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Any correspondence will be sent to the editor:
INSTITUTUL DE ARHEOLOGIE ŞI ISTORIA ARTEI
Str. M. Kogălniceanu nr. 12–14, 400084 Cluj-Napoca, RO
e-mail: choprean@yahoo.com

DTP şi tipar: MEGA PRINT
Coperta: Roxana Sfârlea

Calea 13 Septembrie nr. 13, Sector 5, Bucureşti 76117
Telefon 021–410.38.46; 021–410.32.00/2107, 2119

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ARCHAEOLOGICAL AND EPIGRAPHICAL NOTES

REVIEWS

TRANSMARISCA. STRATIGRAPHY, CHRONOLOGY, TOPOGRAPHY

Sergey Torbatov[1]

Abstract: *Transmarisca was an important military and civilian centre on the Danube border of the Roman Empire during the Principate as well as in the Late Antiquity. It is localized for certain in the northwestern part of the present-day town of Tutrakan in Bulgaria. A lot has been written on Transmarisca in the scientific literature and now it is considered by many researchers one of the sites with well elucidated chronology based on firm stratigraphic evidence. In most of the recent publications the thesis is persistently asserted that the two partially studied fortress walls in Tutrakan belong to one and the same Late Roman fortification, the area of which is estimated at 55–65 ha. That fortification is claimed to have been built in the period between 292 and 309/310 AD. It is also argued that no remains of an Early Roman military camp have been found in Tutrakan so far. However, the latest studies in the area of the so-called South fortress wall decisively refute these claims. Moreover, upon careful reading of the publications and comparison of what is written in them with the attached graphic documentation and photos, one does not find any confirmation of the proposed dating but just on the contrary – the stratigraphic realities drastically contradict it. The aim of this paper is to present a thorough critical analysis of all the available to date evidence on the stratigraphy, chronology and topography of Transmarisca. The result is that the so-called "general periodization" of Transmarisca, which was announced in 1999 for the first time and is still zealously maintained by some researchers, turns out to be simply a myth completely inconsistant with the facts.*

Keywords: *Transmarisca, Roman fortifications, stratigraphy, chronology, topography*

The name of *Transmarisca* is mentioned in a number of written sources from the Roman period and the Late Antiquity[2]. Based on the information in them and on some archaeological and epigraphic finds, this important military and civilian centre on the Danube border of the Roman Empire is since long localized for certain in the northwestern part of the present-day town of Tutrakan in Bulgaria[3] (**Fig. 1**). The first attempts to trace out the historical development of *Transmarisca* through the ages are also based mainly on the available written sources and the few known epigraphic monuments from the site[4]. The earliest evidence about the presence here of preserved structures from the Antiquity dates back to the beginning of the 20th century[5]. The information was supplemented with new field findings six decades later[6]. In the meantime,

[1] National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Department of Classical Archaeology, 2 Saborna Street, 1000, Sofia, BG; e-mail: torbatov@abv.bg; ORCID: https://orcid.org/0000-0001-6037-0570

[2] Cl. Ptol. Geogr. III, 10, 11 – ed. Nobbe; Cl. Ptol. Geogr. III, 10, 5 – ed. Müller; Tab. Peut. Segm. VIII. 2; Itin. Ant. Aug. 223, 1 – ed. Cuntz; Not. Dign. Or. XL, 23, 34 – ed. Seeck; Cod. Iust. VI, 42, 28 – ed. Krueger; Rav. Anonym. Cosmogr. IV, 7 (p. 187_{1}) – ed. Pinder/Parthey; Proc. De aedif. IV, 7, 7–9 – ed. Haury/Wirth; Not. Episc. 1, 446; 2, 514; 4, 464 – ed. Darrouzès.

[3] MANNERT 1812, 114.

[4] POPA-LISSEANU 1914, 60–64; PATSCH 1928, 1–6; POLASCHEK 1937; MĂRCULESCU 1938, 102–112; VELKOV 1973; Георгиева 1977, 54.

[5] Ванков 1905, 462–463; Шкорпил 1905, 450.

[6] Змеев 1969.

Fig. 1. Location of *Transmarisca*

several more monuments from the Roman period became known[7]. Archaeological excavations within the territory of *Transmarisca* were for the first time carried out in 1970, but they covered a very limited area and the results were not duly published. Only a brief report about them appeared in the local press[8].

The real archaeological study of the site began only in 1989 and continued until 2022, but with frequent interruptions of varying duration[9]. Work was carried out in two particular sectors, known in the literature as the "North fortress wall" and the "South fortress wall". The results of these studies are presented in numerous publications of various nature – annual reports on archaeological campaigns[10], publications of individual finds or complexes of finds[11], interim summaries[12], as well as a recently published monographic study[13].

In most of the aforementioned works published after the start of the archaeological excavations in Tutrakan, the thesis is persistently asserted that the two partially studied fortress walls belong to one and the same Late Roman fortification, the area of which is estimated at 55–65 ha; that this fortification, according to reliable stratigraphic data, was built in the period between 292 and 309/310 AD; and that no remains of an Early Roman military camp have been found in Tutrakan so far. However, the latest studies in the area of the south fortress wall decisively refute these claims. Moreover, upon careful reading of the publications and comparison of what is written in them with the attached graphic documentation and photos, one does not find any confirmation of the accepted dating, but just on the contrary – the stratigraphic realities drastically contradict it.

The North fortress wall

In 1999 an article entitled "*Die spätrömische nordliche Festungsmauer von Transmarisca*" appeared in the scientific press[14]. Being the first publication about the site based on archaeological data, it received a wide resonance and is still considered by some researchers to be authoritative on the chronology and stratigraphy of *Transmarisca*. It briefly summarizes the results of the rescue and regular archaeological excavations carried out in the period 1989–1991 and 1995–1998 in the northernmost part of the modern town of Tutrakan. Initially, a part of a massive wall with a length of 6.80 m and an azimuth of 332° was discovered there, the northern extension of which had been washed away by the Danube River in the past. Its substructure is 2 m thick, and the superstructure narrows in steps to 1.58–1.60 m. The faces of the superstructure are made of roughly worked limestone blocks with average size 0.30 × 0.30 × 0.30 m, placed in horizontal rows. White mortar containing an admixture of large pieces of building pottery was used in the emplekton (**Fig. 2/1–2**). Subsequently, a section of a fortress wall with a length of 77 m with two towers located along its course was traced and partially explored to the east of the earlier excavated wall. It is 1.95–2 m thick in the superstructure and has an azimuth of approxi-

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[7] ADAMEŞTEANU 1938; CHRISTESCU 1938.

[8] Змеев 1970a. A much more detailed manuscript by the conductor of the excavations is kept now at the Historical Museum in Tutrakan (Змеев 1970b).

[9] A detailed chronicle of the archaeological research during the discussed period is presented in: Трайкова 2024, 10–13.

[10] Вагалински 1990; Вагалински 1991; Вагалински. 1992; Вагалински 1995; Вагалински/Петков 1996; Вагалински/Петков 2002; Петков 2003; Вагалински/Петков 2004; Петков 2004; Петков 2005; Петков 2009; Петков 2010b; Петков 2012; Петков 2014; Петков 2015; Петков 2016; Върбанов/Митев 2021a.

[11] Вагалински 2008; SHARANKOV 2010; Шаранков 2020; Върбанов/Митев 2021b; Върбанов 2021; Върбанов 2022; Върбанов 2024.

[12] VAGALINSKI 1999; VAGALINSKI/PETKOV 2006; PAUNOV 2007; Петков 2010a; Върбанов 2021.

[13] Трайкова 2024.

[14] VAGALINSKI 1999.

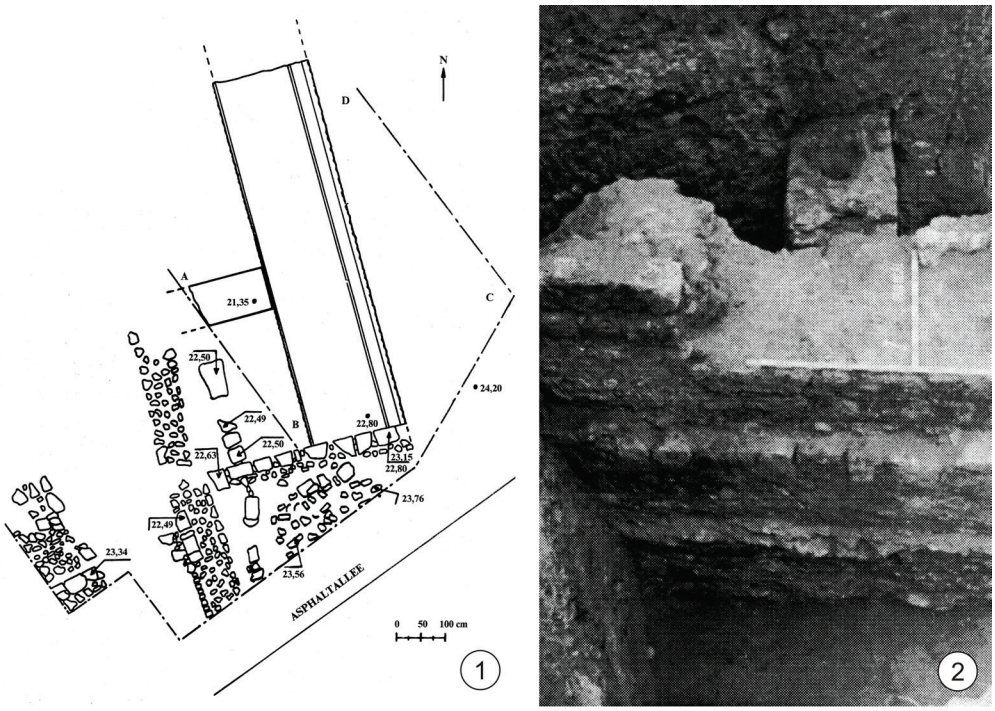

Fig. 2. Wall with north-south orientation: 1. Plan (after VAGALINSKI 1999, 234, Abb. 7); 2. View from the east (after VAGALINSKI 1999, 232, Abb. 3)

mately 65°, but small bends are observed along its length. The initial construction of the fortress wall was similar to that of the above discussed wall, but during a later repair larger roughly worked stones of gray colour and friable mortar with pink colour were used. The application of *opus mixtum* with a belt of 4 rows of bricks is attested *in situ* in the original construction of the south wall of one of the towers (the so-called tower 1)[15]. Although not mentioned in the text, it is evident from a photograph that *opus mixtum* of the same kind is also present in the fortress wall immediately east of this tower[16] (**Fig. 3**). The wall with an approximate north-south direction and the fortress wall are considered to be synchronous[17] (**Fig. 4**).

Fig. 3. The southeast corner of tower 1 and southern face of the North fortress wall (after VAGALINSKI 1999, 232, Abb. 4)

In addition to the data on the discovered fortification remains, the discussed paper

[15] VAGALINSKI 1999, 232.
[16] VAGALINSKI 1999, 232, Abb. 4.
[17] VAGALINSKI 1999, 229.

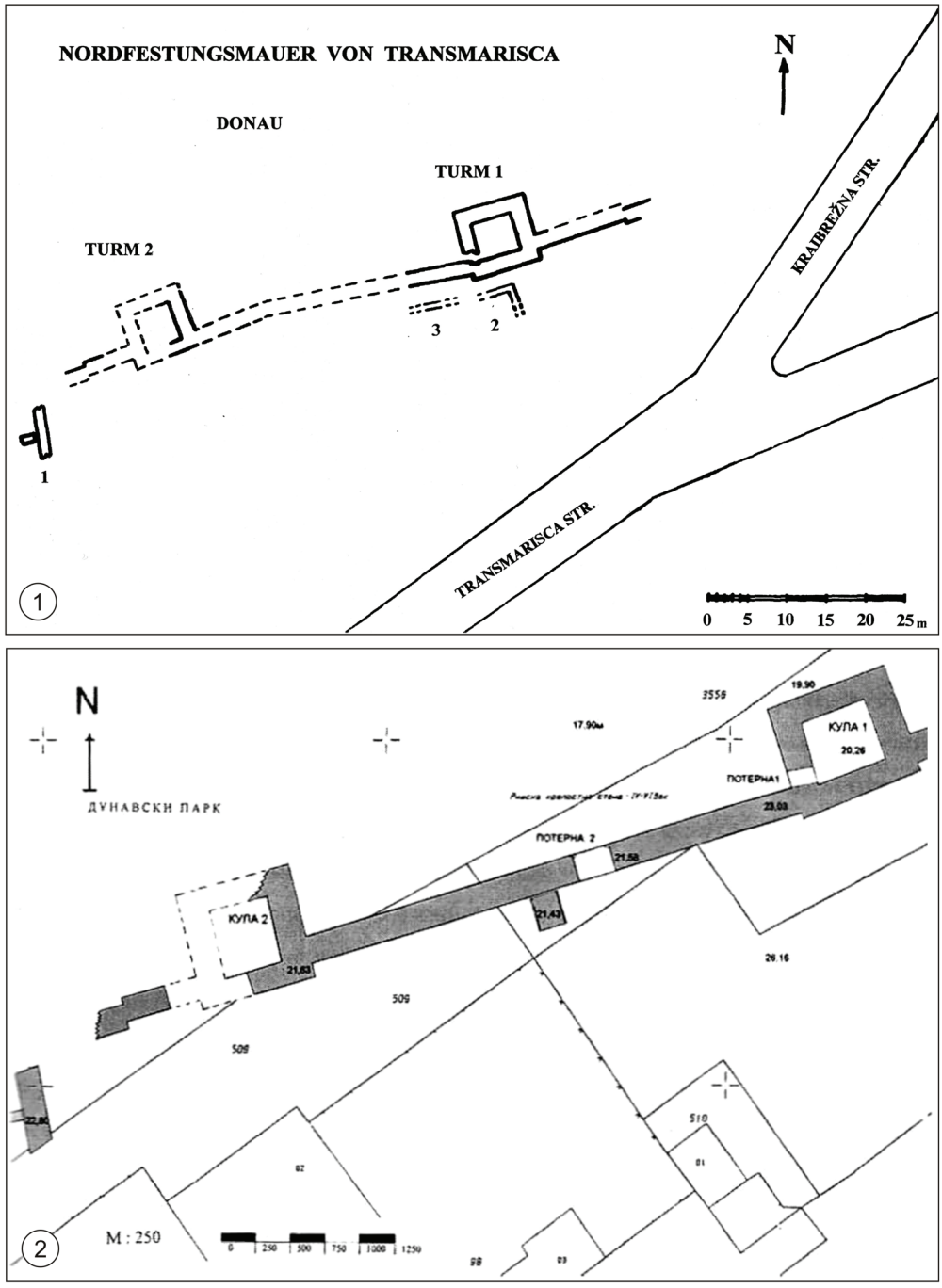

Fig. 4. The North fortress wall: 1. State of research up to 1998 (after VAGALINSKI 1999, 231, Abb. 2); 2. State of the research up to 2010 (after ПЕТКОВ 2010a, 53)

presents stratigraphic findings obtained during the excavations. The terrain proved to have been inhabited from the pre-Roman era to the beginning of the 20th century. The cultural layers after the mid-5th century are severely disturbed by landslide processes, later diggings and modern construction, but the stratigraphy for the time until then is well preserved. This has allowed the distinction of particular chronological phases in the use of the terrain, which are referred to

in the text sometimes as "strata", sometimes as "settlement periods". It is stated that the chronology of the site is based on "stratified coins, individual fibulae and ceramic finds" [18]. It looks as follows:

– The earliest settlement traces include handmade Thracian vessels with many mineral impurities, animal bones and burnt wood[19].

– The next layer yields the same Thracian pottery, Roman ceramic vessels and pieces of one-sided limed wickerwork. The beginning of this layer is dated back to the reigns of Emperors Claudius and Nero according to the thin-walled North Italian bowls found. It is not yet clear when this settlement was destroyed[20].

– During the third settlement period, in addition to light-coloured Roman ceramic vessels, Thracian pottery sherds are also found relatively frequently. The presence of provincial coins of small denomination from *Pautalia*, *Nicopolis ad Istrum* and *Marcianopolis* from the time of the Severans is noted, and coins of Severus Alexander provide a *terminus post quem* for the violent destruction at the end of this period[21].

– The amount of gray-black grooved vessels increases in the next fourth layer, but handmade Thracian pottery is found too. The time of Emperor Claudius II Gothicus is the *terminus post quem* for the registered fire[22].

– The erection of the walls described in the article is associated with the fifth settlement period. The construction is dated back to between 292 and 309/310 AD, and it is assumed that the discovered fortress wall is a part of the *praesidium* epigraphically attested in an inscription from 298/299 AD found in Tutrakan in the past[23]. It is also claimed that for the first time the inscriptions with identical texts from the region can be reliably linked to a particular site[24].

– Soon after that (*terminus post quem* 309/310 AD) the new fortress was attacked[25].

– The next enemy attack (most likely by the Goths) dates back to after 367–375 AD[26].

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[18] VAGALINSKI 1999, 232.

[19] „Die ersten Siedlungsspuren auf diesem Terrain bestehen aus thrakischen handgemachten Gefäßen mit viel Mineralbeimischung, Tierknochen und verbranntem Holz" (VAGALINSKI 1999, 232).

[20] „Die nächste Schicht enthält die bekannte thrakische Keramik, römische Tongefäße, einseitig gekalktes Flechtwerk. Der Beginn dieser Schicht datiert nach den hier gefundenen dünnwandigen norditalischen Schälchen ... in die Regierungszeit von Claudius (41–54) und Nero (54–68) ... Ob diese Siedlung militärischen Charakter trug und wann sie zerstört wurde, kann vorläufig noch nicht bestimmt werden" (VAGALINSKI 1999, 232).

[21] „Neben hellen römischen Tongefäßen findet man in der dritten Siedlungsperiode relativ häufig auch thrakische Scherben. Das Vorhandensein von Provinzialmünzen mit kleinem Nominalwert aus Pautalia, Nicopolis ad Istrum und Marcianopolis, die während der Regierungszeit der Severer-Dynastie geprägt wurden, bezeugt lebhafte Handelsbeziehungen in dieser Zeit. Als terminus post quem für die gewaltsame Zerstörung am Ende dieser Periode dienen Münzen des Kaisers Alexander Severus (222–235)" (VAGALINSKI 1999, 232, 235).

[22] „Handgemachte thrakische Keramik findet sich auch in der nächsten, der 4. Schicht. Hier steigt der Anteil der grauschwarzen, scheibengedrehten Gefäße an. Als terminus post quem für den festgestellten Brand kommt die Zeit von Claudius II. Gothicus (268–270) in Frage" (VAGALINSKI 1999, 235).

[23] CIL III, 6151; The inscription has been repeatedly published, supplemented and commented on in the scientific literature: DESJARDINS 1868, 29–31, № 22; TOCILESCU 1902, 173–178, № 21; CHRISTESCU 1938, 452, № 3; KOLENDO 1966a, 142–144; KOLENDO 1966b, 564–566.

[24] „Die Errichtung der beschriebenen Mauem ist mit der 5. Siedlungsperiode verbunden. Der Aufbau datiert in die Jahre zwischen 292 und 309/310. Man kann annehmen, daß die freigelegte Festungsmauer ein Teil des epigraphisch überlieferten praesidium ist. Nach der Inschrift aus Transmarisca wurde diese Festung im Jahre 298/299 auf Anordnung vom Kaiser Diocletianus errichtet. ...Sein Programm zum Wiederaufbau des Unterdonaulimes ist auch von vier anderen gleichartigen Inschriften des Gebietes bekannt ..., aber zum ersten Mal kann sie mit einem konkreten Bauwerk sicher verbunden werden" (VAGALINSKI 1999, 235).

[25] „Bald darauf wurde die neue Festung wiederum angegriffen – terminus post quem 309/310" (VAGALINSKI 1999, 235).

[26] „Die nächste feindliche Attacke – vermutlich der Goten – datiert nach 367–375" (VAGALINSKI 1999, 235).

– The fortress was particularly badly affected by a most likely Hunnic attack with *terminus post quem* 408/423 AD[27].

– After that the ruins of the north-south oriented wall were removed and a new perpendicular structure was built, very similar to the previous one. This new wall was erected shortly after the Hunnic attack, probably at the end of the reign of Emperor Theodosius II[28].

The proposed chronology raises a number of questions. For example, the earliest settlement traces are associated with "handmade Thracian vessels" but there is no information on their dating, and respectively – for the beginning and end of the period. The end of the second and the beginning of the third period are not defined. The third and fourth periods end with arson and violent destruction, which are dated according to the latest coin finds from the layers with *termini post quem*, but this only gives a relative idea of the real end of the respective periods. The same refers to two of the later ones, whose end is again determined with *termini post quem*. The chronological framework of the fifth settlement period is not defined at all. Judging by the data for the previous one, it should have begun sometime after the reign of Emperor Claudius II Gothicus, but the text does not say whether the next recorded attack with *terminus post quem* 309/310 AD marks its end. The construction of the fortress is attributed by the author precisely to this period, but there is no argumentation as to why it is placed exactly in the time between 292 and 309/310 AD.

The archaeological investigations within the scope of the north fortress wall of *Transmarisca* in the period 1989–1991 and 1995–1998 are reported to have been carried out by means of relatively small but deep trenches[29]. One can get an idea about their location and extent from a recently published plan[30] (**Fig. 5**). The proposed chronological interpretation of

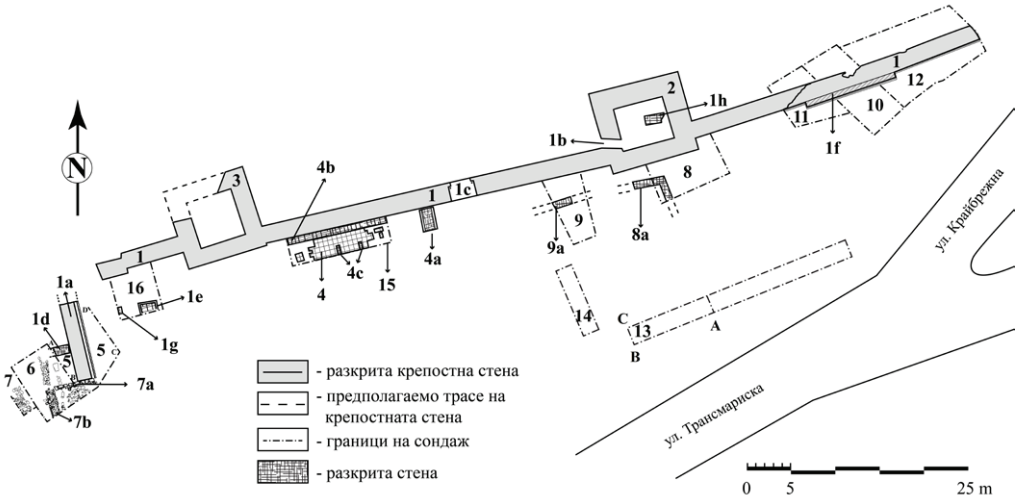


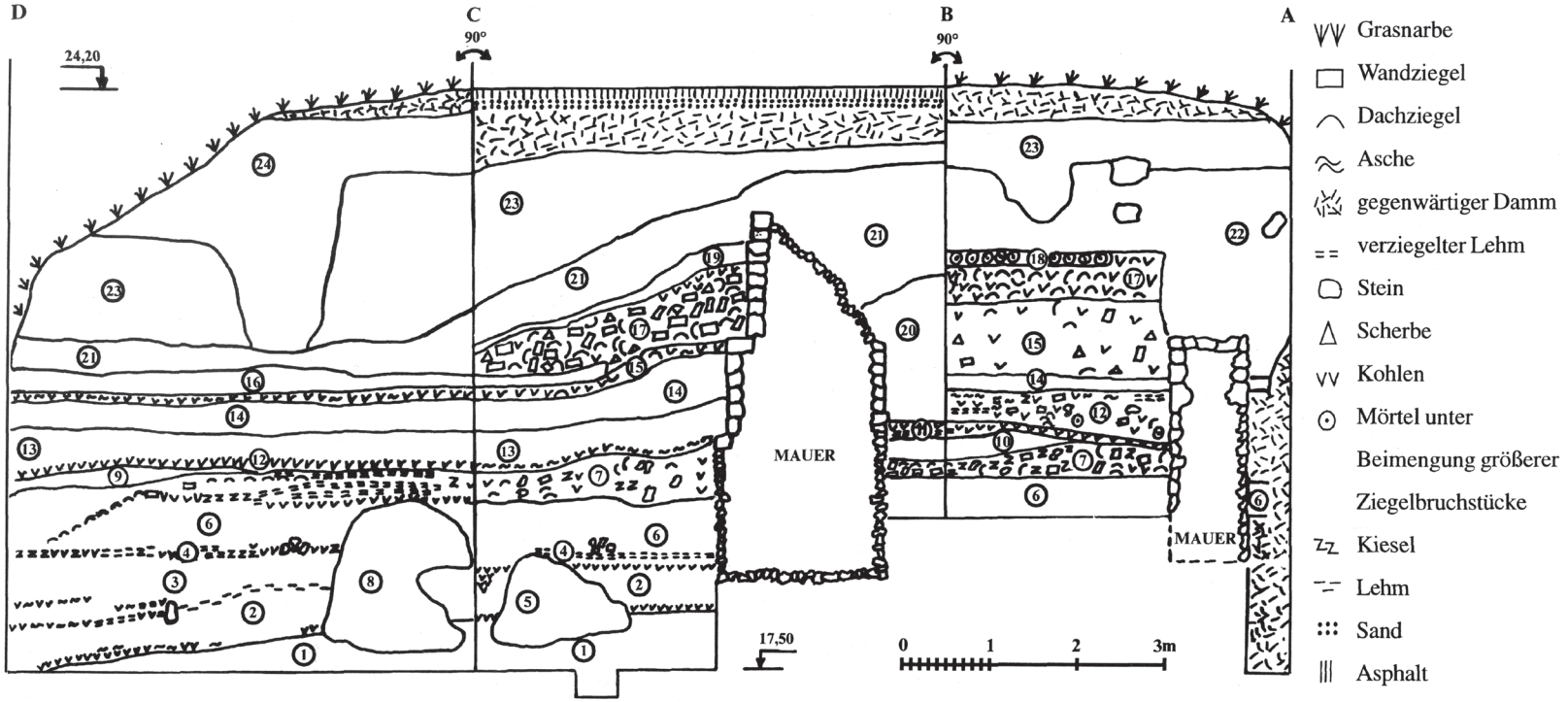
Fig. 5. Location and scope of the trenches within the scope of the North fortress wall (5 – Trench 1/1989; 6 – Trench 2/1990; 7 – Trench 2/1991; 8 – Trench 2/1995–1996; 9 – Trench 3/1995–1996; 10 – Trench 1/2018–2019; 11 – Trench 2/2018; 12 – Trench 3/2018–2019; 13 – Trench 1/2003; 14 – Trench 3/2003; 15 – Surveyed section 1/2011; 16 – Eastern section of Trench 2/1991 (excavations in 1991 and 1998) (after ТРАЙКОВА 2024, 136, фиг. 4)

[27] „Besonders stark wurde das Kastell während eines – sehr wahrscheinlich – hunnischen Angriffs mit terminus post quem 408/423 beschädigt" (VAGALINSKI 1999, 235).

