

MUZEUL NAȚIONAL DE ISTORIE A ROMÂNIEI

**CERCETĂRI
ARHEOLOGICE**

XXX

2

ISSN 0255-6812

**CERCETĂRI
ARHEOLOGICE**

XXX

2

BUCUREȘTI

2023

COLEGIUL DE REDACȚIE:

Sorin Ailincăi, Dan Aparaschivei, Mihai Bărbulescu, Nikolaus K.O. Boroffka, Adina Boroneanț, Dragoș Diaconescu, Stela Doncheva, Gabriel Fusek, Florin Gogâltan, Martin Husár, Sergiu Matveev, Dragoș Măndescu, Ioana A. Oltean, Ioan Carol Opriș, Liviu Petculescu, Constantin C. Petolescu, Zeno Karl Pinter, Stefan Pop-Lazić, Ivan Radman-Livaja, Tudor Sălăgean, Victor Spinei, Agnieszka Tomas, George Trohani, Boaz Zissu

COLECTIVUL DE REDACȚIE:

Silviu Oța – redactor-șef
Laurențiu Angheluță
Bianca Olteanu
Alexandru Rațiu
Andreea Ștefan
Maria-Magdalena Ștefan
Ovidiu Țentea

EDITORI:

Andreea Bîrzu
Katia Moldoveanu
Constantin Haită
Valentin Radu

Tehnoredactare și coperta: Petru Ureche

Ilustrația de pe copertile 1, 4: Podul lui Traian. Foto pila culee (pila C), dinspre SV, înainte de demararea lucrărilor din anul 1984 (anul 1983), fond nr. 854, inv. nr. 954, SJAN MH, dosar 11/1983-1984.

ISSN 0255-6812

www.cercetări-arheologice.ro

<https://doi.org/10.46535/ca.30.1>

<https://doi.org/10.46535/ca.30.2>

Volum editat de Muzeul Național de Istorie a României
Calea Victoriei 12, București, 030026, România

CUPRINS/CONTENTS

30/2

<i>IN MEMORIAM</i> Radian-Romus Andreescu (Editorii)	391
Radian-Romus Andreescu. Activitatea științifică (Editorii)	395
Sabin POPOVICI, Iulia RĂBÎNCĂ, Laurențiu COMĂNESCU, Valentin VOICILĂ, Gavrilă PĂLCĂU, Surface researches on the valley of the Frăsinet river (Frăsinetul de Pădure village, Dobrosloveni commune, Olt County). I	409
Camelia-Mirela VINTILĂ, Necropola de la Cernica. Brățări din inventarul funerar al mormintelor	433
Ana ILIE, Raluca KOGĂLNICEANU, Plastica antropomorfă de lut din așezarea gumelnițeană de la Iepurești (jud. Giurgiu)	457
Cristian-Eduard ȘTEFAN, Un vas antropomorf fragmentar de tip <i>Venus</i> din colecțiile Muzeului Național de Antichități	479
Roxana DOBRESCU, Constantin HAITĂ, Katia MOLDOVEANU, L'industrie lithique de l'habitation LI/1993 du site de Vitănești-Măgurice	491
Andreea BÎRZU, Katia MOLDOVEANU, Ion TORCICĂ, Pavel MIREA, Noi figurine antropomorfe recent descoperite în așezarea gumelnițeană de tip <i>tell</i> de la Vitănești „Măgurice”	527
Mihaela CULEA, Adina BORONEANȚ, A humerus varus deformity in a Eneolithic grave from Gumelnița (Călărași County, Romania)	541
Vasile DIACONU, Constantin APARASCHIVEI, Reevaluarea unor reprezentări antropomorfe și zoomorfe din situl eneolitic de la Petricani (com. Petricani, jud. Neamț)	553
Alin FRÎNCULEASA, Monica MĂRGĂRIT, Daniel GARVĂN, Adrian BĂLĂȘESCU, Industria materiilor dure animale din situl preistoric de la Șoimești – Merez (jud. Prahova)	567
Vasile IARMULSCHI, „Eine Pommersche Fibel“ aus Kamenez-Podolsk (Ukraine)	589
Boaz ZISSU, Nurit SHTOBER-ZISU, An Underground Rock-Cut Shrine near Amatsya, Judean Foothills, Israel	599
Remus Mihai FERARU, Zeii medicinei în coloniile milesiene de la Pontul Euxin: cult și reprezentare iconografică	627
Kateryna SAVELIEVA, Archaeological and epigraphic evidence about the religious life of the roman garrison in Tyras	639
Alexandru RAȚIU, Ioan Carol OPRIS, Samian Ware in Early Roman Contexts at Capidava	651
Alexandru RAȚIU, Mihaela SIMION, Laurențiu ANGHELUȚĂ, The Roman Sports Cavalry Helmet from Islaz (Teleorman County, Romania)	669
Eugen S. TEODOR, Emil DUMITRAȘCU, Săpături arheologice în zona centrală a castrului roman de la Băneasa (județul Teleorman)	691
Jozsef MATYAS, Fortificația romană de la Voislova	713

Corina Anca SIMION, Maria Loredana MARIN, Elena Alexandra ISPAS, Cristian MĂNĂILESCU, Alexandru Răzvan PETRE, Eugen S. TEODOR, Datarea radiocarbon a unor probe de lemn și derivați din lemn, ca urmare a unor tratamente termice. Un punct de vedere arheometric asupra unor eșantioane de la Măguricea Branului	725
Csaba SZABÓ, Miruna LIBIȚĂ-PARTICĂ, Ioan MUNTEAN, Mithras exhibited. Perspectives of sensory museology in Mithraic contexts	737
Ovidiu ȚENTEA, Florian MATEI-POPESCU, Călin TIMOC, Castele romane din sud-vestul Daciei. O trecere în revistă și o actualizare	763

CA

30/2

EXCAVATIONS IN THE CENTRAL AREA OF THE ROMAN FORT AT BĂNEASA (TELEORMAN COUNTY)

EUGEN S. TEODOR,
EMIL DUMITRAȘCU

ABSTRACT:

During the last two archaeological campaigns (2021-2022) we worked in the central area of the large fort at Băneasa. As we expected, the trenches have intersected the defensive ditch of the second phase of the fort (it shrank at less than half of the original surface), and the new gate of the eastern precinct. The two phases are similar in many respects, as the shape and the size of the ditch, the almost flat rampart, the undersized palisade, as well as that unique tower-gate, with no analogies for the first half of the third century. There are also some differences; for instance, the end of this fortification seems rather pacific, as rendered by both the stratigraphic rendition and the short list of findings.

There is still some news, as the discovery of stamped tiles, which is a first for this frontier – *Limes Transalutanus* – all across the plain, south of Pitești City. Unfortunately, those tiles were brought from Slăveni (the largest fort from southern Romania, located 39 km west-northwest of Băneasa, beyond Olt River) therefore we still do not know the name of the military unit garrisoned at Băneasa.

The comparison made for the pottery of the two phases does not show relevant differences, but the chronological gap is not greater than two decades.

REZUMAT: SĂPĂTURI ARHEOLOGICE ÎN ZONA CENTRALĂ A CASTRULUI ROMAN DE LA BĂNEASA (JUDEȚUL TELEORMAN)

Ultimele două campanii arheologice (2021-2022) la Băneasa le-am petrecut în sectorul central al castrului mare. Așa cum era de așteptat, secțiunile noastre au intersectat noul șanț de apărare al castrului (care tocmai fusese redus la mai puțin din suprafața inițială) și poarta de acces. Cele două faze constructive sunt asemănătoare în multe privințe, precum forma și dimensiunile șanțului defensiv, valul superficial sau palisada subdimensionată, ca și un turn-poartă fără analogii în prima jumătate a secolului al III-lea. Există însă și diferențe; de pildă faptul că această a doua fază a castrului a fost părăsită pașnic, ceea ce rezultă atât din interpretarea stratigrafică, cât și din lista relativ scurtă de obiecte recuperate.

Noutățile nu au lipsit însă cu totul, fiind descoperite acum, pentru prima dată pe sectorul de câmpie a *Limes Transalutanus*, țigle ștampilate. Din nefericire, ele au fost aduse de la Slăveni (cel mai mare castru din sudul României, aflat la 39 km VNV de Băneasa, dincolo de râul Olt), deci nu am aflat nici de această dată numele unității militare cantonate la Băneasa.

Comparația între ceramica celor două faze ale castrului nu a produs diferențe considerabile, însă nici distanța în timp între ele nu este mai mare de două decenii.

KEYWORDS: *Dacia inferior*, limes, fort, stamped tiles, pottery.

CUVINTE CHEIE: *Dacia inferior*, limes, castru, țigle ștampilate, ceramică.

Introduction

The archaeological research on the large Roman fort at Băneasa (Teleorman County) has been resumed in 2016¹. First diggings were made against the south-western corner (2016), then the opposite, north-eastern corner (2017)².

¹ Previously there were recorded amateur diggings, in mid-19th century, not published, a terrain survey in late 19th century (Tocilescu 1900, 131 with Fig. 74), and one excavation campaign within the Second World War (Cantacuzino 1945).

² See Teodor 2016a; Teodor, Dumitrașcu and Ștefan 2017.

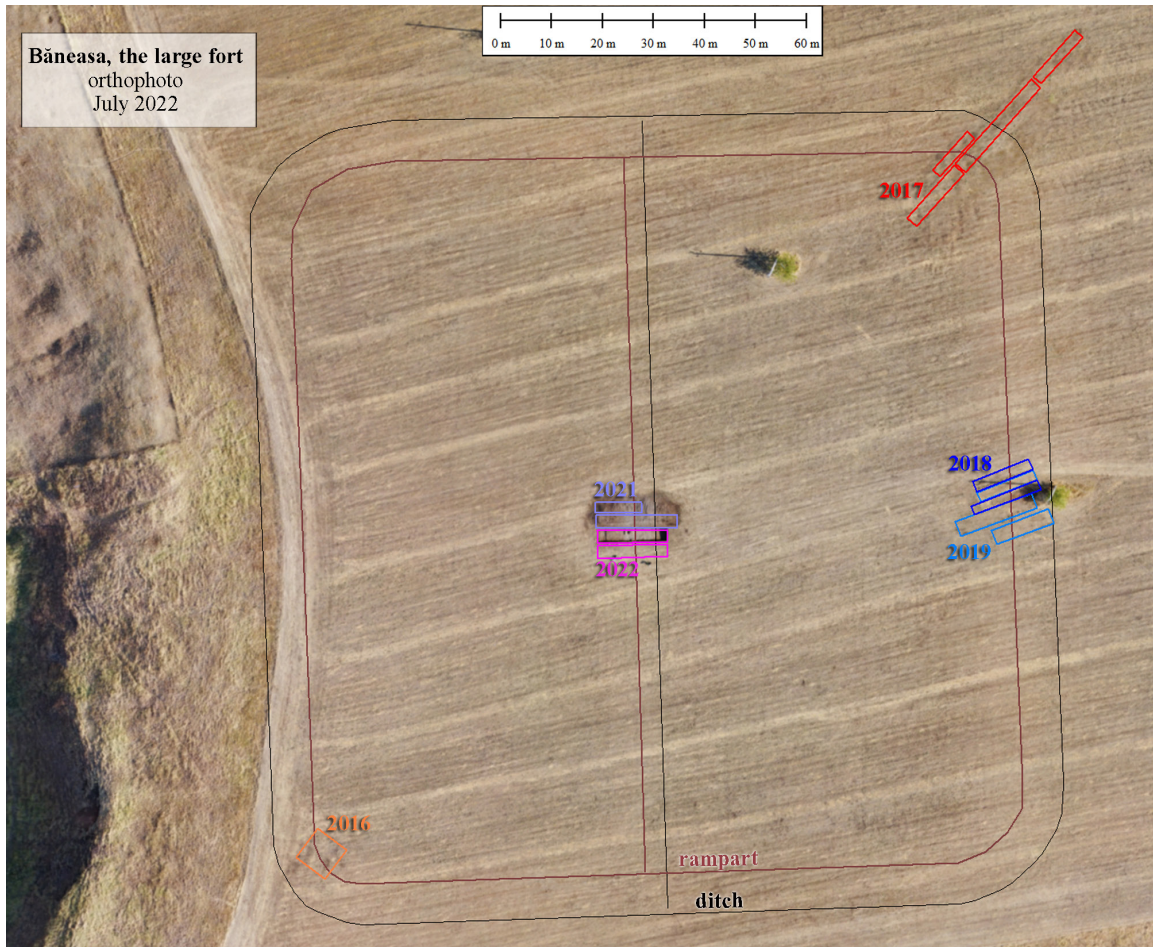


Figure 1. General plan of the excavations.

