The Castellum at Inlaceni/Énlaka and the Eastern Limes of Dacia

Castrul de la Inlăceni/Énlaka și Limes-ul Răsăritean al Daciei

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ABSTRACT

The study presents a recently found inscription among the stone debris of the north gate which fell into the fossa of the castellum at Inlăceni/Énlaka, on the eastern Roman Limes. The building inscription was made in the name of Antoninus Pius, and the action took place in AD 149, the year of the 12^{th} renewal of his tribune power. The cohors VIII Raetorum civium Romanorum equitata torquata was the garrison of the Inlaceni/Énlaka fort in the first half of the 2^{nd} century. The earthen camp was built by this troop, but according to the new inscription, they were also the rebuilders of the fort in 149. Since this could hardly have been an earthen camp, it is necessary to think about the construction of the stone fort. According to this, contrary to the previous assumptions, the stone fortress was built not by the cohors IIII Hispanorum, which replaced her in the middle of the century, more likely after the Markomann wars, but by the cohors VIII Raetorum in 149.

REZUMAT

Studiul prezintă o inscripție recent găsită printre resturile de piatră ale porții de nord căzute în șanțul castrului de la Inlăceni/Énlaka, pe Limes-ul roman de est. Inscripția de construire a fost făcută în numele lui Antoninus Pius, iar acțiunea a avut loc în anul 149 d. Chr., anul celei de-a XII-a reînnoiri a sa ca tribun. Cohors VIII Raetorum civium Romanorum equitata torquata a fost garnizoana fortului Inlaceni/Énlaka în prima jumătate a secolului al II-lea. Castrul de pământ a fost construit de această trupă, dar conform noii inscripții, tot Cohors VIII Raetorum a reconstruit fortul în anul 149. Întrucât acesta cu greu ar mai fi putut fi un castru de pământ, apare posibilitatea unui castru de piatră. Potrivit acesteia, contrar ipotezelor anterioare, fortificația de piatră a fost construită nu de cohors IIII Hispanorum, cea care a înlocuit-o pe cohors VIII Raetorum la jumătatea secolului, mai probabil după războaiele Markomanice, ci de cohors VIII Raetorum în 149.

The province Dacia has attracted the interest of many scholars for centuries thanks to its special situation and history. His fabulous gold treasure, the Latin-related language of the Romanians

living partly in Transylvania, served as a breeding ground also for many bold but legendary theories that still influence scientific thought today. The scientific research of the Roman province dates back about 150 years, to the middle of the 19th century, with the participation of Saxon,

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Hungarian and Romanian researchers. The systematic processing and evaluation of historical sources and inscriptions, as well as the topographical results and finds of archaeological excavations, not only outlined the territory of the province, but also provided important data for its relatively short history. Based on the intensive research of recent decades, Dacia's history and culture are becoming clearer and clearer, in ever finer detail, but there are still two points at which researchers are still at odds.

One is the question of Dacoroman continuity. For Hungarian research, especially since András Alföldi, there has never been any doubt that it is only a legend, but Romanian research has been a follower of this untenable hypothesis since the beginning, and here and there even today. However, since I published a summary study on this topic a few years ago², I will deal with this topic only for the duration of a quote: "The population of Transylvania was radically replaced in the 3rd century AD... Authoritative linguistic research excludes the presence of the ancestors of the Romanian people in Transylvania in the 3rd-6th centuries due to the complete absence of a contemporary Germanic linguistic influence in the Romanian language. The origin of the Romanian people and language should therefore not be sought in Transylvania or north of the Danube, but in an area where they really could not have had contact with the Germans. This area is south of the Danube in the Balkans. By carefully analyzing archaeological and historical sources, several Hungarian and Western researchers, and also some Romanian researchers, have made harsh judgments about the Dacoroman continuity hypothesis, explaining in detail its untenability. It is regrettable that the correct concept of history accepted from the best Romanian researchers

has not yet spread widely and has not passed into the politically influenced public consciousness... The hypothesis of Dacoroman continuity must therefore be definitively referred to in the series of nationalist and at the same time naïve explanations of history. However, it is not enough just to circumvent and ignore the erroneous hypothesis by remaining silent, it is necessary to point out the error and provide credible information about it. This is the task of Romanian and foreign researchers, specialists and publicists."

