THE ROMAN HEADQUARTERS ON THE NORTHERN *LIMES*OF DACIA: *POROLISSUM* (JUD. SĂLAJ/RO) IN THE LIGHT OF RECENT RESEARCH

POROLISSUM AND THE NORTH-WESTERN FRONTIER OF ROMAN DACIA

The name *Porolissum* was considered of local origin, having been recorded in several ancient literary and cartographic sources¹ and also in Latin inscriptions found on the site². The strategic position of *Porolissum* (jud. Sălaj/RO) was based on the necessity of blocking and controlling the passage from the Western plain through one of the main natural access routes to inner Transylvania across the Meseș Mountains (**fig. 1**). Its military importance is also suggested by a high density of defence works consisting of two forts³, a network of surveillance towers, as well as turf walls and *clausura*-type stone walls⁴. The backbone of this military complex system was represented by the fort on the Pomăt Hill ($230 \,\mathrm{m} \times 300 \,\mathrm{m}$) together with a smaller one situated in its immediate vicinity, on the Citera Hill ($101 \,\mathrm{m} \times 67 \,\mathrm{m}$)⁵. The fact that the fort at the Pomăt Hill is oversized, compared to other Roman auxiliary forts, is due not only to the number of attested troops but mainly because it was used as an operational and logistics command centre, as well as for stockpiling supplies.

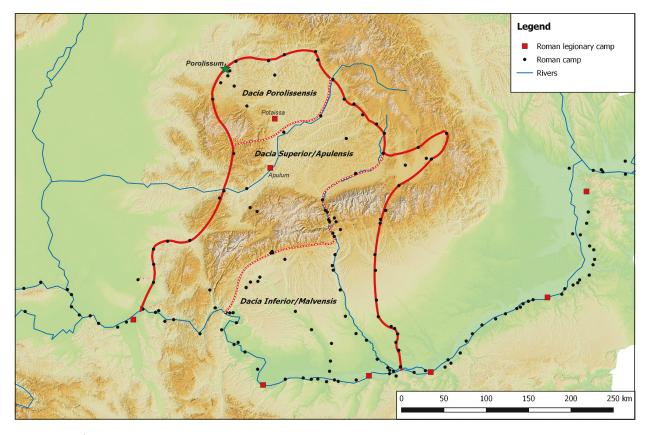


Fig. 1 Map of Roman Dacia. – (Map V.-A. Lăzărescu).

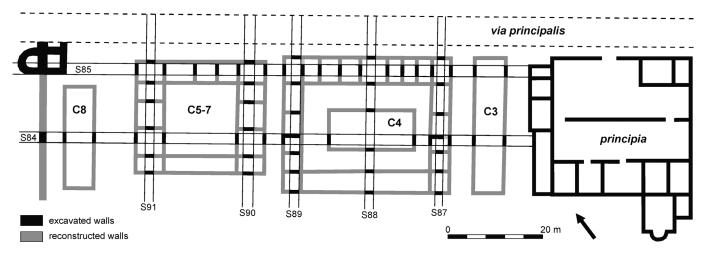


Fig. 2 Old plan of the *latus sinistrum* of the fort at *Porolissum*. – (Compiled after Gudea 1989b, figs 9. 16-17; graphic illustration V.-A. Lăzărescu).

NEW RESEARCH IN THE LATUS SINISTRUM OF THE FORT FROM THE POMĂT HILL

Though the ruins of ancient *Porolissum* were known since the 19th century, the first archaeological excavations inside the fort at the Pomăt Hill were not conducted until 1939-1940⁶. The first plan of the fort was compiled by A. Radnóti in 1943⁷. On his plan, apart from the gates and the walls composing the defensive system, the only element of the internal structure was the principia⁸. An intensive research programme started in 1977 under the direction of E. Chirilă and later by N. Gudea. Among the areas that were investigated by this team were the latera praetorii9. Apart from the excavations conducted in the latus dextrum, in 1984 two parallel trenches (S84: $95.5 \,\mathrm{m} \times 1.5 \,\mathrm{m}$ and S85: $97 \,\mathrm{m} \times 1.5 \,\mathrm{m}$) identified elements of the archaeological structures situated in the latus sinistrum (fig. 2)¹⁰. The excavation of this area was continued the following year, with five additional trenches (S87: $35 \,\mathrm{m} \times 1.5 \,\mathrm{m}$; S88: $36 \,\mathrm{m} \times 1.5 \,\mathrm{m}$; S89: $35 \,\mathrm{m} \times 1.5 \,\mathrm{m}$; S90: $37 \,\mathrm{m} \times 1.5 \,\mathrm{m}$ and S91: $38 \,\mathrm{m} \times 1.5 \,\mathrm{m}$) 11. Based on these excavations, N. Gudea concluded that there were several buildings in this area, the first one (C4) being interpreted as a praetorium or fabrica¹². In the first phase of research, the same author presumed that the other stone walls belonged to other three buildings (C5, C6 and C7); in his opinion, those buildings were identified as possible warehouses 13. In the second phase, after the end of his investigation, he changed his mind considering C5-7 as being part of only one building ¹⁴. Another structure that was identified by the old excavations was building C3, situated in the proximity of the *principia* initially presumed to be a *mithraeum* ¹⁵ and later as an *aerarium* or *schola* ¹⁶. N. Gudea's last research in the area of the latus sinistrum identified the corner of building C9 positioned immediately behind the headquarters building ¹⁷. An important step towards the understanding of the inner topography of the fort was the first geophysical survey of the entire area performed in 2010 by a Hungarian team¹⁸. The same team, having in mind a future excavation used different non-invasive geophysical techniques focusing their attention on building C3¹⁹. We can, therefore, conclude that all previous research poorly contributed to the understanding of the topography and purpose of the buildings situated in this area, the only exceptions being the last-mentioned works.