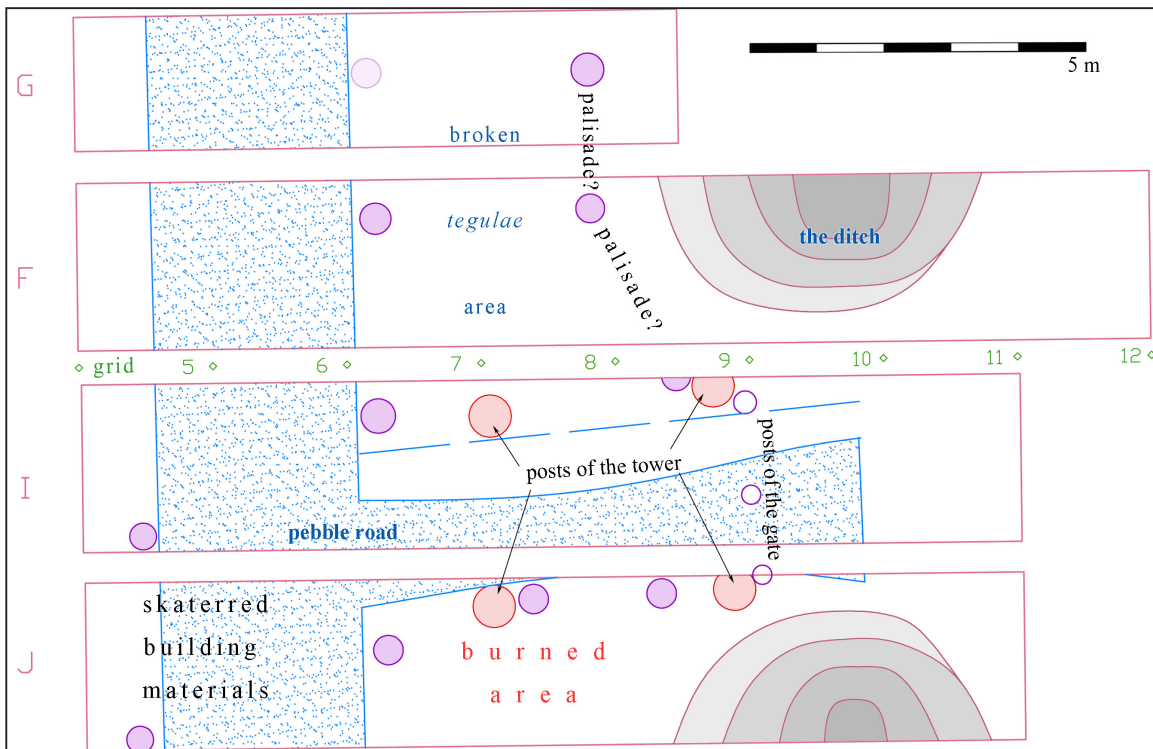


Figure 2. Main traits of the excavation, 2021-2022.

The magnetometry coverage made in 2017 showed some essential differences with the known plan (Tocilescu-Polonic)³, which displayed the eastern gate at the southern third⁴. Our geophysics was still suggesting that the eastern gate would be located in the middle of that side⁵. The 2018 and 2019 campaigns were dedicated to clarify the fact and, indeed, the eastern gate is located where magnetometry has suggested it⁶.

The large fort at Băneasa⁷ has two main phases, an initial one, stretching about 140 x 139 m, ending around 225 AD, as a result of a strong and generalised fire, mainly along the rampart, as the aerial images show⁸. The fortification has been refurbished, still far smaller, keeping the location for three sides, but relocating the eastern one 74 m towards west. It has resulted a rare shape, oblong, measuring 140 x 65 m, with the proportion of 2.15:1, losing 53% of its inner space⁹. Where was located then the new eastern gate? On the same traffic axis? The next two campaigns were devoted to answer that question.

In the central sector of the large fort, at the intersection with the new rampart¹⁰, four new trenches have been marked, perpendicular to the rampart and ditch, as follows: F (16 x 2.5 m), G (north the former, 9 x 2 m), both in 2021, coming next the trench I, south of F, and the trench J, south of I, both measuring 14 x 2.5 m, in 2022 (see Fig. 1 for location and Fig. 2 for the plan of the excavation).

Archaeological features

The excavation caught the gap in the defensive ditch, 4.5 m wide, which is the eastern gate of the second phase of the fort. It is not located exactly where it was expected, but about two meters south of the imaginary axis crossing the field in east-west direction. The profile of the ditch is typical, in V shape, with 36° slopes. The opening is 5.13 m wide, and the maximum deep is 2.07 m, measured from the level of construction, relative to the inner side; the outer side is lower, measuring only 1.62 m in depth, due to different antique ground level. In a direct comparison with our previous excavation over the defensive system (2017, at the north-eastern corner), this ditch is smaller (compare with 6.25 x 2.85 m), possibly due to the location, near the entrance¹¹. Looking at the ditch in a functional manner, it is really much shallower than its maximum depth. The back filling started early, probably even in the construction stage of the fort, as in its tip there are some building materials. It comes next a clogging stage, which is contemporary with the period of functioning. As one can see (Fig. 3, below, compare trench F, from the north side, with trench J, at the southern side), the process is uneven on the sides of the gate gap, being much more evolved in the northern ditch. The situation has a good explanation: the field on which the fort is standing has a 2° tilt from north towards south; therefore the rain water collected in the ditches was flowing south, depositing silt where it stood still, near the gate gap. Consequently, the northern ditch has been almost fully clogged when the fort was still manned.

As well as in the first phase of the fort¹², the later fort does not have a proper rampart. Before the construction of the new gate (phase 2), it has been added a fresh new layer, grey and relatively organic¹³, containing divers small artefacts (including prehistoric!). The difference of level between the ‘rampart’ and the field east of the ditch is

³ Retaken in Teodor and Dumitrașcu 2019, 104-105, with the figure 1 (*apud* Tocilescu 1900, 131, Fig. 74).

⁴ Odd, as the frontier palisade is located eastwards, not south. Most usually *porta praetoria* stands towards the enemy.

⁵ Odd again, as the northern and the southern gates are also located on the middle of those sides, as indicated both by Tocilescu’s plan (Tocilescu 1900, 131, Fig. 74) and our magnetometry. The magnetometry has been published in Teodor, Dumitrașcu and Ștefan, 2017, 83-84 and Fig. 1.

⁶ Teodor and Dumitrașcu 2019.

⁷ There is a smaller fort, located about 200 m northeast, never excavated. We have reasons to think that the two are not contemporary, the small one (app. 59 x 39 m between the ramparts) being very likely earlier (as the beginning of the second century). The larger fort is part of the frontier known as *Limes Transalutanius*, dated consequently in the first half of the third century.

⁸ Teodor 2016b, 103, Fig. 4.

⁹ From 1.946 to 0.91 hectares. All figures with taken measures from the top of the ramparts.

¹⁰ The rampart splitting the former large fort is not well visible on magnetometry, but it is deductible from the topographic survey, being a line easily bumping in the field. For a change, the new defensive ditch was very clear on geophysics, therefore there were no problems to locate the right position. Supplementary, the place was crowded with broken tiles, a very rare fact at Băneasa.

¹¹ Would have been preferable to cut the ditch a little further, for instance with the trench G. Unfortunately, we are making our excavations in a crop land and have to finish one planned dig in the same campaign (three to four weeks) in order to fill back the trench. Therefore we do not plan more than what is feasible in the given time.

¹² Teodor, Dumitrașcu and Ștefan 2017, 86-87 with Fig. 4.

¹³ Surprisingly maybe, as we were expecting some clayish matters from the bottom of the new ditch. Did they need the clay for the new buildings inside?

