish brown slip (2.5 YR 4/8).

— Hayes Form 3, Varian D

29. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench Extra Muros, ▼0.20–0.85 m. D: 22.7, Hp: 4.1. Dark reddish brown clay (2.5 YR 3/6) with limestone, reddish brown slip (2.5 YR 4/6). The exterior of the rim is decorated whit toothed wheel in a single register.

30. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Trench 1, Square 1. D: 20.4, Hp: 4.1. Dark reddish brown clay (2.5 YR 3/6), reddish brown slip (2.5 YR 4/6).

31. Fragment of rim.

Argamum 2001, Basilica 2, Square 8,  $\bigvee$  0.80 m. Hp: 2.1. Orange clay (5 YR 6/6) with silvery mica, pale orange slip (5 YR 8/4). The exterior surface of the rim is covered whit white paint.

32. Fragment of rim.

Argamum 1998, Basilica 2, Trench Extra Muros  $\alpha$ ,  $\mathbf{\nabla}$  0.70–0.85 m. Hp: 2.5. Bright reddish brown clay (5 YR 5/8), orange slip (5 YR 6/6). The exterior of the rim is decorated with toothed wheel in a single register.

33. Fragment of rim.

Argamum 1998, Basilica 2, Trench Extra Muros α, ▼0.60 m. Hp: 1.8. Bright brown slip (2.5 YR 5/8) with some impurities, pale orange slip (5 YR 8/4).

34. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2 Trench Intra Muros C,  $\bigvee$  1.80 m. Hp: 2.3. Bright reddish brown clay (5 YR 5/8) with limestone and silvery mica, pale orange slip (5 YR 8/4). The exterior part of the rim is decorated with toothed wheel in a single register and we observe traces of white paint.

— Hayes Form 3, Variant E

35. Fragment of rim and upper part of the body. Argamum 2000, Trench 2, Square 1, ▼0.6 m. D: 24.1, Hp: 4. Bright brown clay (2.5 YR 5/6) with particles of limestone, bright brown slip (2.5 YR 5/8). On the exterior the rim is decorated with toothed wheel in tow registers. 36. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Trench 2, Square 1, ▼0.6 m. D: 23.8. Hp: 3. Dark reddish brown clay (2.5 YR 3/6), brownish black slip (5 YR 3/1). The exterior of the rim is decorated with toothed wheel in a single register. Also we observe traces of black paint on both surfaces.

37. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼0.80 m. D:25.2, Hp: 2.6. Reddish brown slip (2.5 YR 4/6) with some impurities, bright brown slip (2.5 YR 5/6).

38. Fragment of rim and upper part of the body.
Argamum 1998, Basilica 2, north-east corner, ▼0.50 m. Hp: 2.9.
Dull reddish brown clay (2.5 YR 5/4) with particles of limestone, reddish brown slip (2.5 YR 4/6).

39. Fragment of rim and upper part of the body.
Argamum 1998, Basilica 2, east-shout-east corner, ▼1.50. Hp: 3.1.
Bright reddish brown clay (5 YR 5/8) with limestone, dull orange slip (5 YR 7/4).

40. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench B Intra Muros. Hp: 2.8. Reddish brown clay (2.5 YR 4/8) with limestone and other impurities, bright reddish brown slip (5 YR 5/8).

41. Fragment of rim and upper part of the body. Argamum 1999, Basilica 2, Trench α, ▼ 0.4 m. Hp: 3.7. Bright brown clay (7.5 YR 5/6) with limestone, bright brown slip (2.5 YR 5/8). The exterior of the rim is decorated with toothed wheel in a single register.

42. Fragment of rim.

Argamum 2001, Basilica 2, Square 1,  $\bigvee$  0.95 m. Hp: 2.5. Bright reddish brown clay (2.5 YR 5/8) with particles of limestone, orange slip (5 YR 6/8), the exterior of the rim is decorated with toothed wheel in three registers.