[28] „Danach wurden die Ruinen der N-S orientierten Mauer (Abb. 2/1) abgetragen und ein neuer, senkrechter Aufbau errichtet .... Dieser liegt unter einem modemen Gebäude, so daß nur die nördliche Mauerschale lind der Kern freigelegt werden konnten. Die Bauweise ähnelt sehr dem früheren Bauwerk. Auch die stratigraphischen Angaben belegen, daß die neue Mauer bald nach dem hunnischen Angriff errichtet wurde – vermutlich am Ende der Regierung von Theodosius II." (VAGALINSKI 1999, 235).

[29] VAGALINSKI 1999, 229.

[30] Трайкова 2024, 136, фиг. 4.



1 anstehender gellbbrauner Lehm
2 Schicht der 1. Siedlungsperiode
3 Schicht der 2. Siedlungsperiode
4 verbrannter Fußboden aus 3. Siedlungsperiode
5 Grube der 3. Siedlungsperiode mit Füllung aus Mörtel und Kiesel
6 plannierte Schicht aus hellbraunem Lehm mit Putz, kleinen Bruchsteinen, einzelnen Kohlen und Dachziegeln
7 Brandschuttschicht der 4. Siedlungsperiode
8 Grube der 4. Siedlungsperiode
9 Rest einer Mörtelmischung für den Aufbau der Mauer
10 plannierte Schicht aus hellbraunen Lehm
11 Brandschicht mit *t.p.q.* 292
12 Brandschicht mit *t.p.q.* 309/310
13 plannierte Schicht aus hellbraunen Lehm mit einzelnen Kohlen, Dach- und Wandziegeln, kleine Bruchsteinen, verziegeltem Lehm
14 Reste einer Mörtelmischung (weißer Mörtel unter Beimengung drößerer Ziegelbruchstücke) für Reperatut der Mauer
15 Brandschicht mit *t.p.q.* 367/375 und *t.a.q.* 383/392
16 plannierte Schicht aus hellbraunem Lehm
17 Brandschuttschicht aus Dach- und Wandziegeln, Scherben, Kohlen mit *t.p.q.* 408/423
18 Reste einer Mörtelmischung
19 plannierte Schicht aus gelbgrünem Lehm
20 braungrüner Lehm mit Kiesel
21 weissgelbe Schicht aus Mauerschutt
22 graubraune Erde mit Kieseln und Scherben
23 hellbraune bis graue Erde mit spätantiken, mittelalterlichen und modernen Materialien
24 moderne Grube

Fig. 6. Stratigraphic profiles in trench I from 1989/1990 (after VAGALINSKI 1999, 233, Abb. 5)

the recorded cultural strata is illustrated by stratigraphic drawings of the eastern, southern and western profiles in only one of the trenches – trench I from 1989/1990, which is located in the westernmost part of the studied area and covers the space to the east and west of the initially discovered wall with azimuth of 332°[31] (**Fig. 6**). In the primary publications, the wall in question is identified with a fortress wall[32], while in that from 1999 its functional nature is not commented on[33]. However, in a later publication its affiliation with the *Transmarisca* fortification system is rejected by the researchers themselves, who note that the north fortress wall continued in a western direction but its remains were destroyed by the Danube River in the 1960s[34]. Nevertheless, perhaps in order to achieve a kind of consensus between everything said on this issue until then, in two more recent papers the wall with an approximate north-south direction is again interpreted as a fortress wall, but not as a western one and as a bend in the route of the north fortress wall, which was imposed by "the specific features and topography of the terrain"[35]. However, the topography of the terrain here not only does not require, but also categorically rejects the possibility of forming some kind of bend to the south[36]. The preserved remains of the north fortress wall of *Transmarisca* are located at the southern end of the first floodplain of the Danube River[37], in close proximity to the foot of a steep slope (escarpment) that separates it from the next, second floodplain[38]. The slope follows a continuous line in a southwesterly direction, describing a slight arc. On a survey sketch from 1969, along with the visible remains of the now studied section of the north fortress wall (then still preserved at a height of 2 m along a length of about 25 m), about 60 m west of them, again at the foot of the slope, another preserved section of the same wall is marked[39] (**Fig. 7**), which no longer exists. It is probably exactly this one that was destroyed by the Danube River in the 1960s[40]. As for the other parts of the western extension of the north fortress wall, they had the same fate but in the more distant past, mainly under the influence of the seasonal ice drift on the Danube River[41]. That the commented wall with azimuth 332° has nothing to do with the *Transmarisca* fortification system is convincingly evidenced by the fact that it does not turn west at its southern end, but continues southwards, where its remains lie under a modern building[42]. Moreover, probably towards the end of the reign of Emperor Theodosius II its ruins were removed and a new perpendicular structure was erected over them. Everything said so far completely renders meaningless the fortification interpretation of the wall with north-south direction in trench I of 1989/1990.

But let us return to the stratigraphic picture in this trench (**Fig. 6**). It is evident from the attached graphic drawings that sterile soil was reached only in its eastern part and the first three defined phases in the occupation of the terrain are registered only here. Two burnt layers are depicted in the western profile of the western half of the trench, lying directly on top of each other. The lower one is claimed to have a *terminus post quem* 292 AD, and the upper one

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[31] VAGALINSKI 1999, 233, Abb. 5.

[32] Вагалински 1990, 76–78; Вагалински 1991, 98; Вагалински 1992, 67; Вагалински/Петков 1996, 68.

[33] VAGALINSKI 1999.

[34] VAGALINSKI/PETKOV 2006, 106–108.

[35] Петков 2010a, 52; Трайкова 2024, 10, 25.

[36] VAGALINSKI, PETKOV 2006, 106–108.

[37] The height of the first floodplain in this geographical area is determined to be 7–12 m (Михайлов 1966, 50) or 10–12 m (Николов 2016, 7) above the modern riverbed of the Danube, which in Tutrakan is about 13 m above sea level.

[38] The second floodplain is located at 15–22 m (Михайлов 1966, 49) and according to others – 18–25 m above the modern bed of the Danube River (Николов 2016, 7).

[39] Змеев 1969, 46–48, обр. 1.

[40] VAGALINSKI/PETKOV 2006, 108.

[41] Бончев 1942, 3.

[42] VAGALINSKI 1999, 229.

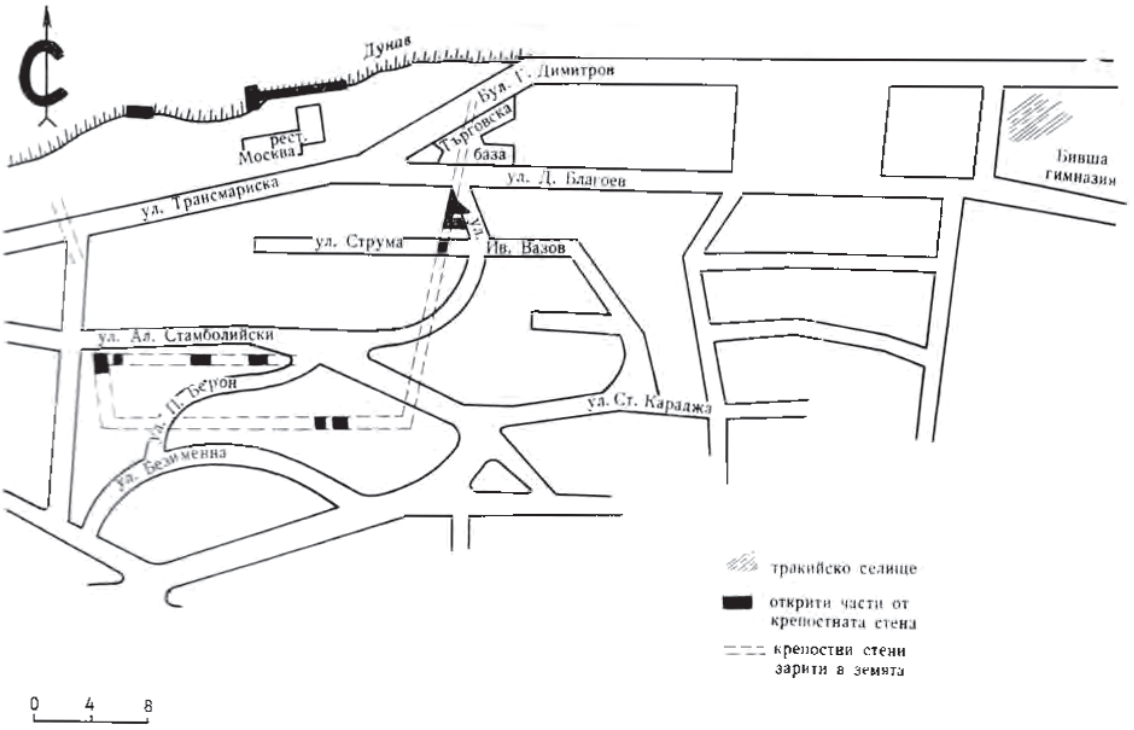


Fig. 7. Hypothetical plan of *Transmarisca* according to the available data in 1969 (after ЗМЕЕВ 1969, 46, обр. 1)

– *terminus post quem* 309/310 AD. On top of them lies a mortar mixer, which is said to have been used to repair the wall, but it should be explicitly noted that the mortar from it is completely identical in composition to that used in the construction of the emplekton of the superstructure of the wall located in immediate neighbourhood[43]. On top of the mortar mixer lies a burnt layer with a *terminus post quem* 367/375 AD and a *terminus ante quem* 383/392 AD. It is strange and quite inexplicable, but the stratigraphy depicted in the adjacent southern profile of the same half of the trench, which is only about 0.65 m wide, is radically different – here the rests of the fire with *terminus post quem* 292 AD are overlain by a homogeneous layer with a thickness of up to 1.70 m of brown-green clay with pebbles. A burnt layer with *terminus post quem* 292 AD does not appear in the eastern and southern profiles of the eastern half of the trench. Above the fire with *terminus post quem* 309/310 AD lies a levelling layer of light brown clay with individual coals, tiles and bricks, small pebbles and burnt clay, and above it – a thick mortar mixer with mortar of the already described type, which reaches in height to the first row of the construction of the upper stepped recess on the eastern face of the wall.

A comparison with the published information in the preliminary reports on the results of the excavations in trench I further deepens the above-mentioned strange discrepancies. It is reported there that during the first year of the excavations a total of 102 coins were found: 7 from the first half of the 3rd century (from Septimius Severus to Gordian III); 4 from the second half of the 3rd century (Gallienus, Claudius Gothicus, Probus, Numerian); 86 from the 4th – early 5th century (Licinius and from Constantine I to Honorius, with 15 specimens constituting a coin hoard with latest issues from the time of Valens); 1 from the first half of the 5th century; 1 of Maurice Tiberius from 591/592 AD; 1 from the 18th – early 19th century and 2 from the

[43] VAGALINSKI 1999, 233, Abb. 5/14; VAGALINSKI 1999, 233: „weißer Mörtel unter Beimengung größerer Ziegelbruchstücke".

Fig. 8. Wall added to the North fortress wall: 1. View from the southeast; 2. View from the north (photos by Sergey Torbatov, 2010)

middle of the 19th century[44]. Three more coins were found while completing the work in the trench – of Constantius II, Gallienus and an illegible early imperial coin from the 1st – 2nd century AD[45]. The question quite reasonably arises: What the postulated dating "after 292 AD" is based on, given the fact that there are no coins with this date of minting among the finds? Is not the so-called burnt layer with a *terminus post quem* 292 AD simply a fiction? What is extremely clear is that only one level was registered in the trench, which is unconditionally related to massive construction at this location (this is the wall with azimuth of 332°), and the mortar mixers marking the level in question lie above a burnt layer with a *terminus post quem* 309/310 AD. It is worth noting here that during the archaeological excavations along the north fortress wall of *Transmarisca* in 2009, about 40 m to the east, another wall was discovered with almost the same orientation (azimuth of 330°) and with completely identical structural parameters – a substructure with a thickness of 1.95 m and a superstructure that narrows in steps on both sides to 1.60 m[46] (**Fig. 8/1–2**). The wall was built later than the fortress wall and was attached to it without constructional joint. It continues southwards outside the studied area. In the first of the above-mentioned publications its dating is attributed to the last quarter of the 4th century, but in the second one it is placed in the second quarter of the same century. This gives me reason to attribute both walls with identical constructional features to one and the same building of very large dimensions and massive construction, attached to the fortress wall after its erection[47].

It is clear from the presented detailed analysis that the situation in trench I of 1989/1990 has no relation to the fortification system of *Transmarisca* and the chronology of the cultural layers registered there neither directly nor indirectly supports the postulated time of construction of the north fortress wall in the period between 292 and 309/310 AD.

This dating was for the first time announced in a report on the archaeological excavations in 1995[48], but without indicating where the chronological benchmarks for outlining this time range were obtained. An opportunity for partial clarification of this issue is provided by the already mentioned recent publication[49], in which, in addition to a plan of the trenches carried out within the reach of the north fortress wall of *Transmarisca* so far, stratigraphic profiles in two of the trenches from 1995–1996 are published for the first time. The profile in one of them (trench 2 from 1995/1996) is definitely not working for the purpose, since the cultural layers there were not explored to reaching the sterile and the junction of the trench with the fortress wall is not marked in the drawing[50].

The profiles in the northern half of trench 3 from 1995/1996 however provide serious stuff for reflection[51] (**Fig. 9**). The first cultural layer above the sterile loess is burnt and is said to be "probably from the end of the Fourth Settlement Period"[52]. It is very clearly visible in the eastern profile that the layer in question is cut by a deep ditch for laying the foundations of the north fortress wall. The ditch is also well discernable in the western profile of the trench, but for

[44] Вагалински 1990, 78.

[45] Вагалински 1991, 98.

[46] Петков 2010a, 54; Петков 2010b, 324.

[47] The connection between the wall in trench I and the fortress wall has not been archaeologically established. In 2009 and 2011 the space along the inner face of the north fortress wall between the two north-south oriented walls was explored in a strip about 3 m wide down to the 4th century walking level and no other structures were found there above this level. Judging by the size and impressive thickness of the walls, its location next to the fortress wall and in immediate vicinity to the fortress gate, as well as the partially preserved brick pavement inside it, the building could have had an economic function (*horeum*).

[48] Вагалински, Петков 1996, 69.

[49] Трайкова 2024.

[50] Трайкова 2024, 146, фиг. 23.

[51] Трайкова 2024, 145–146, фиг. 22.

[52] The period is defined by a *terminus post quem* in the time of Claudius II Gothicus, see: VAGALINSKI 1999, 235.

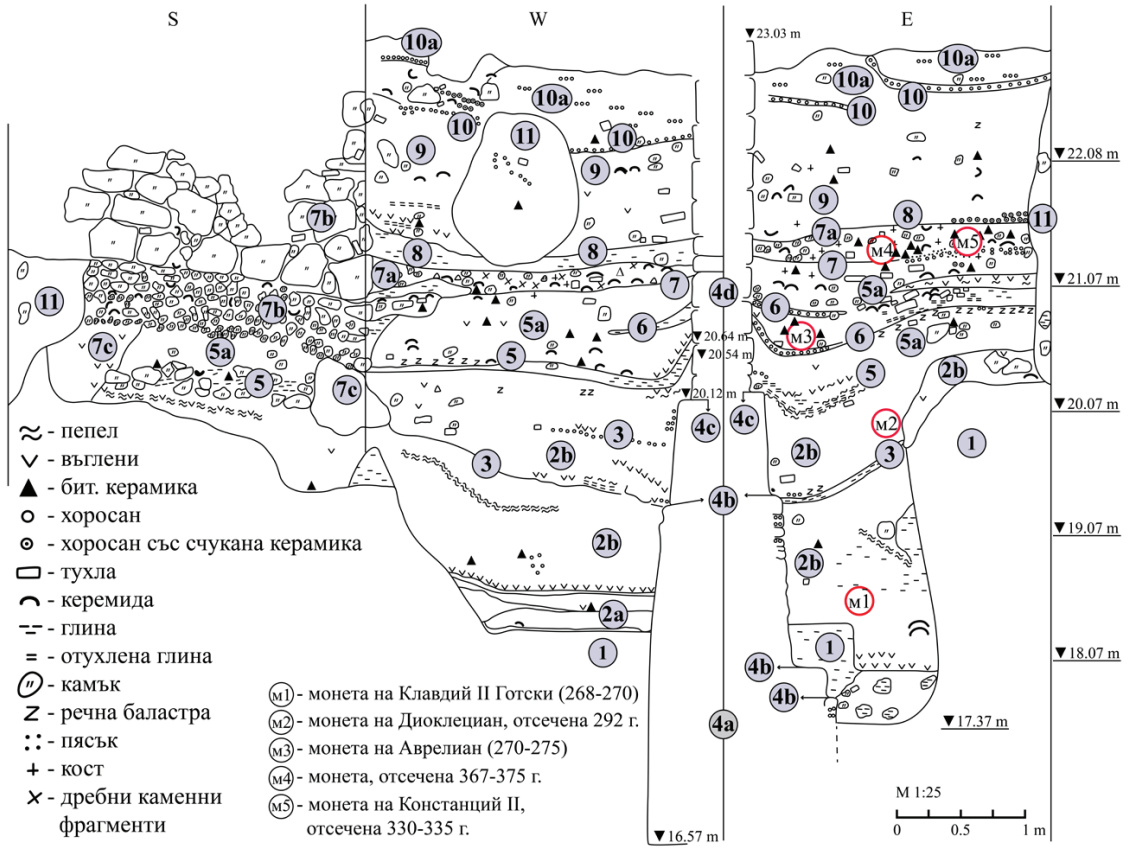


Fig. 9. Stratigraphic sections in trench 3/1996: 1. Sterile loess – yellow-brown layer; 2a. Preceding and cut by (4a) cultural layer: alternation of black soil strips with yellow-brown clayey earth, with a strip of charcoal lying on its upper boundary; 2b. Preceding and cut by (4) burnt layer, later than (2a), probably from the end of the Fourth settlement period: in the E and W sections lie strips of ash cut by the construction trench for (4a). In the E section, this trench shows a fill of clayey mass mixed with charcoal and separate fragments of tiles and pottery; 3. Work surfaces in the stages of construction of (4a), marked by strips: burnt and unburnt clay or fallen mortar. The layer above and below these strips is homogeneous and dense, with few ceramic fragments and charcoal, probably a fill for leveling the construction trench of (4). In the W section, the layer is gray-black, and in the E – gray-brown; 4. Northern fortress wall: 4a. Substructure of (4); 4b. Stepped indentations of (4a), built to stabilize (4) due to the steep descent of the terrain from south to north. The last, highest row of (4b) is built of stones with a processed front surface; 4c. Border of (4) = at the boundary between (4a) and (4d); 4d. Superstructure of (4): front construction of limestone blocks, entirely plastered with smooth mortar; 5. Burnt strip of mixed ash, charcoal, and burnt clay, part of the fire of the Fifth period (4), marking its ground level, in the W section it is formed of yellow-beige clay, and in the S section of small stones, rammed and covered with the same clay; 5a. Dug over?, part of (5). Contains separately scattered small quarry stones, bricks, tiles, pottery, bones, charcoal, lumps of mortar with crushed ceramics, a coin of Diocletian minted in 292 AD; 6. Work surface for repairs of (4), marked by strips of mortar and river gravel; 7. Ground level of the Sixth period, coinciding with the border between substructure and superstructure of (7b); 7a. Fire of (7), gray-brown layer: a large amount of fragmented pottery, bricks and tiles, small quarry stones, animal bones, coin minted 367/375 AD; 7b. Wall with clay binding, with a substructure of small and a superstructure of large quarry stones, there are separate tile fragments in the substructure, and brick fragments in the superstructure; 7c. Pits, for digging over (5a) to extract construction materials for the construction of (7b); 8. Ground level of the Seventh period. In the W section it is formed with a layer of gray-brown clay, in the E section the strip is thin, covered by mortar with crushed ceramics; 9. Fire of (8), light brown layer: pottery, bricks and tiles, charcoal, burnt clay and small quarry stones; 10. Strips of mortar, fallen due to successive repairs of (4); 10a. Layer of mortar in small pieces, mixed with sand and a small amount of soil; 11. Pits, the one in the W section dates to the Ottoman period (after ТРАЙКОВА 2024, 145–146, фиг. 22)

unknown reason a normally deposited cultural layer from the same Fourth Settlement Period is depicted in the lower part of its fill. The latest coin from the fill of the construction ditch is of Diocletian, minted in 292 AD. This is indisputable evidence that the construction was indeed carried out after this date, but the ditch also cuts through a burnt cultural layer above the sterile loess, the dating of which has not been established, but only provisionally attributed to the end of the so-called Fourth Settlement Period. Only three more stratified coins come from the trench. One of them was found in a layer located about 0.40 m higher, which is defined as a "working surface for repairs on the fortress wall". However, the coin is of Emperor Aurelian (!) and it can in no way serve as a *terminus ante quem* for the construction of the fortress. The other two coins are of Constantius II from 330–335 AD and a specimen minted in the period 367–375 AD. Both originate from a burnt layer located about 0.70 m higher, which is associated with the end of the recently defined "sixth settlement period", whose beginning is placed at the end of the first or in the beginning of the second third of the 4th century and the end is marked by a fire with a *terminus post quem* 367/375 AD and a *terminus ante quem* 383/392 AD[53].

In summary, the situation in the commented trench determines for certain 292 AD as *terminus post quem* for the construction of the north fortress wall of *Transmarisca* but it contributes nothing to the chronological specification of this event, and even less to its postulated dating, since there is no context here with a date of ± 309/310 AD. A context with similar dating was really found during the excavations in 1989–1998, but only in trench I from 1989/1990. However, as already said, the wall registered in that trench has no relation to the fortification system and its construction should be placed in the period not before, but after 309/310 AD.

Although indirectly, the existence of a context with a similar dating can be assumed with a very high degree of certainty in another place in the area covered by the research in 1989–1998. After the publication of the summarizing publication of 1999, rescue excavations in the area of the north fortress wall of *Transmarisca* were carried out again in 2003. The two newly dug trenches are located 12 and 2 m respectively southwards of trenches 2 and 3 from 1995/1996[54] (**Fig. 5**). Sterile loess was reached in both of them, directly above which (without a formed walking level) there is a burnt cultural layer[55] (**Fig. 10**). A coin of Licinius with unspecified dating within the timespan of his reign (308–324 AD) comes from that layer, which determines 308 AD as the earliest possible *terminus post quem* for the time of the fire. The text ends with the statement that "the results obtained repeat our information from previous years about the terrain in question"[56]. Judging by the location of the trenches, the definition "the terrain in question" obviously refers to the adjacent area near the north fortress wall of *Transmarisca*. It was explored in 1995 and 1996 and it is just here that the aforementioned trench 3 from 1995/1996 is located. It can be concluded from the authors' statement about "repeated information" that there too the undated first burnt layer above the sterile would not be "probably from the end of the Fourth Settlement Period", as assumed in a recent study[57], but from the time after 308 AD. Taken in consideration that this layer was cut by the construction ditch for laying the foundations of the fortress wall, the coin from 292 AD found in its fill loses its chronological value as a *terminus post quem* for its construction, which could not have happened before 308 AD.