Having in mind the potential of these non-invasive geophysical techniques, we continued to employ this method hoping to refine the previously mentioned results in the area of the *latus sinistrum* (**fig. 3**). Given its good response and effectiveness, magnetometric investigations are the ones usually involved in the creation of the preliminary map of the subsurface on the studied area.



Fig. 3 Magnetic map of the *latus sinistrum* of the fort at *Porolissum.* – (Reprocessed after Fiedler et al. 2018, 451 fig. 1; graphic illustration V.-A. Lăzărescu / D. Ștefan).



Fig. 4 Geophysical electric survey of the *latus sinistrum* of the fort at *Porolissum*. – (Compiled by D. Ştefan).

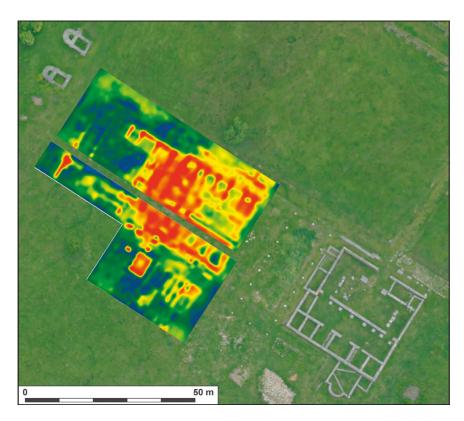


Fig. 5 2.5D ERT survey of the *latus sinistrum* area at a depth of approx. -0.8 m. – (Processed by D. Ştefan and compiled by V.-A. Lăzărescu).

At a first examination of the geophysical map, we can observe that the entire *latus sinistrum* seems to be the result of a unitary construction concept. The available details provided by the surveys showed that between building C3 and building C8, situated in the proximity of the *porta principalis sinistra*, the entire area seems to be occupied by a single residential complex. This idea is also strengthened by its position between the main inner roads of the fort (*via praetoria, via principalis, via decumana, via quintana* and *via sagularis*), all of which can be observed on the geophysical map. The residential complex seems to be composed of several elements. Directly aligned with the *via principalis*, two buildings are having an Italic origin plan with an inner courtyard flanked by a portico (C5-7 and C4). Behind them, there is another huge squared-shaped open space also flanked by a portico, having on its left side five rooms disposed symmetrically. A fourth area, although having an indiscernible inner plan on the magnetic map, can be observed towards the south-east. Although we cannot establish the nature of the relationship with the big open space or the eastern Italic type structure (C4) yet, we can clearly state that it occupied the entire space between the inner open area, the *via decumana*, building C3 and the south-eastern backside of the *principia*.

The results of the magnetic survey have been further refined using electric investigations. The visualisation and the analysis of the electrical data in relation to other layers of information involved usual GIS techniques (fig. 4).

Because large areas of the *latus sinistrum* were covered by thick construction debris and dismantling layers, it was almost impossible to determine the exact plan of the buildings. Therefore, it became clear that the use of a detailed examination employing ERT (Electrical Resistivity Tomography) technique was required. The length of the profiles was 35 m, with 36 electrodes each.

Given the fact that the general humidity level in the soil varied from one measurement session to the other, the approach based on three distinct models was retained rather than a single combined model. The re-

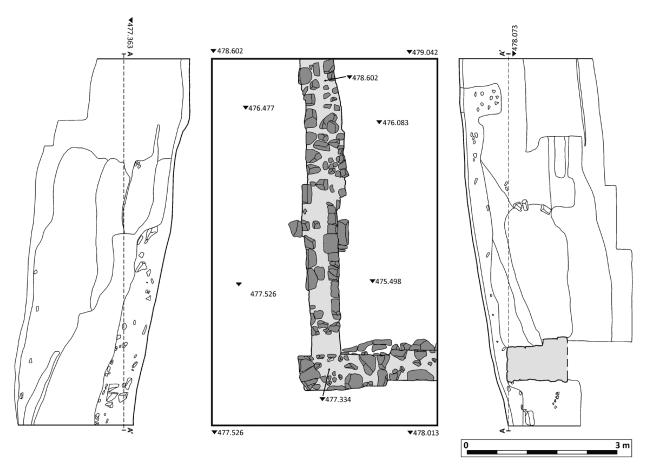


Fig. 6 Ground plan and profiles of the excavation from 2013 at building C8 inside the fort at *Porolissum*. – (Drawings V.-A. Lăzărescu / S. Ferencz).