43. Fragment of rim.

Argamum 1998, Basilica 2, Trench Extra muros  $\beta$ ,  $\bigvee$  0.80–1.10 m. Hp: 2.1. Reddish brown clay (5 YR 4/8), bright brown slip (2.5 YR 5.8). The exterior of the rim is decorated with toothed wheel in tow registers and covered with black paint.

— Hayes Form 3, Variant F

44. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, north-eastern corner, ▼0.50 m. D: 26.1, Hp: 4.5. Reddish brown clay (2.5 YR 4/8) with limestone and other impurities, dull reddish brown slip (2.5 YR 4/4). On the exterior of the rim we observe traces of brown paint.

45. Fragment of rim and the upper part of the body. Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.70–0.85. D: 20.4, Hp: 3.1. Bright reddish brown clay (2.5 YR 5/8), reddish brown slip (5 YR 4/6).

46. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, east-south-east, ▼1.50 m. Hp: 2.6. Reddish brown clay (5 YR 5/8) with particles of limestone, bright reddish brown slip (2.5 YR /8).

47. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼1.4 m. D: 24.8, Hp: 3.7. Bright reddish brown clay (5 YR 5/8) with limestone, bright red brown slip (2.5 YR 5/8). The exterior surface of the rim is decorated with toothed wheel in three registers.

48. Fragment of rim and upper part of the body. Argamum 1997, Basilica 2, Square 7. D: 25.6, Hp: 2.4. Reddish brown clay (2.5 YR 4/8), bright reddish brown slip (2.5 YR 5/8). The exterior of the rim is decorated with toothed wheel in tow registers.

49. Fragment of rim and upper part of the body Argamum 2000, Basilica 2, Square 1, ▼0.7 m. D: 26, Hp: 2.8. Bright brown clay (2.5 YR 5/8) with limestone and silvery mica, reddish brown slip (2.5 YR 4.6).

50. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, Square 6, ▼0.60 m. D: 26.7, Hp: 2.7.

Bright reddish brown clay (5 YR 4/6) with particles of limestone and other impurities, reddish brown slip (2.5 YR 4/8). The exterior of the rim is decorated with toothed wheel in three registers.

51. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.3.

Bright brown clay (2.5 YR 5/8) with several impurities in composition, dull reddish brown slip (2.5 YR 4/4). The exterior part of the rim is decorated with toothed wheel in a single register.

52. Fragment of rim and upper part of the body. Argamum 1998, Basilica 1, Trench 1, Square 1, ▼1.4 m. Hp: 3. Bright reddish brown (5 YR 5/8) with particles of limestone, orange slip (5 YR 6/8). On exterior of the rim we can see traces of black paint.

53. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, α Trench Extra muros, ▼0.85 m. Hp: 2.1. Bright reddish brown (5 YR 5/6) with limestone in composition, dark reddish brown slip (2.5 YR 3/6).

54. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.6. Reddish brown clay (5 YR 4/6) with some impurities in composition, reddish brown slip (2.5 YR 4/6). 55. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼0.80 m. Hp: 2.5. Reddish brown clay (2.5 YR 4/8), dark reddish brown slip (2.5 YR 3/6). The exterior of rim is decorated with toothed wheel in tow registers and painted in black.

56. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench Extra muros  $\alpha$ , ▼0.85 m. Hp: 3.5. Orange slip (2.5 YR 6/8) with particles of limestone, bright brown slip (2.5 YR 5/8).

57. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, *passim*, ▼0.80 m. Hp: 2.8. Reddish brown clay (5 YR 4/6) with small particles of limestone, bright brown slip (2.5 YR 5/8).

58. Fragment of rim and upper part of the body.
Argamum 2001, Basilica 2, Square 8, ▼0.80 m. Hp: 3.3.
Reddish brown clay (2.5 YR 4/6) with limestone, dark reddish brown slip (2.5 YR 3/6).
On the exterior and interior surfaces of the rim we observe traces of black paint.

59. Fragment of rim.

Argamum 2001, Basulica 2, Square 8, ▼0.80 m. Hp: 1.9.