In 2018–2019, another section of the north fortress wall of *Transmarisca* was investigated. It is 21 m long and is the immediate eastern continuation of the remains discovered until

[53] Трайкова 2024, 57, 145, фиг. 22.

[54] The location of the trenches is shown on a plan in: Трайкова 2024, 136, фиг. 4.

[55] A stratigraphic section illustrating the situation in trench 1 of this year was published for the first time in 2024 (Трайкова 2024, 137, фиг. 4А).

[56] Вагалински/Петков 2004, 117–118.

[57] Трайкова 2024, 145–146, фиг. 22.

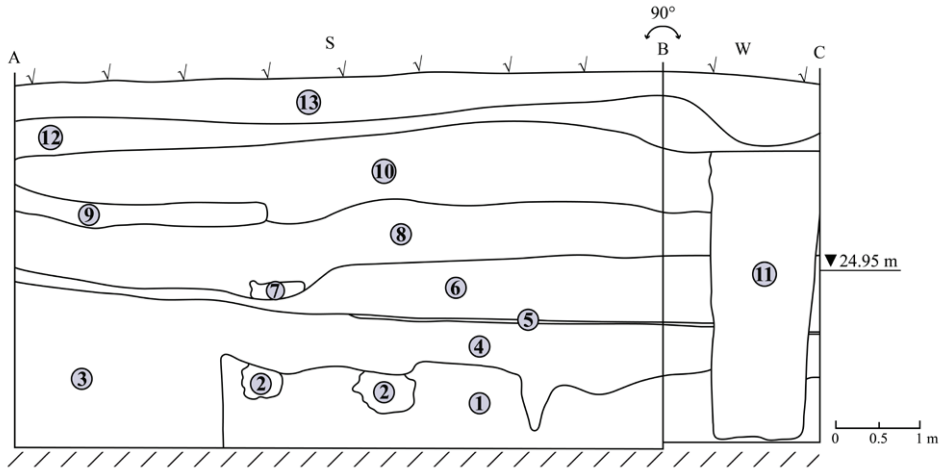


Fig. 10. Stratigraphic section in trench 1/2003: 1. Sterile – yellow-green clay; 2. Substructure, corner of a building, quarry stone with clay binding; 3. Basement?; 4. Burnt layer: adobe, roof tiles, charcoal, fragments of amphorae and pottery, a coin of Licinius (308–324 AD); 5. Place for mortar mixing, white mortar; 6. Leveling layer, green clay; 7. Hearth; 8. Mixed layer with a dark gray color – late antique and early medieval pottery, animal bones; 9. Floor level of Pechenegs' half-dugout, light green clay; 10. Mixed layer – late antique and early medieval pottery; charcoals, animal bones, 12th – 14th century coin; 11. A septic tank from the 19th century; 12. Destructions of "Romanian" buildings; 13. Fill for leveling since 1983, green-brown clay (after ТРАЙКОВА 2024, 137, фиг. 4А)

then (**Fig. 11**). The depth of the foundation of the fortress wall has not been established. Here too, similarly to the sector south of the so-called tower 1, the presence of structural stepped recesses on the southern (inner) face is recorded, which narrow the thickness of its above-ground part to 2 m. The upper one, which is located at an elevation of 21.20 m, is interpreted as a plinth separating the sub- from the superstructure of the wall, which determins the level of the terrain in the protected area during the time of construction. The revetment of the superstructure is made of roughly processed stone blocks. Almost half of the studied length of the wall is occupied by a widening with a width of 0.50 m on the inside, which is stated to have been built on a joint to the southern face. The presence of two external extensions along the course of the widening has been established. The upper one is located 0.74–0.94 m above the plinth of the fortress wall and is also interpreted

Fig. 11. A section of the north fortress wall explored in 2018–2019 (after ТРАЙКОВА 2024, 139, фиг. 9)

as a plinth, but between the sub- and superstructure of this particular construction. The lower extension is about 0.40 m lower and protrudes unevenly by about 10–15 cm. It is considered as a separator between the lower and upper parts of the substructure[58].

Apart from the widening in question, which is considered a later repair "after destructions suffered by the fortress wall"[59], no other repairs have been recorded on the wall itself at the preserved height. That implies that it has survived in its authentic appearance from the time of its construction. Surprisingly, although it is claimed that the widening was built at a joint to the main fortress wall, there is no hint of such on the orthophotograph from the end of the excavations[60] (**Fig. 12**). On the geodetic plans of the site the joint is marked with a dotted line[61] (**Fig. 13**), which also calls in question its existence.

The clarification of this confusing situation requested a visit to the site[62]. The absence of conservation and restoration interventions and the still excellent condition of the remains[63]

Fig. 12. Orthophotography of the surveyed area during the 2018–2019 seasons (after ТРАЙКОВА 2024, 140, фиг. 10)

gave a chance for very important findings to be made (**Fig. 14/1–2**). It was established that there is indeed a joint between the fortress wall and the widening on its inner side, but only up to the end of the first row of the so-called upper part of the substructure of the widening. The construction is completely homogeneous upwards from there (**Fig. 15/1–6**). This proves that

[58] The substructure slightly narrows in depth below it.
[59] Трайкова 2024, 27.
[60] Трайкова 2024, 140, фиг. 10.
[61] Трайкова 2024, 139, фиг. 8–9.
[62] The site was visited three times – on February 8 and 13, and March 24, 2025.
[63] The abundant mortar coating on the inner face of the fortress wall recorded during the excavations is now almost completely destroyed under the influence of weathering, but this only improves the possibilities for observation.

Fig. 13. Geodetic plan of the surveyed area during the 2018–2019 seasons (after ТРАЙКОВА 2024, 139, фиг. 8)

the decision to thicken the wall in this sector was taken when the construction was already in progress. After the widening was built to the level reached, the construction continued in height incorporating both structures in a single body.

It is noted that the joints between the stone blocks of the revetment of the widening's superstructure are carefully plastered with mortar in the western part, while in the eastern part the mortar is applied more abundantly and carelessly[64]. It is very clearly visible on one of the attached photographs[65] that the facing of the so-called upper part of the widening's substructure (the construction between both horizontal recesses) is treated identically to the above-mentioned second way, but this would hardly be possible were it really a substructure, and not a construction rising above the ground level of those days (**Fig. 16**). The same abundant plastering with mortar is also registered on the southern face of the superstructure of the fortress wall itself[66]. However, it is evident from the photo illustrations and the architectural survey of the southern face of the wall that the mortar plastering is not applied from the level of the plinth upwards, but from an approximately horizontal line located 0.40–0.50 m higher than it[67] (**Fig. 17/1–2**). It is this line, and not the plinth, that is the actual indicator of the walking level in the protected area at the time when the fortress wall was finally built and entered in function. This level corresponds very precisely to the lower recess of the widening and testifies that the so-called upper part of its substructure is actually a superstructure, as already argued above in this paper.

Now let us cast a glance at the stratigraphic findings from the 2018–2019 surveys, which are stated to be "analogous to those from the surveys of the section with towers 1 and 2"[68].

[64] Трайкова 2024, 26–27.

[65] Трайкова 2024, 140, фиг. 11.

[66] Трайкова 2024, 27. This is also the case in other studied areas (Петков 2010a, 53). The situation at tower 1 is photographically documented (VAGALINSKI 1999, 232, Abb. 4).

[67] Трайкова 2024, 140, фиг. 11; 142, фиг. 14–15.

[68] Трайкова 2019, 245; Трайкова 2020, 694.

Fig. 14. Current state of the section of the northern fortress wall surveyed in 2018–2019: 1. View from the east; 2. View from the southwest (photos by Sergey Torbatov, 13.02.2025)

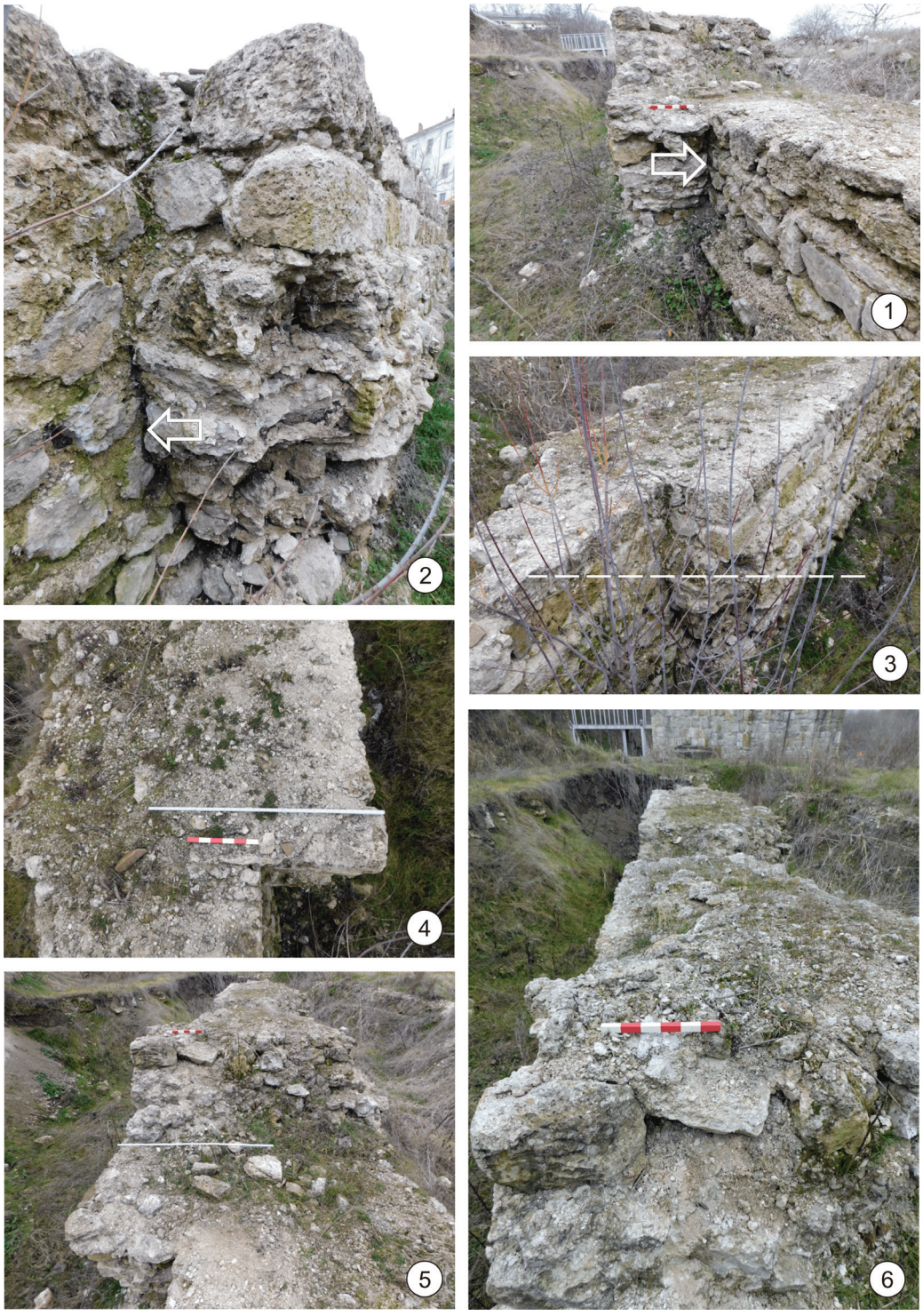


Fig. 15. Widening of the section of the north fortress wall surveyed in 2018–2019: 1. Joint between the fortress wall and the widening (western end of the widening); 2. Joint between the fortress wall and the widening (eastern end of the widening); 3. Upper end of the joint between the fortress wall and the widening; 4–6. Homogeneous construction of the fortress wall with the thickening upwards from the end of the joint (photos by Sergey Torbatov, 08.02.2025)

Fig. 16. Mortar coating of the joints between the stone blocks of the face construction of the so-called upper part of the substructure of the widening along the section of the north fortress wall surveyed in 2018–2019 (after ТРАЙКОВА 2024, 140, фиг. 11)

The so-called "general periodization for the site"[69] is used by the excavator for the purposes of chronological interpretation[70], which is claimed in the text to have been perfectly confirmed[71]. Is that true indeed, one can judge from the following notes.

The earliest materials from the discussed surveys date back to the 2nd – 3rd century (with the presence of isolated earlier finds), but they come from a small section of the fill of the ditch for building the substructure of the fortress wall and do not originate from a cultural layer registered *in situ*. A burnt layer with a thickness of about 0.50 m is recorded above the sterile loess (**Fig. 18**). Several burnt coins originate from it, the latest of which is of Maximinus Daza, minted in 309/310 AD. Based on this, the layer is attributed to the so-called fifth period, and the fire is interpreted as the first one after the construction of the fortress wall, which in turn is dated back to the very end of the 3rd – the beginning of the 4th century[72]. However, the archaeological research has not established the existence of a walking surface associated with this supposed phase of functioning of the fortress wall[73] – the burnt layer lies directly above the natural folds of the sterile loess. Even more interesting is that, in addition to the burnt coins, the layer also yielded two coins of Emperor Constantine I with no traces of burning, minted in 324 and 325/326 AD respectively. The author's explanation for this very confusing circumstance from the viewpoint of the so-called "general periodization of the site" is that the coins accidentally fell into the layer "during its excavation or during construction activities related to repairs on

[69] VAGALINSKI 1999.
[70] Трайкова 2024, 8.
[71] Трайкова 2024, 97.
[72] Трайкова 2024, 32–33.
[73] Трайкова 2024, 33. The existence of such is hypothetically outlined with a dotted line on the stratigraphic sections (Трайкова 2024, 149 фиг. 28, 150 фиг. 29).

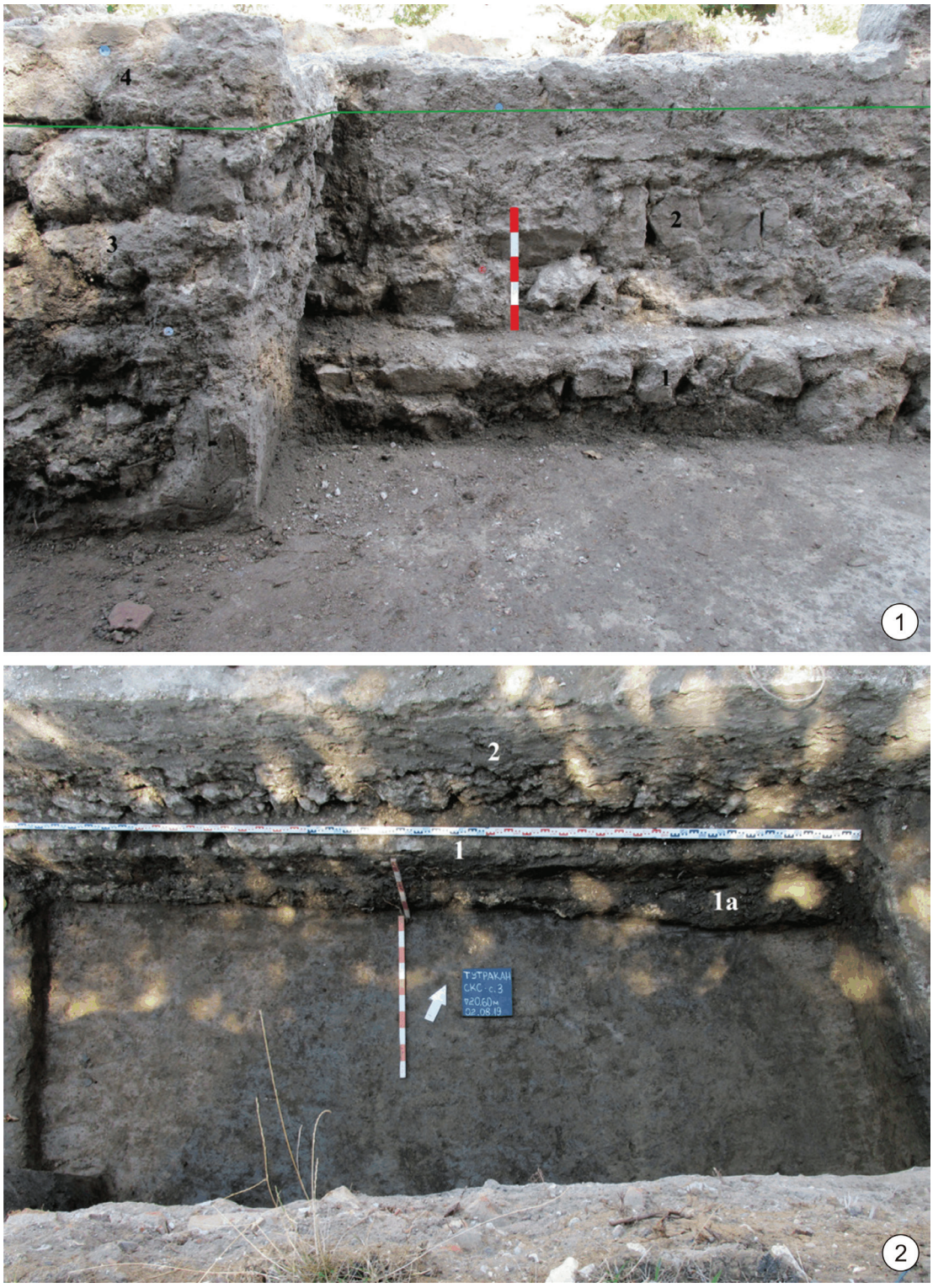


Fig. 17. Mortar coating on the inner face of the superstructure of the section of the north fortress wall surveyed in 2018–2019 (after ТРАЙКОВА 2024, 142, фиг. 14–15)

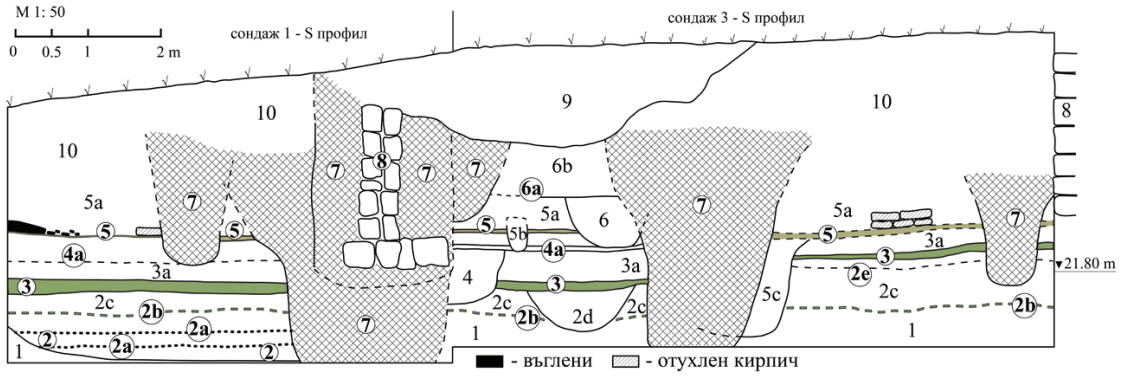


Fig. 18. Southern stratigraphic sections of trenches 1 and 3/ 2018–2019: 1. Sterile: yellow-brown clay; 2. Layers of dark green clay with separate charcoal pieces and small fragments of pottery in the upper part of the layer; a thin layer of sand lies on the bottom two strips = 2a. Working surfaces from the construction of the fortress wall = Fifth period; strips of fallen mortar; 2b. Presumed level of the Fifth period ground level. The level is not preserved because the layer (2c) had been dug over; 2c. Dug over, burnt dark brown layer, mixed with separate small scattered charcoals, strips of ash and burnt mud brick, ceramic fragments, small lumps of mortar, burnt animal bones; with *t.p.q.* 309/310 AD; 2d. Black-brown layer – pit, dug into (2c) by the people who laid (3) down; it contains: lumps of mortar, scattered charcoal, small fragments of pottery, bricks and tiles; 2e. Strip saturated with ash and charcoal; 3. Green clay layer, ground level of the Sixth period, its upper surface is scorched and colored to yellow-green 3a. Burnt layer of the Sixth period, with *t.p.q.* 351/361 AD; contains: finely crushed bricks and tiles, burnt and unburnt mud brick, scattered charcoals, lumps of yellow-white and white mortar with crushed ceramics, small river pebbles and separate thin strips of sand, probably from decomposed mortar, pottery, fragments of glass vessels, animal bones, most are burnt; 4. Pit filled with gray-brown soil, mixed with bricks and tiles, small quarry stones, strips of sand, scattered charcoal 4a. Work surface for repairs on the fortress wall, marked in places by a thin clay strip of gray-green color, on top of which lies a thin layer of stone fraction and sand, mixed with burnt and unburnt mud brick, small quarry stones, lumps of yellow-white mortar, pottery, bricks and tiles 5. Thin clay strip of gray-green color, ground level of the Seventh period; in places on top of it lie strips of shapeless pieces of burnt mud brick, as well as several whole burnt forms; 5a. Burnt layer of the Seventh period, with *t.p.q.* 408/423 AD, mixed with modern fill and disturbed by dugouts: burnt and unburnt mud brick, pottery, brick and tile fragments, scattered charcoal, separate lumps of mortar, animal bones; 5b. Dugout, probably for a beam; 5c. Pit, filled with compacted yellow-brown soil, mixed with scattered charcoal, small lumps of white mortar with crushed ceramics, animal bones; 6. Pit containing: large amounts of charcoal, burnt and unburnt mud brick, pottery, bricks and tiles; 6a. Horizontal, thin clay strip of gray-green color, probably a ground level; 6b. Dug over ruins of (6a) – strips of charcoal and burnt mud brick, pottery, brick and tile fragments, the layer is mixed with modern fill; 7. Modern pits, some of which are septic; 8. Modern walls, some built with blocks from the fortress wall and cement; 9. Foundations and ruins of a 20th-century furnace; 10. A fill containing modern and ancient materials (after ТРАЙКОВА 2024, 149, фиг. 28)

the wall"[74]. In any case, 325/326 AD appears to be a reliable *terminus post quem* for the laying of a walking level in the form of a thick layer of yellow-green clay above the remains of the fire. This is the first, the lowest one archaeologically recorded daily surface in the studied sector and it is very well discernable in all the published stratigraphic cross-sections[75]. The stratigraphic cross-section along the eastern profile of trench 1 from 2019, which is located transversely to the fortress wall[76] (**Fig. 19**), is particularly indicative. It is clearly seen that the daily surface seals the construction ditch for building the wall widening and corresponds exactly to the level,

[74] Трайкова 2024, 33.

[75] Трайкова 2019, 245 обр. 2; Трайкова 2020, 694 обр. 3, 695 обр. 4; Трайкова 2024, 149 фиг. 28, 150 фиг. 29.

[76] Трайкова 2024, 150 фиг. 29.

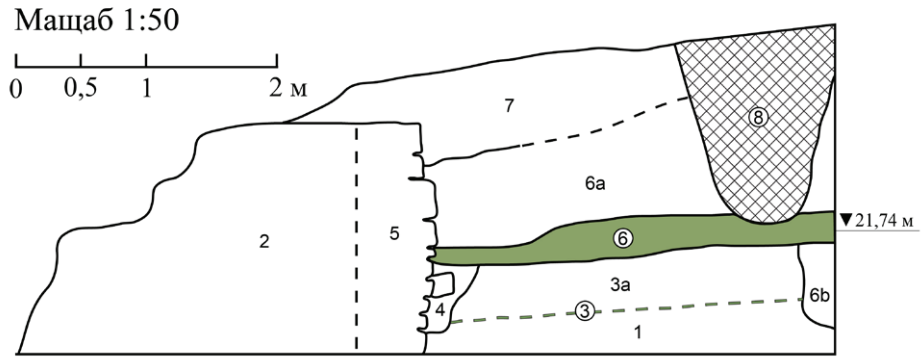


Fig. 19. Eastern stratigraphic section of trench 1/2019 (southern extension): 1. Sterile light brown loess; 2. Northern fortress wall; 3. Presumed ground level of the Fifth period; 3a. Dug over, burnt layer of the Fifth period; contains: separate scattered charcoals, ash stains and burnt mud brick, separate small pottery fragments 4. Trench used for dug of (5); contains ruins = (3a); in its upper part, there is a horizontal stone, probably for the reinforcement of (6); 5. Reinforcement/thickening of (2); 6. Ground level of the Sixth period: thick strip of yellow-green clay ≈ 10 cm up to southern face of (5), and in some places reaching up to 30 cm; 6a. Burnt layer of the Sixth period, with *t.p.q*. 351/361 AD; contains: finely crushed bricks and tiles, burnt and unburnt mud brick, scattered charcoals, lumps of white mortar with crushed ceramics, strips of ash following the slope of (6), small river pebbles, probably from decomposed mortar, pottery, fragments of glass vessels, animal bones; 6b. Pit closed by (6); 7. Mixed layer with materials from (6a) and modern fill; 8. Modern pit (author L. Traykova) Източен стратиграфски профил на сондаж 1/2019 (южно разширение) (after ТРАЙКОВА 2024, 150, фиг. 29)

which marks the beginning of its superstructure (previously considered to be the upper part of the substructure). The mortar coating of the inner face of the fortress wall begins from the same level upwards. As argued above, the construction of the north fortress wall of *Transmarisca* and its widening are not two separate construction periods, but two successive phases in the implementation of one and the same fortification project. The stratigraphic evidence convincingly testifies that this did not happen between 292 and 309/310 AD, as previously claimed, but after 325/326 AD. Therefore, the newly built Late Roman fortress in *Transmarisca* has nothing to do with the fortification activities in the time of Emperor Diocletian and its association with the *praesidium* mentioned in the inscription of 298/299 AD is completely untenable. The fortress arose in the second half of the third decade of the 4th century at the earliest, which connects it with the fortification activities carried out most likely during the last period of the reign of Emperor Constantine I. In this regard, it should be noted that during the excavations of the north fortress wall in 1989–1998 more than 200 bricks with stamps of *legio XI Claudia* of types F and G (LEGXICLFTRAM and LEGXICLFCAND respectively) were found[77]. These stamps were initially dated to the end of the 3rd/beginning of the 4th century[78] and that is used in the aforementioned publications as an additional argument for the fortress being built during the First Tetrarchy. However, in later works the dating of the stamps was revised and now they are attributed to the reign of Emperor Constantine I[79].

