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Cuprins – Table of Contents

Studii și cercetări de arheologie

Archaeological studies and researches

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Ján Rajtár septuagenario

The Archaeological Excavation in the Military Bath of the Castellum of Inlăceni/Énlaka in 2025

Cercetări arheologice în baia militară a castrului de la Inlăceni/Énlaka în 2025

VISY Zsolt [1]

Keywords: Dacia, Limes, castellum, military bath, Inlăceni
Cuvinte cheie: *Dacia, Limes, castru, baia militară, Inlăceni*

ABSTRACT

The task of the excavation in 2025 was the partial excavation of the military bath. It was proved that the bath was smaller and further south than depicted in the previous publication. The investigation resulted in the excavation of the drainage channel of the cold-water basin, the *praefurnium* of the *caldarium* and part of the *caldarium*.

ÖSSZEGZÉS

A 2025. évi ásatás feladata a katonai fürdő részleges feltárása volt. Bebizonyosodott, hogy a fürdő kisebb és délebbre található, mint azt a korábbi publikáció ábrázolta. Az ásatás a hidegvizes medence vízelvezető csatornájának, a *caldarium praefurnium*ának és a *caldarium* egy részének a feltárását eredményezte.

REZUMAT

Sarcina investigațiilor intruzive din 2025 a fost cercetarea parțială a băii militare. S-a dovedit că baia era mai mică și mai la sud decât era prezentată în publicația anterioară. Săpăturile au dus la excavarea canalului de drenaj al bazinului cu apă rece, a *praefurnium* de *caldarium* și a unei părți din *caldarium*.

After the investigations in the *castellum* at Inlaceni/Énlaka[2] new research has been started in 2025: it was the first year of the military bath's five-year research plan[3]. The bath was excavated by Z. Székely and collaborators 65 m west from the castellum in 1950[4]. To find the exact location of the bath was difficult, as the

[1] Professor emeritus of University of Pécs, Department of Archaeology, visy.zsolt@pte.hu.

[2] Visy 2021; Visy 2024. About the restoration and presentation of the remains see Visy 2024a.

[3] Staff of the excavation conducted between 4 and 22 August was Ádám Szabó, Szilamér-Péter Pánczél, Katalin Sidó, Sorin Cociș, Alexandru Popa and students from the University of Szeged. The financial cover for the 3-week excavation was provided by the Research Institute for National Strategy and the Municipality of Etéd. The excavation was carried out with the professional support of the Molnár István Museum in Cristuru Secuiesc, where the finds and documentation will be placed according to the valid contract. Surveyor Gábor Gubacsi helped us in determining and staking out the geographical position of the section. The excavation leader expresses his gratitude to all the supporters and participants of the excavation.

[4] Macrea et alii 1951, 305.

Fig. 1. Stone foundation and layer of a building in section north of the bath.
Fig. 1. *Fundație de piatră și stratul unei clădiri, în secțiune, la nord de baie.*

map published by N. Gudea[5] was inaccurate, marking the bath outside the area known as the Palace Garden/Palotakert. The east-west section CD drawn in the area indicated by Gudea provided only negative results, only at the eastern end a layer of stone appeared from a building with a stone foundation (Fig.1). Since it could not belong to the bath, we continued the research further south, where the structures of the bath were identified.

In the north-south oriented section EF, a diagonal drainage channel and the combustion chamber of a *praefurnium* were found, and in the open section GH, perpendicular to it oriented east-west, the southern wall of a room, and inside the room, the partially preserved brick pillars of *hypocaust* heating (Fig. 2). The east-west interior length of this chamber (room A) is 7 m, not 12.8 m, as indicated on the plan of Gudea. Only the base level of the 0,7-8 m wide wall remained. The stones were put in clay; mortar was applied only in the lost part of the wall above the surface. The south wall of the chamber is not on the line marked on the plan of Gudea but is about 1.3 m south of it. The eastern wall, remained also in its base level, is wider than the south one: 1 m (Fig. 4). It could not be observed the outer additional wall as indicated by Gudea.