Reddish brown clay (2.5 YR 4/8) with limestone and other impurities in composition, reddish brown slip (2.5 YR 4/6).

60. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.7. Bright reddish brown clay (5 YR 5/8) with particles of limestone, reddish brown slip (2.5 YR 4.8). The exterior of the rim is decorated with toothed wheel in three registers.

61. Fragment of rim and upper part of the body.

Argamum 2001, Basilica 2, passim. Hp: 2.3.

Orange clay (5 YR 6/8) with some impurities in composition, bright reddish brown slip (2.5 YR 5/8). The exterior surface of the rim is painted in black.

62. Fragment of rim and the upper part of the body. Argamum 1999, Basilica 2, South, annex 3, ▼0.50 m. Hp: 2.5. Bright reddish brown clay (5 YR 5/8), hardly fired, orange slip (5 YR 6/8). The exterior of the rim is decorated with toothed wheel in three registers.

63. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼0.80 m. D: 29.2, Hp: 2.7. Yellow orange clay (7.5 YR 8/8) with particles of limestone, bright brown slip (2.5 YR 5/8).

— Hayes Form 3, Variant G

64. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, *passim*. D: 30, Hp: 2.8. Bright brown clay (2.5 YR 5/8) with impurities in composition, orange slip (5 YR 7/6).

65. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼0.80 m. D: 28, Hp: 2.4. Reddish brown clay (2.5 YR 4/8) with small particles of limestone, bright brown slip (2.5 YR 5/8). The exterior of the rim is painted in black.

66. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼ 1.15 m. D: 20, Hp: 2. Bright reddish brown clay (5 YR 5/8), hardly fired, bright brown slip (2.5 YR 5/8). On the exterior of the rim we observe traces of black paint.

67. Fragment of rim.

Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2. Orange clay (5 YR 7/8) with small particles of limestone, bright reddish brown slip (5 YR 5/8).

68. Fragment of rim.

Argamum 2000, Basilica 1, Trench 1, Square 1,  $\bigvee$  1.4 m. Hp: 2.3. Orange clay (5 YR 7/8) with limestone and other small impurities, reddish brown slip (2.5 YR 4/8). The exterior of the rim is decorated with toothed wheel in three registers and painted in black.

69. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.4. Orange clay (5 YR 7/8) with particles of limestone, reddish brown slip (2.5 YR 4/8).

70. Fragment of rim and upper part of the body. Argamum 2000, Basilica 1, Tranche 1, Square 5, on the rock. Hp: 2.1. Bright reddish brown clay (5 YR 5/8) with small particles of limestone and other impurities, dark reddish brown slip (2.5 YR 3/6).

71. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼0.80 m. Hp: 2.5. Bright brown clay (2.5 YR 5/8), dark reddish brown slip (2.5 YR 3/6).

72. Fragment of rim and upper part of the body. Argamum 1999, Basilica 2, *passim*. Hp: 2.1. Reddish brown clay (2.5 YR 4/6), reddish brown slip (5 YR 4/6). The exterior of the rim is decorated with toothed wheel in three registers at the lower part was painted in white.

73. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ♥ 0.80 m. Hp: 3.5. Dull reddish brown clay (2.5 YR 4/4) with small particles of limestone in composition, dark reddish brown slip (2.5 YR 3/6). The exterior surface of the rim is painted in black.

74. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 5, ▼1.15 m. Hp: 3.5. Bright brown clay (2.5 YR 5/8), bright reddish brown slip (5 YR 5/8). 75. Fragment of rim and upper part of the body.

Argamum 1998, Basilica 2, Tranche Extra muros α, ▼0.85 m. Hp: 2.6. Reddish brown clay (2.5 YR 4/6) with some impurities, bright brown slip (2.5 YR 5/8). The exterior of the rim is decorated with toothed wheel in three registers.

76. Fragment of rim.

Argamum 2000, Basilica 1, Trench 1, Square 5, on the rok. Hp: 1.8. Bright reddish brown clay (5 YR 5/6) with some impurities in composition, reddish brown slip (2.5 YR 4/6).