The other issue is Dacia's territory, its exact boundary. In a previous study³, I presented the 150-year long process that followed the drawing of Dacia's boundary. At first, even the Hungarian Great Plain and Moldavia were considered provincial areas by the research, and the Great Wall of the Hungarian Plain also seemed to play a role in drawing the western border of the province on several occasions. Later, after World War II, the idea of Dacia stretching to the Tisza developed, and as a result of the straining of the majority of Romanian research, it was transferred to international research, so much so that, with a few exceptions, even the Hungarian academic and scientific workshops unsuspectingly adopted it. However, Hungarian research was successful4, and after a Romanian researcher, E. Nemeth, not only took over this picture, but also refined it⁵, the question came to a resting point. According to this, Dacia never extended to the Tisza and Szeged, and only during the time of Trajan was the area of the Viminacium/Kostolac-Tibiscum/ Zsuppa route part of Dacia in the Banat. According to the latest research, the Bihar mountains did not belong to Dacia, since the border of the province was along the

² Visy 2012, 233-255; Visy 2020/3a, 95-98.

³ Visy 2009a, 115-126.

⁴ Soproni in: TIR L 34; Tóth 1986) 46-106; Visy 2009b, 219-229.

⁵ Nemeth 2005, 184.

Maros from Micia⁶ toward East, and the area in the southeastern corner of the Carpathians did not belong to this province⁷, although the Roman forts there, Barcarozsnyó (Raşnov), Nagyborosnyó (Boroşneu), Mare Bereck (Breţcu) belonged to the army of Dacia inferior. The border of the province here was the river Homorud/Homoród, and from its union with Olt until its mouth in the Danube, it was the Olt.

After such antecedents and in the midst of debates, the research of Dacia's eastern limes was launched by the Department of Archaeology of the University of Pécs and the Pécs Aerial Archaeological Archive together with several museums in Romania in 2007, and in 2017 in the castellum of Inlaceni/Énlaka. The outer walls and several towers of the camp were excavated by Zoltán Székely in 19478, and in 1950 a research group led by Mihael Macrea⁹ continued the work, the actual leaders of which were Zoltán Székely and István Molnár. Then the line of the castellum wall was clarified. They excavated the four gates. In addition to exploring the main building of the *principia* and two other internal buildings, work was also carried out in the bath southwest of the fort. This research was summarized by Nicolai Gudea in 1979¹⁰.

After a long pause, a geophysical survey organized by Alexandru Popa followed. The survey was carried out by DAI and produced a nice result, although the entire area of the fort could not be tested¹¹. A few years later, in 2016, the magnetic survey was repeated, also through DAI. By this time, not only the entire area of the *castellum*, but also most of the mili-

tary vicus were examined¹². The surveying and evaluating Rainer Komp defined four phases of the fortress and plotted it on the map he evaluated, which he marked with the first four letters of the Greek Alphabet.

Based on this survey, another castellum research was launched in 2017. The aim was to verify the existence and nature of the camps drawn on the basis of the geophysical survey, and to make accurate topographical and chronological observations. This research was carried out by Zsolt Visy within the excavation of Sorin Cocis. First, we clarified the relationship between principia and via principalis. The main part of the principia, the stone structures of the office rooms on both sides of the sanctuary, as well as the basilica in front of them have been excavated, but not their continuation, the alae and the courtyard with the closure towards the road¹³. However, in the research trench drawn along the southern ala line, we found the cross walls of the storerooms with only dry-stone foundations, as well as the western closure of the principia, in front of it with the drainage ditch of the via principalis¹⁴. Therefore, only the main part of the headquarters was built entirely of stone, the warehouses of the wing buildings, and apparently the military barracks were made up only of wooden structures mounted on dry-stone foundations. The path identified by the drainage ditch points towards the two side gates, so this excavation also contributed to a better understanding of the internal structure of the fortress.

The leader of the later excavations, after the Romanian archaeological inspectorate granted the right to excavate in Romania on the basis of the documents submitted, was already me. Explorations

Marcu 2016, 4-10; Marcu – Cupcea 2021, 75-79, Fig. 124.

⁷ Visy 2014, 65-68; Visy 2020b, 108-112.

⁸ Székler 1956, 31-40.

⁹ Macrea et alii, 1951, 285-311.

¹⁰ Gudea 1979, 149-273.

¹¹ Popa et alii., 2010, 101-128.

¹² Komp 2017, 249-258, Visy 2017, 229-248.

¹³ Marcu 2009, 140.

¹⁴ Visy 2017, 232-233.

started according to a 5-year research plan in 2019 and continued in 2021 after a forced hiatus due to the COVID pandemic. It is hoped that work will continue uninterruptedly in the future.

During the 2019 research, we cut through the eastern *vallum* of the *castellum* the four fortification lines assumed by R. Komp. The very first one (fort α) soon turned out to be a drainage ditch dug to divert water from the hillside from the castellum. The discovery of the innermost system (fort δ) showed that it was the paved surface of the *via sagularis*, which traveled roughly parallel to the main wall. Only the beta and gamma line (forts β , γ) were a stone wall, and in this place one could really observe a renewal phase. The fitch of the early earth fort may be under this wall, but this has not been explored ¹⁵.