sulted 3D model was divided into several horizontal images for different depths. For this paper, the third image which corresponds roughly to the distribution of the underground structures from the depth of about 0.8 m, was georeferenced and compared with all the other remote sensing and geophysical data. This was done to reveal the detailed building's plan on the *latus sinistrum* area that we were previously unable to discern due to the massive debris layers covering the eastern side of the survey area (**fig. 5**).

To test the validity of the geophysical surveys, a first control trench ($5 \,\mathrm{m} \times 7 \,\mathrm{m}$) was excavated in the vicinity of the *porta principalis sinistra*, the objective of this research being the identification of the south-eastern part of building C8 known from Gudea's S84 trench. This building is placed immediately behind the defence wall of the fort, superimposing the turf wall. Although this building is not entirely uncovered, its dimensions can be fairly established as $25 \,\mathrm{m} \times 9 \,\mathrm{m}$, based on the geophysical prospections that were correlated with our excavations in 2013. The walls of building C8 are poorly preserved due to massive stone-robbing actions starting with the Middle Ages. As a consequence, all the habitation layers were removed through time, with few exceptions where parts of the initial stratigraphy survived (**fig. 6**). Despite this unfortunate situation, of great help is the comparison between building C8 and another building situated in a similar position near the *porta praetoria* having similar dimensions (building B6: $25 \,\mathrm{m} \times 10 \,\mathrm{m}$) (**fig. 7**). The last-mentioned building was entirely excavated between 2010-2014 and interpreted as a *ballistarium* functioning during 140/160-180/190 AD²⁰. Based on this chronology we established that the beginnings of building B6 belonged to the first stone phase of the Roman fort²¹. We can, therefore, presume with a high probability that building C8 from the *latus sinistrum* can also be related to storing military defence equipment being

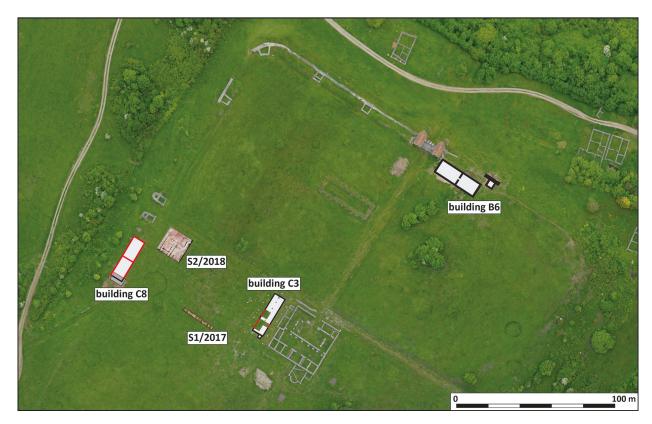


Fig. 7 General plan of the recent excavations inside the fort at *Porolissum*. – (Compiled by V.-A. Lăzărescu).

designed also during the first stone phase of the fort in the period of Hadrian and Antoninus Pius, even direct evidence is missing.

The only intensive excavated building from the *latus sinistrum* was the afore-mentioned building C3 researched between 2009 and 2011 by a Romanian-German team. This structure of $22.5 \,\mathrm{m} \times 7 \,\mathrm{m}$ had its brick floor at a depth of approx. $2.5 \,\mathrm{m}$, while the walls were made in the *opus incertum* building technique (fig. 7). The authors of the research succeeded in reconstructing the history of the building, with two main construction phases being identified. The beginning of its first stone phase was fortunately dated due to a small construction offering a deposit that contained three coins, one from Vespasian and two from Antoninus Pius time (*terminus post quem* $148/149 \,\mathrm{AD})^{22}$. This dating fits very well with our chronological data coming from building B6, both belonging to the first stone phase of the fort. Regarding the function of this feature, after the systematic excavation of building C3, it became clear that its purpose was that of a water tank and not of an underground temple as presumed before²³.