77. Fragment of rim and upper part of the body. Argamum 1998, Trench γ, ▼0.80 m. Hp: 2.5. Bright brown clay (2.5 YR 5/8) with very small particles of limestone, reddish brown slip (2.5 YR 4/6).

— Hayes Form 3, Variant H

78. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Square 8, ▼1.15 m. Hp: 3.9. Orange clay (5 YR 6/8) with some impurities in composition, yellow orange slip (7.5 YR 7/8).

79. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, Trench Intra muros. Hp: 2.6. Orange clay (5 YR 6/6), reddish brown slip (5 YR 4/6). The inferior part of the rim was painted in white.

80. Fragment of rim and upper part of the body. Argamum 1999, Basilica 2, southern annexes, ▼0.50 m. Hp: 2.4. Reddish brown clay (2.5 YR 4/8) with some impurities in composition, bright reddish brown slip (2.5 YR 5/8). The exterior surface of the rim is covered with black paint.

81. Fragment of rim and upper part of the body.
Argamum 1998, Basilica 2, Trench Extra muros α, ▼0.85 m. Hp: 2.4.
Orange slip (5 YR 6/8) with particles of limestone, reddish brown slip (2.5 YR 4/8).

82. Fragment of rim and upper part of the body.
Argamum 2001, Basilica 2, Square 2, ▼1.40 m. Hp: 2.4.
Dull reddish brown clay (4/3), bright brown slip (5/8).

83. Fragment of rim and upper part of the body. Argamum 1998, Basilica 2, south-eastern corner, ▼1.50 m. Hp: 2.2. Reddish brown clay (2.5 YR 4/8) with small particles of limestone, reddish brown slip (2.5 YR 4/6). The exterior part of the rim was painted in black.

84. Fragment of rim and upper part of the body. Argamum 2001, Basilica 2, Trench 1, Square 1, ▼1 m. Hp: 2.3. Dark reddish brown clay (2.5 YR 3/6) with lots of limestone particles in composition, dark reddish brown slip (2.5 YR 3/6).

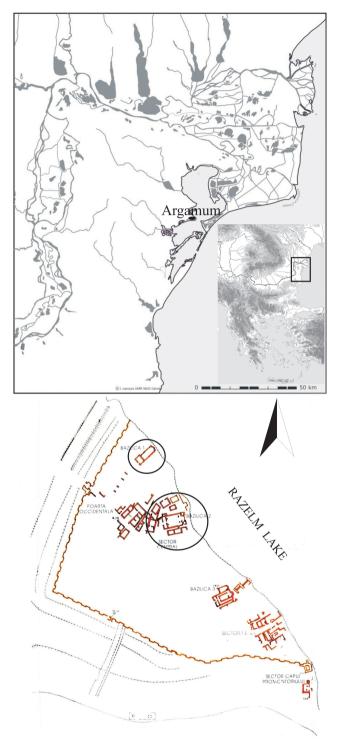


Figure 1. Map of Dobrudja (top) and plan of the settlement from Argamum in Late Antiquity (bottom)