The next excavation was conducted in the area of the two side gates of the *castellum* between 9 and 28 August 2021¹⁶ (Pl. 1). In these places, according to previous research, there were a pair of gate towers on both sides of the exit road¹⁷.

The 30 m long and 2 m wide G-H research trench stretched through the western tower of porta principalis dextra on the north side of the castellum, and the 30 m long and 2 m wide C-D research trench through the western tower of porta principalis sinistra. Both sections were based on the geophysical survey conducted in 2016, which, according to R. Komp's interpretation, suggests three periods in each location. The excavation of 1919 did not prove the existence of the outermost and innermost vallum. The purpose of this year's exploration was to research and control the two internal suspected periods (stone forts β and γ).

The direction of the G-H research trench was at right angles to the northern wall of the castellum and deviated 30° eastwards from the north. After the removal of the humus layer, the Roman layers appeared, and in the northern part of the section their absence appeared (Pl. 2). In the southern part of the section, the western gate tower was found for 6 m long, then after a stone-free lane about 1 m wide, the collapsed ruins of the tower and the wall for again 6 m. Further north, the yellow clay subsoil appeared, into which only small depressions were dug, with a few stone fragments in them and on the surface. The complete lack of artifacts and objects in the northern half of the research trench proves that at this distance from the wall of the castellum no longer has to be counted any fortification. There was no β fort here.

The length of the tower is 6 m, the width is 4 m¹⁸ (Pl. 3). Based on the previous excavation, in the extension of the section to the west, we revealed the western wall of the tower in its entire width, as well as the wall of the fortress connected to it from the west. The width of the outer wall of the tower is 1.25-1.30 m, that of the side wall is 1.2 m and that of the rear wall is 1 m, which are essentially the same as

¹⁵ Visy 2020c, 101-117.

¹⁶ The excavation was carried out on the basis of the 20,000 RON research grant awarded by the Harghita County Council through the positive evaluation of the tender of the Molnár István Museum in Cristuru Secuiesc/Székelykeresztúr. The research was conducted by the Posta Béla Foundation. For the support and implementation of the research, I would like to express my thanks to these organizations and institutions. Before the start of the excavation, an agreement was reached with all the owners concerned to open the research area and then to reburial it after the excavation was complete. The excavated stone material was removed by a local farmer. Archaeology students from Hungarian universities: Ákos Megyesi, Dominika Szabó, Petra Králik Dóra, Zénó Lajos, and Katalin Sidó, a Romanian archaeologist participated in the research. The excavation was visited by Szilamér Pánczél, head of the excavation of the Roman castellum in Călugăreni/Mikháza, István Vári, archaeologist of the Molnár István Múzeum at Cristuru Secuiesc/Székelykeresztúr, and Dr. Alexandru Popa, archaeologist of the Muzeul Naţional al Carpaţilor Răsăriteni in Sfîntu Gheorghe/Sepsiszentgyörgy. The artefacts and documentation will be owned by the Molnár István Museum in Cristuru Secuiesc/Székelykeresztúr.

¹⁷ Macrea et al. 1951, 304-306; Gudea 1979, 163-165.

¹⁸ Gudea 1979, 163; Fig. 17.2.

the previously measured values. The trampled surface of the tower proved to be 699,630 m. The mortar-bound ascending wall of the tower has been preserved at a height of 20-60 cm, and the depth of the stone foundation of its back wall, laid in clay, is 110 cm. Its starting level proved to be 698,294 m.

During further work, a 60 cm wide section of the castellum wall unfolded on the inner side of the north wall of the tower¹⁹ (Pl. 4-5). This was the first wall of the fort without gate towers, which was demolished during the construction of the towers. The north lane of the wall is under the outer wall of the tower. The top 20 cm thick stone layer was placed in a yellowish mortar, and from the dry foundation placed in clay a 20 cm thick layer could be unfurled without compromising the condition of the tower. Later, the tower protruding from the wall plane was built, thus the southern lane of the former wall became superfluous. The survey and the top view clearly show that the orientation of the tower differs by a few degrees from the orientation of the fort wall. A landslide shows a longitudinal fracture, separation, and a gap more than 10 cm wide has formed between the visible part of the former wall and the part under the tower wall. As a result of the landslide, both walls declined to the north.

On the western edge of the section, a wall observed already in the earlier excavation was found, which starts from the wall of the castellum and heads north. Various ideas have been developed for its purpose²⁰, but only a full exploration of the area can provide a basis for determining this. Its most probable function could be to prevent enemy to reach the gate sidewards along the wall.