As our recent non-invasive surveys pointed out, the most interesting area is that which is situated between the buildings C3 and C8. We, therefore, used this information to start a research excavation plan that was materialized by a first control trench of $20 \,\mathrm{m} \times 2 \,\mathrm{m}$ (S1/2017). The position of this trench was dictated by several aspects: 1) the data obtained by employing different geophysical techniques illustrated several anomalies with high archaeological potential, each employed a method proving to be complementary to the other; 2) as opposed to the magnetic map, the electric methods showed a very interesting anomaly in the eastern part of the big inner courtyard – we intended to determine both its function and relation to the other structures identified in its immediate vicinity, and 3) this part of the *latus sinistrum* was unknown, no previous archaeological excavations being performed. The main result of this control trench was the recognition of multiple stone walls belonging to different construction phases (**fig. 8**). A relative chronology was

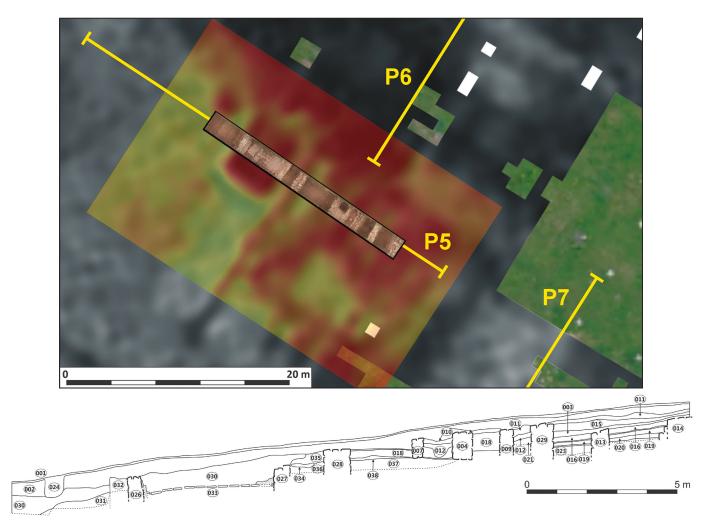


Fig. 8 Combined photogrammetry of S1/2017 overlapping the 2.5D ERT survey and the profile drawing of the archaeological situation. – (Compiled by V.-A. Lăzărescu).

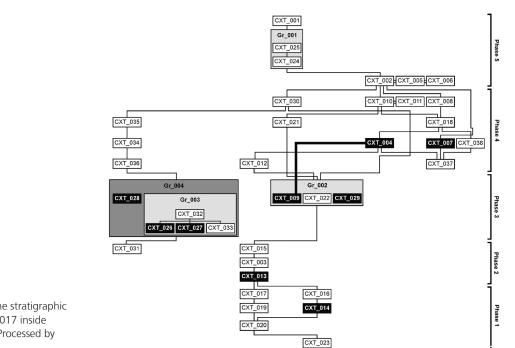


Fig. 9 Harris Matrix of the stratigraphic situation observed in S1/2017 inside the fort at *Porolissum.* – (Processed by V.-A. Lăzărescu).

made possible following the stratigraphic succession of these construction phases and sub-phases (**fig. 9**), but unfortunately, no relevant dating artefacts were recovered; the only notable finds are two fragments of clay lamps stamped with the name NERI and two coins issued during Trajan's reign²⁴ that can only be used as a *terminus post quem*. The geophysical anomaly that was targeted by this control trench turned out to be a $4.8\,\mathrm{m} \times 6\,\mathrm{m}$ water basin having a brick floor and waterproof plaster on its inner walls. The size of bricks used for the flooring as well as its construction technique are similar to the brick floor of the big water tank C3, making it possible for both structures to be contemporaneous.

After this first step towards the understanding of the topography of the *latus sinistrum*, starting with 2018 a new phase of research was initialized. This time, we focused our attention on the so-called building C5-7. Using once more the excellent information provided by the non-invasive surveys we decided to investigate an area of $15 \,\mathrm{m} \times 15 \,\mathrm{m}$ (S2/2018) to uncover the north-western part of the structure. The stratigraphy observed with this occasion is similar to the above-mentioned situation at the neighboring building C8, a situation that can also be recognized while studying the altimetry of this area (**fig. 10**). Here also, the elevation of the stone walls, as well as the ancient habitation layers were removed, the shape of the building being highlighted only by parts of the stone foundation which was dug directly into the local natural reddish clay. We managed to document five rooms having various dimensions and three rectangular stone bases (0.8 m × 0.7 m) from the inner yard of the building (**fig. 11**). The only possible observation was that we are dealing with only one stone construction phase, with no traces of a previous wooden phase. A refined chronology is not possible at the moment; the only datable artefacts discovered are two bronze coins issued during the reign of Trajan²⁵, accounting only for a *terminus post quem*.