Late Roman tableware from Argamum

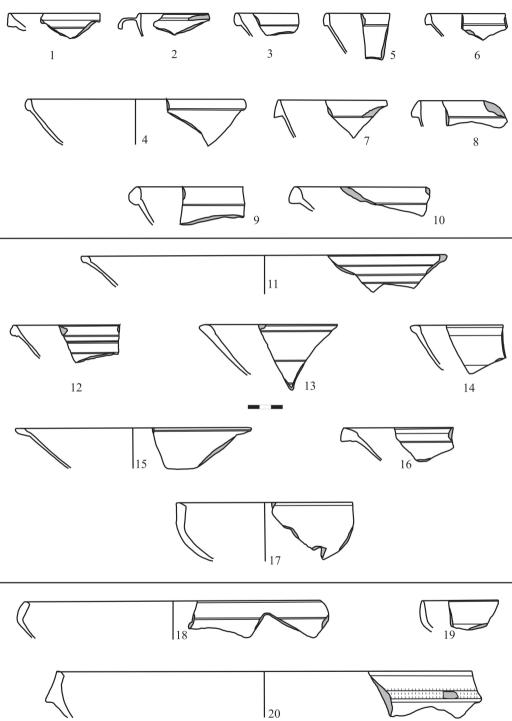


Figure 2. ARSW (1–10); PRSW (11–17); LRCW (18–20) from Argamum

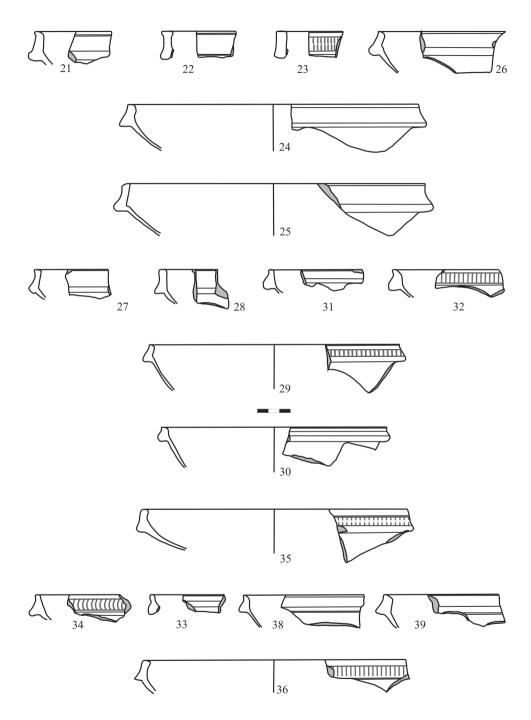


Figure 3. LRCW from Argamum

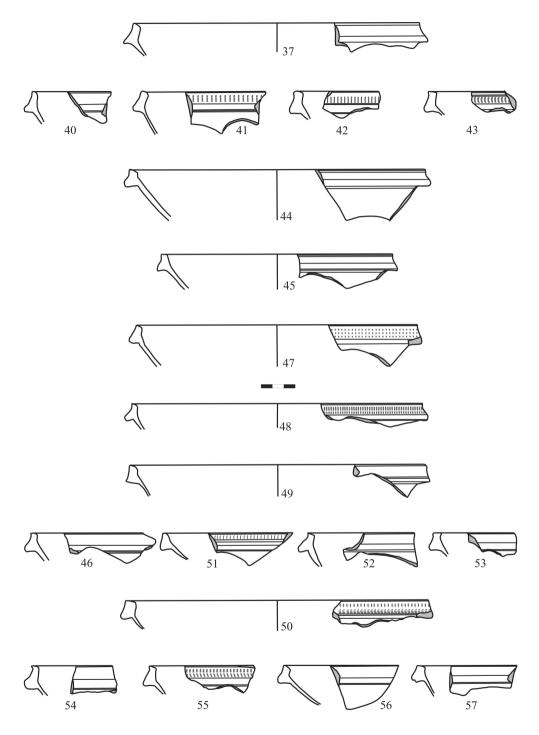


Figure 4. LRCW from Argamum

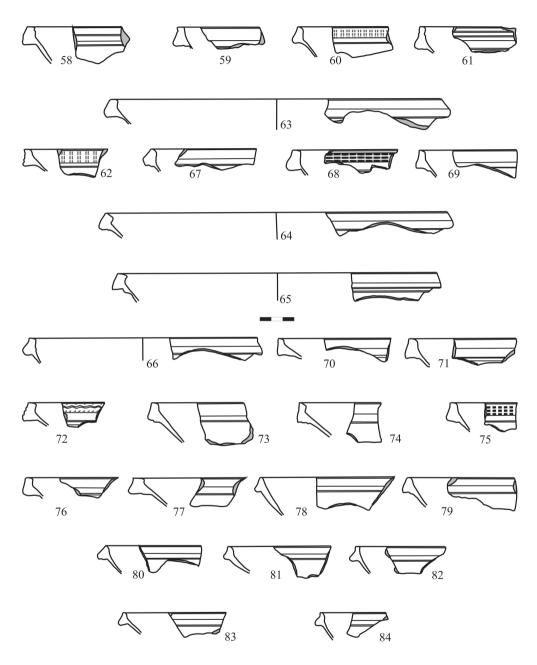


Figure 5. LRCW from Argamum

# References

- AILINCĂI, A., N. MIRIŢOIU, A. SOFICARU 2006. A pit with human remains attributed to the Babadag culture discovered in pre-colonial level at Orgame. In: M. Mănucu-Adameşteanu (ed.), Orgame/Argamum. A la recherche d'un colonie. Act du Colloque International 40 ans de recherches archeologique à Orgamè/Argamum, 81– 107.
- ARSEN'EVA, T.M., K. DOMŽALSKI 2002. Late Roman red slip pottery from Tanais. Eurasia Antiqua 8, 415–491.

BOGDAN-CĂTĂNICIU, I., A. BARNEA 1979. Ceramica și descoperiri mărunte. In: A. Barnea, I. Barnea, I. Bogdan-Cătăniciu, M. Mărgineanu-Cârstoiu, G. Papuc (eds), *Tropaeum Traiani I. Cetatea*, 177–226. București.

- COVACEF, Z. 1999. Ceramica de uz comun din sectorul de est al cetății Capidava. Sec. IV-VI. Pontica 32, 137-186.
- GĂMUREAC, E. 2009. Edificiul B1 din sectorul B al cetății Tropaeum Traiani. Considerații preliminare privind cercetările din 2005–2008. *Pontica* 42, 243–300.

HAYES, J.W. 1972. Late Roman Pottery. London.

HAYES, J.W. 2008. The Athenian Agora XXXII. Roman pottery. Fine-ware Imports. Princeton.

HONCU, Ş. 2006. Ceramica romană de bucătărie descoperită la Argamum – Sectorul Extramuros. In: D. Micle (ed.), Arheovest IV. In honorem Adrian Bejan. Interdisciplinaritate în Arheologie și Istorie, 293–308.