The so-called South fortress wall

The so-called South fortress wall of *Transmarisca* is located about 250 m south of the

[77] PAUNOV 2007, 142; Петков 2010a, 58–59.
[78] MUŞEŢEANU ET ALII I979, 170; MUŞEŢEANU ET ALII 1980, 98–101.
[79] SARNOWSKI 1985, 119; SARNOWSKI 1991, 32.

north one (**Fig. 20**). The first information about its existence is from 1970, when part of a tower was accidentally found in the course of construction works. During the rescue excavations that followed only its front part was revealed, which is arched[80]. The structure is of small and medium-sized stone blocks, bonded with mortar mixed with river rubble and broken tiles. The construction of the tower is dated to the end of the 3rd /beginning of the 4th century, but it

Fig. 20. Location of the so-called South fortress wall

has been established that its front part rests on an earlier wall. It is assumed that it belongs to an

[80] Змеев 1970a, 4; Змеев 1970b.

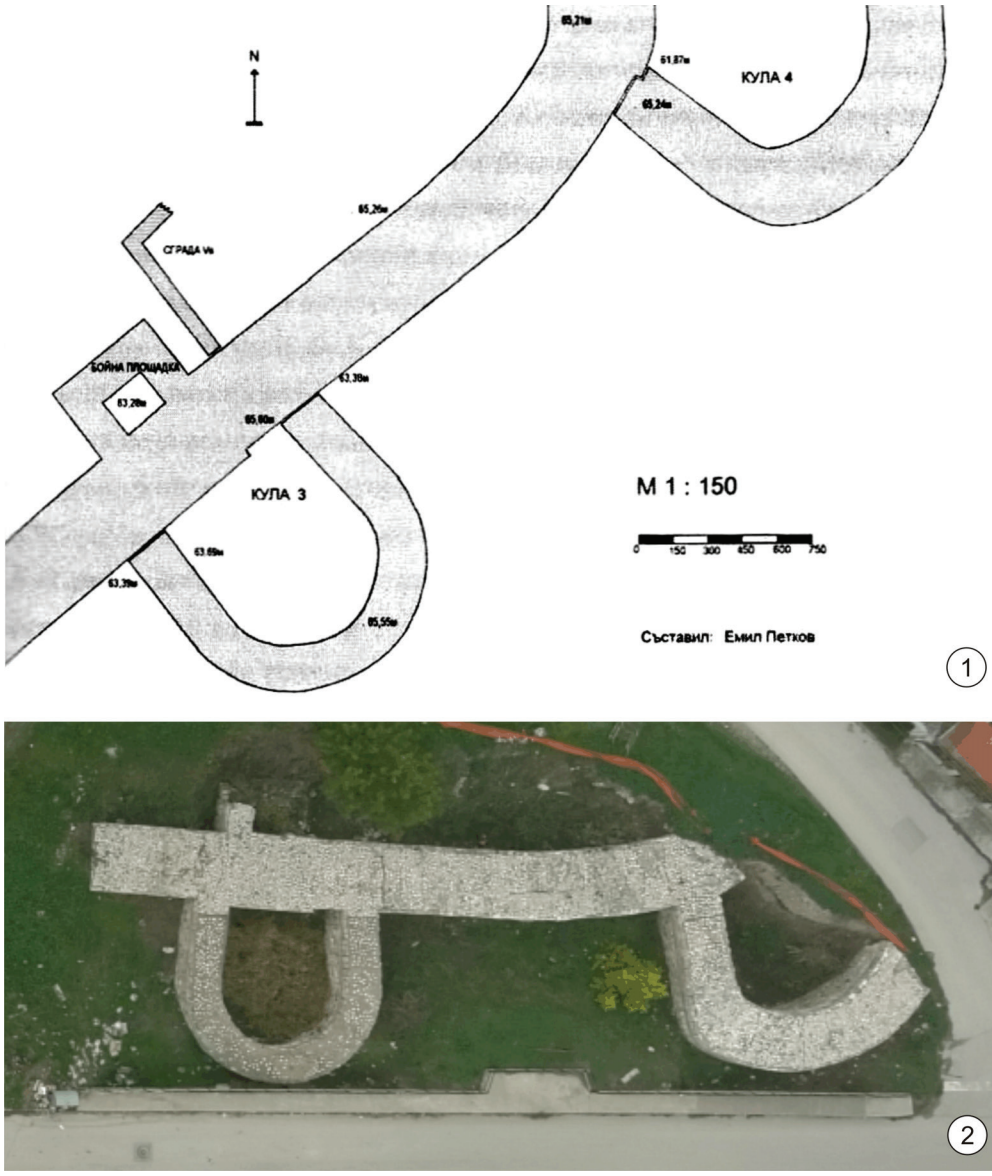


Fig. 21. The eastern section of the so-called South fortress wall: 1. Plan (after ПЕТКОВ 2010a, 55); 2. Current state (photo by Varbin Varbanov)

older tower, which was rectangular, but the research in this sector in recent years categorically rejects the possibility of its existence.

About a hundred meters northeast of this place a section with a length of 34 m of a fortress wall was studied through archaeological excavations in the period 2001–2004. It smoothly turns to the north at its eastern end. Two external towers are registered along its course – an intermediate U-shaped one, and a corner horseshoe-shaped (**Fig. 21**). Both were additionally built to the fortress wall. The U-shaped tower is completely unearthed, but only the southern half of the corner one is revealed. North of the U-shaped tower, on the inside of the fortress wall and in constructional connection with it, a quadrangular structure with external dimensions 4.60 × 3.00 m is registered, the eastern and western walls of which are 1.30 m wide, and the northern one – 1.50 m. The structure has not been studied in depth. It has long been

Fig. 22. The foundation of the fortress wall inside the U-shaped tower (Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Col. № 458, p. 19/22, 21/22)

interpreted by the researchers as a "counterfort"[81], and subsequently as a "battle landing"[82]. In fact, it is an earlier inner tower[83], which became unnecessary and was abandoned and partially dismantled after the construction of the projecting U-shaped tower in the 4th century[84].

The wall is unusually thick in superstructure – 3.60 m[85], but with strangely shallow foundations – only 0.58 m[86]. It is clearly visible on two photographs from the working documentation for the 2002 campaign, which present the situation inside the U-shaped tower, that the construction beneath the plinth consists of only two rows of roughly processed stone blocks dug into sterile loess (**Fig. 22/1–2**)[87]. The plinth inside the southeast corner tower lies at an elevation of 62.95 m[88]. Judging by the published data[89] and the above-mentioned photographs, it is at the same level in the U-shaped tower, too, which is located some 15 m west of it[90]. The publications say absolutely nothing about the external appearance of the fortress wall itself, except that it is built in the same technique as the north curtain wall[91]. However, there is reliable evidence that *opus mixtum* was applied in the superstructure of the towers[92]. The stonework under the first brick belt in the U-shaped tower has a facing masonry of stone blocks measuring 0.40 × 0.45 m and 0.30 × 0.35 m. The joints between the blocks (excluding the front part) are abundantly plastered with mortar[93] (**Fig. 23**). The inner revetment of the southeast corner tower is treated in the same way, with only individual faces of stone blocks visible in places[94].

Fig. 23. Construction of the superstructure of the western wall of the U-shaped tower (Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Col. № 458, p. 19/22)

[81] Вагалински/Петков 2002, 90; Петков 2004, 116; Петков 2005, 196; VAGALINSKI/PETKOV 2006, 108.
[82] Петков 2010a, 56.
[83] Върбанов 2021, 173.
[84] Вагалински/Петков 2002, 90; Петков 2004, 116; VAGALINSKI/PETKOV 2006, 108; Петков 2010a, 56.
[85] Some of the publications note that the wall thickness is 3.70 m (Вагалински/Петков 2002, 89; VAGALINSKI/PETKOV 2006, 108; Петков 2010a, 55; Петков 2015, 416) but the measurement of the remains shows that this is not true.
[86] The depth of the substructure is mentioned only in one of the publications (VAGALINSKI/PETKOV 2006, 108).
[87] Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Col. № 458, p. 19/22, 21/22.
[88] Петков 2010a, 57.
[89] The inner plinth of the U-shaped tower is at an elevation of 63.34 m (Петков 2004, 117) and is located about 0.40 m higher than that of the adjacent fortress wall.
[90] And not at an elevation of 63.70 m as claimed in a new work (Трайкова 2024, 16) with reference to an older publication (Петков 2010a, 55–57), in which nothing of the kind is mentioned.
[91] Вагалински/Петков 2002, 89; VAGALINSKI/PETKOV 2006, 108; PAUNOV 2007, 145; Петков 2010a, 55.
[92] PAUNOV 2007, 146; Петков 2010a, 56. There is no evidence of bricks with stamps being found during the excavations.
[93] Петков 2010a, 56.
[94] Петков 2003, 94; VAGALINSKI/PETKOV 2006, 108; Петков 2010a, 56.

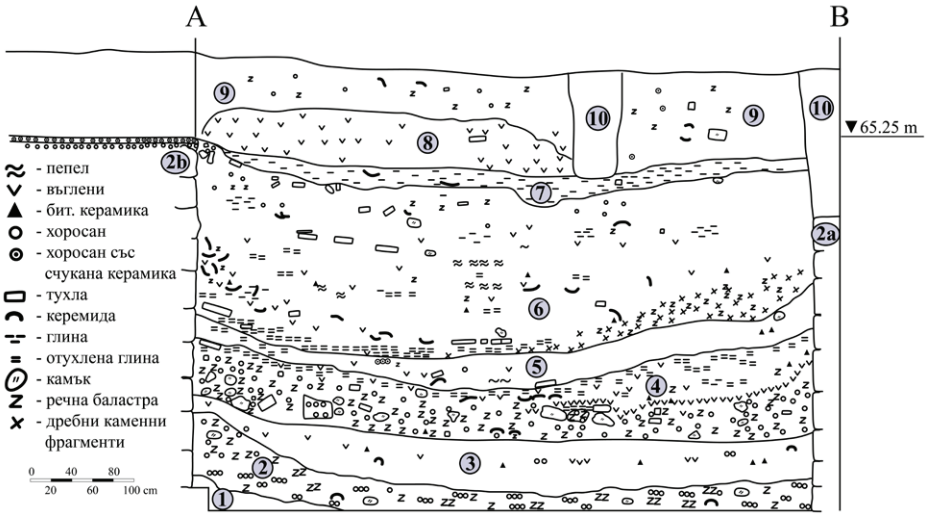


Fig. 24. Stratigraphic profile in the southeastern corner tower (= tower 4): 1. Sterile; 2. Strips of fallen mortar and river gravel from the construction of the Tower 4; 2a. The front side of Tower 4; 2b. The western wall of Tower 4; 3. Clay floor level; 4. The first fire of southern fortress wall after 309/310 AD, tower 3 was added after it; 5. Clay floor level; 6. Fire from enemy attacks with a *t.p.q*. 367/375 AD; 7. Clay floor level; 8. Fire with a *t.p.q*. 408/423 AD; 9. A disturbed cultural layer, including asynchronous and modern materials; 10. Modern pits (after ТРАЙКОВА 2024, 136, фиг. 3А)

As for the chronology, based on the "identical" building technique, the fortress wall studied in 2001–2004 is declared to be synchronous with the north fortress wall, and its construction is similarly attributed to the time of Emperor Diocletian at the end of the 3rd century[95]. The erection of the U-shaped tower is considered a later addition, but there is a great discrepancy in the publications regarding the time of its appearance – between the first and last quarter of the 4th century[96], in the first quarter of the 4th century[97], in the 4th century[98], in the middle of the 4th century. For the corner horseshoe-shaped tower however, which is completely identical by construction and is additionally attached to the fortress wall like the other, it is claimed that "stratigraphic observations establish that it is synchronous with it [i.e. with the wall]"[99], but the text does not explain what these "stratigraphic observations" are[100].

In fact, very little is said about stratigraphy at all in the publications concerning the research in 2001–2004 within the scope of the so-called south fortress wall of *Transmarisca*. Apart from the already mentioned understudied and undated structure defined as a "buttress"

[95] Вагалински/Петков 2002, 89; Петков 2003, 94; VAGALINSKI/PETKOV 2006, 108; PAUNOV 2007, 145; Петков 2010a, 55.

[96] Вагалински/Петков 2002, 90; Петков 2003, 94; Петков 2004, 117.

[97] VAGALINSKI/PETKOV 2006, 108.

[98] PAUNOV 2007, 145.

[99] Петков 2010a, 56.

[100] A new publication cites as evidence for this the field observation that the inner plinth of the western wall of the corner horseshoe-shaped tower begins at the level of the adjacent outer plinth of the fortress wall (elevation 62.95 m) (Трайкова 2024, 19). For unknown reason however the author fails to note that at the same location the lower end of the tower's substructure lies almost 2 meters deeper (at an elevation of 60.97 m: Петков 2004, 117). There is no data about the depth of the foundation of the fortress wall at this location but 15 m west of here it is only 0.58 m (VAGALINSKI/PETKOV 2006, 108). Furthermore, the documentation from the excavations stored in the Scientific Archives of the National Institute of Archaeology with Museum explicitly states that the joint between the wall of the tower and the curtain wall sharply widens in depth and reaches 0.15 m (see here note 108: Diary, p. 13 – 9 and 10 October 2002).

or "battle landing", only one corner of a Late Antique building has been partially revealed in the fortified territory, which was built against the fortress wall to the east of the U-shaped tower after the end of the 4th century[101]. The cultural stratifications in depth beneath this building have not been studied. A sterile layer was reached during the excavations only within the space of the towers added to the wall[102]. The fortress wall and the towers are dug into sterile soil and no cultural layers have been discovered beneath them[103]. The archaeological material from the interior of the towers is Late Antique, dating to the time span between the end of the 3rd and the beginning of the 5th century[104]. The earliest level here is dated by the researcher back to the end of the 3rd century, and no traces of earlier human presence have been recorded at this place[105]. The stratigraphy upwards is mentioned in only one work, which very briefly notes that it is the same as the situation by the north fortress wall – enemy attacks soon after 309/310 AD (as a result of which the U-shaped tower was built), 367–375 AD (by the Goths and their allies) and 408/423 AD (by the Huns)[106].

All the three mentioned chronological benchmarks are however literally reproduced from a previous publication referring to the already commented stratigraphy registered within the scope of the north fortress wall of *Transmarisca*[107]. No evidence has been presented that the situation in this southern sector is the same. Only recently a stratigraphic profile from the 2002 excavations inside the southeastern tower was published, which is claimed to illustrate the veracity of the thesis about the three successive fires[108] (**Fig. 24**). A reference to the original documentation from these excavations, kept now at the Scientific Archives of the National Institute of Archaeology in Sofia[109], however shows that the drawing made at the site by the researcher has been crudely manipulated under the pretext that it is only "digitalized", which any unbiased reader can easily establish (**Fig. 25**). The claim that coins from the reign of Claudius II Gothicus (268–270) to that of Licinius I (308–324) were found in the first registered fire above the sterile does not correspond to the truth, because the coins in question were found at elevations from 62.30 to 63.22 m (**Fig. 26**), and this covers the first four and a part of the fifth layer above the sterile according to the original graphic documentation of the field researcher. A total of 3 coins were found during the excavations in the upper layers, one of which is from 1937. The other two were found at an elevation of 64.05 m, in a burnt layer above a floor level registered at elevation of 63.65–63.85 m, but they have not been identified[110]. How then can it be claimed that three consecutive fires have been actually registered in the southeastern corner tower, and that they are precisely with the above-mentioned datings[111]? Is this the "precise study of the southeastern fortification sector", which supposedly fully confirms "the chronology of the archaeological periodization of *Transmarisca* (Vagalinski 1999) for the periods of its construction and use"[112]? The so-called "general periodization" of *Transmarisca* is simply a myth that is still maintained to this day by some researchers with references to the first publication about it, but without

[101] Вагалински/Петков 2002, 90; VAGALINSKI/PETKOV 2006, 108.
[102] Петков 2003, 94; Петков 2004, 117; Петков 2010a, 57.
[103] VAGALINSKI, PETKOV 2006, 109.
[104] Петков 2003, 94; VAGALINSKI/PETKOV 2006, 108; PAUNOV 2007, 146; Петков 2010a, 57.
[105] PAUNOV 2007, 146.
[106] VAGALINSKI/PETKOV 2006, 109.
[107] VAGALINSKI 1999, 232–235.
[108] Трайкова 2024, 19, 136 фиг. 3A.
[109] Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Col. № 458 („Отчет разкопки в Тутракан през 2002 г." – ръководител Емил Петков).
[110] Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Col. № 458, p. 7/22 (Diary, p. 6: 7 and 10 June 2002).
[111] Трайкова 2024, 19, 136.
[112] Трайкова 2024, 19.

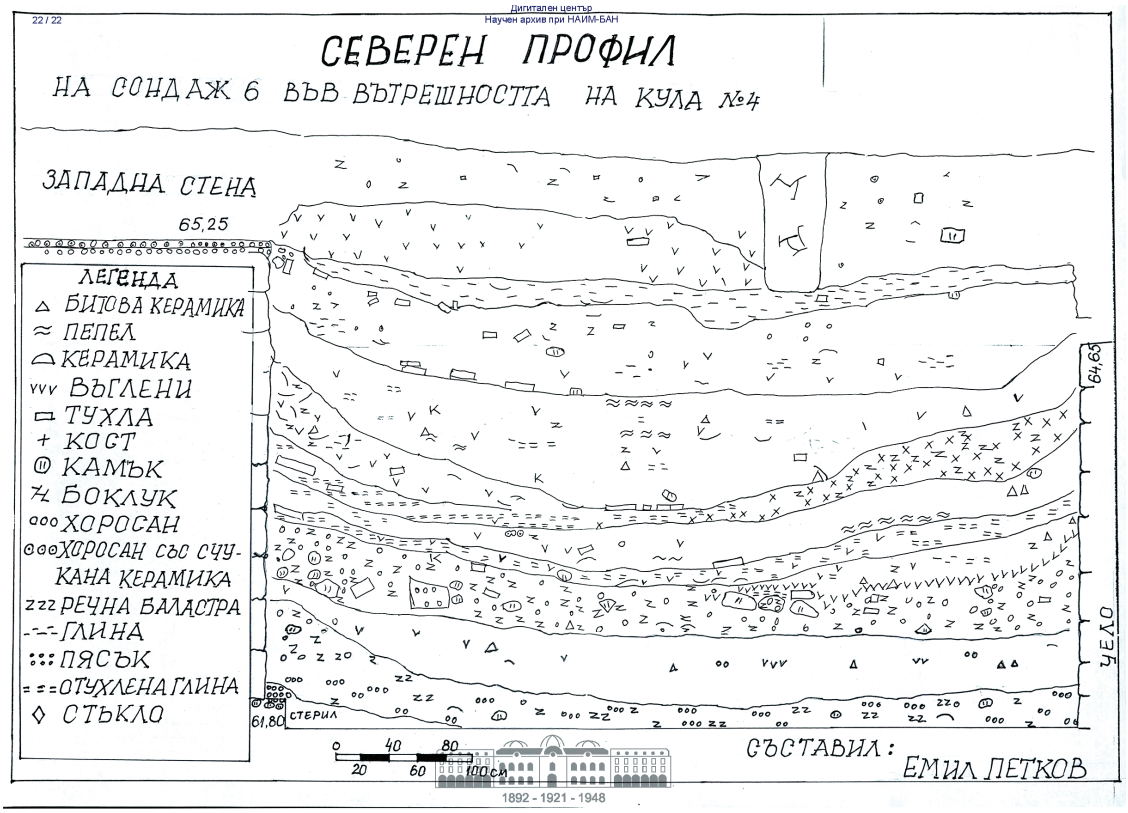


Fig. 25. Stratigraphic profile in the southeastern corner tower (Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Col. № 458, p. 22/22)

analyzing its argumentation and with *a priori* trust in what had once been said. All that leads to scientifically unacceptable attempts to consciously distort the facts, with the sole purpose to prove the veracity of the "general periodization", despite the drastic contradictions with the archaeological realities.

During the excavations in 2003 a part of a wall 0.90 m thick was discovered at the front of the U-shaped tower. It is built at a joint to the tower, but its length is not established and there is no data on its constructional features. It has been suggested that the wall might be a proteichism connecting the fronts of two neighbouring towers, synchronous with them[113], but this is unlikely. Similar walls were discovered in 1970[114], 2014[115] and 2022[116] in the space in front of the fortress wall to the east of the southwestern corner tower. They are located parallel and perpendicular to the fortress wall and are interpreted as remains of buildings added at a later time to its outer face.

A qualitatively new stage in the study and interpretation of the findings of the previous excavations of the so-called south fortress wall of *Transmarisca* began in 2014. During regular archaeological excavations, the southwestern corner of the fortress was discovered. Like the southeastern one, it is also rounded. The thickness and constructional features of the fortress wall are identical to the previously unearthed sections. The eastern and western walls of a fan-shaped corner tower have been partially studied, the front of which was detected during construction

[113] Петков 2004, 117.
[114] Змеев 1970a, 4; Змеев 1970b.
[115] Петков 2015, 416.
[116] Върбанов/Митев 2022.

work back in 1970. Like the southeastern corner and the intermediate U-shaped tower, this tower is also additionally built at a joint to the fortress wall. The most important discovery during the 2014 campaign is the identification of an internal quadrangular corner tower, structurally connected to the curtain wall. Since this type of towers is typical of the Early Roman period, its functioning is dated back to the beginning of the fortification's existence, and for the first time the idea is put forward that the time of its coming into being is probably subject to revision[117].

КОПИЕ НА ДНЕВНИК НАХОДКИ ОТ АРХЕОЛОГИЧЕСКИТЕ ПРОУЧВАНИЯ В ГР. ТУТРАКАН ПРЕЗ 2002 ГОДИНА

	№	Дата	Ниво	Сондаж	Датировка
1	414	13.03.02 г.	63,22	Сондаж - 6	CLAVDIV II GVTHICVS 268 –270 г.
2	415	13.03.02 г.	63,10	Сондаж – 6	DIOCLETIAN 284 – 305
3	416	13.03.02 г.	63,11	Сондаж – 6	LICINIUS I 308 – 324
4	417	14.06.02 г.	63,09	Сондаж – 6	AVRELIAN 270 – 275
5	418	14.06.02 г.	63,00	Сондаж – 6	AVRELIAN 270 – 275
6	419	14.06.02 г.	63,00	Сондаж – 6	AVRELIAN 270 – 275
7	420	14.06.02 г.	62,80	Сондаж – 6	DIOCLETIAN 284 – 305
8	421	17.06.02 г.	62,90	Сондаж – 6	PROBUS 276 - 282
9	422	17.06.02 г.	62,85	Сондаж – 6	CARUS 282 - 283
10	423	17.06.02 г.	62,68	Сондаж – 6	DIOCLETIAN 284 – 305
11	424	18.06.02 г.	62,65	Сондаж – 6	SEVERNA 270 - 275
12	425	18.06.02 г.	62,50	Сондаж – 6	PROBUS 276 – 282 г.
13	426	18.06.02 г.	62,80	Сондаж – 6	AVRELIAN 270 – 275
14	427	19.06.02 г.	62,30	Сондаж – 6	PROBUS 276 – 282 г.
15	428	03.07.02 г.	64,30	Сондаж - 3	LICINIUS I 308 – 324
16	429	03.07.02 г.	64,30	Сондаж - 3	PROBUS 276 – 282
17	430	04.07.02 г.	64,15	Сондаж - 3	AVRELIAN 270 – 275
18	431	04.07.02 г.	64,05	Сондаж - 3	MAXIMIANUS 286 - 305
19	432	09.07.02 г.	63,85	Сондаж - 3	AVRELIAN 270 – 275
20	433	22.07.02 г.	63,62	Сондаж - 3	DIOCLETIAN 284 – 305
21	434	22.07.02 г.	63,68	Сондаж - 3	AVRELIAN 270 – 275

Fig. 26. List of the coin finds from the 2002 excavations (Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Col. № 458, p. 11/22)

In 2015 the inner corner tower was almost entirely unearthed and it was found out that 3 massive buttresses had been built on its western and northern sides at a later time, which is explained by forced measures taken as a result of some natural cataclysm (earthquake or landslide). During the same campaign a small section of the western wall of the fortification was revealed, immediately north of the rounded corner[118] (**Fig. 27**). It is significantly thinner than the southern one, with a thickness of 2.30 instead of 3.60 m[119].