In the caldarium (room A) some brick pillars were found. Three types of bricks were used in the pillars: 18x18x7,5 cm, 18x18x12 cm and round ones: D= 10-18 cm, width: 9,7 cm. The different types speak for reiterated repair of the *praefurnium*. The pillars could stand in 0,3 m from each other. There were found parts of *tegulae mammatae*, width 3 cm, which

[5] Gudea 1979, 167–170, fig. 35 on page 235 – I apply the room numbering A-E of Gudea.

Fig. 2. South part of the *hypocaustum* in room A – *caldarium*.
Fig. 2. *Partea sudică a hypocaustului din camera A – caldarium.*

Fig. 3. The southern part of the bath with the sections surveyed in 2025. In section EF to the left the ditches B and C, to the right the drainage A, coming from the piscina.
Fig. 3. *Partea sudică a băii, cu secțiunile investigate în 2025. În secțiunea EF, în stânga sunt șanțurile B și C, iar în dreapta drenajul A, provenind din piscina.*

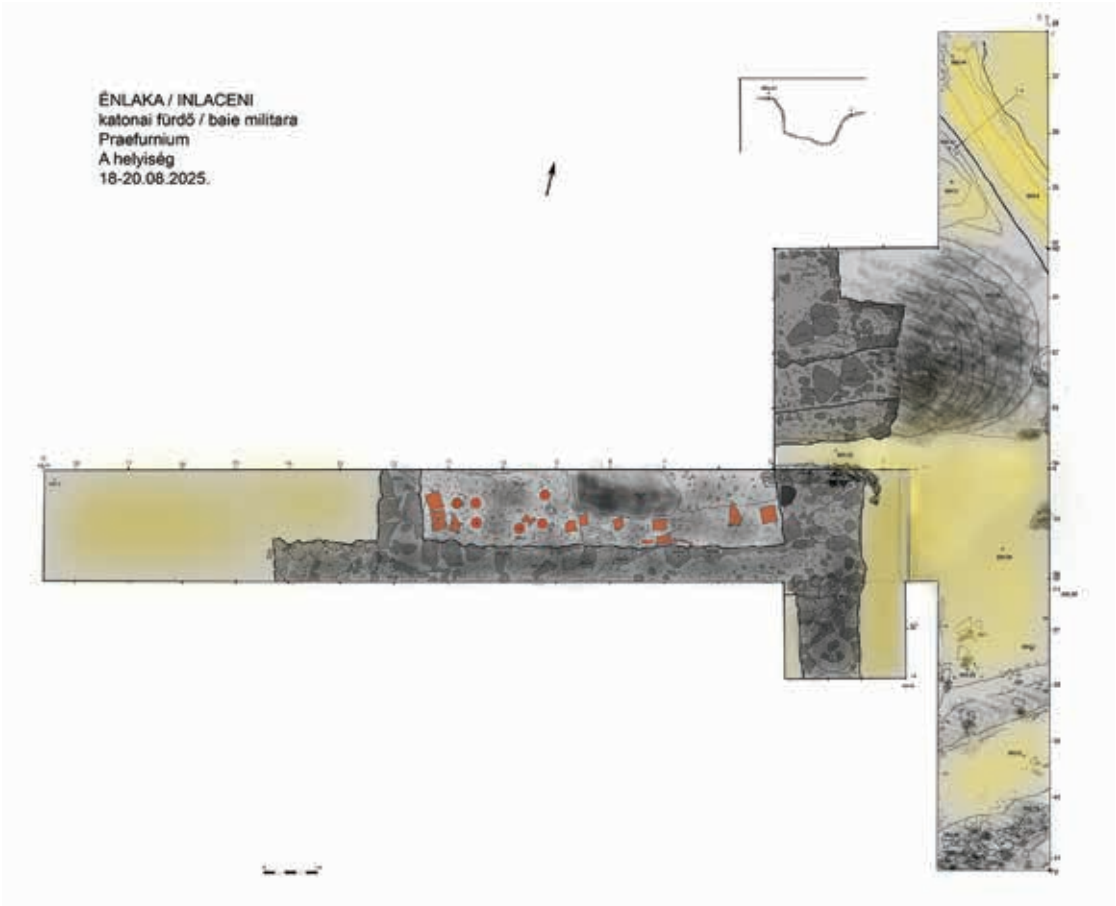

Fig. 4. The southern part of the bath according to the research in 2025.
Fig. 4. *Partea sudică a băii, conform cercetărilor din 2025.*

served as floor tiles. It can be assumed that many stones and intact tiles were gathered by local people after the excavation of Z. Székely, published by N. Gudea. Some people of the village preserve also *tubuli* from the bath, but no such chimney tile was found at the excavation.