MĂNUCU-ADAMEȘTEANU, M. 1992. ...Orgame.... Pontica 25, 55-67.

MĂNUCU-ADAMEȘTEANU, M. 2001. Orgame/Argamum. București.

- MOCANU, M. 2011. Considerații privind ceramica de masă de la (L)Ibida. Studiu de caz. Sectorul Extramuros Vest III. *Peuce* S.N. 9, 225–252.
- MOCANU, M. 2014. Considerations on tableware pottery of (L)Ibida III. X research area. Studia Antiqua et Archaeologica 20, 283–305.
- MOCANU, M. 2014A. Considerații privind ceramica de masă de la (L)Ibida (II). Sectorul extra muros nord I. *Peuce* S.N. 12, 147–168.
- OPAIȚ, A. 1985. Einige Beobachtungen zur spätrömischen Keramik mit rotem Űberzug. Dacia N.S. 29, 153–163.
- OPAIȚ, A. 1996. Aspecte ale vieții economice din provincia Scythia (secolele IV-VI p.Chr.). Producția ceramicii locale și de import. București.
- OPRIȘ, I.C. 2003. Ceramica romană târzie și paleobizantină de la Capidava în contextul descoperirilor de la Dunărea de Jos (sec. IV-VI p. Chr). București.
- PARASCHIV, D. 2006. Contribuții la studiul ceramicii romane de la Argamum. Sectorul extra muros. I. Amforele. In: M. Mănucu-Adameșteanu (ed.), Orgame/Argamum. A la recherche d'un colonie. Act du Colloque International 40 ans de recherches archeologique à Orgamè/Argamum, 285–342.
- SUCEVEANU, A. 1982. Contribuții la studiul ceramicii romano-bizantine la Histria. Studii și Cercetări de Istorie Veche 33, 1, 79–108.

SUCEVEANU, A. 2007. Histria XIII. La basilique épiscopale. Bucarest.