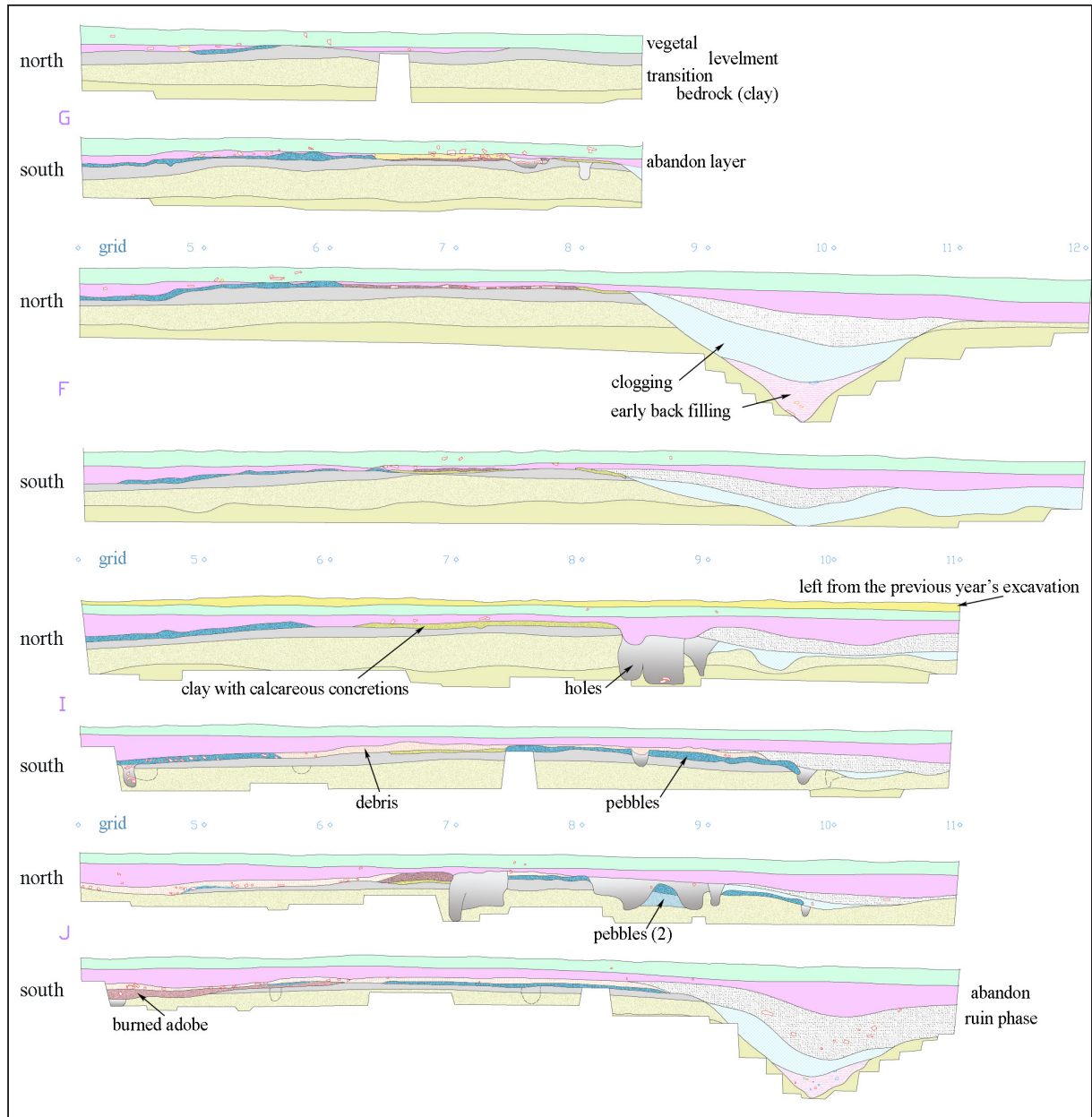


Figure 3. Sections of the trenches. Southern sides are depicted in horizontal flip.

varying between 45 cm (measured along the trench F) and 88 cm (measured along the trench J)¹⁴, giving an average of 0.67 m¹⁵.

The dramatic shrink of the fort's surface, within the second phase, drove our expectations towards the idea that the military units were changed, a smaller one (*numerus*?) taking the place for the former one (a cohort?). So it looked

¹⁴ Not sure. The trench is too short to be sure. Could be less.

¹⁵ A few examples from the proxy geography will be helpful. Răcari fort, from central Oltenia, has a rampart 1.5 m higher than the berm (Teodor 2006, 226, Fig. 5; Teodor 2009, 1530-32). Apparently, at least, the situation at Slăveni (Olt Country, on Olt River) is similar, but the published evidence does not allow measurements (Tudor 1978, 301-307, esp. Fig. 87). A situation closer to Băneasa one can find on Urlueni case (the larger fort, see Bogdan Cătănciu 1997, Fig. 69), with a rampart not higher than 0.7 m. The situation is repeating at Putineiu fortlet, a few km south of Băneasa (Bogdan Cătănciu 1997, Fig. 70). Looking at the terrain-models acquired in *Limes Transalutanus* project (2014-2017), the differences of height between the rampart and the outer area (beyond the ditch) is of 1.4 m for the smaller fort at Urlueni. For the larger fort at the same location, at Urlueni (Argeș County), measurement on the GIS file confirms the literature data, 0.7 m. The same kind of documentation, for the larger fort at Săpata de Jos (Argeș County), tells that the height of the rampart is no more than 0.6 m. For the last case, yet, the ditch is very wide (about 20 m), thus impressive, suggesting (falsely) that the rampart is 'big'. Low ramparts look like a trait of *Limes Transalutanus*.

after the first campaign, when apparently we had a tower behind the defensive ditch. The second campaign proved that we were wrong. Four large postholes (diameters around 65 cm, with depths 60 to 70 cm) mark the gate-tower in the middle of the gate gap, less impressive than the one seen three years before¹⁶, but following the same idea: a unique tower-gate, crossed by the road through the centre (see again Fig. 2). The entrance into the tower-gate has been secured by a double wooden gate, with side openings, supported on three smaller postholes in front of the tower, two on sides and one in centre. The circulation corridors through the double gate are very narrow: 1.06 m on the northern gate, and only 0.91 m on the southern one, which obviously excludes carts¹⁷.

The pebble road that crosses the tower-gate is ending abruptly in front of the gate, where the axis of the ditch is, and there is any sign that would continue farther. The difference of level between the ‘rampart’ (where the tower has been located) and the eastwards field has been probably resolved on wooden planks, but no trace remained. The hint of a sort of ‘bridge’ has been given by some bricks found on the edge of the northern defensive ditch, as well as rolled almost to the bottom¹⁸.

The functional use of the rest of the postholes depicted in figure 2 is not all clear. Those three located north of the tower could be related to a palisade, even if the relation is non-linear. A clear fact, for a change, is that most of *tegulae* were found there, west of those three postholes, suggesting a roofing, a supplementary space for the guards, because, obviously, the tower is too small to host – as usual – all the activities associated with a tower (guarding, resting, storing and eating). In the north-western side of that area, under the roof, but also laying on the pebble road from west, most of the pottery shards recovered was found¹⁹.

Still more difficult is to understand the smaller postholes located in the southern side of the tower-gate. One thing is yet clear: the ground floor of the tower was not closed with planks, being very likely open, at least on sides. The



Figure 4. Photo taken in the Trench J, heading west-northwest. The white-red stakes are marking the edge of the gate-tower.

¹⁶ Teodor and Dumitraşcu 2019, esp. 106 within the Fig. 3.

¹⁷ Another bizarre fact from Băneasa... There are no gates on the southern and northern sides for the second phase, or at least this is what geophysics says. The only chance for a larger entry could be on the western side, but that would drive to a slanted terrain, against a terrace 20 m high.

¹⁸ Suggesting that the first ‘bridge pole’ has been lost very early, within the building phase, because some of the bricks are contained in the tip of the filling. Note that the use of the bricks, at Băneasa, is very rare.

¹⁹ Pottery shards were found in small quantities, as well as in the case of the eastern gate of the first phase (Teodor and Dumitraşcu 2019, 121), but in sharp contrast with the excavations made in barracks, as those from 2016 (Teodor 2016a, 115-120) and 2017 (Teodor and Dumitraşcu 2018).

two posts from the southern side could be the necessary frame for making a ladder for access to the first floor. The plan drawn at the figure 2 is still a simplified view of the digging, in order to keep it intelligible. The stratigraphic rendition (Fig. 3, Trench J, northern profile, between the grid marks 7 and 9) shows a more complex situation, with ‘small’ holes larger than expected, with oblong plans, east-west oriented; these could be signs of some collapsing structures. A similar situation could be seen near the north-eastern posthole of the gate-tower (Fig. 3, Trench I, northern profile, into the grid 9), meaning that the ground floor of the tower was not closed.

Although the northern annex of the tower was covered in tiles, the tower itself had a roof consisting of vegetal material, like reeds. It ended in fire and, due to its light nature, burned quickly, without combusting the entire structure; the burning roof collapsed falling towards south and west, while the deck of the first floor was still standing (see Fig. 4, with the distribution of the blazing roof).

Towards the southwestern corner of the investigated area, especially near the western end of the trench J, lots of building materials were found, laying on the pebbles of *via sagularis*. Obviously, this would come from a nearby building from outside the excavated area. The structure of those materials is neatly different from those found near the ditch or in its cavity. If in the last case there is a parity of broken tiles and bricks, in the former case the tiles are six times more frequent than the bricks. Regarding the dimensions of the fragments there is a second difference, the smaller are found towards the western end of the trench. Consequently, they have been used as secondary building material, in a structure with walls based on adobe. If so, it would mean that the broken tiles have been recovered from a building of the first phase, which would be news for us.

The finds

Coins

Two coins were found in 2022, in the trench J, on the antique ground level, in an area covered by debris of the burned roof of the gate-tower. Both have the effigy of Julia Domna²⁰ (Fig. 5) and both are more or less burned. The first is a silver denarius, in a relative good state of preservation, as it stood in circulation for at least 20 years. The second is a fourré denarius, in a pretty bad shape of preservation. This was an ‘official’ fake denarius²¹, very frequent at the Lower Danube and could date anytime in the second or third decade of the third century, even later, towards AD 240. The poor state of conservation (due to the core containing a lot of iron) is suggesting a rather late chronology. A similar fourré denarius has been discovered in our diggings from 2017, at the north-eastern corner of the large fort, but that one was by far in a better shape²².

Our discoveries from 2017 are important, as they offer a relatively tight date for the end of the first phase of the fort, around AD 225²³. The coins recovered in 2022 do not change this perspective. The second phase of the fort – with the diminished surface – could start any time after 225, but probably not later than 230, this being the main fort of the frontier, south of Vedeia River, which is the ‘shield’ of *Romula*, the capital of *Dacia inferior*. A closing time for the second phase of the fort cannot be given in excavation grounds, but in the general chronology of *Limes Transalutanus*, very likely related to the Carpi invasion, in 245-246²⁴.



Figure 5. Coins discovered in 2022.

Tile stamps

The excavations from the central area of the large fort at Băneasa brought the first stamped tiles ever found, not only here, but on the entire frontier line known as *Limes Transalutanus*, south of Argeş River.²⁵ All of them are

²⁰ Wife of Septimius Severus, empress between 193 and 211. We are grateful to our colleague, Mihai Dima, for identification.

²¹ Due to the shortage of cash for army's needs.

²² Teodor, Dumitraşcu and Ştefan 2017, 91, Table 1, second row.

²³ Two *denari*, virtually not worn, minted AD 222 and 223 (Teodor, Dumitraşcu and Ştefan 2017, 91, Table 1, rows 4 and 4), are strongly suggesting the end of the first phase of the fort around AD 225.

²⁴ Christescu 1938; Petolescu 2021, 50.

²⁵ They are really that rare, as the extensive diggings of Ioana Bogdan Cătănicu, at Urlueni and Putineiu, produced none. The

coming from the central area of the excavations, mostly from the grid 7. Four of them were found on the trench F, two for each from the trenches G and I, and one from the trench J, all standing on the antique ground soil (see again Fig. 2 for location). None of them have an unbroken stamp, but surely they are the same type (see Fig. 6), read ACL (*Ala Claudia*). One can see the same stamp, with the same dimensions (6 x 2 cm), in IDR II, 525 (published in 1977), found in the ruins of the baths from Slăveni²⁶. There are two Roman military units with similar names in Dacia, *Ala I Claudia Gallorum Capitoniana*, and *Ala I Claudia nova miscellanea*. For the first option pleaded C.C. Petolescu and his followers²⁷, for the second – D. Tudor and I.I. Rusu²⁸. The last seems unlikely, as all the monuments connected to it are referring *Dacia superior* (or *Porolissum*)²⁹. Stamps considered to be issued by *Ala I Claudia Gallorum Capitoniana* have been found at Boroșneul Mare and Reci (near the Roman fort from Comolău)³⁰, within *Dacia inferior*, but their abbreviations are neatly distinct (ALA GAL or AL GAL).