ANALYSIS AND DISCUSSION

The new topography of the latus sinistrum

One of the most relevant results regarding the *latus sinistrum* in the Roman fort at *Porolissum* is a new and more accurate topographical situation (**fig. 12**). This area is bordered by the main inner roads of the fort, forming an *insula*-type quarter of $105 \, \text{m} \times 65 \, \text{m}$ (roughly $6800 \, \text{m}^2$). The eastern and western lateral sides of this space are occupied by two narrow rectangular buildings, one being the water tank (C3) near the head-quarters building, while the other one is the military warehouse near the *porta principalis sinistra* (C8). The central part of the *latus sinistrum* is composed of a cluster of massive buildings having a complex ground plan. This huge $4500 \, \text{m}^2$ construction area seems to be the result of a unitary initial architectural design. We are dealing with four structures having different shapes and dimensions as follows:

- 1) An Italic plan building of $26 \,\mathrm{m} \times 22 \,\mathrm{m}$ with an inner courtyard flanked by a portico. The portico is marked by ten brick-made bases; as traces of no stone columns were found, it is highly probable that the columns were made of wood. The building had small rooms of approx. $3 \,\mathrm{m} \times 4 \,\mathrm{m}$ on each side (a total of 16 rooms).
- 2) Another Italic plan building of 32 m × 27 m with an inner courtyard flanked by a portico. The portico is different from the above-mentioned one, being visible on the geophysical maps as a continuous rectangular wall which probably supported stone columns. Directly aligned, at approx. 2 m from the *via principalis*, we can presume that the building has had also a front stone column portico similar to the one documented for the façade of the *principia*.

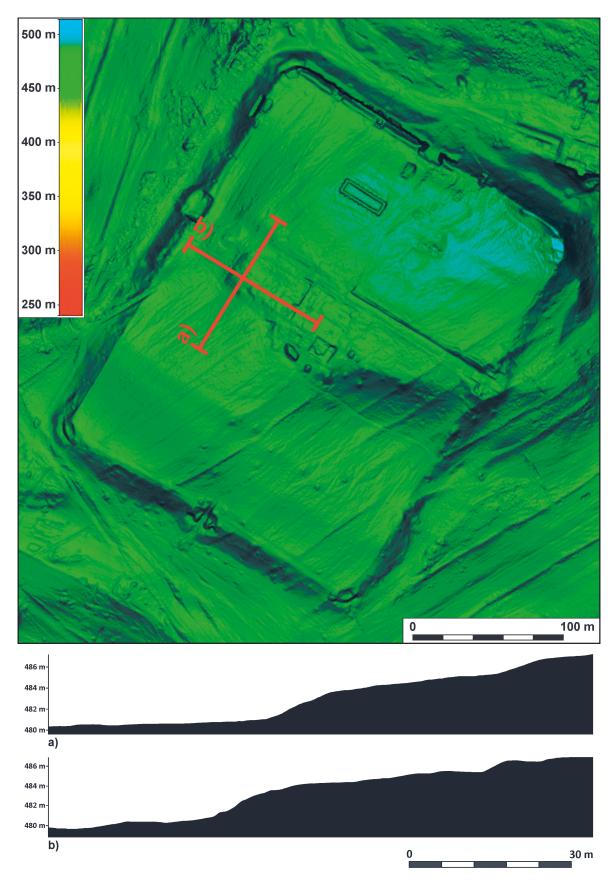


Fig. 10 Digital Terrain Model based on the LiDAR survey and altimetry profiles in the area of the *latus sinistrum* of the fort at *Porolissum*. – (Processed by V.-A. Lăzărescu).



Fig. 11 Photogrammetry of S2/2018 and the virtual reconstruction of building C5-7 inside the fort at *Porolissum* based on the geophysical surveys. – (Compiled by V.-A. Lăzărescu).

- 3) A larger open-space area $(29 \, \text{m} \times 20 \, \text{m})$. This courtyard can be flanked by rooms, being very well visible on the magnetic map only on its western side. On the eastern side, the only clear geophysical anomaly was the brick-paved small basin sectioned by S1/2017. This structure makes possible the existence of other closed spaces along this side of the courtyard.
- 4) The fourth area (30 m × 50 m) occupies the south-eastern part of the *latus sinistrum*. Due to its complicated inner partitioning, the topographical plan of this side cannot be accurately mapped. Therefore, it is uncertain at this point whether we are dealing with a unitary structure. However, we can state that the outer shape of this fourth block is of rectangular shape; its southern and northern walls are visible on the geophysical map, while its north-eastern corner was uncovered in one of N. Gudea's excavations²⁶. The existence of a portico on the opposite side, along with the *via decumana*, makes possible the hypothesis of an access point from this side.

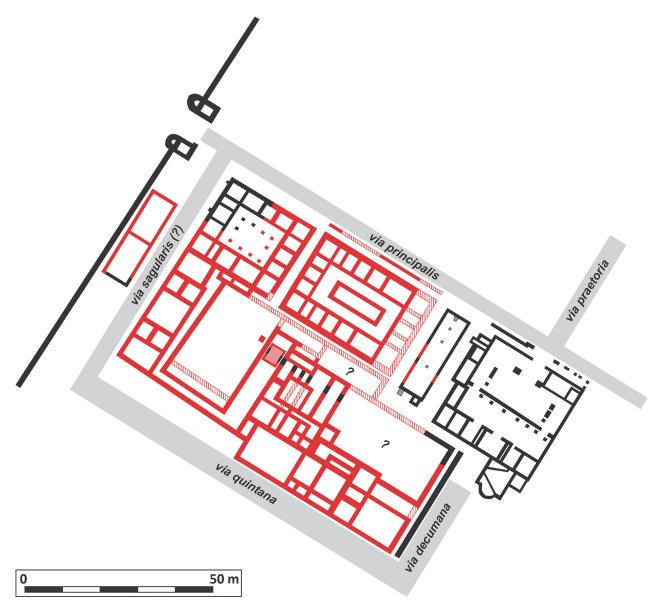


Fig. 12 Combined interpretation of the *latus sinistrum* area based on all the available information. – (Compiled by V.-A. Lăzărescu / C. H. Opreanu).