- TOPOLEANU, F. 1999 (2001), Sector 'Bazilica II" (1981–1994). Considerații preliminare privind locuirea romană târzie. *Materiale și Cercetări Arheologice* 1 S.N., 191–201.
- TOPOLEANU, F. 2000. Ceramica romană și romano-bizantină de la Halmyris (sec. I-VII d.Ch.). Tulcea.



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Ștefan Honcu, Ceramica romană de bucătărie din Dobrogea (secolele I-III p. Chr.) [Roman ceramic kitchenware in Dobrudja – 1<sup>st</sup>–3<sup>rd</sup> centuries AD], Editura Dobrogea, Constanța 2017, 225 p., XXXI pl.

Ștefan Honcu, a researcher of the Archaeological Institute in Iași, published his doctoral thesis titled *Ceramica romană de bucătărie din Dobrogea (secolele I-III p. Chr)*. The work is divided into five chapters and it comprises an annex with petrographic analyses conducted by Florica Mățău, abbreviations, bibliography and illustrations.

In the introduction of the thesis (pp. 11–19), the author highlights the reason and relevance of the topic. He underscores that thus far for the Dobrudjan territory, the ceramic kitchenware was treated along with the other ceramic categories and thus, the information is incomplete. At the same time, methodological information is provided and the stage of research at international level and for the studied territory was taken into account.

The first chapter (pp. 23–42), dedicated to the ceramic kitchenware production centres, proposes to clarify several issues. The purpose is to determine the extent to which some local workshops covered the need for ceramic products in the province of Moesia Inferior and the identification of products in military *officinae*, in the Greek cities and in the rural environment. At the same time, he focused on imports and on the extent to which they influenced and replaced their local manufacturing.

Before identifying of the local workshops within the aforementioned environments, the author also notes a series of prerequisite conditions to be met before founding such a production centre, such as demographic conditions, access to raw material sources, vicinity o important roadways or littoral areas and their constitution in areas protected from invasions. Possible areas where pottery workshops existed in the military environment are the following Durostorum, Troesmis and Noviodunum. Nonetheless, it should not be forgotten that these centres were researched, even though they were not also published. However, the author has the merit of having accessed directly to the pottery discovered in this environment, and this aspect completed his overall view. Other smaller military centres such as Dinogetia may have had their own pottery workshops, but their findings have not been published yet. In the Greek environment—in the period of the 1<sup>st</sup>-3<sup>rd</sup> centuries—workshops may have existed at Tomis, Argamum and Callatis. These identifications have been considered possible due to the different composition of the ceramic paste within each centre. There are production centres for the rural environment and it is impossible for production to have existed in the Greek cities, too.

The rural workshops are represented by finds of *officinae* that functioned from the 2<sup>nd</sup> century. Such workshops were identified at: Valea Morilor, the settlements of Frecăței, Telița Amza, Sarichioi–Sărătură and possibly of Gura Canliei. This production was destined to *villa rustica* or to the villages nearby. The author also provides political history details in accordance with the proposed topic and he posits that the ceramic production within the centres of Scythia Minor most probably ceased activity after the Adrianople disaster of 378.

The second chapter (pp. 43–134) is the most comprehensive and it comprises the main types of kitchenware in the Istro-Pontic space. For each type, the author described the vessel; analogies from Moesia Inferior, Dacia and/or the western part of the Empire were provided. As for fragments, the author outlined the discovery place, the dimensions, the description, the bibliography, when applicable, and the dating. The importance of this chapter results from the fact that most of the material taken into account has not been published. In total, 17 types of Roman provincial vessels (Aula and Olla) – a type of La Tene traditional, handmade vessels; four types of imported vessels and three types of containers/*dolia*. This category of kitchenware also includes three types of baking dishes or casseroles; seven types of Roman provincial pans and two types of imported pans. Another category included is the one of bowls/*patera* and 16 types of such vessels were identified; three types of *mortaria*, water containers, colanders and Roman provincial and imported lids.