The comparison between the older discoveries from Slăveni³¹ and ours (Fig. 6) is not perfectly safe, as the old measurement was obviously rounded (6 x 2 cm) and our photos are not orthophotos. We were able to measure only one stamp width (fragment 501, very close to 6 cm), but several heights vary from 18.82 mm to 21.5 mm. The problem could be not only the optical deformation given by the lenses³², but also the fact that all the artefacts are burned *after* stamping, and we neither know the place where a certain artefact stood into the oven, nor the quality of the process³³. We all are aware that ceramic mixtures when exposed to high temperatures are shrinking, but the actual process is difficult to assess for each of them. In our opinion, all the tile stamps from Băneasa are coming from the same wooden tool, which is likely the same (or very similar) with that known from Slăveni (*recte* IDR II, 525).

The archaeological report for the Roman baths from Slăveni is not quite a detailed one, however some facts are relevant. The report is stating that the baths were made in the time of Septimius Severus. The stamped tiles ACL (unknown how many of them)³⁴ have been found in the ruins of *thermae*, for which there is no direct mean of chronology³⁵. The only coins found on the site were contained by a pit (probably a fountain) in use *before* the baths, as the draining sewer has been partly built *over* it³⁶. The newest coin of that collection has been minted by Severus Alexander³⁷, becoming a *terminus post quem* of the *thermae* themselves³⁸.

main cause is that they are on course of disappearance on the entire Roman Empire, being found in far smaller numbers in the first half of the third century than one century earlier. The process ended in the second half of the century, when they are absent, and not only in Dacia (McComish 2012, 86). Within the otherwise few diggings south of Argeș River, there have been cases of alleged partial prints, but none could be read. See Săpata de Jos, KILC?, Christescu 1938, 446, Fig. 16, for a photo; IDR 2, 634, for drawing; Gresia, where has been discovered a broken brick with a partial stamp reading [...] ●B, has been taken by the archaeologist as CIB, for *coh I Augusta Nervia Pacensis Brittonum milliaria* (Avram 1998, 342 with Figs. 9 and 10). Note yet that the stamp from Slăveni is retrograde, has no dot before B, and has been previously ascribed to *Coh I Bracaraugustanorum* (IDR II, 527; contra: Petolescu 2021, 195-196). A connection between Slăveni and Gresia is yet plausible, on geographical grounds.

²⁶ Interestingly, the authors were citing D. Tudor, N. Gostar, I.I. Rusu and C.C. Petolescu, but not the archaeological report for *thermae* at Slăveni, where the stamped tiles were found, published years before (Popilian 1971).

²⁷ For instance Petolescu 2002, 69-70; Petolescu 2021, 164-165; Țentea and Matei-Popescu 2004, 264; N. Gostar (1966, 181) was first to say that *ala Claudia Gallorum Capitoniana*, from *Dacia inferior*, should not be confused with *ala I Claudia nova miscellanea* from *Dacia superior*, and the stamps from Boroșneul Mare, Reci and Slăveni could stand for the same unit, although different.

²⁸ Tudor 1965, 358-359;

²⁹ Porolissum, Micia, Drobeta (Petolescu 2002, 70).

³⁰ IDR III/4, 327-328 (Boroșneul Mare); IDR III/4, 315 (Reci, civilian settlement near the Comolău fort), both far from Băneasa (about 250 km), therefore from another age.

³¹ IDR II, 525, drawing.

³² The differences between the measurements made on photos and those collected later with a calliper are irrelevant. The check was still profitable, as we noticed that the stamp has oblique edges, not vertical, which means, simple, that a deeper struck would make a larger mark. Also, if the stamp is not applied vertically, but slanted, the resulted mark would be apparently slightly smaller.

³³ The variety of shades for the same type of tile stands as a direct argument.

³⁴ In the monograph for Slăveni there are three variants of the stamp ACL (Tudor et al. 2011, 189, cat. 210-212, plates 38-39), all found at *thermae*. Note that all stamps from Băneasa are following the first variant (cat. 210), which seems the same with that published in IDR II, 525.

³⁵ Let alone the coin issued by Philip Arabs, found in the mortar used on one apse, considered a remade (a second phase of the baths).

³⁶ Popilian 1971, Fig. 2.

³⁷ Unfortunately without other detail.

³⁸ Therefore a chronology beginning with Septimius Severus is impossible. Obviously, the archaeologists have to search for some earlier baths, because a large fort as Slăveni could not miss one.

As already said, the date of the stamped tiles from Băneasa should be around 230 AD, which is also helpful for a correct chronology of the Roman baths from Slăveni.



Figure 6. Stamped tiles (ACL) and the brick with graffito. Numbers are ID's in repository.

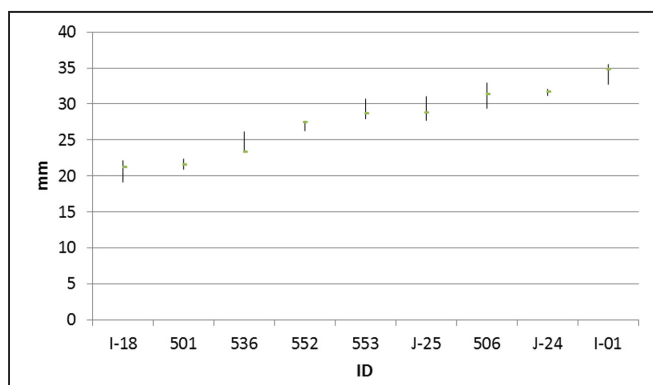


Figure 7. Standard deviation graph for tiles thickness (the tick is the average).

Although the similarity of the stamped tiles is striking, their measurements went a bit wild; there are consistent differences between their thickness, both for the same artefact, and for their averages. Beginning with the last, their thickness could be as different as 20.8 mm and 34.4 mm (Fig. 7), which is surprising for tiles theoretically made in the same time. The standard deviation for each is also unexpectedly large, as the individual measurements could go as far as 6% afar from the average. The uneven thickness is mentioned in the literature, although it rather expresses some sort of evolution over the centuries.³⁹

In the same area where tiles stamps were found three fragments from the same brick have been also recovered, showing a graffito (Fig. 6/547),

MD (?)⁴⁰. The reading of the second letter is uncertain, but most likely it is a D in hand writing⁴¹. Is that letter reversed (written in mirror)? It is difficult to say, probably not. The answer is relevant, as in one case we would read MD, if not – DM. The letters, drawn by a finger, are abnormal large: M is almost 12 cm in width and 7.1 cm in height; D is smaller, having anyway 6 cm in width and 5 cm in height. They were drawn by a person not very used to write. Unfortunately, the abbreviation MD does not say much in terms of military units known in Dacia⁴². We know that there were plenty of *Mauri* units in Dacia⁴³, usually known as *numeri*, but apparently the N is missing⁴⁴.

A closer look at the fabric of the tiles revealed that their faces are protected by a slip (Fig. 8), on which one can see finishing traces, left by a wooden board⁴⁵. The paste of the body is good, relatively fine (for a tile), showing still some porosity; the cover is still finer, with almost no pores. The slip could be traced on each artefact, including the lines of the wooden fibres (see again Fig. 6, especially 501, 506, 552), though with different conservation. This includes the brick from the Fig. 6/547 (see the right-down



Figure 8. Detail on the tile ID 537, with clear differences between coated surfaces (and marks of the wooden board) and those with the lost coat. The artefact is rotated left (compared to the Fig. 6).

³⁹ McComish 2012, 82, Fig. 4. For York Roman sites, for the mid third century the average thickness of tiles was almost 26 mm (tending to decrease), which is not very far from our results (27.7 mm), on a short list of artefacts.

⁴⁰ We own this observation to our friend and collaborator, Pavel Mirea.

⁴¹ Compare with Voloșciuc 2007, 65-66, letter D, especially the row with samples from the wax tablets.

⁴² Between *numerus Maurorum Aurelianorum* and *numerus Maurorum Miciensium* there nothing in the list (Southern 1989, 136).

⁴³ Németh 1997; Benea 2018.

⁴⁴ *Mauri* military units with abbreviations missing N are known (as MID – *Mauri Iuniores Daciae*, see Benea 2018, 76), yet dated before the half of the second century, when *numeri* military bodies were founded. Such a chronology is not possible at Băneasa.

⁴⁵ Such finishing, adding a slip on tiles and make them neat, although not mentioned in Romanian literature, occurs yet in broader literature, as McComish 2012, 64.



Figure 9. Section of the graffito brick (ID 547).
The average width of the brick is 52 mm. Face up.

corner). This is bringing the question if the brick with graffito has been also brought from Slăveni, or it is a local product. The answer is far to be easy, because at Băneasa we have only a few fragmentary tiles and bricks. The fabric of the brick with the inscription MD(?) is very similar to what we have seen at the tiles; the same composition, colour and consistence, with the notable difference that the porosity is by far greater (about double as size and density of the holes), as seen in the figure 9. Unfortunately, the literature is not helpful so far⁴⁶.

In order to figure out if the coated *tegulae* were usual, we randomly checked in the repository of the

National Museum six artefacts from *Sucidava* (Celei)⁴⁷. Briefly, in all cases we have seen that the upper part was covered with a slip, finer than the body mix, and in all cases could be seen traces of the wooden board used to spread the slip and flatten the surface. The only difference spotted is the smoothness of the wooden tool used, leaving marks more or less visible.

It is now obvious that clarifying the previous question (if the graffito brick is locally made, or it is transported from distance) cannot be solved by macroscopic observation. We will try to untangle the riddle, by chemical composition analysis, sometime in the near future.

The pottery

The amount of potsherds recovered from digging is relatively low, as well as seen at the eastern gate of the large fort (during the archaeological campaigns 2018-2019). A comparison with the diggings in a barrack – as done in 2017 – shows that in places where the military lived on a more permanent bases the pottery collected is at least twice more numerous as in the case of the places where they are on active duty, as a gate. There are possible differences in what concerns the distribution on functional types, but this is what we are going to check.

In the central sector of the fort pottery sherds were present only in a well-defined area, in and near the annex building that was standing north of the tower, for which we already stated that it was used for the rest of the guards and, as well, as a canteen. The number of sherds is relatively low – a bit over 100 – and not quite recommended for statistical purposes. Being, nevertheless, the first time to dig over the second phase of the fort, we asked ourselves if, giving the difference of chronology between the two phases (probably around 20 years), one can see some change.

All the pottery was collected from the antique ground level, partially disturbed by ploughing, but also broken by the heavy machines used in agriculture in the last decades, as they were lying close to the surface. In such conditions, it is a bit hazardous to establish the ‘minimum number of artefacts’. In our count they are 108, but in reality they could be some less. Another drawback is the conservation status, not very good, due to the chemical fertilizers, giving a whitish coat on the sherds’ surface, sometimes so dense that the colour cannot be estimated if not performing a mechanical clean-up.

A possible first answer to the question ‘what has been changed’ is offered by the report about the type of firing on pottery, as given in the Table 1.

The percentage of the reduced pottery is four points above the results published in 2018, not saying much about such a small sample as this. It can also be observed that truly coarse pottery is almost absent, but this might be considered normal in a non-cooking place.

⁴⁶ We have to mention a recent – and interesting – paper, full of high-tech analytical technologies (Badica et al. 2022), failing yet to provide an archaeological description (for instance: the analysed brick from Romula is coated, or not?). The only gain is the obvious similitude of the mixture (with visible quartz around 1 mm, see Badica et al. 2022, 4, Fig. 2b). Note that the geological environment is similar, as both *Romula* and Băneasa are located in the same area of the Lower Olt River.