Inside the tower was found a regular rectangular pit with vertical walls (Pl. 6-7), the horizontal bottom of which was 85 cm deep from the observation level: 697,980 m. Its size is 125 x 185 cm. Its walls fit in a parallel line to the inner walls of the tower, so it was dug after the construction of the tower. Apart from one or two uncharacteristic pieces of pottery, there were no other artifacts in it. Its purpose could not have been determined. Based on the color and hardness of its loading, it may have been Roman, but it is not excluded that it was deepened during the earlier excavation, although there is no data on this in the excavation report.

It was found that the β wall²¹ did not exist, the band believed to be is the collapse of the castellum wall and the gate tower. The narrow stripe between them may have been formed by the excavation in 1950, which deepened and cleaned a stripe of about 90 cm on the outside of the tower. Beneath the surface of the stony crumble in front of the tower and 20 cm below and to the north of it brick crumbles lay at a depth of 30-50 cm. This layer continues further north, following the angle of tilt of the protective ditch. The tegula fragments come from the tegulacovered roof of the tower. Many fragments of tegulae and lateres were found among the large stone blocks of the wall. There were two lateres with shoe prints (Pl. 8). One is a military caliga, so the other, but because it has a pointed nose, it may have come from women's shoe. On the eastern edge of the research trench, a stone block with a ledge carved from sandstone was found, which, after being taken out, turned out to represent a Genius relief²². The relief could have been built secondarily into the wall of the tower.

This wall was opened in 1950 in both gate towers: Macrea 1951, e.g. IV, Gudea 1979, fig. 17.2, but it was not evaluated in either case.

Macrea 1951, 305: built to prevent landslides; Gudea 1979, 164: zid avea rolul unui contrafort; 216, fig. 5.

²¹ Komp 2017, fig. 257 3.

The ceramic, metal, stone, and other artefacts found during the excavation will be evaluated by Katalin Sido

In the research section G-H, the protective ditch of the stone-walled fortress was excavated (Pl. 9). The two walls of the fossa close at an angle of 130° to each other, with a width of 650 cm. The distance of its axis from the tower is 4,4 m, where its depth is 697,290 m (Pl. 10-11). The dark filling under the ditch is the ditch of the former earthen camp, but only a small part of it could be explored during the excavation. From the east side of the *fossa*, a heavy rain washed out a carved stone with the last lines of an inscription visible.

The partial exploration of the porta principalis dextra came with several surprises. One is that the object indicated in red on the map of the β fortress assumed by R. Komp does not exist. The reason for this assumption was probably the widely collapsed wall mass. At the same time, the research section passing through the western gate tower showed that in the first phase there were no gate towers of the stone fort, since the lower stone rows of the demolished castellum wall were found inside the gate tower and under the tower wall (Pl. 12). In addition, it was observed that the gate tower was built at a slightly oblique angle from that of the wall. The gate towers were therefore built in a later time, by analogy, probably in the era of Caracalla. This phenomenon has been observed in several cases. In Intercisa, the excavation showed exactly this order and arrangement²³, but the demolished wall also appeared under the tower of porta praetoria in the castellum at Quadrata²⁴. It is true that there were some doubtful opinions, but the phenomenon, which has been proved indisputably, is clearly proved by the excavation in Inlaceni/Énlaka. The ditch of the earthen fort appeared as a dark band in front of the tower and partly below it, but this could not be opened here either.

In 2021, the excavation in the porta principalis sinistra, which began in 2019, was continued in the C1-D1 research section with trenches drawn through the western tower of the gate. The section was later slightly expanded to the east: section X-Y (Pl. 13-14). During the excavation and cleaning, the northwest corner of the gate tower was found (Pl. 15). The ruined wall shows several cracks caused by a landslide. The southwestern corner of the tower is in a similar state, in a very dilapidated state. The calcareous-stony crumbling found in the western half of the section X-Y shows the line of the eastern wall of the original tower, where modern disturbances, presumably traces of earlier excavation, can be seen²⁵. At 60 cm of it another wall was found. This wall was about 1 m wide, connected by another 60 cm wide weak attachment wall and then by an east-west wall. At the eastern end of the X-Y section, on a surface of 2x2 meters, we clarified the connection between the later tower wall and the eastwest wall. The structure of the later tower wall is different from the previous one: larger dark stones were placed on both sides, and smaller stones can be found inside the wall body in a strong lime mortar bandage (Pl. 16-17). The weak extension wall on its eastern side and the narrow wall starting from it to the east are probably closed the gate in the middle of the 3rd century. On the basis of the new observations the tower had two main periods. In the first one it was 5 m wide, and in the second one 7 m²⁶. The first period of the tower can be assigned to the beginning of the 3rd century, quite surely to time Caracalla's rule, the 2nd one some decades later, but before the building of the gateclosure wall. The extension wall on its eastern side and the narrow wall starting

²³ Visy 1977, 12; Visy 2003, 76; Visy 2021, 221-224.