The additional wall on the western side was found as earlier. It is the continuation of the south wall of room A in the length of 1,9 m. It turned out, too, that there was an additional room south of the *caldarium*. Its 1,6 m long part has been excavated in the continuation of the western wall of the caldarium. In the southern part of the N-S section EF the ditches B and C were found which ran north-east – southwest, containing some stones and ceramics. Lacking evidence, one cannot determine their function and their connection with the supposed southernmost chamber of the bath (Fig. 3).

The two side walls of the *praefurnium* are much wider and more resistant than the walls schematically represented on the plan. The furnace between the side walls of the *praefurnium* contained thick ash layers, and two big stone slabs lay under them. Also, the pit outside of it was burnt black and filled with ash layers (Fig. 5). No remains of a wooden or stone structure could be observed in the excavation area, which could have covered this workplace.

In the northern part of the north-south section the big drainage A was excavated.

Fig. 5. The *praefurnium* of the *caldarium* of the bath.
Fig. 5. *Praefurnium-ul caldarium-ului băii.*

Its direction is northwest–southeast (Fig. 3, Fig. 4 also with its profile). According to the plan of N. Gudea a semicircle room is here just north of the section, which was paved with tiles, the channel identified could serve as the drainage channel of the apse. As the tiles were covered with terrazzo layer[6], it follows that it was the *piscina*, the basin for cold water.

The stamped bricks discovered attest to the activity of *the cohors I Alpinorum equitata*,[7] (Fig. 6) but also the bricks with the stamps *cohors IIII Hispanorum* and *legio XIII gemina* have been found earlier[8]. The *cohors I Alpinorum equitata* had its garrison in Sărățeni[9] and probably the architects of this unit had expertise in the complex construction of the baths and

Fig. 6. Stamped tiles of the *cohors I Alpinorum equitata.*
Fig. 6. *Țigle ștampilate ale cohors I Alpinorum equitata.*

[6] Gudea 1979, 170.
[7] Similar type of stamps hav been found, Gudea 1979, 173-174; 249, Pl. XIV. 1; 3; 8.
[8] Gudea 1979, Pl. XIII-XIV.
[9] Petolescu 2002, 81-82.

participated in the construction of such buildings nearby, as in the case of the baths in Inlăceni and in Călugăreni[10].

This is also evidenced by the fact that no brick with the *cohors VIII Raetorum* stamp has been found so far in the area of the Inlăceni bath. The bricks of the *cohors IIII Hispanorum* may date from the last third of the second century or, rather, from the first half of the third century. Since the construction of the bath can be dated to the first half of the second century, Hispanic unit bricks can date alteration or repair work on the bath.

No significant finds came to light during the excavation. The small ceramic and glass fragments can be dated to the 2nd and 3rd century. It is no surprise because the bath has been fully excavated in 1950. Also, the lacuna in the wall of the western wall of the caldarium, room A, just south of the *praefurnium* wall can be attested to this work. The only find to be mentioned is a fragment of a bronze brooch (Fig. 7)[11].

The excavations in 2025 can be accurately corroborated with the published plan of the old excavations (Fig. 8), through which several relevant conclusions are obtained:

The bathroom is smaller than thought based on the plan published by Gudea. The interior length of bathroom room A is not 12.8 m, but only 7 m. The south wall of the chamber is not on the line marked on the plan but is about 1.3 m south of it. The two side walls of *the praefurnium* are much wider and more resistant than the walls schematically represented on the plan.

Contrary to previous assumptions, it turned out that the bath had another room on the south side. This is proven by the 1,6 m long wall from the new excavations.