⁴⁷ Artefacts with inventory numbers 123577, 123369, 123581, 123591, 123609 (all fragmentary bricks), and 123371 (fragmentary tile). Many thanks to our colleagues Ovidiu Țentea and Alexandru Rațiu, for facilitating the visit in their repository. Note that in the museum’s inventory are missing *tegulae* from *Romula* or Slăveni, located closer to Băneasa.

Table 1. Main classes of pottery.

firing	finesse ⁴⁸	items	percent
reduced	very fine	18	30.0
	fine	24	40.0
	half-coarse	16	26.7
	coarse	2	3.3
	total ⁴⁹	60	62.0
oxidized	very fine	10	27.8
	fine	17	47.2
	kaolinite ⁵⁰	2	5.6
	half-coarse	6	16.7
	coarse	1	2.8
	total	36	38

Table 2. Colours of the pottery.

shade	items	percent	totals
reddish	2	1.9	39.8%
reddish yellow	16	14.8	
pale yellow	15	13.9	
greyish yellow	10	9.3	
ochre grey	2	1.9	58.4%
yellowish grey	11	10.2	
dark grey	2	1.9	
grey	48	44.4	
whitish	1	0.9	
not determined	1	0.9	

Beyond the wide categories of ‘reduced’ versus ‘oxidized’, there are the colours, more diverse by nature (Table 2). It worth mention that for evaluating the shade of the potsherds⁵¹, we always took the most visible face of the product, as it was before breaking, as would be the outer face of a beaker or the inner face of a dish.

As concerns the slip, the statistical rules detailed in our last paper are conserved. The slips are frequently finer than the body, with a darker shade, especially on the reduced pots (Table 3). They still can be sometimes lighter than the body, having a yellowish tint missing on the section, proving thus that the paste mixture had a different composition, differently reacting to heat. Such differences could be summed under the presumption of different workshops, likely imports from more distant places. There are also previously known circumstances when the body and the slip are of strongly contrasting qualities, in both directions, either finer or coarser⁵². If the first situation is relatively easy to understand, the latter is a bit paradoxical, because good pottery is imitating the kitchenware.

The novelties are not many, but they are not absent. Interesting is the situation of a polished grey body, from a relatively small recipient. Polished grey pottery will become ‘usual’ one century later, within the Chernyakhov Culture⁵³, and it is almost unknown on Roman

Table 3. Quality of the slip.

description	conditions	items	percent
darker	than the body (reduced)	9	22.0
lighter	on oxidized pottery	1	2.4
kaolinite	on oxidized fine pottery	4	9.8
present	at the same quality and shade as the body	11	26.8
bilateral	where certain	1	2.4
only outer side	where certain	1	2.4
red paint	on oxidized pottery	5	12.2
yellowish	on reduced pottery	3	7.3
finer	on half coarse pottery	2	4.9
coarser	on finer pottery	3	7.3
polished	on reduced pottery	1	2.4
total	all determined cases	41	100

⁴⁸ For the pottery from 2017 we have published short descriptions for almost 100 types (Teodor and Dumitrașcu 2018, 121-124, Table 2). Such a specific typology is not useful on 100 sherds and we have preferred larger groups, the classic four: very fine (with grains of silicates around 0.1 mm and of relatively low density), fine (visible compounds around 0.2-0.3 mm), possibly with a more sandy touch; half-coarse, with silica around 1 mm; coarse, with higher figures both for size or frequency.

⁴⁹ Teodor and Dumitrașcu 2018, 120-121, with the Table 1, where reduced types gathered 58.6%.

⁵⁰ Pottery containing kaolin is about half way between the usual classes named here ‘fine’ and ‘half-coarse’, in terms of granularity.

⁵¹ We have expressed reasons not to use Munsell chart (Teodor 2019, 138-140) and we stick to them.

⁵² Teodor and Dumitrașcu 2018, finer slip: ID DB 224 (amphora), 199 (cooking pot); coarser slip: 98 (lid).

⁵³ Teodor 2021, 38-40. Polished fine grey pottery was usual in eastern Romania, where *Carpi* lived, in the same third century (Bichir 1973, 88). For the contemporary culture from southern Muntenia, just east of *Limes Transalutanus*, things are less clear.

Table 4. Distribution of the functional shapes.

shape ⁵⁸	items	percent	observations
storage pot	7	8.3	all species, mainly fine and grey
storage pot?	10	11.9	all species
(liquid container)	2	2.4	
(large container)	2	2.4	
cooking pot	16	19.0	all colours, dull shades, mostly half-coarse
cooking pot?	4	4.8	
dish	1	1.2	fine, grey
dish	1	1.2	half-coarse, grey
lid	3	3.6	all reduced
bowl	5	6.0	all species
bowl or flagon	1	1.2	oxidant
bowl?	2	2.4	
small beaker	2	2.4	fine, grey
(small container)	8	9.5	
cup	1	1.2	fine, grey
flagons	4	4.8	all fine, different colours
flagons?	5	6.0	oxidized
(middle sized container)	1	1.2	fine, oxidized
amphora	8	9.5	mostly fine and oxidized
<i>mortarium</i>	1	1.2	oxidized, fine
all determined	84	100	

(a lid groove), usually met on kitchenware, occurring here on half-fine grey pottery, suggesting a storage pot for liquids⁵⁹. Unusual is the shielded bottom made out of half-coarse paste (Fig. 10/7), such a conformation being more natural on recipients meant to contain liquids (usually made of fine compositions).

The proportion between the dishes and the bowls is changed, having here a 1:3 proportion, instead of an expected balanced ratio, as previous⁶⁰, which could suggest that in guard service there are less personal items than in the usual housing from the barracks. Only one of the bowl shapes is new (Fig. 10/15), but there is an overall continuity

The monograph is mentioning polishing, but only with a decorative purpose (Bichir 1984, 35, on some fine grey flagons); yet some drawings are suggesting that large areas of the recipient have been polished (for instance Bichir 1984, 149, Pl. 28/8, bowl). The situation is still less clear for the contemporary Roman pottery from the province. The descriptions rarely go beyond generic descriptors as 'fine', or 'grey', the finishing of the body being rarely described. There are situations of pottery published as colour photographs, on which speculations about a polished body are possible (Popa and Bordi 2016, 157, Pl. 27/4, fine oxidized bowl; 158, Pl. 38/4, fine grey bowl; 166, Pl. 36/5, fine grey bowl, etc.). Elsewhere in Europe grey (or black) polished pottery could be found (for instance in Gallia, see Marrieu, Le Moal and Labrousse 1953, 58), for the same age).

⁵⁴ It worth mention that working recently on pottery from Răcari fort (Dolj County, diggings 2003-2010) we found several such sherds, with polished decoration.

⁵⁵ Teodor, Bădescu and Haită 2016, dealing with a late Chilia-Militari type pottery from a site east of the Roman frontier, where polishing was a usual mean of finishing or decorating fine greyware. Interesting, the settlement is dated between the Roman withdrawal from Dacia and the Chernyakhov culture settle in the Romanian Plain.

⁵⁶ See yet Teodor and Dumitrașcu 2018, 129, database ID 108 (fragmentary table amphora); see also page 148, ID 624. Pots made out of kaolinite are far more numerous (Teodor and Dumitrașcu 2018, 173, Table 12).

⁵⁷ For kaolin like pottery at the Lower Danube in Roman Age, see Teodor 2019, 142, esp. the note 53.

⁵⁸ Order from the illustration (Fig. 10).

⁵⁹ It was met before: Teodor and Dumitrașcu 2018, 136, ID 118. It worth mention that usually the differences between fine and half-coarse compositions are straight, the former having visible ingredients at most at 0.2 mm, and the later around 1 mm. There are just a few cases (as this, illustrated at Fig. 6/5) when intermediary cases could occur (see below, Table 5, last page).

⁶⁰ Teodor and Dumitrașcu 2018, 157-161 for bowls, 162-166 for dishes. Both were recording between 5 and 6% from all pottery.

sites from Dacia of the mid third century⁵⁴. Băneasa is standing on the fringe of *barbaricum*, where polished greyware was fashionable both before and after the Romans⁵⁵.

Another fact rarely observed previously at Băneasa is the slip made up with kaolinite, on ceramic bodies missing kaolin⁵⁶. As the white clay is not available in the area (including Oltenia)⁵⁷, such products must have had been brought from distance, on Danube.

Looking back on the pottery published in 2018, the distribution of the functional types is almost normal (Table 4). There are yet some details to be highlighted.

Kitchen pots are present in very low figures, which is normal in an area which is non-cooking area. Interestingly is the artefact depicted in figure 10/5, a rim with S-shaped profile

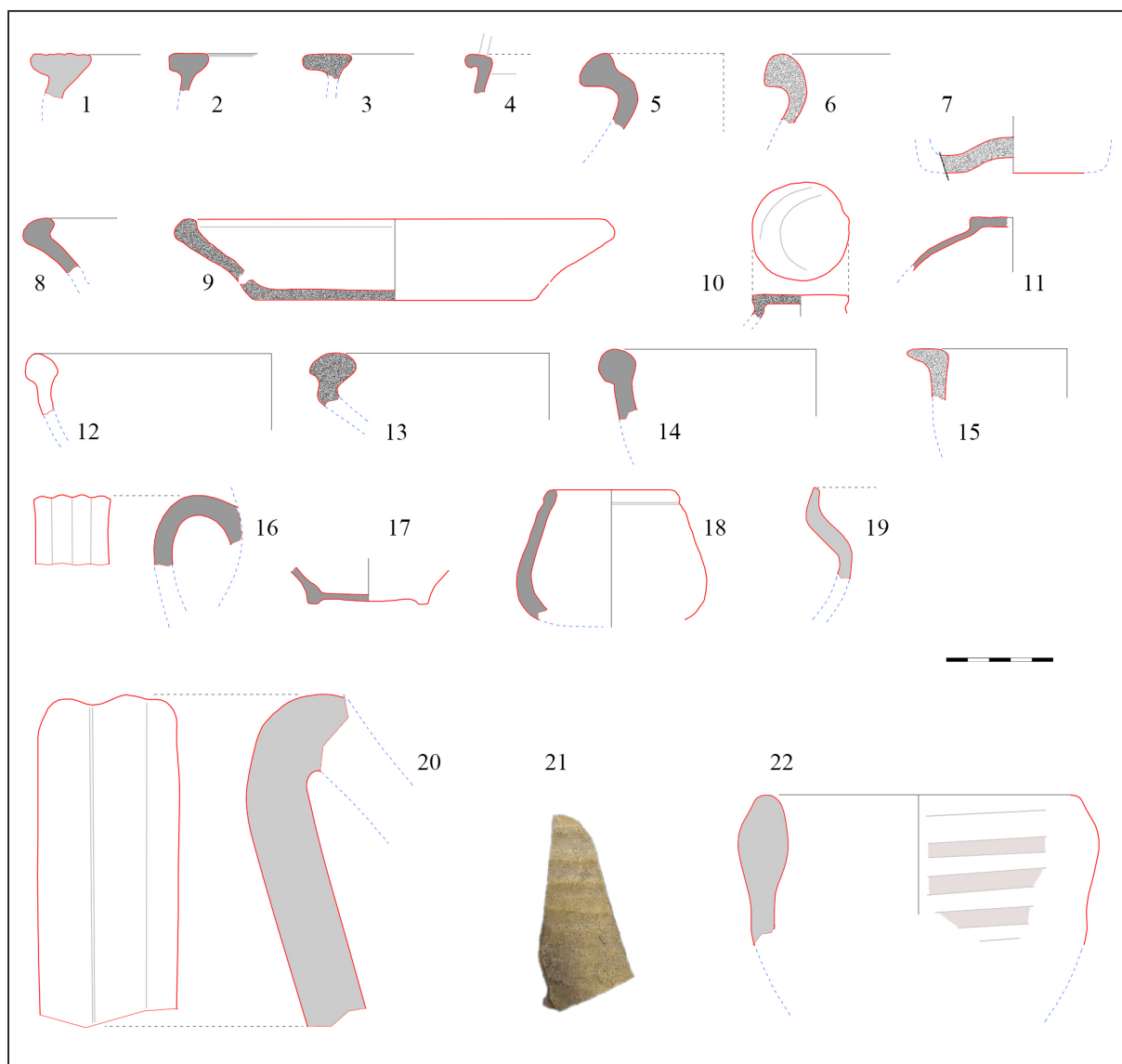


Figure 10. Pottery from the central sector. Light grey section: oxidized; darker grey section: reduced; white section: kaolinite; pixelate grey: coarse pottery. Storage pots (1-4, possibly 5); cooking pots: 6-7; dishes: 8-9; lids: 10-11; bowls: 12-15; small beakers: 16-17; cup: 16; flagon: 19; amphora: 20-21; mortarium: 22.