²⁴ Gabler 1977, Abb. 2; Visy 2003, 20.

Macrea et. (al) 304; Gudea 1979, 164; Fig. 1, where, however, it is mistakenly listed in the caption as porta principalis dextra.

²⁶ Gudea 1979, 179; Fig. 17.2.

from it to the east represents the third period in the middle of the 3rd century. In the area damaged by quarrying, it can only be assumed that the wall and the tower are in the same relation and temporality as on the north side, although during Macrea's excavation the former fortification wall was not found inside this tower.

In the three upper layers of the *fossa*, a large number of fragments of stone and bricks were found. It was not explored to the full depths due to lack of time.

The wall blocking the gate is nothing new at the Dacian fortresses. This phenomenon has already been observed in several places, and it is not the first time that this change has been detected in

Inlaceni/Énlaka. At all three other gates, this phenomenon was observed²⁷, and only a door opening was left in the closures for pedestrian traffic. In the case of the porta principalis sinsitra, which was also discovered, presumably due to the strong disturbance, this could not be established earlier. The closing of the two side gates, and occasionally the porta praetoria and the porta decumana, was carried out for protection purposes in the forties of the 3rd century, when Germanic invasions were increasing²⁸ (Table 1). This phenomenon is also known in Pannonian limes, but it was only in the second half of the 4th century that the troops were forced to take this step²⁹.

castellum	Gate closures in the 3 rd century
Dacia Porolissensis	
Resculum (Bologa/ Sebesvár)	P.praet., P.dec.
Ilisua/Alsóilosva	P.praet.
Dacia superior	
Inlaceni/Énlaka	P. princ. dextra and sinistra, P. praet., P. dec.
Dacia inferior	
Râșnov	P. dec, P. princ. dextra and sinistra
Bunbeşti	two gates excavated
Racari (at Jiu)	P. dec, P. princ. dextra and sinistra

Table 1

During the earlier excavation of the *porta principalis dextra*, a small, unfortunately indeterminate fragment of an inscription has already been found, and during the last year's excavation a fragment of the building inscription and a Genius relief have already been found. The most exciting find of the excavation was the fragment of the building inscription found in the stone debris of the north gate falling into the *fossa*³⁰ (Pl. 18a-b). Building and other inscriptions have been found in the

area of the gates before, too, which is explained by the fact that disused blocks with inscriptions were installed either in the gate towers built at the beginning of the 3rd century or in the walls of the gate closures a few decades later. From the closure of the *porta principalis sinistra* came a Hadrian's base and a fragment from the Severus era, two Caracalla inscriptions in the *porta praetoria* area and part of a base

For a detailed description, see Visy 2022.

²⁷ Gudea 1979, 179; Figs. 12.1-2; 17.2.

²⁸ Gudea 1997, *14.

²⁹ Visy 2000, p. 105.

from the threshold of the gate erected for Philippus Arabs and his son³¹.

About the last third of the lines of the inscription remained. It was decorated with tabula ansata. Luckily enough, all important data can be read or completed: [Imp(erator) • Caes(ar) • T(itus) • Ael(ius) •] Hadr/[ianus • Anton]inus / [Aug(ustus) • Pius • p(ater) • p(atriae) • p]ontif(ex) / [maxim(us) • trib(unicia) • po] t(estate) • XII / 5 [imp(erator) • II • co(n)s(uI) • II]I • mur(um) / [et • por(tas) • cast(elli) • co]h(ortis) • VIII • Raet(orum) / [c(ivium) • R(omanorum) • eq(uitatae) • tor(quatae) • fec(it)] • per • eand(em) co(ho)rte(m).

The building inscription was made in the name of Antoninus Pius, and the action took place in AD 149, the year of the 12th renewal of his tribune power. The cohors VIII Raetorum civium Romanorum equitata torquata was the garrison of the Inlaceni/Énlaka fort in the first half of the 2nd century³². The earthen camp was built by this troop, but according to the new inscription, he also built a fort in 149. Since this could hardly have been an earthen camp, it is necessary to think about the construction of the stone fort. According to this, contrary to the previous assumptions, the stone fortress was built not by the cohors IIII Hispanorum³³, which replaced her in the middle of the century, more likely after the Markomann wars, but by the cohors VIII Raetorum in 149. At the end of line 7, there may have been a strong abbreviation for activity of the troop: per eand(em) co(ho)rte(m).