Fig. 7. Bronze brooch.
Fig. 7. *Fibulă din bronz.*

The drainage channel identified in the northern part of the north-south section served as the drainage channel from the *piscina* in the apse basin.

Since only rooms A–C were heated and D was unheated, it can be assumed that this was the bath *frigidarium*, and the basin with an apse marked E served as *piscina*. This is also in line with the general design principle, according to which the cold water area was located on the north side, and the *tepidarium* and *caldarium* on the south side, exposed to the sun[12]. Although it is not possible to determine the function of room C, room B with a substructure of *hypocaustum* was *tepidarium*, and room A was *caldarium*, as Gudea has already indicated. This is also evident from the fact that *the praefurnium*, which has considerable dimensions and a thick layer of ash, is located next to it. Although neither the former excavation and nor the present one have not confirmed, there was surely a hot water basin in the eastern part of the *caldarium*.

[10] Gudea 1997, 57-60.
[11] Merczi 2012, 538, VIII t. 7-8.
[12] Vitruvius, De architectura libri decem, V. 10.

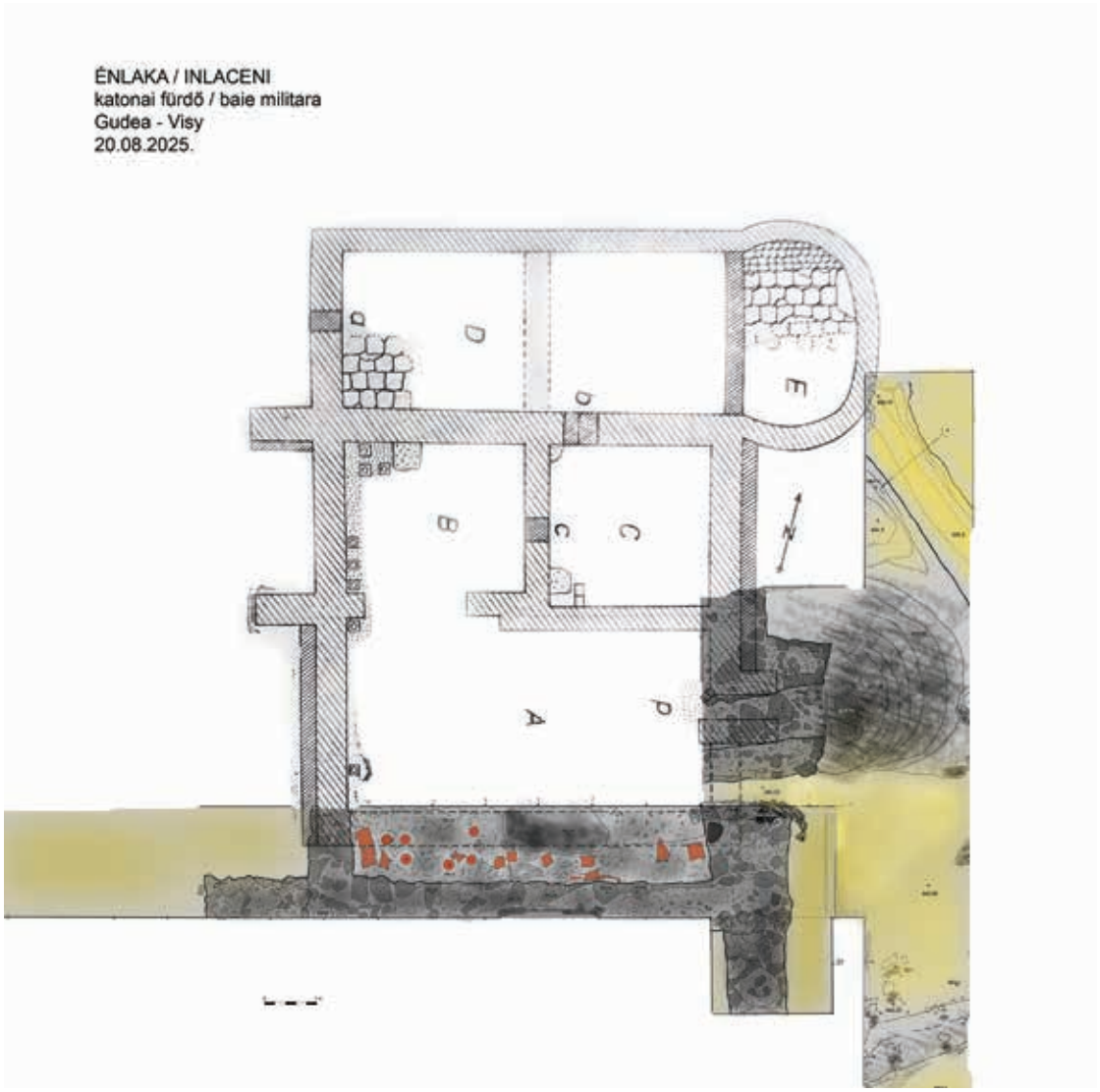

Fig. 8. The plan of the authenticated bath.
Fig. 8. *Planul băii reconstituite.*

The functionality of the room south of the *caldarium* can be clarified only through later investigation. Taking all this into account, the currently known area of the bath (not including the *frigidarium* and *preafurnium*) was 12.7 x 8.7 m.

One of the most important points was always to choose the exact location of a bath. There was a need for a great amount of possibly running water, and it could be made in Inlăceni/Énlaka. The castellum lay on the watershed between the rivers Târnava Mare/Nagy Küküllő and Târnava Mic/Kis Küküllő in the level 680-700 m, and at the same time on the western slope of the 1063 m high Hill Firtos. There are more fountains of abundant quantity of water on the hill that supply also now the village with fresh and clean water. The Roman unit took advantage of the opportunity and built an aqueduct from the hill to the bath. The line of this aqueduct is clearly visible on the geophysical measurement of 2016[13]. It runs some 15-20 m south form the south wall of the

[13] Komp 2017, 249-258.