in pottery production and distribution. The two dishes are of the same type frequently encountered in the first phase of the fort⁶¹, although it was not at all popular in Oltenia. This is an indicator of continuity of the garrison, or at least of the pottery providers. For a change, the only flagon present here (Fig. 10/19) is new at Băneasa⁶².

The amphora fragments are relatively few⁶³. What caught our attention is the fact that most of the analysed fragments are made of relatively fine pastes, which was not the case previously⁶⁴. Despite that, we still can identify Kapitän 2 type on the strong bent of the handle from Fig. 10/20, in an obviously new fabrication. The large body-to-neck shard from Fig. 10/21, decorated with large and shallow grooves cannot be classified, but its size and shape are suggesting also an amphora. An interesting fact, this type of decoration is encountered also on the fragmentary *mortarium* from the Fig. 10/22, on which the decoration is developed rather in spiral. The latter is made of fine,

⁶¹ Teodor and Dumitrașcu 2018, Fig. 7, type 1.

⁶² There are no many possible analogies in Oltenia, as a bulged mouth is not very common, closest match being the type 4 (Popilian 1976, plate XLIV, esp. no 469). Note yet that Popilian considered it a rare form, used exclusively for funerary purposes (Popilian 1976, 98), which is not the case here.

⁶³ A direct comparison is difficult to make, as in the paper from 2018 the statistics are based on weight (giving 31% from all pottery), but now we are handling counted items (9.5%). Even if a difference would be real, it wouldn't express an overall situation for the second phase.

⁶⁴ Teodor and Dumitrașcu 2018, 127-131.

yellowish paste, very tough, being covered with a slip of the same quality, but is whitish, containing a mixture with kaolinite. There is a good chance to have both (Fig. 10/21 and 22) from the same provider, or at least from the same area.

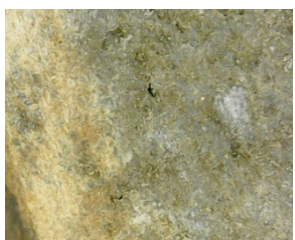
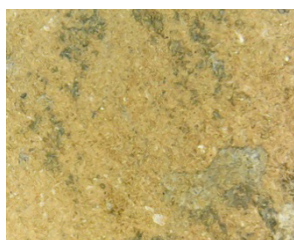


In order to provide the reader with an intuitive tool about the main classes of fabrication from Băneasa, we used a digital microscope, a modest one, but well enough for our purposes⁶⁵, giving a selection of images to be found into the Table 5. The original images are the equivalent of 4 mm on the artefact, giving 320 pixels per millimetre, but it have been downscaled here in order to have a 10:1 scale. Although shrunk to fit a cell 4 cm wide, at 400 dpi, the images are not altered by other means, as contrast or balance. The colours are close to the original, albeit not perfect, as the balance is made automatically, for every image.

Most of the photos within the Table 5 are paired, in order to see differences between the body fabrication and the slip, both being rarely similar or close. We have avoided tentative identification of the geological compounds, when are not obvious, as we aren't geologists. It is really a pity that we are not able to set a classification of the fabric types for pottery, as one can see for Great Britain⁶⁶. Such an activity not only asks specialised archaeologists, with advanced studies on pottery (almost absent today, but expected in the coming years), but also needs geologists for petrography⁶⁷. Hoping that one day such an undertaking will happen, the table contains a reference number which could help retrieve the artefacts in the repository.

One of the facts established with this occasion is the occurrence of the goat hair in the ceramic mixture. Such a thing was previously seen on Chernyakhov pottery⁶⁸, asking then if the issue is a 'Gothic' trait, or a more general one, in the area of the Lower Danube. Well, it is present on Roman pottery, made locally (for instance see references 502b, 503j, 507g, 517j) or on artefacts imported from beyond the Danube (see reference 505a). How do we know it is a goat thread? We don't, but this is the only animal fibre with 20 microns in width⁶⁹, available anywhere in desired quantities.

From the processed pottery, goat hair has been spotted on 9 sherds, which will not be taken as 'below 9%'. The intrusions cannot be seen by naked eye⁷⁰, not even on magnifying glasses; one can see them only on microscope, and only if you are lucky. If someone would be patient enough and had time to spend, probably would prove that at least half of them have such a constituent in composition. Our guess is that goat hair was added into the clay composition before kneading, in order to improve the bond and avoiding to be sticky. Note that it was seen on all basic categories of pottery (fine, coarse, even on amphorae).

Table 5. Microscopic images for pottery. Scale 10:1.

			
Amphora, fragment near the shoulder, thick (9.7 mm), fine, compact, grey section (left), reddish-yellow faces (right); ref. 504a		Amphora, fragment of handle and neck, half coarse, yellowish-grey body (left), with darker slip (inner side, right); ref. 508a	

⁶⁵ CoolingTech digital microscope, the same previously used (Teodor 2021, 12-13), working at a base magnitude of 29:1.

⁶⁶ Tomber and Dore 1998.

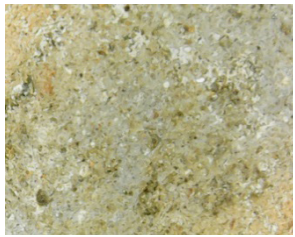

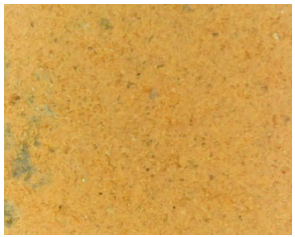


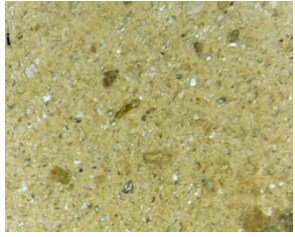













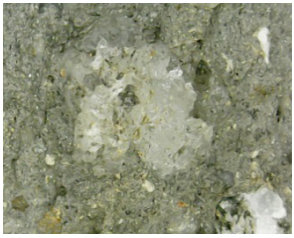
⁶⁷ Today it is working into the archaeological system from Romania only one geologist, at the National Museum of Romania History (Bucharest). It is impossible to start a national research project, oriented towards ceramic fabrication, on such a narrow basis. Of course, one can find literature as Adams, MacKenzie and Guilford 1988 (*Atlas of sedimentary rocks...*), making here the mention that the entire illustration there is made on thin sections, casual in a real research environment, but too expensive for an archaeological budget smaller than 10,000 Euros per year, including the excavations. One could yet find much basic archaeological literature, developing ceramic typology from the detailed study of the production centres, as, for instance, in Marsh and Tyers 1976. Such an endeavour, although necessary in Romania, is delayed into an uncertain future.




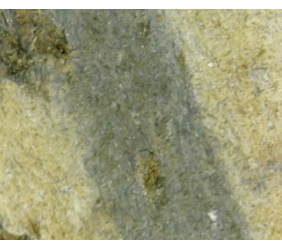
⁶⁸ Teodor 2021, 64, 83, 105, etc.

⁶⁹ Twice thinner than sheep and four times thinner than human hair.

⁷⁰ They have around 20 microns on width, being usually not longer than 0.2 mm.

<p>Amphora, fragment near the base, relatively coarse, yellowish grey body, relatively porous (left), reddish slip with large mica flakes (right, glittering); ref. 508b</p>		<p>Amphora, half coarse body (containing a goat hair, small, white arrow?), covered by a dark brown slip; ref. 505a; Fig. 10/20</p>	
			<p>Amphora with a whitish slip (kaolinite, left), and unusual fine composition (outer view in middle, inner view on right); ref. 548a; see Fig. 10/21</p>
<p><i>Mortarium</i>, compact and hard body (left) covered by a kaolinite slip (right); ref. 548b; see Fig. 10/22</p>		<p>Bowl made of kaolinite paste, section; ref. 503c; see Fig. 10/12</p>	
<p>Fragment from a larger recipient, half fine composition (inner view at left), covered externally by a whitish slip (right); ref. 508f</p>		<p>Relatively fine greyware, with sand and mica flakes, compact body (left), with the outer side covered in a darker slip, containing a goat hair (right); ref. 502b</p>	
<p>A ring base (flagon?) with fully oxidized paste, fine (left), with a sandy slip on the outer side (right); ref. 503 a</p>		<p>Shoulder area from a recipient decorated with 2 incisions; oxidized, relatively fine body, coated externally with a red-brick fine slip; ref. 507b</p>	

			
<p>Lower end of a small handle (flagon?), made of fine paste, coated with red paint; ref. 508d</p>		<p>Part of a middle size recipient, from a fine but sandy composition (left), covered outside in red paint; ref. 508g</p>	
			
<p>Fine greyware, view in section (left) and on the coated surface (on the both sides; right photo), the slip being more grainy and turning lighter; ref. 508k</p>		<p>Paradoxical fabrication, with a fine section (left) and a 'kitchen-type' slip, almost coarse (right), with large silica; ref. 508s; Fig. 10/7</p>	
			
<p>Paradoxical fabrication, with a body finer (left) than the slip (right), kitchenware; ref. 517k</p>		<p>Grey ware with fine composition (left) and a coarser slip (right); ref. 539a</p>	
			
<p>Half fine composition, quasi-oxidized (section, left), and external slip made of a whitish composition (mechanical cleaned of post-depositional compounds, right); ref. 548f</p>		<p>Kitchenware, intermediary composition (better than average), section with traces of oxidized heat (left; see also a hair fibre), coat almost black, of the same quality (right); ref. 539b; Fig. 10/5</p>	
			
<p>Half-coarse oxidized fabric, dense, compact; ref. 548e</p>	<p>Kitchenware, half-coarse, traces of cooking;</p>	<p>Half-fine, compact, dark slip with mica and a hair thread; ref. 517j</p>	<p>Kitchenware, coarse; ref. 508r</p>

			
Kitchenware, coarse, containing hair thread, oxidized outside (in picture) and reduced inside; ref. 507g	Kitchenware, half-coarse, grey, with hair threads; ref. 503j	Kitchenware, half-coarse, grey; ref. 534h; see Fig. 10/15	Section type 'sandwich', fine pottery; ref. 515b

Small finds

In comparison with any other excavation from the large camp at Băneasa, this sector from the central area has produced, by far, the least amount of small finds. This confirms a conclusion already driven by stratigraphic means that the area has been not destroyed in a violent episode, like, for instance, at the eastern gate of the first phase⁷¹. This later tower-gate, although similar with the previous, is by far simpler and modest. There are no large nails to reinforce the boards of the gate⁷², and, generally speaking, there are no large nails⁷³, only middle-sized ones, and just a few (7), with different typology (see a selection at the Fig. 11/4-6).