The excavations in the same sector were renewed in 2020 and continued until 2022[120]. The research area was significantly expanded, covering terrains both inside and outside the forti-

[117] Петков 2015, 416.

[118] Петков 2016, 455–456, обр. 2.

[119] The thickness of the wall is mentioned only in the detailed report and field diary (dated 17.11.2020) attached to the field documentation for the 2020 excavations (Върбанов/Митев 2020).

[120] Only a report about the first campaign has been published (Върбанов/Митев 2021a). Those for the next two campaigns are still in print in the series "Археологически открития и разкопки". I express my heartfelt gratitude to the head of the excavations Dr. Varbin Varbanov for allowing me to use for the purposes of this study not only the reports submitted for publication, but also all the full field documentation for the studies in 2020 – 2022, copies of which are stored at the Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences.

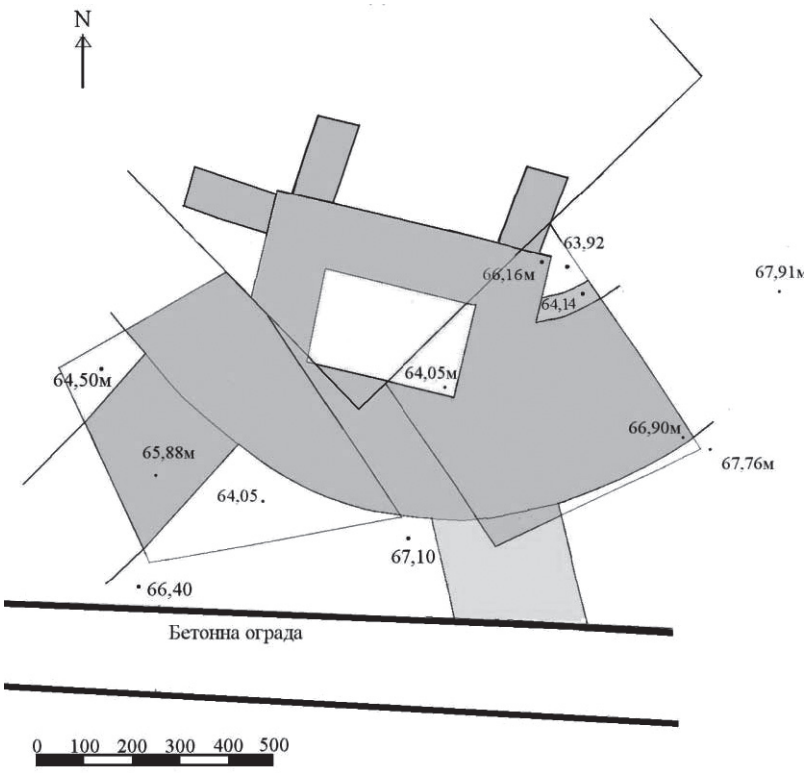


Fig. 27. The towers at the southwestern corner (surveys in 2014–2015) (after ПЕТКОВ 2016, 456, обр. 2)

Fig. 28. The southwestern sector (state of research by November 2022) (photo by Varbin Varbanov)

fied territory (**Fig. 28**). In both zones sterile soil was reached in some places[121]. A new section of the western curtain wall with a length of about 7 m was unearthed. The inner corner tower was completely explored. The foundation level of its walls was reached inside it. It was established that they are dug into sterile loess down to an elevation of 61.90–61.80 m. There is a narrow plinth between the sub- and superstructure of the western and northern walls, lying at a level of 63.70 m. A little below, at an elevation of 63.64–63.48 m, a thin layer of mortar is registered, which is assumed to probably mark the floor

[121] Върбанов/Митев 2022.

Fig. 29. A plinth separating the sub-from the superstructure on the inside of the fortress wall east of the southwestern corner tower (photo by Varbin Varbanov)

level in the time of construction[122]. Judging by the fact that the layer is of uneven thickness and is not aligned in horizontal plane, as well as by the presence below it and above the sterile of a cultural layer, which also contains pottery from the Roman period, this seems to be in my opinion more likely a construction level directly related to the very construction of the tower. In 2022, at an elevation of 63.50 m, a plinth was discovered separating the sub- from the superstructure of the fortress wall on its inside, to the east of the tower[123] (**Fig. 29**).

A significant difference was registered during the excavations in 2020–2022 in the structure of the cultural layers within and outside the outlines of the fortress.

To the west of the western fortress wall, where the terrain drops sharply and it is assumed that a defensive ditch had once existed, below the layer with destructions from the end of the 6th century there follows another one with few finds (mainly small sherds of Late Roman pottery (**Fig. 30**). The coins originating from it date to the end of the 4th – the first half of the 5th century[124]. A lead commercial sealing with unspecified dating in the 4th century from the city of *Sebennytos* in Lower Egypt was found together with them[125]. The situation in front of the south fortress wall, where the terrain is flat, is different (**Fig. 31**). Here the earliest layer is from the 4th century. At the end of the century or rather in the beginning of the 5th century a building probably with economic func-

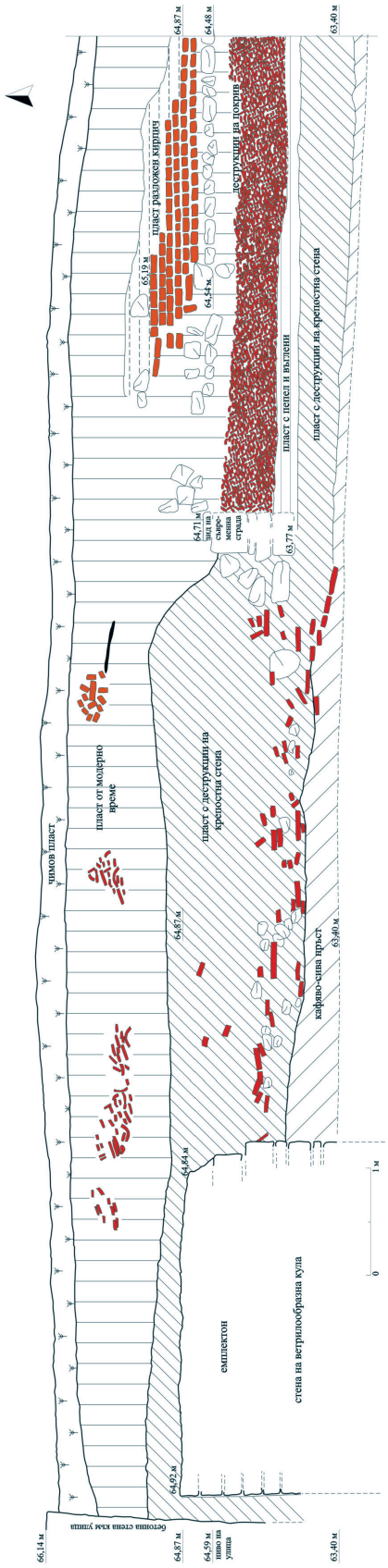


Fig. 30. Western profile of the area surveyed in 2013–2014 and 2020 (after ВЪРБАНОВ, Митев 20216, 292, обр. 2)

[122] Върбанов/Митев 2021a, 624; Върбанов/Митев 2021c; Върбанов 2022, 45.
[123] Върбанов/Митев 2022.
[124] Върбанов 2024, 51.
[125] Върбанов/Митев 2021b.

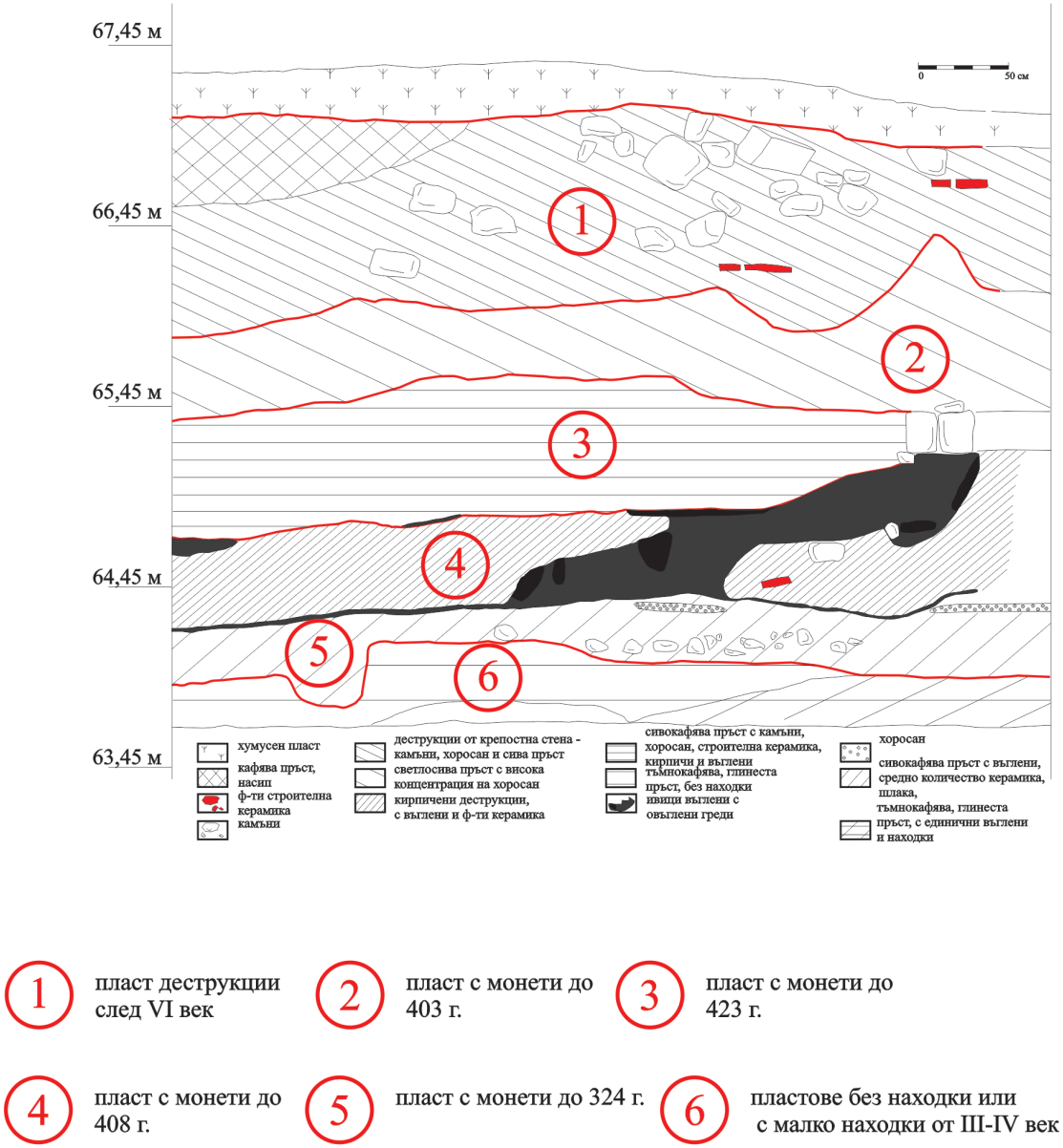
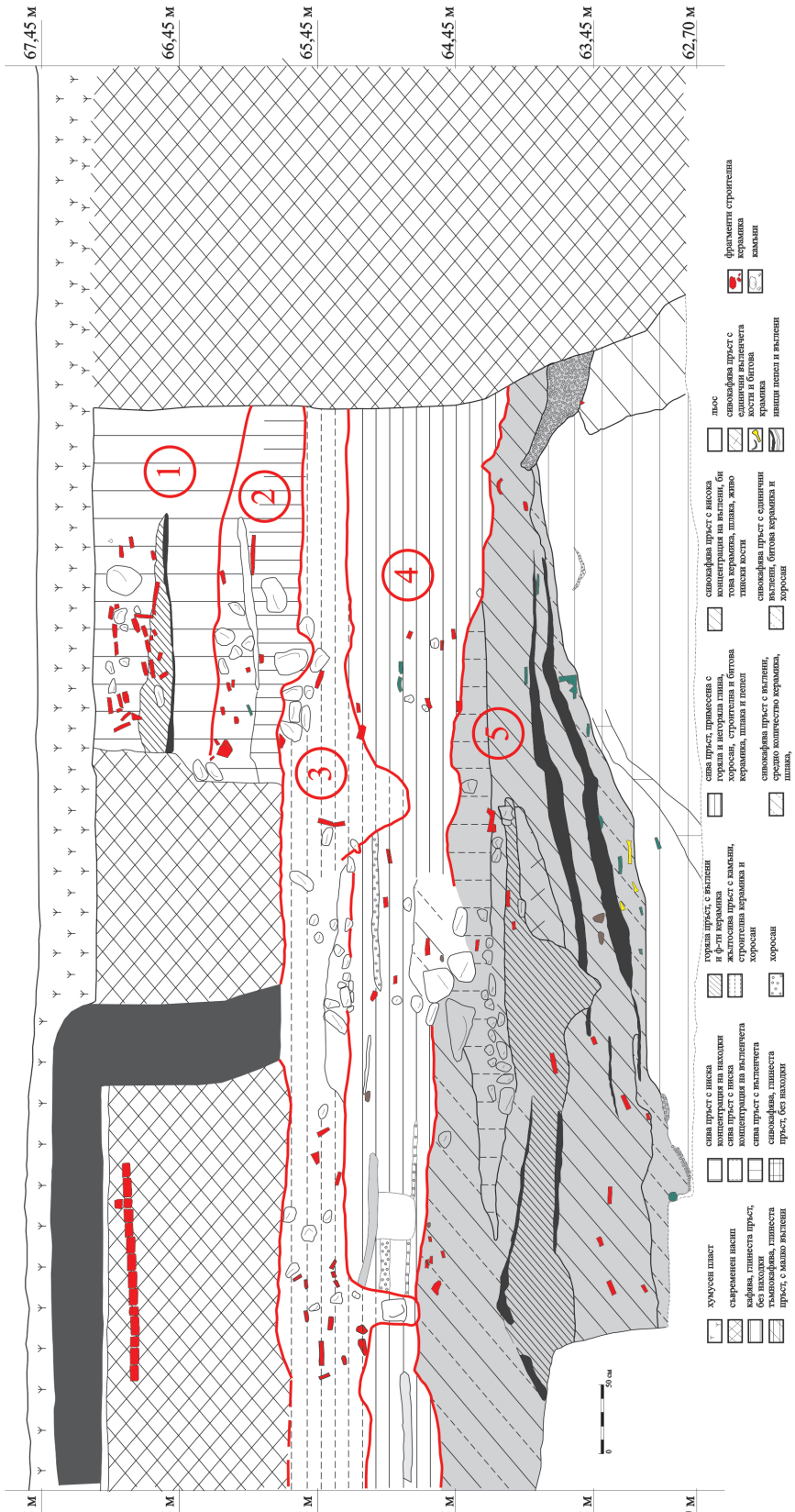


Fig. 31. Southern stratigraphic profile in square I_2 (outside the fortress wall) (after ВЪРБАНОВ 2024, 70, обр. 2)

tions was added to the wall. Only about 5% of the total amount of pottery acquired during the excavations is found outside the fortress walls, with almost all sherds dating to the Late Roman and Early Byzantine periods[126].

The picture within the outlines of the fortress is completely different (**Fig. 32**). A large number of stratified coin finds, which have been duly published, helps to refine the dating of the registered levels[127]. The earliest layer here is over 1.0 m thick in places. It contains finds and pottery from the 1st – early/mid-2nd centuries, with over 50% of the pottery discovered in 2020–2022 (which exceeds 12000 fragments) being associated with exactly this layer. Both

[126] Върбанов 2024, 51.
[127] Върбанов 2021; Върбанов 2022; Върбанов 2024.



1 пласт с монети до средата на V век

2 пласт с монети до 375-378 г.

3 пласт с монети до 276-282 г.

4 пласт с монети до средата на III век

5 пласт с монети и находки от втората половина на I - началото на II век.

Fig. 32. Northern stratigraphic profile in squares II_1-II_2 (inside the fortress) (after ВЪРБАНОВ 2024, 70, обр. 2)

local forms and types characteristic of the period as well as imports are attested. The dating of the coins from the layer does not exceed the end of the 1st century, but all the specimens bear traces of continuous circulation[128]. It is important to note that there is an impressive series of objects with a purely military purpose among the finds (fasteners and plates from *loricae*, bronze decorations from military equipment, a bone application from a sword scabbard, 17 ceramic slingshots[129]), which have good parallels from various fortified sites within the Roman Empire from the period of the Early Principate[130].

No detached layer from the middle and the second half of the 2nd century has been registered so far, but there are two layers associated with the occupation of the site in the 3rd century. The latest coin from the former one is of Julia Mamaea, and from the latter – of Probus[131]. One or possibly two consecutive levels are certainly attributed to the 4th century. The last preserved cultural layer inside the fortress is from the first half of the 5th century[132]. The stratigraphy upwards has been completely destroyed by numerous deep diggings and construction activities from the 19th and 20th centuries, but individual finds from the compromised uppermost layers give researchers reason to assume that the occupation of the fortress continued until the end of the 6th century[133].

The excavations in 2020–2022 prove the existence of earlier levels only within the outlines of the fortress. The absence of early layers and finds in the adjacent territory *extra muros* completely excludes the possibility that the fortress was built over an earlier settlement. The dating and the very nature of the finds undoubtedly testify to military occupation of the terrain long before the end of the 3rd century, when the construction of the fortress has been traditionally dated to for some twenty years[134]. The study of the southwestern sector convincingly leads to the conclusion that the so-called south fortress wall of *Transmarisca* with its internal towers belongs to an Early Roman military camp[135]. Its construction is dated by the researchers to the second half of the 1st[136] or rather to the end of the 1st century, but it is not excluded that the camp might have had an earlier earth-and-timber phase[137]. It underwent a significant reconstruction in the 4th century, as a result of which the internal towers were abandoned and partially dismantled and external ones were added to the fortress wall instead of them, with a shape characteristic of the period and corresponding to contemporary trends in the development of fortification art.

A very important ascertainment was made during the survey in the southwestern sector in 2020. It was established that the early corner tower is not entirely internal, but its front protruded 0.40 m in front of the fortress wall, the thickness of which here is 2.65–2.70 m (**Fig. 33**). A direct parallel was drawn with the situation in front of the partially excavated in 2001 and 2003 inner tower located behind the later U-shaped tower in the eastern section of the fortress wall. A similar protrusion is also present there, but with a width of 0.25 m. However, it was not recognized by the surveyor as an integral part of the tower (considered a "buttress" or "battle landing"), but was interpreted as a "bend" along the course of the fortress wall[138]. The southwestern

[128] Върбанов 2024, 52–56.
[129] They are published and commented on in: NANKOV 2023, 64–77, 119–122.
[130] Върбанов 2024, 50–53.
[131] Върбанов 2024, 53.
[132] Върбанов 2024, 54.
[133] Върбанов/Митев 2021a, 623; Върбанов/Митев 2021b, 288.
[134] Even now, completely neglecting the findings of the latest excavations, some researchers continue to keep to the old dating hypothesis (Трайкова 2024, 24–25).
[135] Върбанов/Митев 2021a, 624; Върбанов 2021, 174; Върбанов/Митев 2021c; Върбанов/Митев 2022.
[136] Върбанов/Митев 2021a, 624; Върбанов 2021, 174.
[137] Върбанов/Митев 2022.
[138] Петков 2010a, 56.

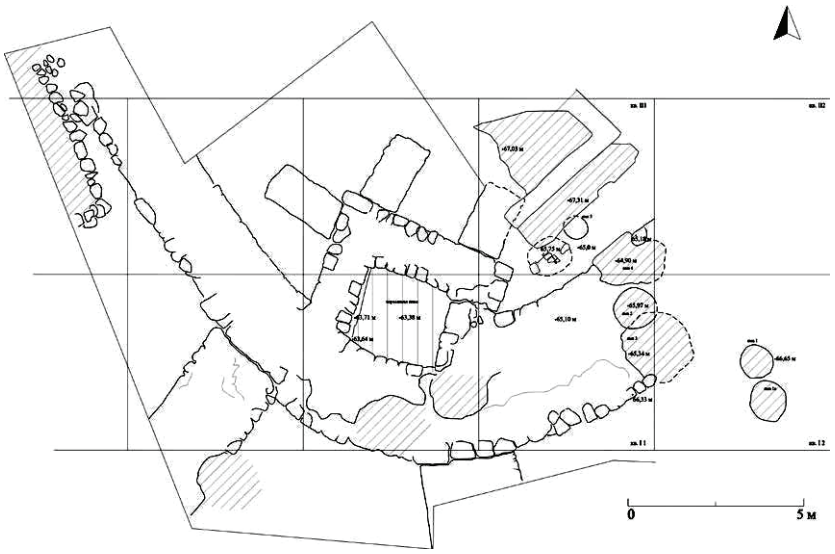


Fig. 33. The southwestern inner corner tower (state of research by November 2020) (after ВЪРБАНОВ, МИТЕВ 2021а, 623, обр. 1)

end of this projection is not marked on the attached plan, and the fortress wall west of the U-shaped tower is depicted with an increased thickness (**Fig. 21/1**). This is not true, which is quite clearly discernable both on ground and on the here attached aerial photograph (**Fig. 21/2**). Another similar feature, again defined as a "0.25 m bend", was also recorded on the outside of the excavated part of the rounded southeastern corner of the fortress wall[139]. In view of the above-mentioned, this should be interpreted as a reliable indication of the location of the southern wall of the still undiscovered southeastern corner tower of the Early Roman military camp.

The data presented in the previous publications about the fortress wall itself are very scarce and mainly concern its rarely met thickness in superstructure. As for its structural characteristics, the authors find it enough to laconically note that it is built in the same technique as the studied sections of the north curtain wall[140]. In reality, that is not the case at all, which is clear evidence of their asynchronism. Let me remind: in its original form, the revetment of the superstructure of the north fortress wall is of roughly processed limestone blocks with average dimensions of 0.30 × 0.30 × 0.30 m placed in horizontal rows, while the bonding material in the emplekton is white mortar containing an admixture of large pieces of building pottery. At least in some sections, there is certain evidence that the construction was in *opus mixtum* with a belt of 4 rows of bricks[141]. The faces of the south and the adjacent western fortress walls of the Early Roman military camp are also made of stone blocks placed in horizontal rows, but they are made of both white limestone and yellow sandstone, and are distinguished by very good workmanship. In addition, the blocks are of significantly larger dimensions, often reaching and sometimes exceeding 0.60 × 0.40 m in frontal projection (**Fig. 34**). Gray-white mortar is used for their bonding, which is abundantly mixed with fine river rubble but did not contain any ceramic fraction (**Fig. 35/1–4**). The joints on the face of the construction are coated with gray-white lime-and-sand mortar without rubble (**Fig. 35/5–6**). The emplekton is made of small and medium-sized quarry stones. It is also worth noting that it is not tightly rammed and there are cavities in places (**Fig. 36**). Probably for that reason, transversely placed wooden beams were used to strengthen its structure in the section of the fortress wall east of the later added U-shaped tower. This was not noticed by the researchers, but is clearly visible on a photograph in one of their publications[142] (**Fig. 37**).

[139] Петков 2010а, 57.

[140] Вагалински/Петков 2002, 89; VAGALINSKI/PETKOV 2006, 108; PAUNOV 2007, 145; Петков 2010а, 55.

[141] VAGALINSKI 1999, 232.

[142] VAGALINSKI/PETKOV 2006, 108, fig. 5.