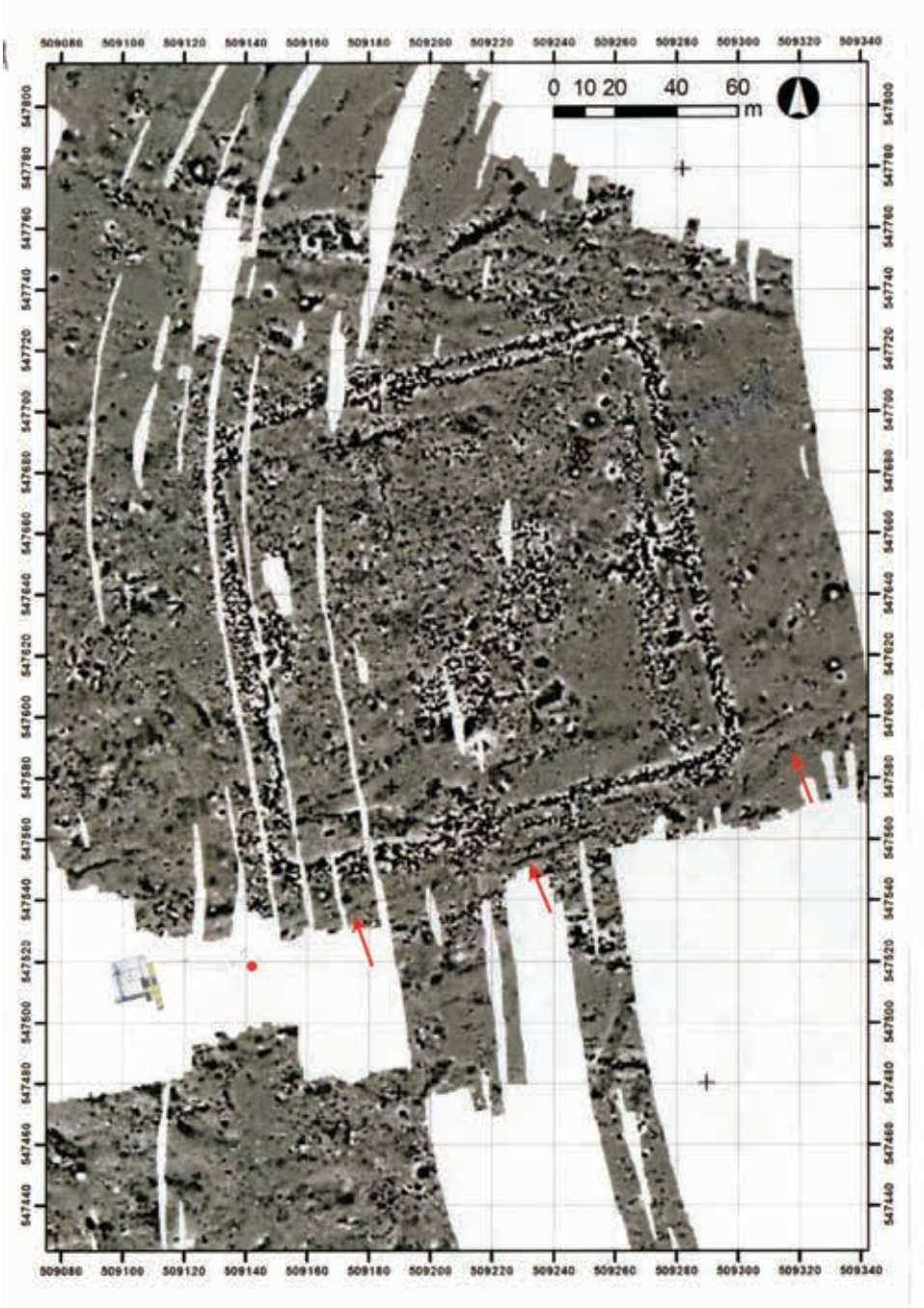

Fig. 9. The plan of the corroborated bath.
Fig. 9. *Baia militară și apeductul acesteia.*

castellum (Fig. 9). Its last sector before the bath is not visible, because here was not possible to make geophysics. However, people knows that there is a "fountain" in the V-form eastern end of the Palotakert. The red dot represents this "fountain" on the map. Some people gathered ceramic pipes from this aqueduct, but there are some examples also in the Molnár István Museum in Székelykeresztúr/Cristuru Secuiesc. It is to be supposed that the aqueduct brought the fresh water to the *piscina*

of the *frigidarium*. The bath had also a *latrina*. It was cleaned by the already used water of the bath and coming out from the piscina. It could run through the excavated drainage ditch and flowing round the bath to the west on the slope, where it can be found in a later excavation.

The structure of the bath follows the general system of the military baths. Those of the auxiliary units were built outside of the fort in a very near place along the Roman limes, like in Zülpich[14], in Weissenburg i. Bay.[15], in Intercisa[16], only some military bath to mention, but a significant number of military baths are known or have been excavated in Dacia, too[17]. The floor plan and the layout of the military baths are quite similar, always