We found relatively many shoe hobnails (9), all with the help of the metal detector⁷⁴. Their small dimensions (length around 13 mm, average weight 0.7 g) make them difficult to spot in the excavation⁷⁵. The most complete of them are rendered at the Fig. 11/7-8.

A puzzling artefact is rendered at the Fig. 11/1, made from a single iron bar. One end is split and bent at right angle, in both directions, making a T-shaped handle; the other end is flattened, but the tip is broken. As no relevant

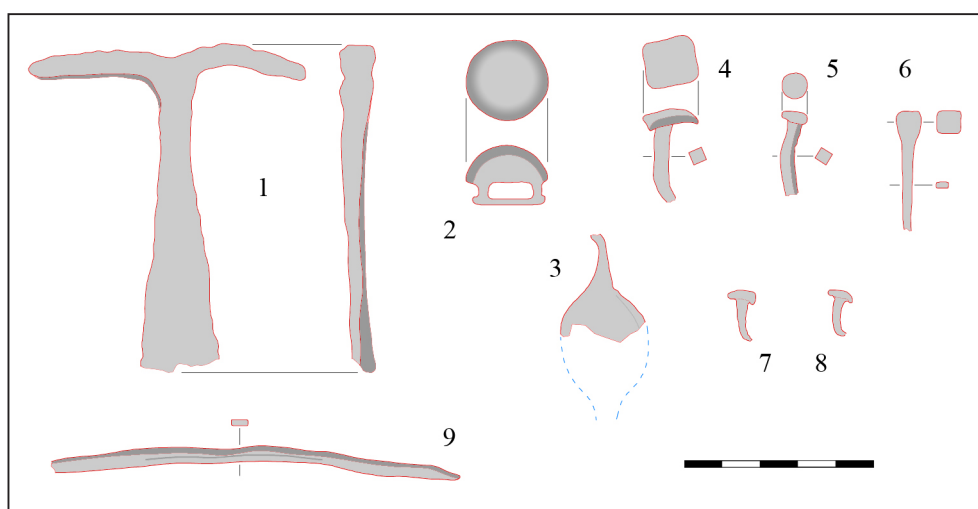


Figure 11. Selection of the small finds. Bronze: 2, 3, 9; iron: 1 4-6, 7-8. All 1:2.

⁷¹ Teodor and Dumitrașcu 2019, 121-122 (conclusions).

⁷² Teodor and Dumitrașcu 2019, 116-117 with the Fig. 15.

⁷³ This is a general trait at Băneasa, forcing us to suppose that for structural purposes there were used wooden nails. For the lack of natural resources in the area and the consequences for the material welfare in the fort see Teodor 2017, 899-902.

⁷⁴ Note that we do not own a metal detector (due to administrative restrictions, which do not worth a discussion here), being helped by our friend from Alexandria, Pavel Mirea, which payed us several visits in each campaign. In our estimation, is we could use a metal detector on systematic bases, probably the number of very small finds – as the hobnails – would be at least double.

⁷⁵ As well as happened in 2017 (digging in a barrack), when 18 out of 22 hobnails were found with the metal detector. See a description in Teodor, Dumitrașcu and Ștefan 2017, 95, with the note 29, as it fits recently found artefacts. Note that the average weight was 0.73 g in 2017, and 0.69 g in 2021-2022. The best preserved items are usually below 1 g.

archaeological analogies were found, we took a look at the modern tools. The most likely is a leather skiving knife, used to thin the leather. There are obvious differences, as the modern tool has a round section wooden handle, but a T shape handle could be even better, in order to drive the knife parallel with the skin. Really intriguing is that a similar artefact has been found in the excavations from eastern gate (the first phase of fort)⁷⁶, as the connection between a craft tool and a fort gate is difficult to assess⁷⁷. It would be more likely to suppose a practical function within the building itself, but we were not able to find one. Were thus the long hours of guard used for handicraft?

There are only a couple of artefacts of military equipment. One is a drop-shaped pendant, conserved less than half (Fig. 11/3), made of bronze, usually ascribed to harness, hanging from a loop (deformed here). The surface is slightly curved, the convex side showing traces of incisions⁷⁸. Drop-shaped pendants are relatively usual within Roman mounted army⁷⁹.

The second object is also made of bronze, resembling a belt stunt (Fig. 11/2), but having certainly a different purpose. It is made of a hemisphere having four short legs welded by a round disc. Comes out an artefact with four rectangular holes in cross, measuring 12 x 4.3 mm, allowing the distribution of two leather straps not larger than 12 mm and not thicker than 2 mm⁸⁰. This could hardly play for harness, but for body equipment, in a place where two narrow straps are crossing. For the regular army equipment of the Roman army, this is not something usual.

There is a third copper alloy object, a 107 mm long rod, 4.4 mm wide and 1.5 mm thick, with a sharp, oblique end, the other being broken. On the middle part it has a groove (Fig. 11/9). The sharp end is suggesting the use: a cautery. Although usually made from iron – as the Latin name is suggesting, *ferrum candens* – there are known similar bronze implements; both could have round or rectangular section⁸¹. They are all having a handle longer than 10 cm, with a spatula at one end (the one missing in our case), the other end being sharpened, sometimes used as a scalpel.

We have to mention here also several other objects, which are not small. There are two fragmentary grinder stones, of similar sizes (estimated diameter is 38 cm), yet with different sections (Fig. 12). They were not broken on the spot, as the other parts are missing; very likely they were reused as construction material, for filling the walls of



Figure 12. Fragmentary grinder stones.



Figure 13. Grit sharpener.

⁷⁶ Teodor and Dumitrașcu 2019, 119-121, with Fig. 16/9 and the note 57.

⁷⁷ Very likely there is none. We found between our old drawings for artefacts found at the Roman fort at Răcari (Dolj County) a very similar tool, having a T-shape, not published. It is 17.4 cm long, with a shorter handle (5.6 cm), with a rectangular shaft (almost square near the broken tip, 0.55 cm wide). It was found near the surface, therefore it should have a similar date, around the middle of the third century. The place of discovery is far from any gate or tower, being truly a craft tool and not a carpentry device. The narrow body couldn't have any relationship with skin skiving. The only connection is the T-shaped handle. Three similar artefacts have been discovered at Slăveni, all considered (construction) nails, all shorter than 13.8 cm and all with a rectangular section of the shaft, decreasing towards the tip (Tudor et al. 2011, 212, cat. 430, 432, 434, Pl. 80/430, 432, 434); their T-shaped heads seem to be welded, not split. All might be 'nails', which obviously does not fit our artefact from the Fig. 11.1.

⁷⁸ The artefact has not been cleaned and restored, operation taking usually a few years.

⁷⁹ Radman-Livaja 2010, 95 (cat. 85), 101 (cat. 99), 166 (cat. 70); Ivčević 2016, 482, no. 127-139. We found ourselves a similar pendant at Segarcea, in a test-digging 16 km southwest of Băneasa (Teodor et al. 2019, 96, plate X/9). Where the publication presents a vertical section, the slightly arched profile is obvious (Khamis 2013, 115, figs. 33 and 34; the author denominate them 'teardrop-shaped pendants', but it is the same type of pendant, including the dimensions, the hook or the enlarged teardrop from the bottom).

⁸⁰ A belt is at least 30 mm wide, as suggested by the belt fittings (Radman-Livaja 2008, 297).

⁸¹ Gilson 1983, 385-388. For a good illustration see <http://exhibits.hsl.virginia.edu/romansurgical/#tile> (Historical Collections at the Claude Moore Health Sciences Library (Virginia University)).

the constructions (it is not clear if the tower-gate, or the barrack laying on southwest). A second artefact worth mention is a sharpener made of a grit of very good quality (fine and relatively tough), with a length of 25.5 cm (Fig. 13), a central section almost perfectly square (5.5 cm) and slimmer endings (also square, 2.5 cm on each side). The tool is almost new, having traces of use on a single edge.

Conclusions

In 2021 and 2022 we have made (small) excavations in the central area of the large fort at Băneasa (Teleorman County). After the destruction of the first phase, in mid of the third decade of the third century, the eastern side has been withdrawn 74 m towards west⁸². Our hope was to find the new gate, in the same position, at the half of the eastern side, which proved to be right. The entrance in the fort is guarded by a single tower-gate, as well as in the first phase, which is a military building without analogy in the first half of the third century. The only notable difference is the proportion, the later tower-gate being much smaller.

The ditch closing the later fort is, in its turn, a bit smaller than that of the earlier one. In front of the gate, the ditch has been partially dug, in order to allow rain water the flow towards south, as the natural tilt of the terrain is. The crossing of the ditch was made on a small log bridge, supported by a pile of bricks. The pebble road could be seen only from the gate, crossing the tower and intersecting *via sagularis*.

There are many peculiar facts at this fort. One of them is the cvasi-absence of the rampart, no higher than half a metre, visible only from the outside, but almost invisible from inside. Another trait is the unconvincing palisade, with rare posts, not larger than 0.2 m⁸³. The palisade is obviously small and weak – when not doubtful at all, here and there – but apparently compensated by stakes fixed in the inner side of the ditch (Fig. 14). It is not the first time we suspect their existence⁸⁴, and we are not fully certain of our interpretation, due to the fact that on the site we are dealing with lots of bioturbations. The wood has not been preserved, as in other happy situations⁸⁵, but comparing the two sides of the ditch, as seen at the Fig. 14, there is a good possibility that the inner side was full of spikes. Obviously, there will be necessary new – and patient – excavation at the defensive system to make things clearer.



Figure 14. Trench F, northern section, excavation in the defensive ditch, close to the base. White oblique arrows – marks of the former wooden stakes; horizontal light blue arrows – bioturbations.

The excavations from the central area brought the only tiles stamps from Băneasa, but also from the entire length of *Limes Transalutanius* south of Argeș River, made by the same military unit documented at the Roman baths from Slăveni, probably *Ala I Claudia Gallorum Capitoniana*. The tiles were produced in Slăveni, as we will try to prove in a future research project. Apart of these, we found a graffito brick, MD (?), suggesting an unknown military unit, possibly resident at Băneasa.

⁸² Interesting to note, viewed from the frontier (about 400 m eastward), the Roman fort would look the same, large enough, as the eastern side has 140 m, as it previously had.

⁸³ Except for one case, in our first digging, at the south-western corner (Teodor 2016a, 113).

⁸⁴ We have seen similar facts in 2017 campaign, but we were not sure what we are seeing.