I believe that for this chapter a brief methodology part would have been necessary. I noted, for instance, that the Roman provincial vessels were not divided by types depending on their dating and probably the typology was elaborated depending on the number of fragments included within each type. At the same time, the most accurate terminology for the storage vessels /dolia (p. 79) would be household vessel. This change would be necessary, because the vessels taken into account by the author were used in order to preserve a small and average amount of products, while the term *dolia* is generally used for very large vessels; their capacity exceeds 200 litres.

The third chapter (pp. 135–161) is dedicated to kitchenware and to the Romanization of the Istro-Pontic space. Within it, the introduction of Roman products to the local market is discussed. This introduction of the products is considered the trigger factor leading to the acquisition of the material and spiritual values of the Roman world by the Getians. The Roman influence on local civilization was manifested by the adoption of new pottery-making techniques, namely using the potter's wheel, but this did not entail the disappearance of the old technique until late 3<sup>rd</sup> century or even early 4<sup>th</sup> century. From a morphological standpoint, the old ceramic forms were also preserved until early 4<sup>th</sup> century, but they were executed using the new technique. Also gradually, new Roman provincial ceramic forms were accepted. At the same time, the author references the other parameters included in this Romanization phenomenon and the "improvements" brought by the Roman Empire to this territory, such as infrastructure, city founding, border organization, etc.

### Bianca Elena Grigoraș

This chapter is of a more general nature and the Romanization issue is very complex; significant amounts of work have been dedicated to this topic. Concerning pottery, A. Opaiţ (Opaiţ 1980, p. 348) highlighted even since 1980 that at Troesmis, the local ceramic forms were preserved, but they were made of higher quality clay and wheel-thrown.

In the fourth chapter, (pp. 163–171) the author discusses the diet of the Roman population in the Istro-Pontic space from the perspective of archaeozoological and archaeological discoveries. The chapter begins with a presentation of underground resources, climacteric and landform conditions to explain the grain types encountered in the Lower Danube area. Hence, the economic resources of the area were also highlighted through the archaeological discoveries in the area. The author mentions the agricultural tool treasure of Moșneni, the tools of Fântânele, Telița-Amza and Tropaeum Traiani. At the same time, the seed finds confirming the practice of agriculture are also mentioned. Such carbonized seeds were found at Mosneni (wheat and rice seeds), Murighiol (lentil). The existence of Thracian-Dacian words (peas, pod, etc) and the Latin words (lentil, beans, etc) of our vocabulary confirm their existence from that period. Animal breeding is also closely connected the landform within the area studied. The archaeozoological studies confirmed the breeding and sacrificing of domestic animals such as sheep or goats, traction animals, birds and the practice of fishing at the Peuce mouth. All these resources only confirm the role played by the kitchenware. The vessels were used to boil porridge or soups, the pans to bake bread, the casseroles to reheat food.

The last chapter is dedicated to final considerations, which reprise the ceramic types and a brief description; charts are featured comprising the percentage distribution of kitchenware in the Istro-Pontic space at macro level, but such charts also concern various settlements, such as *Noviodunum*, *Troesmis*, *Durostorum*, *Argamum*, Baia-Caraburun, *Ibida* and Niculițel.

The annex at the end of the thesis is represented by the petrographic analysis conducted by Florica Mățău on three ceramic fragments of *Durostorum*, *Troesmis* and *Noviodunum*. Analyses have concluded that three fragments have a homogeneous and compact aspect; they feature granoclast and lithoclast inclusions, but they are differentiated in terms of quantity.

The thesis ends with a well-established bibliography and with a catalogue where each drawing has its own scale and each fragment is provided with the type, origin and bibliography, when applicable.

This thesis does not wish to be strictly typological, because it has managed to explain issues related to economics, society and diet. The dominant chapter of the thesis—dedicated to the typology—is very well elaborated; each type benefits from the same details, which provides consistency to the entire work. The unpublished material featured in this thesis will be a great help for all persons who study pottery. I believe that the author's initiative of elaborating a thesis dedicated completely to a ceramic category has long been overdue, because it enables us to find out detailed information about the changes within the society, diet and lifestyle.

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