Fig. 34. Structure of the fortress wall of the Early Roman military camp: 1. Outer face of the south fortress wall east of the southwestern corner tower (photo by Varbin Varbanov, 2022); 2. Outer face of the southern fortress wall east of the southwestern corner tower (photo by Sergey Torbatov, 24.03.2025); 3. Outer face of the western fortress wall north of the southwestern corner tower (photo by Sergey Torbatov, 24.03.2025 г.); 4. Inner face of the south fortress wall east of the southwestern corner tower (photo by Varbin Varbanov, 2022); 5. Outer face of the south fortress wall within the later U-shaped tower (Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences, Col. № 458, p. 19/22); 6. Outer face of the north wall of the southwestern corner tower (photo by Varbin Varbanov, 2022)

Based on the available information about the historical development of the Lower Danube lands during the Early Roman period and the strategic importance of this place for the defense of the northern border of the Roman Empire, an opinion has been since long imposed in the scientific literature that *Transmarisca* came into being as a military centre probably as early as the Flavian period[143] or at the end of the 1st – the beginning of the 2nd century at the latest[144]. The new archaeological research in Tutrakan not only convincingly confirms the existence of an Early Roman military camp in *Transmarisca*, but moreover provides reliable information about

[143] VELKOV 1973, 266; SARNOWSKI 1988, 43; VELKOV 1993, 137.
[144] POLASCHEK 1937, 2172; Георгиева 1977, 54.

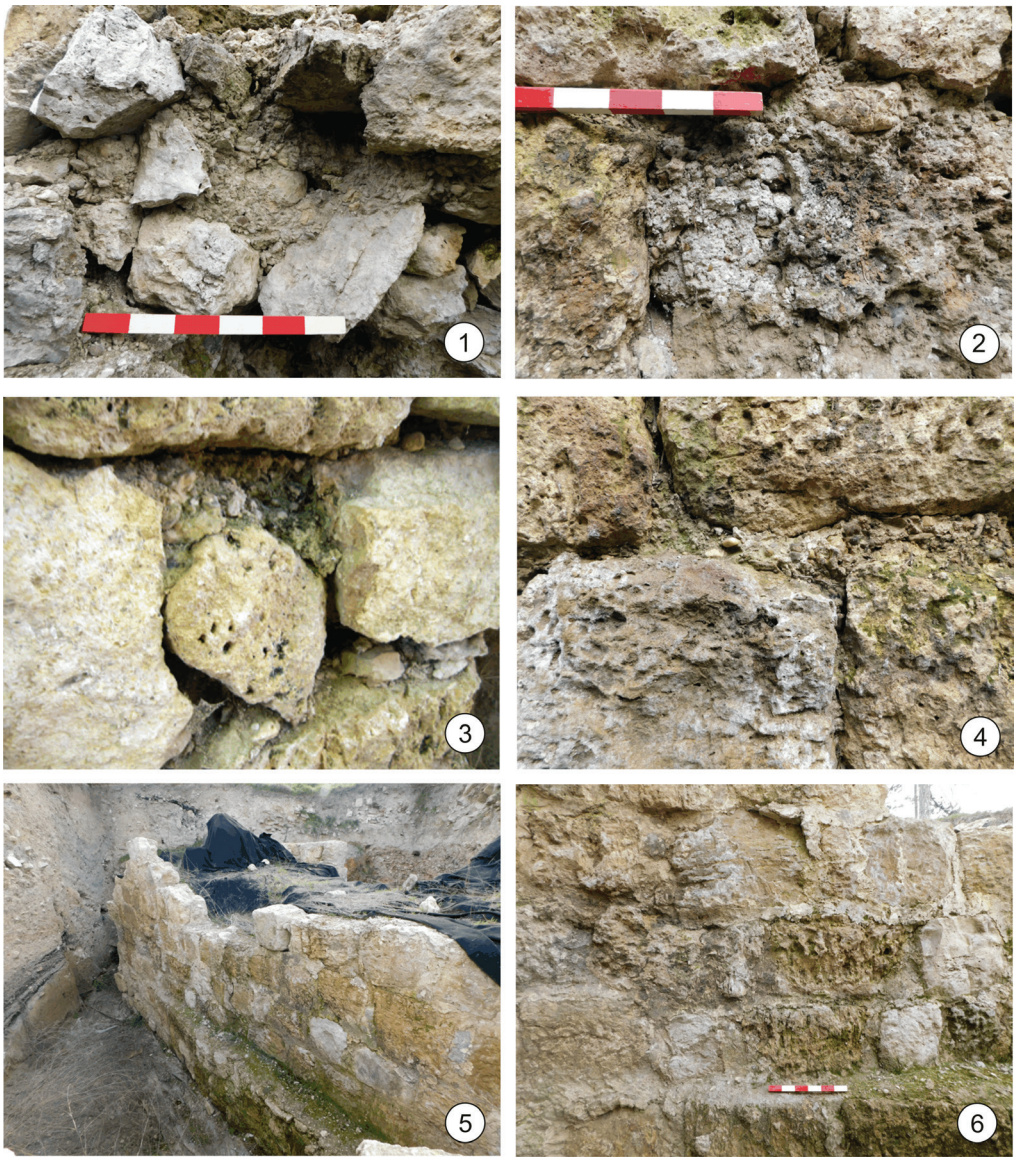


Fig. 35. Structure of the mortar used in the construction of the south fortress wall of the Early Roman military camp: 1. Southwestern corner, emplecton (photo by Sergey Torbatov, 24.03.2025); 2. Southwestern corner, outer face (photo by Sergey Torbatov, 24.03.2025); 3. East sector, inner face (photo by Sergey Torbatov, 24.03.2025); 4. Southwestern corner, inner face (photo by Sergey Torbatov, 20.06.2024); 5–6. Southwestern corner, inner face (coating of the joints) (photos by Sergey Torbatov, 24.03.2025)

its location. It is built on a high plateau-shaped terrace with a gentle slope from southeast to northwest, rising more than 45 m above the Danube River bed and located some 0.2 km from the river bank. The camp's area is estimated at about 2.0–2.5 ha and its remains occupy the territory between the modern streets Kreposta, Strandzha, Ropotamo and Alexander Stamboliyski[145]. The course of the south fortress wall is established for certain and considerable sections of it are archaeologically studied (the southwestern and partially the southeastern corner, 34 m of the wall at the eastern end). According to the canons of Roman fortification from the period of the Early Principate, the corners of the camp are rounded, and the towers – internal, in this

[145] Върбанов 2021, 174.

Fig. 36. Structure of the emplacton of the south fortress wall of the Early Roman military camp at the southwestern corner (photos by Sergey Torbatov, 24.03.2025)

particular case slightly protruding in front of the fortress wall. Two of the towers are excavated – one at the southwestern corner, and the other some 18 m west of the southeastern corner. There is reliable evidence about the existence of a internal tower at the southeastern corner, too. A part of the western fortress wall has also been unearthed. The camp is oriented with its longitudinal axis in the east-west direction and its length is about 160 m. The course of its north wall should be identified with great confidence with the fortification remains accidentally discovered during construction activities in the 1960s in several neighbouring land properties located south of Alexander Stamboliyski Street[146]. Those remains are identified in the publication with a "second southern wall", but a "first southern wall" (located south of it) simply does not exist. The idea of its existence is formulated on the basis of ruins of fortress walls discovered in the courtyards of the Tutrakan residents Bahri Nazifov and Sabri Yuseinov[147]. The house of the former however partially overlies the western wall[148], and the land property of the second one is located to the east outside the scope of the Early Roman military camp. The remains reported there most likely belong to a bend in the course of the east fortress wall of *Transmarisca*, which was built in the Late Roman period. Judging by the available information and the topographical features of the terrain, the north wall of the Early Roman military camp would have closely followed the edge of the natural plateau-shaped terrace. The once visible fortification remains in *opus mixtum* in the back part of the courtyard of the Tutrakan citizen Mariyka Maneva[149] are located at the

[146] Змеев 1969, 48.
[147] Змеев 1969, 48.
[148] This is explicitly mentioned in the cited article by R. Zmeev from 1969 (Змеев 1969, 48). The address of the land property is 21–23 Ropotamo Street. The information has been confirmed by the current residents here to Dr. Varbin Varbanov during his recent research of the southwestern sector.
[149] Змеев 1969, 47–48, обр. 2

Fig. 37. Structure of the emplacton of the south fortress wall of the Early Roman military camp east of the later U-shaped tower (after VAGALINSKI, PETKOV 2006, 108, fig. 5)

junction of the west and north fortress walls. In all likelihood, they belong to a later external tower, similar to the situation at the southwestern and southeastern corners. The width of the camp in the north-south direction does not exceed 120 m. Its protected area is a little more than 1.9 ha, which fits well into the standards for accommodating an auxiliary military unit of the *cohors quingenaria* category (both *peditata* and *equitata*) during the Principate, with the possibility of also housing a *cohors milliaria peditata* or *ala quingenaria*[150].

So far, no data have been published that would be able to accurately determine the time of construction of the Early Roman military camp attested in *Transmarisca*. As already was stated, its coming into being is generally attributed to the second half or rather to the end of the 1st century AD, but the possibility is not excluded that the stone fortification reproduces the plan of an earlier earth-and-timber one. In my opinion, the presence of a layer with Roman materials below the mortar level registered in the southwestern corner tower, which is chronologically related to its construction, is a very serious argument in this direction. Even more symptomatic is the layer of densely rammed brown clay soil without finds recorded at the lowest level in squares II_1 and II_2 (beneath the layer with materials from the 1st – early/mid-2nd century), which rises sharply in height from an elevation of 62.70 to about 64.00 m in direction towards the stone fortress wall. It is important to note that this is much higher than the level of the internal plinth of the wall recorded at the southwestern corner (63.50 m) (**Fig. 32, 38**). The structure, specific configuration and stratigraphic position of this embankment give me reason to identify it with remains of an internal rampart typical of the Early Roman fortification, intended to reinforce and provide convenient access to a once existant earth-and-timber fortress wall, which was subsequently dismantled and replaced with the now preserved stone one.

The quadrangular plan with rounded corners (the so-called "playing-card" design) is a typical feature of Roman military fortifications from the Principate to the Severan period and is found in both earth-and-timber and stone camps[151]. However, the plan of the Early Roman

[150] BENNETT 1986, 710, 712; RICHARDSON 2004, 37–40.
[151] LANDER 1984, 12, 114.

Fig. 38. A layer of densely rammed brown clay soil rising towards the stone fortress wall of the Early Roman military camp – a probable internal rampart of an earlier earth-and-timber fort (photo by Sergey Torbatov, 24.03.2025)

stone military camp at *Transmarisca* displays some other characteristic features that could be used as relative chronological indicators. These are the slight protrusion of the corner and intermediate towers as well as the unusually large thickness of the south fortress wall.

The earliest examples of reconstruction of pre-existing earth-and-timber camps in stone date back to the Flavian period[152] and the earliest military camp in the Roman Empire originally built of stone is considered to be the so-called "Eastern Fort" at *Lambaesis* in North Africa, with the construction of which a building inscription from 81 AD is associated[153]. Stone fortification construction gained momentum during the reign of Trajan and in many cases, it was not a mere rebuilding but a completely new construction *a fundamentis*[154]. While the partial projection of the towers at the gates is known already from earlier monuments of the Roman fortification architecture, this became a widespread practice precisely in the time of Trajan[155]. The earliest evidence for a slight projection of the intermediate towers is from the stone phase of the legionary camp *Vindonissa*, whose complete reconstruction is associated with the accommodation there of *legio XI Claudia* and is placed in the period after 72 AD[156]. By the way, this is the only surely known example from the Flavian period so far. Slightly projecting intermediate and corner towers however appear in a number of military camps in various parts of the Roman Empire owing their emergence or reconstruction in stone to the fortification activities of Emperor Trajan: in *Germania Superior* – Benningen[157], Bad Cannstatt[158], Waldmössingen[159]; in *Pannonia Superior – Carnuntum* (the auxiliary camp)[160]; in *Moesia Superior – Diana*[161], *Pontes*[162]; in *Dacia – Drobeta*[163] and perhaps *Arcidava*[164]. Although in decreasing progression, the same architectural concept is also witnessed in later monuments of Roman fortification art from the period of the Principate: from the time of Hadrian – in *Arutela*[165], Copăceni (*Praetorium* I?)[166], Răcari[167] and Racoviţa[168] (*Praetorium* II?) in *Dacia Inferior*, Gherla in *Dacia Porolisensis*[169] and perhaps *Campona* in *Pannonia*[170]; from the reign of Antoninus Pius – *Arcobadara* in *Dacia*[171] and probably *Abusina* in *Raetia*[172]; from the time of Marcus Aurelius – Albing in *Raetia*[173]; and from the time of Septimius Severus – Cămpulung in *Dacia*[174]. The emergence of the military camp near *Lugdunum Convenarum* in *Gallia Aquitania* is currently dated to the period

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[152] LANDER 1984, 22–28; MORILLO/GARCIA-MARCOS 2005, 571–573.
[153] LANDER 1984, 24.
[154] LANDER 1984, 32 et sqq.
[155] LANDER 1984, 24, 28, 47.
[156] LAUR-BELART 1935, 20–24; HERZIG 1946–1947, 53–58; TRUMM 2015, 98; TRUMM 2024, 313.
[157] PLANCK 2005a, 35–37.
[158] FILTZINGER 2005, 327–331.
[159] PLANCK 2005b, 311–314.
[160] STIGLITZ 1986, 419; KANDLER 2003, 58.
[161] Ранков 1980, 51–79; GUDEA 2001, 75–78.
[162] Гарашанин/Васић 1980, 7–24; Гарашанин ET ALII 1984, 25–54; Гарашанин/Васић 1987, 71–84; GUDEA 2001, 78–79.
[163] VLĂDESCU 1986, 12–16; GUDEA 2001, 81–85
[164] BOGDAN CĂTĂNICIU 1981, 12, 41; GUDEA 1997, 26–28; NEMETH 2005, 689–691; ŢENTEA ET ALII 2023, 770–773.
[165] VLĂDESCU 1986, 46–60; MARCU 2009, 178.
[166] VLĂDESCU 1986, 68–70; ŢENTEA ET ALII 2021, 36; ŢENTEA ET ALII 2022B, 558–559.
[167] VLĂDESCU 1986, 26–29; BENEA 1999, 172.
[168] VLĂDESCU 1986, 70–79; MARCU 2009, 209; ŢENTEA ET ALII 2021, 33–35.
[169] PROTASE ET ALII 2008, 33–42.
[170] FÜLEP 1976, 92–93.
[171] GĂZDAC ET ALII 2011, 1–2.
[172] GSCHWIND 2004, 275.
[173] KANDLER/VETTERS 1986, 105–109.
[174] ŢENTEA ET ALII 2022a, 205–209.

of Marcus Aurelius – Septimius Severus[175] and there is no data about those in Feldioara in *Dacia*[176] and Mauer an der Url in *Noricum*[177].

It is evident from the above-presented information that the boom in the construction of military camps with slightly protruding corner and intermediate towers coincides with the early period of the reign of Emperor Trajan. The earliest application of this pattern is in *Vindonissa* and dates back to the 70s of the 1st century, but this is the only one known so far example from the Flavian period.

The incredibly large thickness of the south fortress wall of the Early Roman military camp in *Transmarisca* (3.60 m) is another problem of special interest. The fact that the western wall has a normal thickness of 2.30 m suggests that we most probably have to do with a special engineering solution in this particular case, consistent with objective assessment of the actual geomorphological features of the terrain, which is highly susceptible to landslide processes. In fact, exactly that must have caused the cracking of the southwestern corner tower and necessitated its subsequent strengthening with buttresses.

In Flavian times the average thickness of the stone fortification walls was less than 1.50 m. That of the so-called "Eastern Fortification" at *Lambaesis*, amounting to 2.50 m, has long been considered a special exception[178]. However, the wall of the repeatedly mentioned legionary camp *Vindonissa* is 3.60 m thick[179] – exactly as much as that of the Early Roman *Transmarisca*, but that might be a mere coincidence. The military camps from the time of Trajan have an average wall thickness of 1.40 m[180]. The newly built under Hadrian auxiliary camp at *Gemellae* along the *Fossatum Africae* however has walls no less than 2.75 m thick[181]. The walls of the so-called milecastles along the Hadrian's Wall in Britain are also more than 3 m thick[182]. The military camp *Rapidum* in North Africa (built in 122 AD) presents a special case. The thickness of its fortress wall is 1.60 m but in the rounded corners, in order to strengthen them, it is significantly increased and exceeds 4.00 m[183]. Another interesting example is the legionary camp Albing in *Noricum*, built during the Marcomannic Wars of Marcus Aurelius. While the rest of its sides are protected by walls 1.80 m thick, the one in its northeastern part (facing the possible attacker) is 3.15 m[184].

The examples mentioned show that the thickness of the fortress wall was determined by various reasons and is not a reliable chronological benchmark. In any case, there is no evidence for anything similar to the south fortress wall of the Early Roman military camp in *Transmarisca* among the monuments of Roman fortification from the Principate period after the time of Marcus Aurelius.

The first epigraphically attested military unit stationed in *Transmarisca* is *cohors I Thracum Syriaca equitata*, with whose residence at this place is associated a votive altar dedicated to an unknown deity by the cohort through its prefect C. Navius Quadratus[185]. The monument is not precisely dated and is generally referred to the 2nd century. Before its appearance in *Moesia Inferior* this military unit camped for a long time in *Timacum Minus* in *Moesia Superior*.

[175] SCHAAD/SOUKIASSIAN 1990, 104–109; SCHAAD 1991, 171–172; SCHAAD/SCHENCK-DAVID 2003, 142, 150.
[176] VLĂDESCU 1986, 80–81; GUDEA 1997, 68–69; ȚENTEA ET ALII 2021, 23–25.
[177] KANDLER/VETTERS 1986, 117–119.
[178] LANDER 1984, 24.
[179] TRUMM 2015, 98; TRUMM 2024, 313.
[180] LANDER 1984, 46.
[181] TROUSSET 1977, 561.
[182] LANDER 1984, 58.
[183] SESTON 1928, 154–157.
[184] KANDLER/VETTERS 1986, 105–109.
[185] ADAMEŞTEANU 1938, 451–452.

Its relocation from there is associated with the Dacian Wars of Emperor Trajan or with events immediately after them. Some researchers date the arrival of the cohort in *Transmarisca* as early as 106 AD and place it in the context of Trajan's reorganization of the limes[186]. However, there are strong reasons to assume its temporary residence in *Acidava* in *Dacia* as well as participation in Trajan's Parthian War in 115 AD, which makes it more plausible to assume that it was stationed in *Transmarisca* only at the beginning of Emperor Hadrian's reign[187]. Its stay in *Moesia Inferior* is attested by a series of military diplomas, the earliest of which is from 125 AD and the latest from 157 AD[188]. It has been suggested that the cohort may have continued to reside in the province, with a permanent camp in *Transmarisca*, until the end of the 2nd/the beginning of the 3rd century[189], during the 2nd and most of the 3rd century[190] and even until the end of its existence[191], but there is no reliable data for this.

If the above presented historical reconstruction of the movements of *cohors I Thracum Syriaca equitata* is correct, its appearance in *Transmarisca* in no way agrees with the archaeological data on the emergence of the first military camp here. It is also difficult to accept that this military unit is in any way connected with the construction of the archaeologically attested stone camp. The problem with the earliest military presence at this site is still subject to clarification.

Concluding remarks

The first written evidence of the existence of a settlement with the name Τρομάρισκα/Τραμαρίσκα is in the work "Geographical Guide" by Claudius Ptolemy[192]. As is well known, this work was completed in the early years of the reign of Emperor Marcus Aurelius but the information about Moesia Inferior in it reflects the situation in the province in the time after the Dacian Wars of Emperor Trajan (in the late-Trajanian or early-Hadrianic period). The author designates the settlement as a "city" (*πόλις*) and the majority of Ptolemaic *πόλεις* are considered to have been centres of territorial subdivisions with quasi-municipal organization but without a real urban centre, which might have been based on old traditions of tribal division[193]. This suggests that the predecessor of *Transmarisca* already existed in the pre-Roman era and was a significant settlement and a kind of centre of the surrounding area.

The earliest known settlement in the territory of nowadays Tutrakan dates back to the Early and Late Iron Ages. Its remains have been registered in the northwestern periphery of the modern town, on the gravel bank of the Danube River opposite the island of Tutrakan[194]. Its existence was confirmed during the excavations within the scope of the north fortress wall of *Transmarisca* but only in one of the trenches – trench I from 1989/1990, which is located in the westernmost part of the studied area[195]. Therefore, the settlement must have occupied an area in a westerly direction from the currently discovered and exhibited fortress remains. There is currently no data on whether it also extended southwards, onto the second floodplain. It is very likely that it continued to exist during the initial period of Roman rule, as evidenced by the Italian imports from the middle and the beginning of the second half of the 1st century found at the same place. Materials of the kind have not been found during the excavations in eastern

[186] ZAHARIADE 2009, 151.
[187] MATEI-POPESCU 2010, 233–234; MATEI-POPESCU/ŢENTEA 2018, 71.
[188] MATEI-POPESCU 2010, 233–234; MATEI-POPESCU/ŢENTEA 2018, 71.
[189] MATEI-POPESCU 2010, 234–235.
[190] ZAHARIADE 2009, 151.
[191] WHATELY 2016, 49.
[192] Cl. Ptol. Geogr. III, 10, 11 – ed. Nobbe; Cl. Ptol. Geogr. III, 10, 5 – ed. Müller.
[193] Геров 1980, 65–101; MROZEWICZ 1982, 71–75; BOGDAN CĂTĂNICIU 1991, 62–63.
[194] Георгиева/Бъчваров 1985, 74.
[195] VAGALINSKI 1999, 232.

direction[196] but isolated structures from the 2nd–3rd centuries are recorded here, although there is no data for a normally deposited cultural layer from that time[197].

The problem with the exact location and territorial scope of Roman *Transmarisca* has not been satisfactorily resolved. It is also unclear whether it is a direct successor to the settlement that existed here in the pre-Roman era and in the early decades of Roman rule. Its emergence and development are directly related to the construction of a military camp at this strategically important place. According to ground surveys from the beginning of the 20th century, Roman *Transmarisca* must have been located on the second floodplain of the Danube, south of the steep slope towards the river. This place occupies the highest part of the then urban territory of Tutrakan and was known among the local population in the past under the name *Cetate* ("fortification" in Romanian). Remains of walls, bricks, household ceramics and coins (Roman Republican and Imperial, Early Byzantine of Justinian I) were found here[198]. On the sketch illustrating K. Škorpil's work the area of the settlement is depicted as stretching in an easterly direction to the main town Christian temple of Tutrakan – the church of St. Nicholas[199] (**Fig. 39**). However, now there is reliable data that the easternmost part of this territory was once occupied by the eastern Roman and Late Antique necropolis of *Transmarisca*[200].

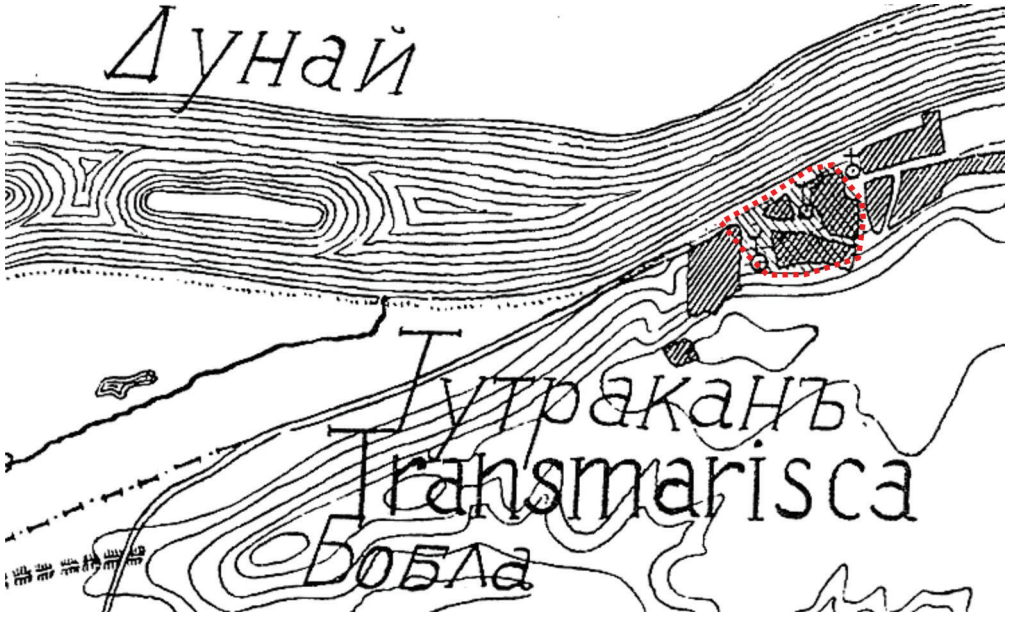

Fig. 39. Sketch of Tutrakan with the location of the remains of the Roman and Late Antique *Transmarisca* (after ШКОРПИЛ 1905, Табл. CXV, 4, I)

The military camp was located immediately south of the civilian settlement, on a higher riverside terrace. The very emergence and development of Roman *Transmarisca* is fairly associated with the construction and functioning of the military camp[201].