According to the earlier conception, the conversion of the limes forts into stone was generally carried out under Hadrian. However, on the basis of more accurate obser-

vations, building inscriptions and dating finds, it was clear that such a construction campaign carried out on central measures could hardly be expected, the reconstruction was largely carried out over a longer period of time according to local characteristics and conditions, and extended to the age of Antoninus Pius and later time. Examples of this are known from several European provinces³⁴, and several such cases are known from Dacia³⁵. The stone fort in Gherla was built almost simultaneously with the Inlaceni/Énlaka in 14336, confirming the generalization of the construction of stone camps in the age of Antoninus Pius in Dacia. Macrea dated the construction of the stone fort in Inlaceni/Énlaka to the age of Caracalla³⁷, based on the inscription used secondarily in porta praetoria. However, this building inscription, made in 214, refers only to the reparation of the fort and to the construction of gate towers. Since in the case of the Intercisa castellum it was possible to justify the construction of the gate towers in the Severus period, the new find not only provides further evidence for this, but also shows that it is not an isolated Pannonian phenomenon³⁸. Gudea thought that the stone fort at Inlaceni/Énlaka had been built by the middle of the 2nd century, the time of Hadrian or Antoninus Pius, and assumed that this construction had already been carried out by the cohors IIII Hispanorum. The new inscription of the cohors VIII Raetorum not only specifies the exact time of construction, but also shows that the builder was this cohort. The transfer of the troop to Teregova and the arrival of the cohors IIII Hispanorum to Inlaceni/Énlaka should therefore be

³¹ Russu 1988, Nr. 263, Nr. 265, Nr. 267, Nr. 269.

³² Macrea 1960, 339-352; Gudea 1979, 170-171; Petolescu 2002, 119-120; Beneš 1978, 49-50.

The earliest known inscriptions of the troop were erected in 212 in Inlaceni/Énlaka: AE 1967, 417; AE 1988, 970-971.

⁴ Kellner 1971, 207-215, Gabler 1980, 644-645.

³⁵ Stone forts built in the era of Antoninus Pius: Gudea 1997, *33: Jupa; *38-39: Micia; *43-44: Largiana; *53-54: Ilişua; *61-62: Olteni?; *68-69: Feldioara?; *96-97: Răcari; *100-101: Gilău; *102-103: Gherla 143 AD.

³⁶ AE 1906, 112; HD021920.

³⁷ Macrea 1957, 285-311.

³⁸ Visy 2000, 103-104; Visy 2021, 36-39.

postponed, presumably in the period after the Marcomannic War.

Under Hadrian and Antoninus Pius, four building inscriptions testify to the

conversion of forts in Dacian to stone, and in several cases the research assumes similar construction time (Table 2)³⁹.

castellum	stone fort's construction time
Dacia Porolissensis	
Largiana (Romanasi/Alsóegregy)	Hadrianus/Antoninus Pius
llisua/Alsóilosva	Hadrianus.
Orheiul Bistritei/Beszterce	Antoninus Pius
Dacia superior	
Ad Pannonios (Teregova)	middle of 2 nd c.?
Tibiscum (Jupa/Zsupa)	middle of 2 nd c.
Micia/Vecel	160-170
Inlaceni/Énlaka	149 – rep. Caracalla
Olteni/Oltszem	Hadrianus?
Gilau/Gyalu	Antoninus Pius – reparature middle of 3 rd c.
Gherla/Szamosújvár	143
Dacia inferior	
Cumidava (Rasnov/Barcarozsnyó) – outer fort	Hadrianus/Antoninus Pius?
Feldioara/Földvár	middle of 2 nd c. – rep. beginning of 3 rd c.
Racari – at Zil	Hadrianus
Praetorium II (Racovita)	Hadrianus – rep. beginning of 3 rd c.
Praetorium I (Copaceni) – numerus	138
Arutela (Bivolari) - numerus	138
Campulung Muscel	Hadrianus?

Table 2

After 180, only a few stone fortifications could be built, and during Caracalla there were no longer new constructions, but the repair and modernization of the existing forts. This is mainly referred to by towers protruding from the wall plane with the width of the tower wall. This may seem like a small change, but it is already a consequence of the realization that during a possible siege of the forts it was from these towers easier to fire the enemy who had breached the walls. It was not possible to jump the outer walls of the towers further than this without com-

pletely transforming the existing *fossa* and placing it further away. Therefore, cases where the demolished fort walls can be observed inside the gate towers are evidence of the Caracalla-era reconstruction. In many cases this phenomenon can be observed in the revealed and published plans of the Dacian fortresses⁴⁰ (Table 3), which, of course, also confirms that the first stone phase of these forts was built in the middle of the 2nd century. On the basis of this observation,

³⁹ The table is based on Gudea 1997 compilation

⁴⁰ The table is based on Gudea 1997 compilation.

therefore, the construction of the stone forts of Resculum, Porolissum, and Micia must be modified to the time of Hadrian or Antoninus Pius.