Chronology

Our excavations in the *latus sinistrum* did not identify the first timber phase of the buildings. The old excavation reports are mentioning traces of wattle and daub walls under the later stone ones at the headquarters building and beneath buildings C4 and C9 being interpreted as a first timber phase and dated with Trajan's coins²⁷. As opposed to the initial timber phase, the first stone phase of this area is much better documented. In A. Radnóti's 1943 excavation in the fort, a construction inscription dating to 129 AD was found at the *porta principalis sinistra*²⁸. Even if fragmentary, the inscription probably mentioned the erection in stone of the gate or of the whole defence wall. Another similar inscription was discovered at the *porta praetoria* dating to 140 or 140-144 AD²⁹. Recently, I. Piso proposed a new reading of the last-mentioned inscription, replacing the name of Antoninus Pius with Hadrian³⁰. The editor of Radnóti's research, E. Tóth, concluded the existence of a first partial stone phase during the period of Hadrian and later, under Antoninus Pius,

the entire fort would have been built in stone³¹. The *ballistarium* excavated by us in the vicinity of the *porta praetoria* (building B6) was also constructed during the reign of Antoninus Pius (140/160 AD)³². The same chronology was established for the water tank (building C3), its construction offering a deposit dated with a *terminus post quem* coin to 148/149 AD³³. Summarizing all the chronological available data, we can state that E. Tóth's hypothesis seems to be correct: the first stone phase of the fort at *Porolissum* started under Hadrian when the defence system was raised, while the general plan of the inner buildings was probably designed at a second phase during the reign of Antoninus Pius and all the main inner buildings were erected. The same pattern can be also recognized in the civilian settlement where the most representative building, the amphitheatre, was built in stone in 157 AD³⁴.

A second stone phase of the defence system of the fort at *Porolissum* has established for the year 213 AD, using as main evidence three identical construction inscriptions found in the gates of the fort³⁵. N. Gudea did not agree with the existence of a first stone phase of the precinct wall. He was convinced that the construction of the stone precinct wall as well as that of the main gates had been done only in 213 AD³⁶. Even if he agreed that the inner organization of the fort was not changed since the 2nd century, he argues that the *principia*, despite following the initial plan, was entirely rebuilt during the 3rd century, using as main evidence the different colours of the mortar employed at its reconstruction³⁷. In our excavations conducted inside the fort, we concluded that the differences in colour of the mortars used are not chronologically relevant, pointing only differences in the construction technique.

Construction phases later than the initial one from the period of Hadrian and Antoninus Pius were documented at the water tank (C3 building)³⁸ and in our control trench S1/2017 from the *latus sinistrum*. Unfortunately, no dating evidence was found and only the relative chronology of the different contexts revealed by these new excavations accounts for this construction sequence (**figs 8-9**). The last construction sub-phase of later dating was recorded by N. Gudea inside building C9, where a room of 3 m × 5 m was separated by thin walls using in their structure fragments of older monuments, columns and inscriptions³⁹. These improvised construction works were also identified in different areas of the fort such as at the southwestern wall, where fragments of older monuments and inscriptions were used⁴⁰, as well as in other parts of the wall⁴¹. Other reused inscriptions and monuments were found at the gates. At the *porta decumana* an honorary inscription for emperor Philippus Arabs was discovered⁴² representing a *terminus post quem* for this type of work, the same situation is also documented at the *porta principalis sinistra*⁴³.

FINAL COMMENTS

As we have previously argued, because all the buildings placed in the *latus sinistrum* are following a single construction plan, we can advance the hypothesis that they belonged to a unitary complex. At the moment, several data are supporting the hypothesis of a residential purpose for this complex. The plan of building C5-7 is related to a house of Mediterranean type, having rooms disposed around a central courtyard with a portico. One of the rooms situated on the eastern side of the open-space area turned out to be a pool, paved with bricks, which can be connected to a larger structure that might be interpreted as a private bath. Nearby, the existence of a small space heated with a hypocaust tells also of a private residential area. Judging by the compiled plan, we can consider that all the above-mentioned structures are part of the same residence, probably a *praetorium*. In this case, we can think of two separate purposes: a public area aligned to the *via principalis* and a private one situated behind it. Other examples of the *praetoria* with annexed private baths are also probable in the forts at Tihău (jud. Sălaj/RO), Buciumi (jud. Sălaj/RO), Cășeiu (jud. Cluj/RO), Ilişua (jud. Bistrița-Năsăud/RO) and possibly Gilău (jud. Cluj/RO).