According to the available written and epigraphic evidence, the systematic deployment of permanent military garrisons and the construction of the prototype of the Lower Danube

196 Петков 2010а, 38.
197 Трайкова 2024, 28.
198 Ванков 1905, 462–463; Шкорпил 1905, 450.
199 Шкорпил 1905, Табл. CXV, 4, I.
200 Змеев 1987, 19; Вагалински/Динчев 1995, 32; Петков 2010а, 48.
201 VELKOV 1973, 266; Георгиева 1977, 54.

limes east of the Yantra River date back to the years of Vespasian's reign, but the section of the Danube bank between the mouth of the Yantra River and the Black Sea was under more or less effective military control by the Moesian army already since the liquidation of the Thracian Kingdom and the annexation of the so-called *Ripa Thraciae* to *Moesia* in 45/46 AD. The control in question was carried out through a specially created *praefectura*, subordinate to the Moesian governor. As a typical organism of pre-provincial type, the prefecture aimed to prepare the necessary conditions for full integration of the newly annexed lands, whose administration and overall organization of internal life had been subordinated until then to the traditions and procedures established in the Thracian Kingdom. The adaptive period for the lands covered by the military prefecture in *Ripa Thraciae*, and respectively – the existence of this institution, ended with the delimitation of the territory of the province of *Thracia* in 74 AD, after which they became an integral part of *Moesia* (after 85 AD – *Moesia Inferior*), with all the ensuing consequences[202]. It is hardly a pure coincidence that the earliest epigraphic evidence about the construction of a military camp east of the Yantra River dates back to 76 AD, i.e. very soon after this date. The evidence mentioned is a building inscription from *Appiaria*, which had contained the names of two cohorts and their prefects but only that of the commander of the second cohort survived[203]. It is certain that both cohorts were directly involved in the construction but it is not clear whom the camp itself was intended for. It is also not clear whether it was made of earth-and-timber or stone.

Considering its immediate proximity to *Appiaria* as well as the archaeological context recorded here, the emergence of the first military camp in *Transmarisca* should be attributed to approximately the same time, i.e. to the last years of Emperor Vespasian's reign. According to the analysis of the published data, it was initially an earth-and-timber structure. It is not yet possible to say when exactly the preserved *in situ* stone fortification dates from but most likely it must have already been built before the appearance of *cohors I Thracum Syriaca equitata* in *Transmarisca* at the beginning of Hadrian's reign. A building inscription is known from Tutrakan with a presumed dating from the time of Emperors Valerian I and Gallienus, which was found reused as a *spolium* in a building from the Late Roman period. It is assumed that the inscription is related to the construction or repair of some fortification facility in *Transmarisca*[204]. The only known so far fortification facility that existed and functioned here at that time is the military camp, but its archaeological study provides no confirmation of this hypothesis. However, a few decades later the camp underwent a major reconstruction aimed at bringing it into line with the new trends in fortification art. The inner towers were abandoned, partially dismantled to the then walking level and filled with earth. New projecting towers were erected instead of them – fan-shaped at the corners and U-shaped along the walls. All of them were built in *opus mixtum*. A large number of bricks from the destroyed brick belts have been found during the excavations among their ruins and in the surrounding area, but none of them bears a stamp. The reconstruction is generally dated back to the 4th century, but there is no reliable evidence for exact chronological determination of the act. That is why the assumptions made so far vary widely – between the first and the last quarter of the century. *Ad Statuas*, *Ulcisia Castra* and *Campona* in *Pannonia* are pointed out as good architectural parallels in one of the more recent works, but without comments on their chronology[205].

The military camp at Ács-Vaspuszta, usually identified with *Ad Statuas*, was built under Vespasian and went through two earth-and-timber phases before being rebuilt in stone after 170/178 AD. The construction of external fan-shaped towers is dated back to the time of

[202] For more details on these issues, see: Торбатов 2010, 47–49; Торбатов 2012, 111–113.

[203] Бешевлиев 1952, 71–72, № 122; SHARANKOV 2016, 35–36.

[204] SHARANKOV 2010, 86–89.

[205] Върбанов 2021, 174.

Constantine I or Constantine II[206]. *Ulcisia Castra* underwent a major reconstruction in the 4th century, as a result of which it received external fan-shaped and U-shaped towers and was renamed *Castra Constantia*. This is believed to have happened under Constantine I[207]. The external fan-shaped towers in *Campona* appeared after an enemy attack in 332–333 AD, but it is not clear whether the repair work was undertaken already under Constantine I or in the following decades before the middle of the 4th century[208]. In fact, the examples for such modernization of existing and still functioning fortifications from the period of the Principate are much more numerous and from different provinces. Let us continue with *Pannonia*. *Annamatia* received fan-shaped corner towers after 337–340 AD, but before 350 AD[209]. Such are also attested in *Azaum*, with their construction being placed at the beginning of the 4th century[210]. It is assumed for the Iža-Leanyvar camp (*Celamantia*?) that the reconstruction dates to the time of Constantine I[211], and for *Intercisa* – to around 350/360 AD[212]. The examples from the neighbouring *Noricum* are also not few in number. It is striking however that the proposed dates for most of the sites are very uncertain. While the reconstruction of Zeiselmauer (*Cannabiaca*?) and Traismauer (*Augustianis*) is placed in the time of Constantine I[213], for Tulln (*Commagenis*) only the 4th century is marked[214]. According to more recent studies in Mautern (*Flavianis*) and Zwentendorf (*Asturis*), the reconstruction of the former is generally related to the fifth period in its settlement development, and of the latter – to the fourth period in its settlement development, whose chronological ranges are respectively 260/270 – 360/370 AD and 250/270 – 370/400 AD. It is only assumed in both cases that the new construction might perhaps be related to the reforms of Diocletian[215]. It is pointed out in the case with *Arelape* that the modernization of the *castellum* was carried out after 270/280 AD, without being it possible to specify whether this took place under Diocletian, or under Constantine I[216]. The major reconstruction of the fortification system of *Drobeta* in *Dacia*, carried out according to a very similar design and including complete replanning of the inner space, is last related to the third decade of the 4th century[217].

As can be seen, the above-mentioned examples have a very broad and, in many cases, only hypothetical dating, which makes them unsuitable even for an approximate chronological positioning of the reconstruction of the Roman military camp in *Transmarisca* during the Late Roman period. Given this, another task should be added to the tasks of future archaeological research in Tutrakan – to acquire reliable stratigraphic data in order to clarify this important issue.

The careful analysis of the stratigraphic evidence convincingly proves that the north fortress wall of *Transmarisca* does not date to the period between 292 and 309/310 AD as previously claimed, but to the time after 325/326 AD. It, together with the so-called west and east walls, are integral components of one and the same newly built fortification, added from the north to the military camp that had existed ever since the period of the Principate and was still in function.

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206 GABLER 1989, 636–646; GABLER 2003, 72.
207 SOPRONI 1976, 76–77; LANDER 1984, 248; VISY 2003, 97.
208 FÜLEP 1976, 93; LANDER 1984, 248; KOCSIS 2003, 108; TÓTH 2009, 38.
209 KOVÁCS 2003, 120.
210 BIRÓ 1976, 39.
211 KUZMOVÁ/RAJTÁR 1986, 208–209.
212 LŐRINCZ/VISY 1980, 692; LŐRINCZ ET ALII 1986, 366; VISY 2003, 118.
213 UBL 1977, 260–262; UBL 1997, 221–225; STUPPNER 2011, 131, 137.
214 STUPPNER 2011, 136; SCHOLZ/KRENN 2011, 52.
215 STUPPNER 2011, 131–134; PLOYER 2013, 68, 80–82. The attribution of Traismauer, Zwentendorf, Mautern, Zeiselmauer and Ács-Vaspuszta to the "tetrarchic fortifications" in a new work (DÜRR ET ALII 2022, 167) openly contradicts the facts.
216 SCHMID 2023, 896.
217 ZAHARIADE 1997, 168.

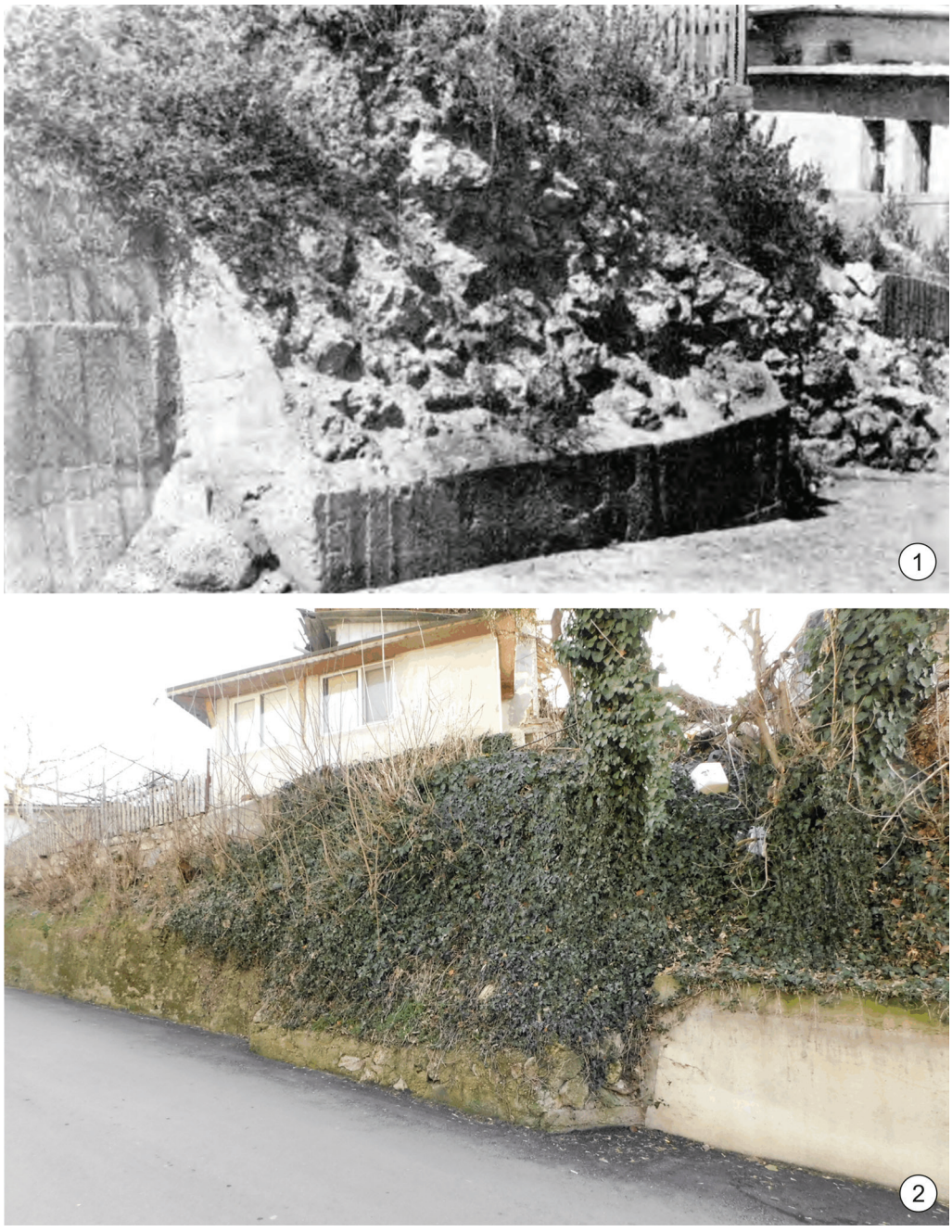

Fig. 40. Remains of the east Late Roman fortress wall of *Transmarisca* on Ivan Vazov Street: 1. State of preservation in 1969 (after ЗМЕЕВ 1969, 46, обр. 1); 2. Modern state (photo by Sergey Torbatov, 13.02.2025)

Sections of the east wall of this new fortification were discovered at several places during construction works in the second half of the 20th century – beneath the so-called Trade Base[218] and along Ivan Vazov Street, Struma Street[219] (**Fig. 7**) and Alexander Stamboliyski Street north

[218] The building occupies the western corner between Kraibrezhna Street and Transmariska Street. It is now used for other purposes.

[219] Змеев 1969, 47.

of the nowadays Kristal Apartment Building[220]. Only a small fragment of these is still preserved on the western side of Ivan Vazov Street (**Fig. 40**). There is reliable evidence that a projecting quadrangular tower was built at this location along the course of the wall[221]. The east fortress wall followed the direction of a natural deep gorge[222], making the digging of an artificial defensive ditch unnecessary. The wall seems to have bent to the west at its southern end[223] and joined the east wall of the military camp at a yet undetermined point.

Since the west wall of the military camp was traced along the upper edge of a steep slope, the west wall of the new Late Roman fortification most likely began from its northwestern corner. It followed from here in a northwestern direction to the Danube bank, where it joined the north fortress wall built at the foot of the steep slope separating the first from the second Danubian floodplain. The notes of M. Vankov from the beginning of the 20th century provide very important information about the course of the west wall. He saw then on the bank of the Danube at the western end of Tutrakan a wall 5–6 m thick, built of hewn stones and mortar on the one side, and of small stones, pieces of bricks and mortar on the other. The wall followed in a straight line to the south. The foundations of the house of Pavel Stoyanov, which was demolished and completely rebuilt in March 1903, lay directly on the wall remains[224]. The house in question has survived to this day and occupies the southeastern corner between Ropotamo Street and Transmariska Street[225]. It is a reliable benchmark for exact determination of the course of the west fortress wall.

It is evident from the presented data that the fortified annex to the military camp in *Transmarisca*, which was built no earlier than the second quarter of the 4th century, had an area of about 5 ha. It had an irregular plan largely consistent with the topographic features of the terrain and included the greater part of the territory with registered traces of settlement habitation during the previous period. In the Late Roman period *Transmarisca* was one of the two main bases of *legio XI Claudia*, in which half of the legion was permanently stationed. Most probably in the time of Constantine I another auxiliary military troop was added to the local garrison – *milites Novenses*[226]. The current state of research does not give grounds to conclude were the newly built Late Roman fortress a military installation or a settlement fortification aimed at ensuring efficient protection of the local civilian population in a period of increasing insecurity and constant threat of sudden barbarian attacks. However, judging by the significant differences in the construction features, the modernization of the already existant military camp and the construction of the fortified annex to it are surely asynchronous, with the former apparently preceding the latter. *Transmarisca* continued to exist in this form until the end of the Late Antiquity, when it finally disappeared from the historical sources (**Fig. 41**).

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220 Петков 2010a, 57.

221 Змеев 1969, 47.

222 Змеев 1987, 18.

223 This is evidenced by the remains registered in the courtyard of the Tutrakan resident Sabri Yuseinov (Змеев 1969, 48) as well as by the fragment of a wall located immediately to the south and parallel to Kristal Apartment Building, which is marked on a plan but not commented on in the text (Петков 2010a, 51).

224 Ванков 1905, 462.

225 The address is 1 Ropotamo Street/39 Transmariska Street. Now the building is part of the architectural culture heritage of Tutrakan. It is known as the "Syarov House" after the lawyer Todor Syarov, who purchased it in 1958 from the widow of Pavel Stoyanov (https://oldhouses.eu/5/).

226 Not. Dign. Or. XL, 23, 34 – ed. Seeck

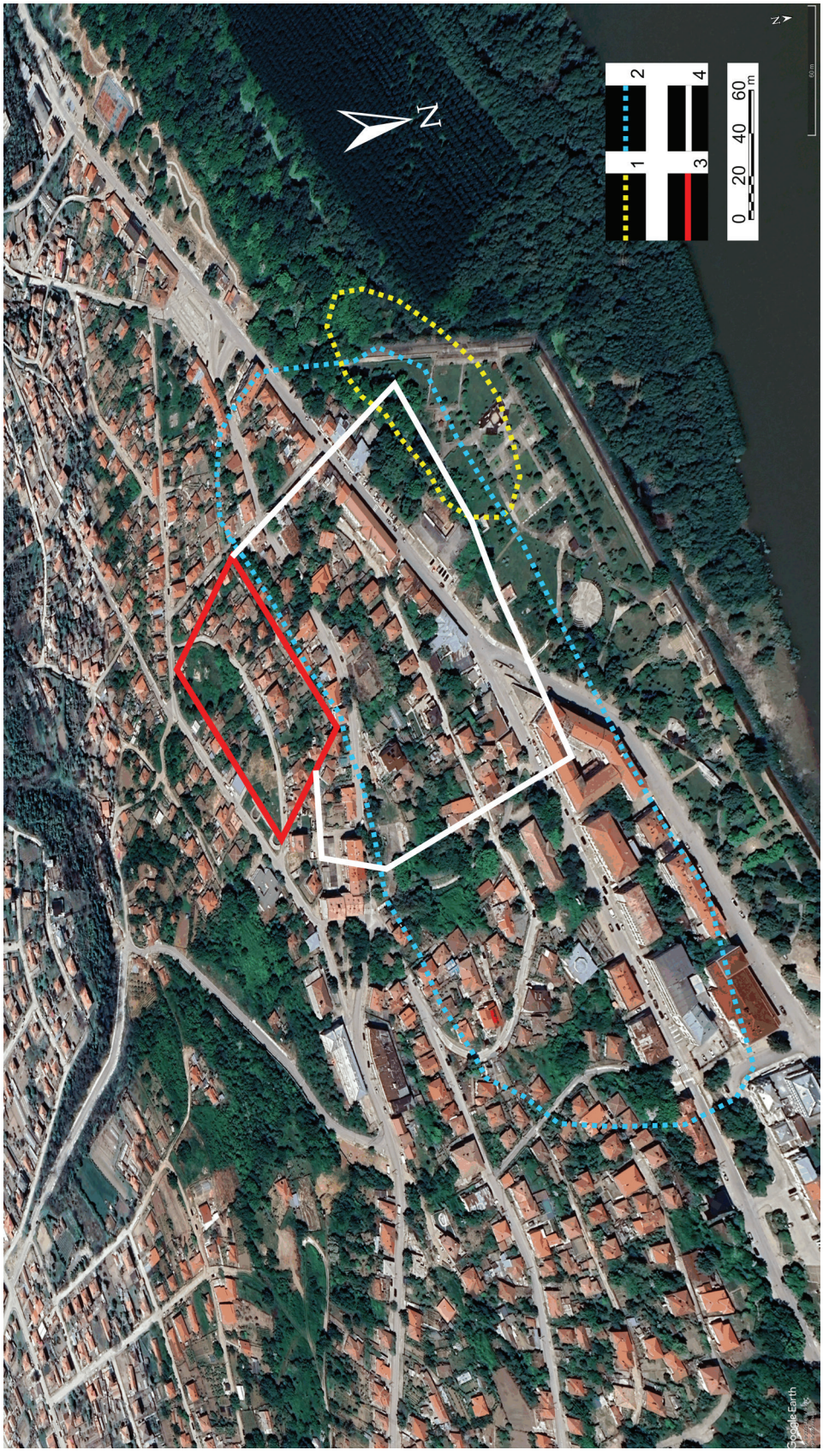

Fig. 41. Hypothetical reconstruction of the topography of *Transmarisca* according to the current state of research: 1. Pre- and Early Roman settlement; 2. The civillian settlement of *Transmarisca* during the Roman period; 3. The Early and Late Roman military camp; 4. The Late Roman fortification

BIBLIOGRAPHY

Бешевлиев 1952
В. Бешевлиев, Епиграфски приноси (София 1952).

Бончев 1942
Г. Бончев, Теренът на дунавското прибрѣжие въ Тутраканско и Силистренско. Списание на Българската академия на наукитѣ и изкуствата. Клон природо-математиченъ LXV/32, 1942, 1–9.

Вагалински 1990
Л. Вагалински, Спасителни разкопки на крепостна стена на Трансмариска (Тутракан). – В: Археологически открития и разкопки през 1989 г. Кюстендил, 1990, 76–78.

Вагалински 1991
Л. Вагалински, Спасителни разкопки на крепостна стена на Трансмариска (Тутракан). In: Археологически открития и разкопки през 1990 г. (Ловеч 1991), 98.

Вагалински 1992
Л. Вагалински, Редовни археологически разкопки на крепостна стена на Трансмариска (Тутракан). In: Археологически открития и разкопки през 1991 г. (София 1992), 67.

Вагалински 1995
Л. Вагалински, Каменни тежести от Трансмариска (Тутракан). In: А. Кузманова, П. Бойчев (Eds.), Тутракан в историческото развитие на Добруджа (Тутракан 1995), 67–75.

Вагалински 2008
Л. Вагалински, Късноримска гема от Transmarisca. In: Е. Генчева (Ed.), Югоизточна Европа през Античността (VI в. пр. Хр. – началото на VII в. сл. Хр.). Изследвания в чест на Александра Димитрова-Милчева (Велико Търново 2008), 492–495.

Вагалински/Динчев 1995
Л. Вагалински/В. Динчев, Археологическа карта на община Тутракан. In: А. Кузманова, П. Бойчев (Eds.), Тутракан в историческото развитие на Добруджа (Тутракан 1995), 12–48.

Вагалински/Петков 1996
Л. Вагалински/Е. Петков, Спасителни разкопки на къснoримска крепостна стена на Трансмариска (Тутракан). In: Археологически открития и разкопки през 1995 г. (София 1996), 68–70.

Вагалински/Петков 2002
Л. Вагалински/Е. Петков, Археологически проучвания в Тутракан през 2001 г. In: Археологически открития и разкопки през 2001 г. (София 2002), 89–90.

Вагалински/Петков 2004
Л. Вагалински/Е. Петков, Спасителна археологическо проучване в Тутракан през 2003 г. In: Археологически открития и разкопки през 2003 г. (София 2004), 117–118.

Ванков 1905
М. Ванков, Останки от укрепената линия на римляните по десния бряг на Дунав – от Силистра до Свищов. Задружен труд IV.5, 1905, 462–463.

Върбанов 2021
В. Върбанов, За ранния лагер на Трансмариска. Монети от проучването на югозападната кула през 2015 г. Известия на Регионален исторически музей – Разград III, 2021, 173–184.

Върбанов 2022
В. Върбанов, Монети от проучването на Трансмариска (2020 – 2021 г.). Нумизматика, Сфрагистика и Епиграфика 18, 2022, 45–80.

Върбанов 2024
В. Върбанов, Монети от проучването на Трансмариска през 2022 г. Нумизматика, Сфрагистика и Епиграфика 20, 2024, 49–78.

Върбанов/Митев 2020
В. Върбанов/Г. Митев, Римска крепост Трансмариска (редовни археологически разкопки 26. 10. – 20. 11. 2021 г.) [a manuscript kept at the Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences].

Върбанов/Митев 2021a
В. Върбанов/Г. Митев, Къснoримска крепост Трансмариска, Тутракан. Югозападна кула. In: Археологически открития и разкопки през 2020 г. (София 2021), 622–625.

Върбанов/Митев 2021b
В. Върбанов/Г. Митев, Къснoримска оловна търговска пломба от Трансмариска. Известия на Регионален исторически музей Разград III, 2021, 287–293.

Върбанов/Митев 2021c
В. Върбанов/Г. Митев, Римска крепост Трансмариска (редовни археологически разкопки 27. 09. – 18. 10. 2021 г.) [a manuscript kept at the Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences].

Върбанов/Митев 2022
В. Върбанов/Г. Митев, Римска крепост Трансмариска. Сектор Югозападна крепостна кула (археологически разкопки 17.10. – 10.11. 2022 г.) [a manuscript kept at the Scientific Archives of the National Institute of Archaeology with Museum – Bulgarian Academy of Sciences].

Гарашанин/Васић 1980
М. Гарашанин/М. Васић, Трајанов мост – Кастел Понтес. Ђердапске свеске I, 1980, 7–24.

Гарашанин/Васић 1984
М. Гарашанин/М. Васић, Г. МарЈановић-ВуЈовић, Трајанов мост – Castrum Pontes. Извештај о археолошким истраживањима у 1980. години. Ђердапске свеске II, 1984, 25–54.

Гарашанин/Васић 1987
М. Гарашанин/М. Васић, Castrum Pontes. Извештај о ископавањима у 1981. и 1982. години. – Ђердапске свеске, IV, 1987, 71–84.

Георгиева 1977
Р. Георгиева, Селища по крайбрежието на р. Дунав между *Sexaginta Prista* и *Durostorum* през римската епоха. Векове 3, 1977, 52–58.

Георгиева/Бъчваров 1985
Р. Георгиева/И. Бъчваров, Нови данни за поселищния живот през I хил. пр. н. е. в Силистренски окръг. In: Североизточна България – древност и съвремие (София 1985), 65–76.

Геров 1980
Б. Геров, Земевладението в римска Тракия и Мизия (I–III в.) (= Годишник на Софийския университет – факултет по класически и нови филологии, 72.2) (София 1980).

Змеев 1969
Р. Змеев, Кастелът Трансмариска. Археология 4, 1969, 45–53.

Змеев 1970a
Р. Змеев, Интересно археологическо откритие. Тутракански глас IX.17 (150), 1970, 4.

Змеев 1970b
Р. Змеев, Отчет за археологическите проучвания на ул. „Назъм Хикмет" в гр. Тутракан, през 1970 г. [a manuscript kept at the Historical museum – Tutrakan].