having *apodyterium-frigidarium-tepidarium-caldarium*, and often also *sudatorium* in a block form or in a row. Hypocaust-heating is regularly only in the *caldarium*, *tepidarium*, and also in the *sudatorium*, if there is such a room. Their size is different, depending on the number of soldiers, on number of people who used them[18].

During the excavations, no pertinent data were obtained on the construction of the bath, but the stamped bricks attest that it could have taken place in the first half of the second century. The tiles in room A from the *hypocaust* pillars of various shapes and sizes, including quadrilateral and circular ones with a thickness between 7 and 15 cm, indicate multiple repairs. These repairs could have taken place at the end of the second century or in the first half of the third century, according to the tiles with the stamp of *cohors IIII Hispanorum*.

[14] Fedeles et alii (2003) – the extension of the *caldarium* is 6,5 x 4,5 m. Zu den Roman baths see Dodt 2005.

[15] Visy 1988, 117-135. – the extension of the *caldarium* of the bath of the *ala I Britannica Auriana* is 10 x 8 m.

[16] Újlaki-Pongrácz 2007 – the length of the bath of the *cohors I milliaria Hemesenorum* is 11 m.

[17] Gudea 1997 passim; Burkhardt 2016, 383-404.

[18] Brödner 1983, 96-106.

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