Earlier wall inside the tower	
Dacia Porolissensis	
Resculum (Bologa/Sebesvár)	
Porolissum (Moigrad)	
Dacia superior	
Micia/Vecel	
Inlăceni/Énlaka	
Gilău/Gyalu	
Dacia inferior	
Praetorium II (Racovița)	
Praetorium I (Copăceni) - numerus	
Arutela (Bivolari) - numerus	
Slăveni	
Câmpulung Muscel	

Table 3

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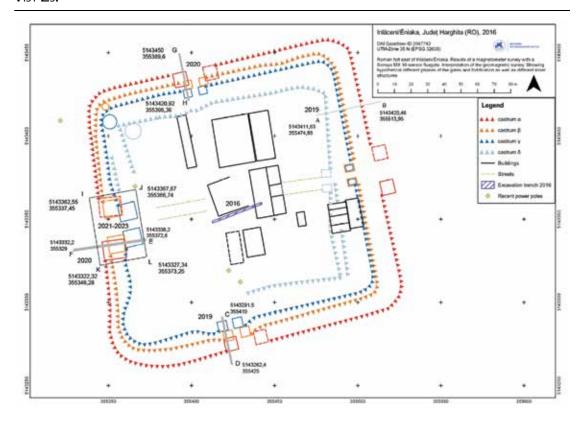
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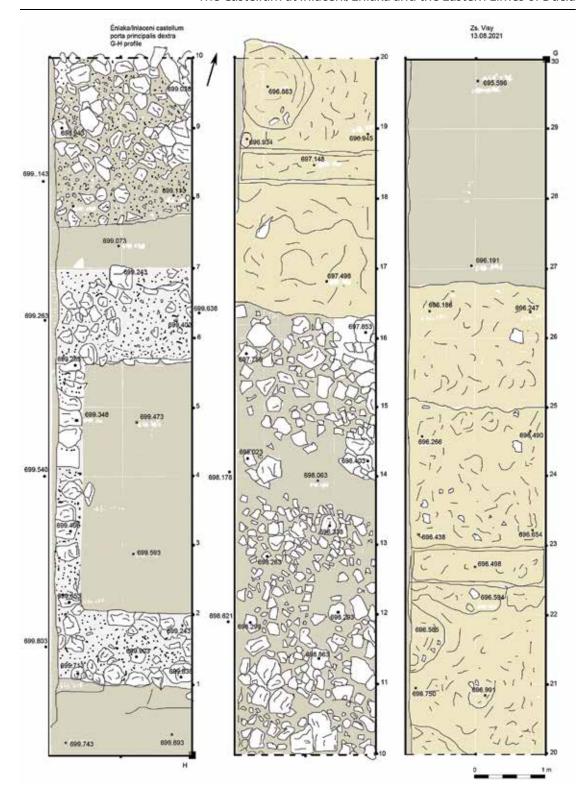
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Pl. 1 Five-year research plan of *castellum* in Inlaceni/Énlaka on the map of R. Komp. **Pl. 1** Planul cercetărilor din ultimii cinci ani în castrul de la Inlaceni/Énlaka pe harta lui R. Komp.



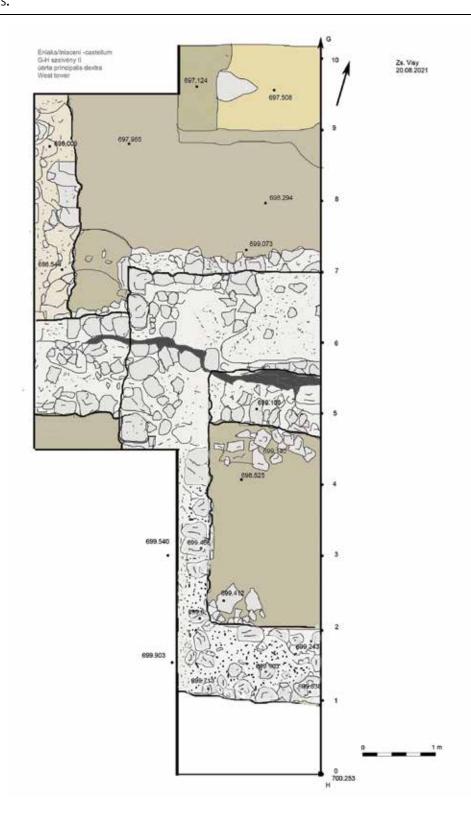
Pl. 2 The G-H research section. **Pl. 2** Secțiunea arheologică G-H.