known in the Empire, with the best examples being documented in the forts at Chester (Cheshire/GB) and Housesteads (Northumberland/GB)⁴⁵. Furthermore, *praet[orium?---] let in bali[neum]* is possibly epigraphically recorded at Öhringen (Hohenlohekreis/D)⁴⁶, while at Muru de Bangius (prov. Oristano/I) this type of *praetorium* was archaeologically researched⁴⁷. This hypothesis is also supported by the presence of a water tank in the very neighbourhood (building C3), positioned between the *principia* and the *praetorium*. Building C4, despite its plan having rooms disposed around a central courtyard, has an uncertain purpose, especially because the old excavations recorded numerous artefacts that are very difficult to relate to a private structure, i.e. a great number of bow laths, bone arrowheads, and other weapons⁴⁸ which were found inside the inner court of the building. Based upon this data, L. Vass proposed that the purpose of this building was that of a workshop for antler bow laths and bone arrowheads⁴⁹.

The high density of structures identified in the *latus sinistrum* of the Roman fort at *Porolissum* does not represent a standard for the regular auxiliary fort, suggesting a genuine concept unknown in any other fort of the province of Dacia. If we add to this observation also the numerous *horrea*-type buildings (known from the geophysical surveys) situated in the *praetentura* where the barracks are usually placed we can argue that the main purpose of this fort was that of a command and logistics support base for the entire *limes* area of *Dacia Porolissensis*.

Notes

- 1) Daicoviciu 1953, col. 265-266.
- CIL III 7986; CIL XVI 132; Daicoviciu 1937-1940, no. 7b = AÉ 1944 no. 52; no. 7c = AÉ 1944 no. 53; no. 7d = AÉ 1944 no. 54.
- 3) Gudea 1989a; 1997a.
- 4) Matei 1996. Gudea 1997b. Matei 2007. Lăzărescu/Bilașco/Vescan 2016.
- 5) Gudea 1997, 46-50.
- 6) Gudea 1989a, 33-37.
- 7) Tóth 1978, 5-12 fig. 2.
- 8) Ibidem 11-12 fig. 5.
- 9) Gudea 1989b, 23-24 figs 16-17.
- 10) Gudea et al. 1986, 120.
- 11) Gudea et al. 1988, 149.
- 12) Gudea et al. 1986, 122-123; 1988, 149-150.
- 13) Gudea et al. 1986, 123 fig. 5.
- 14) Gudea 1989b, 24 fig. 17.
- 15) Gudea et al. 1986, 122. Gudea 1997a, 70.
- 16) Marcu 2009, 95-96.
- 17) Gudea et al. 1992, 144-145. 160 fig. 3. Marcu 2009, 97-98.
- 18) Fieldler et al. 2018, 451 fig. 1.
- 19) Döhner et al. 2010a, 125 pl. 2; 2010b, 99 fig. 6.
- Opreanu/Lăzărescu/Ștefan 2013a, 86. 100 figs 12-13. –
 Opreanu/Lăzărescu 2016, 78.
- Opreanu/Lăzărescu/Ștefan 2013a, 85; 2013b, 511. Opreanu/Lăzărescu 2016, 77.
- 22) Mustată et al. 2014, 218. Fiedler et al. 2018, 459.

- 23) Mustată et al. 2014. Fiedler et al. 2018.
- 24) We would like to thank Dr. Cristian Găzdac (Cluj-Napoca) for determining the coins as follows: 1) As, Trajan minted in Rome, 140-107 AD, RIC II, 503; Woytek 207c; 2) As, Trajan minted in Rome, 108-110 AD, RIC II, 500; Woytek 331b.
- 25) We would like to thank Dr. Cristian Găzdac (Cluj-Napoca) for determining the coins as follows: 1) Sestertius, Trajan minted in Rome, 112-113 AD, RIC II 610; Woytek 454b; 2) Sestertius, Trajan minted in Rome, 112-113 AD, RIC II 610; Woytek 454b.
- 26) See note 17.
- 27) Gudea et al. 1992, 145. Gudea 1997a, 24.
- 28) Tóth 1978, 7; 17 nos 4a-b.
- 29) Ibidem 18-19 no. 6.
- 30) Piso 2013.
- 31) Tóth 1978, 9.
- 32) See note 20.
- 33) See note 22.
- 34) CIL III 836.
- 35) Macrea 1957, 222-226 figs 2-3.
- 36) Gudea 1997a, 35.
- 37) Ibidem 34-35.
- 38) Mustață et al. 2014, 218. Fiedler et al. 2018, 460-461.
- 39) Gudea et al. 1992, 144.
- 40) Gudea et al. 1980, 80 fig. 3.
- 41) Gudea 1989a, 82.
- 42) Ibidem 764 no. 17.
- 43) Tóth 1978, 10.