Змеев 1987
Р. Змеев, Тутракан (София 1987).

Михайлов 1966
Ц. Михайлов, Геоморфология на дунавските тераси в Побрежието. Известия на Българското географско дружество VI (XVI), 1966, 47–60.

Николов 2016
В. Николов, Геоморфоложка карта на терасите в крайдунавската низина Побрежие. In: Сборник доклади от научна конференция „Географски аспекти на планирането и използването на територията в условията на глобални промени", гр. Вършец, България 23.09 – 25.09.2016 г. (София 2016), 1–9.

Петков 2003
Е. Петков, Археологически проучвания в Трансмариска (Тутракан) през 2002 г. In: Археологически открития и разкопки през 2002 г. (София 2003), 94.

Петков 2004
Е. Петков, Археологически проучвания в Тутракан през 2003 г. In: Археологически открития и разкопки през 2003 г. (София 2004), 116–117.

Петков 2005
Е. Петков, Археологически проучвания в Тутракан през 2004 г. In: Археологически открития и разкопки през 2004 г. (София 2005), 196–197.

Петков 2009
Е. Петков, Спасителни археологически проучвания на антична крепост Трансмариска, обект „Теке" в гр. Тутракан. In: Археологически открития и разкопки през 2008 г. (София 2009), 432–433.

Петков 2010a
Е. Петков, Антична история и топография на Трансмариска. In: Л. Вагалински, П. Бойчев (Eds.), История на Тутракан. Том 1 (Тутракан 2010), 33–66.

Петков 2010b
Е. Петков, Археологически проучвания на антична крепост Трансмариска, обект „Северна крепостна стена“, в гр. Тутракан. In: Археологически открития и разкопки през 2009 г. (София 2010), 324.

Петков 2012
Е. Петков, Археологически проучвания на античната крепост Трансмариска в гр. Тутракан, обект „Северна крепостна стена“. In: Археологически открития и разкопки през 2011 г. (София 2012), 269–270.

Петков 2014
Е. Петков, Спасителни археологически проучвания на антична крепост Трансмариска, обект „Южна крепостна стена“ в град Тутракан. In: Археологически открития и разкопки през 2013 г. (София 2014), 324–325.

Петков 2015
Е. Петков, Археологически разкопки на югозападната ъглова кула на античния кастел Трансмариска, гр. Тутракан. In: Археологически открития и разкопки през 2014 г. (София 2015), 416–419.

Петков 2016
Е. Петков, Археологически проучвания на антична крепост Трансмариска обект „Южна крепостна стена“ в гр. Тутракан през 2015 г. In: Археологически открития и разкопки през 2015 г. (София 2016), 455–456.

Ранков 1980
Ј. Ранков, Ископавања на Караташу. Ђердапске свеске I, 1980, 51–60.

Торбатов 2010
С. Торбатов, Строителна керамика с печати на I Италийски легион от кастела Тримамиум. Археология 3–4, 2010, 41–57.

Торбатов 2012
С. Торбатов, Гарнизонът на Сексагинта Приста през I – III в. Известия на Регионален исторически музей – Русе 15, 2012, 111–161.

Трайкова 2019
Л. Трайкова, Археологическо проучване на късноримската северна крепостна стена на Трансмариска, гр. Тутракан, обл. Силистра. In: Археологически открития и разкопки през 2018 г. (София 2019), 244–246.

Трайкова 2020
Л. Трайкова, Археологическо проучване на късноримската северна крепостна стена на Трансмариска, Тутракан. In: Археологически открития и разкопки през 2019 г. (София 2020), 691–696.

Трайкова 2024
Л. Трайкова, Късноантичната фортификация на Трансмариска на Долен Дунав (по археологически данни) (= Archaeologia Bulgarica Supplements, Volume 7) (София 2024).

Шаранков 2020
Н. Шаранков, Amor Romae: Любов към Рим на Дунав. Графити върху крепостната стена на Трансмариска дават интересен ракурс към войнишкото ежедневие (available

at: https://www.archaeologia-bulgarica.com/category/%d0%be%d1%82%d0%ba%d1%80%d0%b8%d1%82%d0%b8%d1%8f/; accessed 20.06.2020).

Шкорпил 1905
К. Шкорпил, Некоторыя из дорог восточной Болгаріи. Известия Русского археологическаго института в Константинопле X, 1905, 443–502.

ADAMEŞTEANU 1938
D. ADAMEŞTEANU, Inscription en verse découvert à Turtucaia (Transmarisca). Dacia V–VI, 1938, 449–450.

BENEA 1999
D. BENEA, Archäologische Forschungen auf dem Limes der Dacia Apulensis, 1983 – 1994. In: N. Gudea (Ed.), Roman Frontier Studies. Proceedings of the XVIIth International Congress of Roman Frontier Studies (Zalău 1999), 171–186.

BENNETT 1986
J. BENNETT, Fort Sizes as a Guide to Garrison Type: A Preliminary Study of Selected Forts in the European Provinces. In: C. Unz (Hrsg.), Studien zu den Militärgrenzen Roms III (13. Internationalen Limeskongress Aalen 1983: Vorträge) (Stuttgart 1986), 707–716.

BIRÓ 1976
E. BIRÓ, Almásfüzítő (Azaum). In: J. Fitz (Hrsg.), Der römische Limes in Ungarn (Székesfehérvár 1976), 38–39.

BOGDAN CĂTĂNICIU 1981
I. BOGDAN CĂTĂNICIU, Evolution of the System of Defence Works in Roman Dacia (BAR International Series 116) (Oxford 1981).

BOGDAN CĂTĂNICIU 1991
I. BOGDAN CĂTĂNICIU, À propos de *civitates* en Dacie. Ephemeris Napocensis I, 1991, 59–67.

CHRISTESCU 1938
V. CHRISTESCU, Quelques monuments inédits de Turtucaia (Transmarisca). Dacia V–VI, 1938, 451–452.

DESJARDINS 1868
E. DESJARDINS, Sur quelques inscriptions inédites de Valachie et de Bulgarie (provinces de Dacie, de Mésie et de Scythie (Lettre à M Henzen). Annali dell'Instituto di corrispondenza archeologica 40, 1868, 5–107.

DÜRR ET ALII 2022
R. DÜRR/C. BĂJENARU/F. TEICHNER, *Fundatori pacis aeternae*? – Fortifications between the High Rhine and the Black Sea from the time of Diocletian and the early Tetrarchy. In: O. Heinrich-Tamóska (Hrsg.), *Castra et Villae* in der Spätantike: Fallbeispiele von Pannonien bis zum Schwarzen Meer (Castellum Pannonicum Pelsonense, Bd. 8) (Leipzig – Budapest – Keszthely – Rahden/Westf. 2022), 151–171.

FILTZINGER 2005
P. FILTZINGER, Stuttgart-Bad Cannstatt. In: D. Planck (Hrsg.), Die Römer in Baden-Württemberg (Stuttgart 2005), 327–331.

FÜLEP 1976
F. FÜLEP, Nagytétény (Campona). In: J. Fitz (Hrsg.), Der römische Limes in Ungarn (Székesfehérvár 1976), 92–93.

GABLER 1989
D. GABLER, The Roman Fort at Ács-Vaspuszta (Hungary) on the Danubian limes. Part I (BAR International Series 531 (I)) (Oxford 1989).

GABLER 2003
D. GABLER, Ad Statuas castellum. In: Z. Visy (Ed.), The Roman Army in Pannonia. An Archeological Guide of the Ripa Pannonica (Pécs 2003), 70–72.

GĂZDAC ET ALII 2011
C. GĂZDAC/C. GAIU/E. MARCHIŞ, *Arcobadara* (Ilişua) (Coins from Roman sites and collections of Roman coins from Romania, Vol. VI) (Cluj-Napoca 2011).

GSCHWIND 2004
M. GSCHWIND, Abusina. Das römische Auxiliarkastell Eining an der Donau vom 1. bis 5. Jahrhundert n. Chr. (Münchner Beiträge zur Vor- und Frühgeschichte, 53) (München 2004).

GUDEA 1997
N. GUDEA, Der Dakische Limes. Materialen zu seiner Geschichte. Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz 44/2, 1997, 1–113.

GUDEA 2001
N. GUDEA, Die Nordgrenze der römischen Provinz Obermoesien. Materialien zu ihrer Geschichte (86–275 n. Chr.). Jahrbuch des Römisch-Germanischen Zentralmuseums 48.2, 2001, 1–118.

HERZIG 1946–1947
H. HERZIG, Versuch einer Rekonstruktion der Tore, Türme und Umwallung von Vindonissa. Jahresbericht der Gesellschaft Pro Vindonissa 1946–1947, 52–72.

KANDLER 1999
M. KANDLER, Neues vom Carnuntiner Auxiliarkastell. In: N. Gudea (Ed.), Roman Frontier Studies. Proceedings of the XVIIth International Congress of Roman Frontier Studies (Zalău 1999), 379–395.

KANDLER 2003
M. KANDLER, Carnuntum castellum. In: Z. Visy (Ed.), The Roman Army in Pannonia. An Archeological Guide of the Ripa Pannonica (Pécs 2003), 58–60.

KANDLER/VETTERS 1986
M. KANDLER/H. VETTERS, Der römische Limes in Osterreich. Ein Führer (Wien 1986).

KOCSIS 2003
L. KOCSIS, Campona castellum. In: Z. Visy (Ed.), The Roman Army in Pannonia. An Archeological Guide of the Ripa Pannonica (Pécs 2003), 106–108.

KOLENDO 1966a
J. KOLENDO, Une inscription inconnue de Sexaginta Prista et la fortification du Bas-Danube sous la Tetrarchie. Eirene 5, 1966, 139–154.

KOLENDO 1966b
J. KOLENDO, Nieznana inskrypcja z kolekcji krzemienieckiej i problem fortyfikacji nad dolnym Dunajem za tetrarchii. Przeglad historyczny 57.4, 1966, 558–579.

KOVÁCS 2003
P. KOVÁCS, Annamatia Castellum. In: Z. Visy (Ed.), The Roman Army in Pannonia. An Archeological Guide of the Ripa Pannonica (Pécs 2003), 119–121.

KUZMOVÁ/RAJTÁR 1986
K. KUZMOVÁ/J. RAJTÁR, Bisherige Erkenntnisse zur Befestigung des Römerkastells in Iža. Slovenská archeológia 34–1, 1986, 185–222.

LANDER 1984
J. LANDER, Roman Stone Fortifications. Variation and Change from the First Century A.D. to the Fourth (BAR International Series 206) (Oxford 1984).

LAUR-BELART 1935
R. LAUR-BELART, Vindonissa. Lager und Vicus (Römisch-Germanische Forschungen, Band 10) (Berlin – Leipzig 1935).

LŐRINCZ ET ALII 1986
B. LŐRINCZ/K. SZABÓ/Z. VISY, Neue Forschungen im Auxiliarkastell von Intercisa. In: C. Unz (Hrsg.), Studien zu den Militärgrenzen Roms III (13. Internationalen Limeskongress Aalen 1983: Vorträge) (Stuttgart 1986), 362–368.

LŐRINCZ/VISY 1980
B. LŐRINCZ/Z. VISY, Die Baugeschichte des Auxiliarkastells von Intercisa. In: W. S. Hanson, L. J. F. Keppie (Eds.), Roman Frontier Studies 1979. Papers presented to the I2th International Congress of Roman Frontier Studies. Part II (BAR International Series 71 (II)). (Oxford 1980), 681–701.

MANNERT 1812
K. MANNERT, Geographie der Griechen und Römer. Siebenter Theil. Thracien, Illyrien, Macedonien, Thessalien, Epirus (Landshut 1812).

MARCU 2009
F. MARCU, The Internal Planning of Roman Forts of Dacia (Bibliotheca Musei Napocensis, XXX) (Cluj-Napoca 2009).

MĂRCULESCU 1938
O. MĂRCULESCU, Transmarisca – Turtucaia. Analele Dobrogei 3, 1938, 102–136.

MATEI-POPESCU 2010
F. MATEI-POPESCU, The Roman Army in Moesia Inferior (The Centre for Military Studies 7) (Bucharest 2010).

MATEI-POPESCU/ŢENTEA 2018
F. MATEI-POPESCU/O. ŢENTEA, Auxilia Moesiae Superioris (The Centre for Roman military studies, 9) (Cluj-Napoca 2018).

MORILLO/GARCIA-MARCOS 2005
A. MORILLO/V. GARCIA-MARCOS, The defensive system of the legionary fortress of the VII gemina at León (Spain). The porta principalis sinistra. In: Z. Visy (Ed.), Limes XIX.

Proceedings of the XIXth International Congress of Roman Frontier Studies held in Pécs, Hungary, September 2003 (Pécs 2005), 569–583.

MROZEWICZ 1982
L. MROZEWICZ, Rozwój ustroju municypalnego a postępy romanizacji w Mezji Dolnej (Seria Historia Nr 98) (Poznań 1982).

MUŞEŢEANU ET ALII 1979
C. MUŞEŢEANU/M. ZAHARIADE/D. ELEFTERESCU, Spre o tipologie a ştampilelor legiunii XI Claudia în Moesia Inferior. Studii şi materiale de muzeografie şi istorie militară – Muzeul military central 12, 1979, 164–185.

MUSETEANU ET ALII 1980
C. MUŞEŢEANU/M. ZAHARIADE/D. ELEFTERESCU, Spre o tipologie a ştampilelor legiunii XI Claudia din Moesia Inferior. II. Catalogul pieselor. Studii şi materiale de muzeografie şi istorie militară – Muzeul military central 13, 1980, 85–105.

NANKOV 2023
E. NANKOV, Markers of Military Mobility: Toward an Archaeology of the Sling in Ancient Thrace (5th c. BC – 4th c. BC) with a Corpus of the Inscribed Lead Sling Projectiles from Bulgaria (Разкопки и проучвания, том L) (София 2023).

NÉMETH 2005
E. NÉMETH, Die neuen Ausgrabungen im Auxiliarkastell von Varadia – "Pusta". In: Z. Visy (Ed.), Limes XIX. Proceedings of the XIXth International Congress of Roman Frontier Studies held in Pécs, Hungary, September 2003 (Pécs 2005), 689–696.

PATSCH 1928
C. PATSCH, Beiträge zur Völkerkunde von Südosteuropa. III. Die Völkerbewegung an der unteren Donau. Sitzungsberichte der Akademie der Wissenschaften Wien, Philosophisch-historischen Klasse 208/2, 1928, 1–68.

PAUNOV 2007
E. PAUNOV, History of *Transmarisca*. In: L. Vagalinski (Ed.), The Lower Danube in Antiquity (VI c. BC – VI c. AD) (Sofia 2007), 141–146.

PLANCK 2005a
D. PLANCK, Benningen. In: D. Planck (Hrsg.), Die Römer in Baden-Württemberg (Stuttgart 2005), 35–37.

PLANCK 2005b
D. PLANCK, Schramberg-Waldmössingen. Römisches Kastell und zivile Siedlung. In: D. Planck (Hrsg.), Die Römer in Baden-Württemberg (Stuttgart 2005), 311–314.

PLOYER 2013
R. PLOYER, Der norische Limes in Österreich (Fundberichte aus Österreich, Materialhefte Reihe B, 3) (Horn 2013).

POLASCHEK 1937
E. POLASCHEK, Transmarisca. In: G. Wissowa (Hrsg.), Real-Encyclopädie der klassischen Altertumswissenschaft VI.A2 (Stuttgart 1937), 2171–2174.

POPA-LISSEANU 1914
G. POPA-LISSEANU, Cetăţi şi oraşe greco-romane în noul teritoriu al Dobrogei (Bucureşti 1914).

PROTASE ET ALII 2008
D. PROTASE/N. GUDEA/R. ARDEVAN, Din istoria militară a Daciei romane. Castrul roman de interior de la Gherla/Aus der Militärgeschichte des römischen Dakien. Das römische Binnenkastell von Gherla (Bibliotheca historica et archaeological Banatica, XLVI) (Timişoara 2008).

RICHARDSON 2004
A. RICHARDSON, Theoretical Aspects of Roman Camp and Fort Design (BAR International Series 1321) (Oxford 2004).

SARNOWSKI 1985
T. SARNOWSKI, Die Legio I Italica und der untere Donauabschnitt der Notitia Dignitatum. Germania 63.1, 1985, 107–127.

SARNOWSKI 1988
T. SARNOWSKI, Wojsko rzymskie w Mezji Dolnej i na północnym wybrzeżu Morza Czarnego (Novaensia 3) (Warszawa 1988).

SARNOWSKI 1991
T. SARNOWSKI, Późnorimskie stemple legionów dolnodunajskich. Novaensia 2, 1991, 9–32.

SCHAAD 1991
D. SCHAAD, Encraoustos: un camp militaire romain à Lugdunum- St-Bertrand-de Comminges (France, Département de la Haute-Garonne. In: V. Maxfield, M. J. Dobson (Eds.), Roman Frontier Studies 1989. Proceedings of the XVth International Congress of Roman Frontier Studies (Exeter 1991), 170–174.

SCHAAD/SCHENCK-DAVID 2003
D. SCHAAD/J.-L. SCHENCK-DAVID, Le camp militaire romain de Saint-Bertrand-de-Comminges (Haute-Garonne): nouvelles données. Aquitania: une revue inter-régionale d'archéologie 19, 2003, 127–153.

SCHAAD/SOUKIASSIAN 1990
D. SCHAAD/G. SOUKIASSIAN, Encraoustos: un camp militaire romain à Lugdunum civitas Convenarum (Saint Bertrand de Comminges). Aquitania: une revue inter-régionale d'archéologie 8, 1990, 99–120.

SCHMID 2023
S. SCHMID, The Roman auxiliary Fort at Arelape/Pöchlarn (Lower Austria) and its Development in Late Antiquity. In: Limes XXIIII. Proceedings of the 24th International Congress of Roman Frontier Studies, Belgrade – Viminacium, Serbia, 2nd September – 9th September, 2018. Volune II (Beograd 2023), 891–903.

SCHOLZ/KRENN 2011
U. SCHOLZ/M. KRENN, Stadtarchäologie in Tulln: Die Großgrabungen 2005–2009. In: 15th International Conference on Cultural Heritage and New Technologies, November 15–17, 2010. Proceedings (Wien 2011), 51–66.

SESTON 1928
W. SESTON, Le secteur de Rapidum sur le Limes de Mauritanie césarienne après les fouilles de 1927. Mélanges d'archéologie et d'histoire 45, 1928, 150–183.

SHARANKOV 2010
N. SHARANKOV, Latin Building Inscription from Transmarisca (Tutrakan). In: Реката и времето. Материали от международна научна конференция, посветена на 35 год. от основаването на Етнографски музей „Дунавски риболов и лодкостроене", гр. Тутракан, 22–23 октомври 2009 (Туракан 2010), 86–93.

SHARANKOV 2016
N. SHARANKOV, An Overlooked Inscription of *Ala I Atectorigiana* from *Appiaria*. Archaeologia Bulgarica XX, 3, 2016, 33–40.

SOPRONI 1976
S. Soproni, Szentendre (Ulcisia Castra – Castra Constantia). In: J. Fitz (Hrsg.), Der römische Limes in Ungarn (Székesfehérvár 1976), 76–77.

STIGLITZ 1986
H. STIGLITZ, Das Auxiliarkastell von Carnuntum. – In: C. Unz (Hrsg.). Studien zu den Militärgrenzen Roms III (13. Internationalen Limeskongress Aalen 1983: Vorträge) (Stuttgart 1986), 416–420.

STUPPNER 2011
A. STUPPNER, Zur Kontinuität in der Spätantike am norisch-pannonischen Limes in Niederösterreich. In: O. Heinrich-Tamaska (Hrsg.), Keszthely-Fenékpuszta im Kontext spätantiker Kontinuitätsforschung zwischen Noricum und Moesia (Budapest, Leipzig, Keszthely, Radhen/Westf. 2011), 129–156.

ȚENTEA ET ALII 2021
O. ȚENTEA/F. MATEI-POPESCU/V. CĂLINA, Frontiera romană din Dacia Inferior. O trecere în revistă și o actualizare. Cercetări Arheologice 28.1, 2021, 9–90.

ȚENTEA ET ALII 2022a
O. ȚENTEA/F. MATEI-POPESCU/V. CĂLINA/A. RAȚIU, Frontiera romană din Dacia Inferior. O trecere în revistă și o actualizare. 2. Cercetări Arheologice 29.1, 2022, 197–244.

ȚENTEA ET ALII 2022b
O. ȚENTEA/V. CĂLINA/I. MANEA, Drumul și castrul roman de la Copăceni (com. Racovita, jud. Vâlcea). Reevaluarea recentă a unor monumente uitate. Cercetări Arheologice 29.2, 2022, 557–572.

ȚENTEA ET ALII 2023
O. ȚENTEA/F. MATEI-POPESCU/C. TIMOC, Castrele romane din sud-vestul Daciei. O trecere în revistă și o actualizare. Cercetări Arheologice 30.2, 2023, 763–804.

TOCILESCU 1902
G. TOCILESCU, Monumentele epigrafice şi sculpturale ale Muzeului National de Antichitati din Bucureşti. Partea I (Bucureşti 1902).

TÓTH 2009
E. TÓTH, Die spätrömische Militärarchitektur in Transdanubien. Archaeologiai Értesitő 134, 2009, 31–61.

TROUSSET 1977
R. TROUSSET, Le camp de Gemellae sur le limes de Numidie d'après les fouilles de colonel Baradez (1947–1950). In: J. Fitz (Hrsg.), Limes. Akten des 11. Internationalen Limeskongress (Szekesfehervär, 30. 8.- 6. 9. 1976) (Budapest 1977), 559–576.

TRUMM 2015
J. TRUMM, Legionslager Vindonissa – Stand der Forschung. In: L. Vagalinski, N. Sharankov (Eds.), LIMES XXII. Proceedings of the 22nd International Congress of Roman Frontier Studies, Ruse, Bulgaria, September 2012 (Sofia 2015), 93–102.

TRUMM 2024
J. TRUMM, The fortress of *Vindonissa*. State of research. In: H. van Enckevort, M. Driessen, E. Graafstal, T. Hazenberg, T. Ivleva, C. van Driel-Murray (Eds.), Strategy and Structures along the Roman Frontier. (Limes XXV. Volume 2; Archeologische Berichten Nijmegen 10) (Leiden 2024), 309–317.

UBL 1977
H. UBL, Der spätrömische Burgus von Zeiselmauer. Grabung und Restaurierung. In: C. Unz (Hrsg.), Studien zu den Militärgrenzen Roms II. Vorträge des 10. Internationalen Limeskongress in der Germania Inferior (Köln – Bonn 1977), 251–262.

UBL 1997
H. UBL, Traismauer – Augustiana. In: H. Friesinger, F. Krinzinger (Hrsg.), Der römische Limes in Österreich. Führer zu den archäologischen Denkmälern (Wien 1997), 221–225.

VAGALINSKI 1999
L. VAGALINSKI, Die spätrömishe Nordfestungsmauer von Transmarisca. In: G. von Bülow, A. Milceva (Hrsg.), Acta der internazionalen Konferenz "Der römische Limes an der unteren Donau von Diokletian bis Heraklios" (Sofia 1999), 229–233.

VAGALINSKI/PETKOV 2006
L. VAGALINSKI/E. PETKOV, New data on the fortifications of Late Antiquity Transmarisca. In: M. Vasić (Ed.), Felix Romuliana: 50 Years of Archaeological Excavations. Papers from the International Conference, Zaječar, 27th–29th October, 2003 (Belgrade 2006), 105–110.

VELKOV 1973
V. VELKOV, Die Stadt Transmarisca (Moesia Inferior). Arheologia Polona 14, 1973, 263–268.

VELKOV 1993
V. VELKOV, Epigraphischer Beitrag zur Geschichte des Donaulimes im II. Jh. (über die Stadt Transmarisca). In: В. Гюзелев, К. Попконстантинов (Eds.), Studia Protobulgarica et Mediaevalia Europensia. В чест на професор Веселин Бешевлиев (Велико Търново 1993), 137–140.

VISY 2003
Z. VISY, Castellum *Ulcisia Castra*. In: Z. Visy (Ed.), The Roman Army in Pannonia. An Archeological Guide of the Ripa Pannonica (Pécs 2003), 97–98.

VLĂDESCU 1986
C. VLĂDESCU, Fortificaţiile romane din Dacia Inferior (Craiova 1986).

WHATELY 2016
C. WHATELY, Exercitus Moesiae. The Roman Army in Moesia from Augustus to Severus Alexander (BAR International Series 2825) (Oxford 2016).

ZAHARIADE 1997
M. ZAHARIADE, The Late Roman Drobeta. I. The cruciform building aud the fort garrison in the 4th ccntury A.D. Acta Musei Napocensis 34, 1997, 167–182.

ZAHARIADE 2009
M. ZAHARIADE, The Thracians in the Roman Imperial Army (From the First to the Third Century A.D.). I. Auxilia (The Center for Roman Military Studies, 2) (Cluj-Napoca 2009).