⁸⁵ Killgrove 2023, about the excavations at the fort at Bad Ems (not published yet), giving yet a good photo, with the stakes preserved at the bottom of the V-shaped ditch.

There are no clues for rejecting the historical fact that *Limes Transalutanus* has been devoid of troops in the middle of the fifth decade of the third century AD, which very likely happened also in Băneasa.

One of the most puzzling facts of these excavations is the absence of any sort of traces of the buildings of the first phase. We could draw several hypotheses, but the most appealing – and surprising – is that the central area of the first phase was... empty, adding another item on the long list of weird things. Looking back at the magnetometry we can see that the central area is dull, with very small contrasts, exempt this gate in full centre⁸⁶. Obviously, the hypothesis should be properly checked, by digging some 20 m towards south.

REFERENCES

- Adams, A.E., MacKenzie, W.S. and Guilford, C. 1988. *Atlas of sedimentary rocks under the microscope*, London: ELBS.
- Avram, R. 1998. Fortificațiile romane cu incintă de pământ din Dacia Inferior. *Universitatea București, PhD thesis* (not published).
- Badica, P., Alexandru-Dinu, A., Grigoroscuta, M.A., Burdusel, M., Aldica, G. V., Sandu, V., Bartha, C., Polosan, S., Gălățanu, A., Kuncser, V., Enculescu, M., Locovei, C., Porosnicu, I., Tiseanu, I., Ferbinteanu, M., Savulescu, I., Negru, M. and Batalu, N.D. 2022. Mud and burnt Roman bricks from Romula. *Scientific Reports*, 12, no. 15864: 1-25.
- Benea, D. 2018. Unele observații privind *Numeri Maurorum* din provincia Dacia. *Sargetia* SN 9: 61-85.
- Bichir, G. 1973. *Cultura carpică*. București: Editura Academiei.
- Bichir, G. 1984. *Geto-dacii din Muntenia în epoca romană*. București: Editura Academiei.
- Bogdan Cătănciu, I. 1997. *Muntenia în sistemul defensiv al imperiului roman, sec. I-III p. Chr.* Alexandria: Muzeul Județean Teleorman.
- Cantacuzino, G. 1945. Le grand camp romain situé de la commune Băneasa. *Dacia* 9-10 (1941-44, 1945): 441-472.
- Christescu, V. 1938. Le <castellum> romain de Săpata-de-Jos. *Dacia*, 5-6 (1935-36, 1938): 435-447.
- Gilson, A.G. 1983. A Group of Roman Surgical and Medical Instruments in Cramond, Scotland. *Medizinhistorisches Journal* 18, 4: 384-393.
- Gostar, N. 1966. Studii epigrafice II. *Arheologia Moldovei* 4: 175-188.
- Khamis, E. 2013. Copper Alloy Objects, in: W. Aylward (ed.), *Excavations at Zeugma*: 93-166. Los Altos: The Packard Humanities Institute.
- Killgrove, K. 2023. Ancient Roman 'spike defences' made famous by Julius Caesar found in Germany. *Life Science*, 28 Feb. 2023.
- Ivčević, S. 2016. *Tipologija i kronologija Rimske vojne opreme u doba Principata na Području između Rijeka Krke I Cetine*. Zagreb: Filozofski fakultet.
- Marrieu, M.M., Le Moal, Y. et Labrousse, M. 1953. La villa gallo-romaine de la Tasque à Cadeihan-Saint-Clar (Gers). *Gallia* 11, 1: 41-67.
- Marsh, G.D. and Tyers, P.A. 1976. Roman pottery from the City of London. *Trans London Middlesex Archaeol Soc* 27: 228-244.
- McComish, J.B. 2012. *An Analysis of Roman Ceramic Building Material from York and its Immediate Environs*. MA, University of York.
- Németh, E. 1997. Die Numeri im römischen Herr Dakiens. *Ephemeris Napocensis* 7: 101-116.
- Petolescu, C.C. 2002. *Auxilia Daciae*. București: Ars Docendi.
- Petolescu, C.C. 2021. *Armata romană în Dacia*. București: Editura Academiei.
- Popa, A. și Bordi, Z.L. 2016. *Studii asupra granițelor romane din Dacia. Fortificația de la Comolău*. Cluj-Napoca: Mega.
- Popilian, G. 1971. Thermele de la Slăveni. *Apulum* 9: 627-642.

⁸⁶ See Teodor, Dumitrașcu and Ștefan 2017, 84, fig. 1.

- Popilian, G. 1976. *Ceramica romană*. Craiova: Scrisul Românesc.
- Radman-Livaja, I. 2008. Roman belt-fittings from Burgenae. *Journal of Roman Military Equipment Studies* 16: 295-308.
- Radman-Livaja, I. (ed.) 2010. *Finds of the Roman military equipment in Croatia*. Zagreb: Arheološki musej u Zagrebu.
- Southern, P. 1989. The Numeri of the Roman Imperial Army. *Britannia* 20: 81-140.
- Teodor, E.S. 2006. Prima amenajare a castrului de la Răcari, in E.S. Teodor and O. Țentea (eds.), *DACIA AVGVSTI PROVINCIA, Crearea provinciei*: 219-235. Târgoviște: Cetatea de Scaun.
- Teodor, E.S. 2009. Roman fort from Răcari (Dolj County, Romania) and its four stages. Planimetry, stratigraphy and chronology, in field researches 2003-2006, in *Proceedings of the XXth Congress of the Roman Frontiers, 4-11 Sept. 2006, Léon, Spain, 2009*, vol. 2: 1524-39. Madrid: Polifemo.
- Teodor, E.S. 2016a. New archaeological researches at the Roman fort from Băneasa. *Cercetări Arheologice* 23: 107-126.
- Teodor, E.S. 2016b. Stadiul identificării așezărilor civile pe frontiera transalutană, in: E.S. Teodor (ed.), *Arheologia peisajului și frontierele romane*: 97-121. Târgoviște: Cetatea de Scaun.
- Teodor, E.S. 2017. Historical Outcomes at the end of an archaeological project: Limes Transalutanus, in: S. Forțiu (ed.), *Arhevest V. In honorem Doina Benea*: 885-907. Szeged: JATEPress Kiadó.
- Teodor, E.S. 2019. Gheorghe Popilian and the Roman Pottery from Oltenia. *Journal of Ancient History and Archaeology* 6, 3: 134-171.
- Teodor, E.S. 2021. *Ceramica din necropolele nord-dunărene din secolul al IV-lea d.Chr., din colecția Muzeului Național de Istorie*. Târgoviște: Cetatea de Scaun.
- Teodor, E.S., Bădescu, A. and Haită, C. 2015. One Hundred Sherds. Chilia-Militari Culture reloaded. Alexandria pottery case. *Journal of Ancient History and Archaeology* 2, 4: 90-135.
- Teodor, E.S., Dumitrașcu, E. and Ștefan, D. 2017. Archaeological excavations at the Roman fort Băneasa, in the summer 2017. *Cercetări Arheologice* 24: 83-89.
- Teodor, E.S. and Dumitrașcu, E. 2018. Roman Age Pottery at the fort Băneasa, collected in 2017 archaeological campaign. *Cercetări Arheologice* 25: 119-180.
- Teodor, E.S. and Dumitrașcu, E. 2019. Excavations at the Eastern Gate of the Băneasa Roman Fort. *Cercetări Arheologice* 26: 103-124.
- Teodor, E.S., Mirea, P., Dumitrașcu, E. și Micu, M. 2019. Cercetările arheologice de la Segarcea-Deal 'Cișmele' (județul Teleorman). *Buletinul Muzeului Județean Teleorman* 11: 79-100.
- Tocilescu, G.G. 1900. *Fouilles et recherches archéologiques en Roumanie. Communications faites à l'Académie des Inscriptions et Belle0Lettres de Paris, 1892-1899*. Bucharest: Imprimerie du Corps didactique.
- Tomber, R. and Dore, J. 1998, *The National Roman Fabric Reference Collection: A Handbook*. Museum of London Archaeology Service.
- Tudor, D. 1965. Comunicări epigrafice III. *Studii și Comunicări de Istorie Veche* 16, 2: 357-372.
- Tudor, D. 1978. *Oltenia romană* (ed. IV). București: Ed. Academiei.
- Tudor, D., Popilian, G., Bondoc, D. și Gudea, N. 2011. *Castrul roman de la Slăveni*. Cluj-Napoca: Mega.
- Țentea, O. and Matei-Popescu, F. 2004. Alae et cohortes Daciae et Moesiae. A review and updating of S. Spaul's Ala and Cohors. *Acta Musei Napocensis* 39-40/I, 2002-2003 (2004): 259-296.
- Voloșciuc, A. 2007. Scrierea cursivă în Dacia romană. *Analele Banatului, S.N., Arheologie-Istorie* 15: 57-68.

Lista ilustrațiilor

- Figura 1. Planul general al săpăturilor arheologice de la Băneasa (2016-2022).
- Figura 2. Principalele elemente constructive descoperite în săpăturile din 2021-2022.
- Figura 3. Desenul profilelor (cele sudice sunt reprezentate în oglindă).
- Figura 4. Fotografie în timpul săpăturilor din Secțiunea J, vedere spre VNV. Jaloanele marchează colțurile laturii de sud a turnului-poartă.

Figura 5. Monedele descoperite în 2022.

Figura 6. Țigle șampilate (ACL) și cărămida cu grafitto. Numere din inventarul de șantier.

Figura 7. Deviația-standard a grosimii țiglelor (variabilitatea și media).

Figura 8. Detaliu de pe țigla nr. 537, ilustrând diferențe clare între suprafețele angobate și cele care și-au pierdut protecția. Obiectul este răsucit la stânga (față de Figura 6).

Figura 9. Secțiunea cărămizii cu grafitto (nr. 547). Grosimea medie este de 52 mm, suprafața angobată – deasupra.

Figura 10. Ceramică din zona centrală a castrului. Profile cenușiu-deschis: ardere oxidantă; profile cenușiu-închis: ardere reducătoare; profile albe: caolin; suprafețe neomogene: ceramică grosieră. Vase de provizii (1-4, posibil 5); oale de bucătărie: 6-7; farfurii: 8-9; capace: 10-11; castroane: 12-15; cănițe: 16-17; cupă: 16; urcior: 19; amfore: 20-21; *mortarium*: 22.

Figura 11. Selecție de obiecte mărunte: bronz: 2, 3, 9; fier: 1 4-6, 7-8. Toate la scara 1:2.

Figura 12. Pietre de moară fragmentare.

Figura 13. Piatră de ascuțit.

Figura 14. Fotografie din Secțiunea F, spre profilul nordic, săpătura din dreptul șanțului de apărare, aproape de finalizare. Săgeți albe oblice: urme ale unor țepușe de lemn; săgeți albastre orizontale: bioturbații.

Tabelul 1. Principalele clase de ceramică.

Tabelul 2. Culorile ceramică.

Tabelul 3. Calitatea angobei.

Tabelul 4. Distribuția tipurilor funcționale.

Tabelul 5. Imagini la microscop ale ceramicii, scara 10:1.

EUGEN S. TEODOR
Muzeul Național de Istorie a României, București
esteo60@yahoo.co.uk

EMIL DUMITRAȘCU
Muzeul Național de Istorie a României, București
emildumitrascuionut@yahoo.it