- 44) Isac/Hügel/Andreica 1994. Opreanu/Lăzărescu 2016, 104 fig. 65.
- 45) Johnson 1987, 156.
- 46) CIL XIII 11 759 (= ILS 1554). CIL suggested as possible also the form *praet(enturam)*?
- 47) Zucca 1992.
- 48) Gudea et al. 1988, 149. Gudea 2008, fig. 10, 1-17.
- 49) Vass 2015, 101. 112 pl. III.

References

- Daicoviciu 1937-1940: C. Daicoviciu, Neue Mitteilungen aus Dazien. Dacia 7-8, 1937-1940, 299-336.
 - 1953: RE XXII, 1 (1953) col. 265-270 s.v. Porolissum (C. Daicoviciu).
- Döhner et al. 2010a: G. Döhner / M. Fiedler / C. Höpken / C. Merzenich / S.-P. Pánczél / V. Stürmer / Z. Vasáros, Forschungen im Kastell von Porolissum. Bericht zur Kampagne 2009. Marisia 30, 2010. 115-126.
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Zusammenfassung / Summary / Résumé

Die römischen Hauptquartiere am nördlichen Limes von Dakien: *Porolissum* (jud. Sălaj/RO) im Lichte neuerer Forschung

Die Autoren stellen ihre neuen geophysikalischen und archäologischen Forschungen zum *latus sinistrum* im römischen Kastell von *Porolissum* vor. Das Ergebnis der intensiven geophysikalischen Untersuchungen war die Kartierung eines riesigen Wohnkomplexes von 4500 m², der aus mehreren Gebäuden besteht. Die anschließende archäologische Ausgrabung bestätigte die geophysikalischen Daten und lieferte chronologische Details. Zusammenfassend lässt sich sagen, dass die neuen Forschungen in *Porolissum* im *latus sinistrum* des Kastells ein Areal mit mehreren Gebäuden identifiziert haben, die das Ergebnis eines einheitlichen architektonischen Plans zu sein scheinen. Die erste chronologische Phase der Steingebäude wurde in die Zeit von Hadrian und Antoninus Pius datiert, während die zweite Steinphase, die aus den Kellern der meisten Gebäude rekonstruiert wird, im ersten Jahrzehnt des 3. Jahrhunderts begann. Der Zweck dieses riesigen Komplexes war vermutlich ein Prätorium mit privaten Badeeinrichtungen eines Kastells, das sehr wahrscheinlich das militärische Hauptquartier und eine Logistikbasis für den nördlichen Limes Dakiens war.

The Roman Headquarters on the Northern *limes* of Dacia: *Porolissum* (jud. Sălaj/RO) in the Light of Recent Research

The authors are presenting their new geophysical and archaeological research of the *latus sinistrum* in the Roman fort at *Porolissum*. The result of the intensive geophysical surveys was the mapping of a huge residential complex, of 4500 m² composed of several buildings. The archaeological excavation which followed confirmed the geophysical data and provided chronological details. In conclusion, the new research at *Porolissum* identified in the *latus sinistrum* of the fort an area with several buildings which seem to be the result of a unitary architectural plan. The first chronological phase of the stone buildings was placed in the period of Hadrian and Antoninus Pius, while the second stone phase, which is a reconstruction from the basements of most of the buildings, started in the first decade of the 3rd century. The purpose of this huge complex was probably a *praetorium* with private bath facilities of a fort which was very probably the military headquarter and a logistics base for the northern *limes* of Dacia.

Les quartiers généraux romains sur le *limes* nord de la Dacie: *Porolissum* (jud. Sălaj/RO) à la lumière de nouvelles recherches

Les auteurs présentent leurs dernières recherches géophysiques et archéologiques sur le *latus sinistrum* du fort romain de *Porolissum*. Les prospections géophysiques intensives permirent de dresser le plan d'un énorme complexe résidentiel de 4500 m², composé de plusieurs bâtiments. Les fouilles archéologiques qui suivirent ont confirmé les données géophysiques et fourni des détails chronologiques. Les dernières recherches menées à *Porolissum* ont donc permis d'identifier au *latus sinistrum* une zone de plusieurs constructions qui seraient le résultat d'un plan architectural cohérent. Une première phase de constructions en pierre est située sous Hadrien et Antonin le Pieux, tandis qu'une deuxième phase en pierre, qui correspond à la reconstruction intégrale de la plupart des bâtiments, débuta dans la première décennie du 3e siècle. Ce vaste complexe était probablement destiné à être le prétoire, avec bains privés, d'un fort qui abritait probablement les quartier général et servait de base logistique au limes septentrional de la Dacie.

Traduction: Y. Gautier

Schlüsselwörter / Keywords / Mots clés

Porolissum / römisches Kastell / Geophysik / Prätorium / Limes Porolissum / Roman fort / geophysics / praetorium / limes Porolissum / fort romain / géophysique / praetorium / limes

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