Pl. 3 The profile of the south wall of the western gate tower and the pit 1. *Pl. 3* Profilul de sud al zidului turnului de vest al porții și groapa 1.



Pl. 4 The western gate tower of the *porta principalis dextra* at the southern end of the G-H research section from the southeast. **Pl. 4** Turnul vestic al porții principalis dextra la capătul de sud al secțiunii G-H, văzut dinspre sud-est.



Pl. 5 The western gate tower of the *porta principalis dextra* and the additional wall starting from the wall of the *castellum* in the G-H research section. **Pl. 5** Turnul vestic al porții principalis dextra și zidul adiacent ce pornește din fortificația castrului în secțiunea G-H.



Pl. 6 Pit 1 inside the western gate tower of the *porta principalis dextra*. *Pl.* 6 Groapa 1 in turnul vestic al porții principalis dextra.



Pl. 7 Pit 1 inside the western gate tower of the *porta principalis dextra* from the southwest.

Pl. 7 Groapa 1 în turnul vestic al porții principalis dextra dinspre sud-vest.



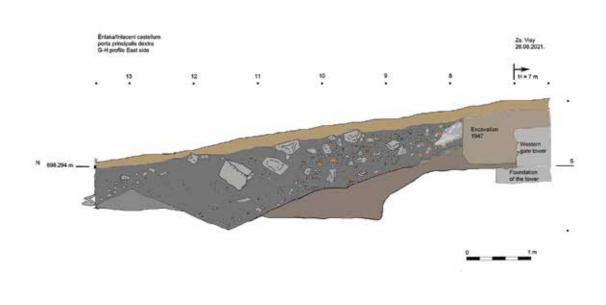
Pl. 8 The genius relief and shoe-printed tegula fragments in the fossa. **Pl. 8** Relieful cu geniu și fragmentele de tegula cu amprenta de încălțăminte descoperite în șanț.



Pl. 9 The fossa of the castellum in section G-H during excavation from the north. **Pl. 9** Şanţul castrului în secţiunea G-H în timpul săpăturilor, văzut dinspre nord.



Pl. 10 The fossa of the castellum in the eastern profile of the G-H section. **Pl. 10** Şanţul castrului în profilul estic al secţiunii G-H.



Pl. 11 The fossa of the castellum in section G-H. **Pl. 11** Şanţul castrului în secţiunea G-H.



Pl. 12 The stone wall of the *castellum*, the western tower of the *porta principalis dextra* and the additional wall starting from the *castellum* in the G-H research section. **Pl. 12** Zidul castrului, turnul vestic al porții principalis dextra și zidul de legătură în secțiunea G-H.



Pl. 13 Research section C1-D1 with X-Y section. **Pl. 13** Secţiunea arheologică C1-D1 şi extensia X-Y.



Pl. 14 The C1-D1 research section, expanded with the X-Y section, with periods I and II of the western tower of the *porta principalis sinistra*, as well as gate closure. The drawing of the gate in the lower right corner is according to Macrea's exploration (Gudea 1979, 227. Pl. 1 [with incorrect caption]). **Pl. 14** Secţiunea C1-D1 şi extensia X-Y, cu fazele I şi II ale turnului vestic al porţii principalis sinistra, şi închiderea porţii. Desenul porţii din colţul drept de jos este conform cercetării lui Macrea (Gudea 1979, 227. Pl. 1 [cu descriere greşită]).



Pl. 15 The northwest corner of the western tower of *porta principalis sinistra* and the strip of its western wall in the C1-D1 research section from the north. **Pl. 15** Colțul de nord-vest al turnului de vest al porții principalis sinistra și fâșia zidului său de vest în secțiunea C1-D1 văzută dinspre nord.



PI. 16 The eastern wall of the western tower of *porta principalis sinistra* in the second period with the wall connecting from the east and the start of the gate closure in section X-Y from the south.

Pl. 16 Zidul estic al turnului vestic al portii principalis sinistra în faza II, cu zidul de legătura dinspre est și începutul închiderii portii în secțiunea X-Y, văzută dinspre sud.



Pl. 17 The eastern wall of the western tower of *porta principalis sinistra* in period II with the wall connecting from the east and the opening of the gate closure in section X-Y, and the eastern, crumbling wall remnant of the gate tower in period I from the northeast. **Pl. 17** Zidul estic al turnului de vest al portii principalis sinistra în faza II cu zidul de legătură dinspre est si deschiderea porții în secțiunea X-Y;

restul de zid estic, prăbușit, al turnului porții în faza l dinspre nord-est.





Pl. 18a-b Fragment of the building inscription in the *fossa* excavated in the G-H research section. **Pl. 18a-b** Fragment al inscripției de construcție în şanțul castrului cercetat în secțiunea G-H.