

RESEARCH OF THE ROMAN TRENCHES IN SERBIA IN RELATION TO THE CSÖRSZ DITCH IN HUNGARY

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In the vast flat land of the Pannonian basin, stretching across Hungary, there is a large system of earthworks known as the Csörsz Ditch. Though under a different name, parts of this system of earthworks also run through Romania and Serbia. Strong interest amongst the academic community for these large-scale features has existed for almost two centuries. In the late 19th century, inspired by similar efforts in Western Europe, Hungarian archeologists, whose work also dealt with territory now in present day Romania and Serbia, began researching this topic. Their contribution was largely to the depiction, description and demarcation of the earthworks as well as the first assumptions concerning their origins. Yet even today, questions such as who built the earthworks, when and for what purpose are still debated amongst scholars. Although researchers in Serbia and Hungary have been informed, at least to a certain extent, about each other's work, this paper aims to give an overview of research conducted on earthworks in Serbia, emphasizing the results of the most recent investigations.

Large earthworks have been identified in the northern Serbian province of Vojvodina, in both the Bačka and Banat counties (Fig. 1). In Serbian literature these are known as Roman trenches. These earthworks have received a limited amount of study and the interest of scholars has tended to focus on the ones located in

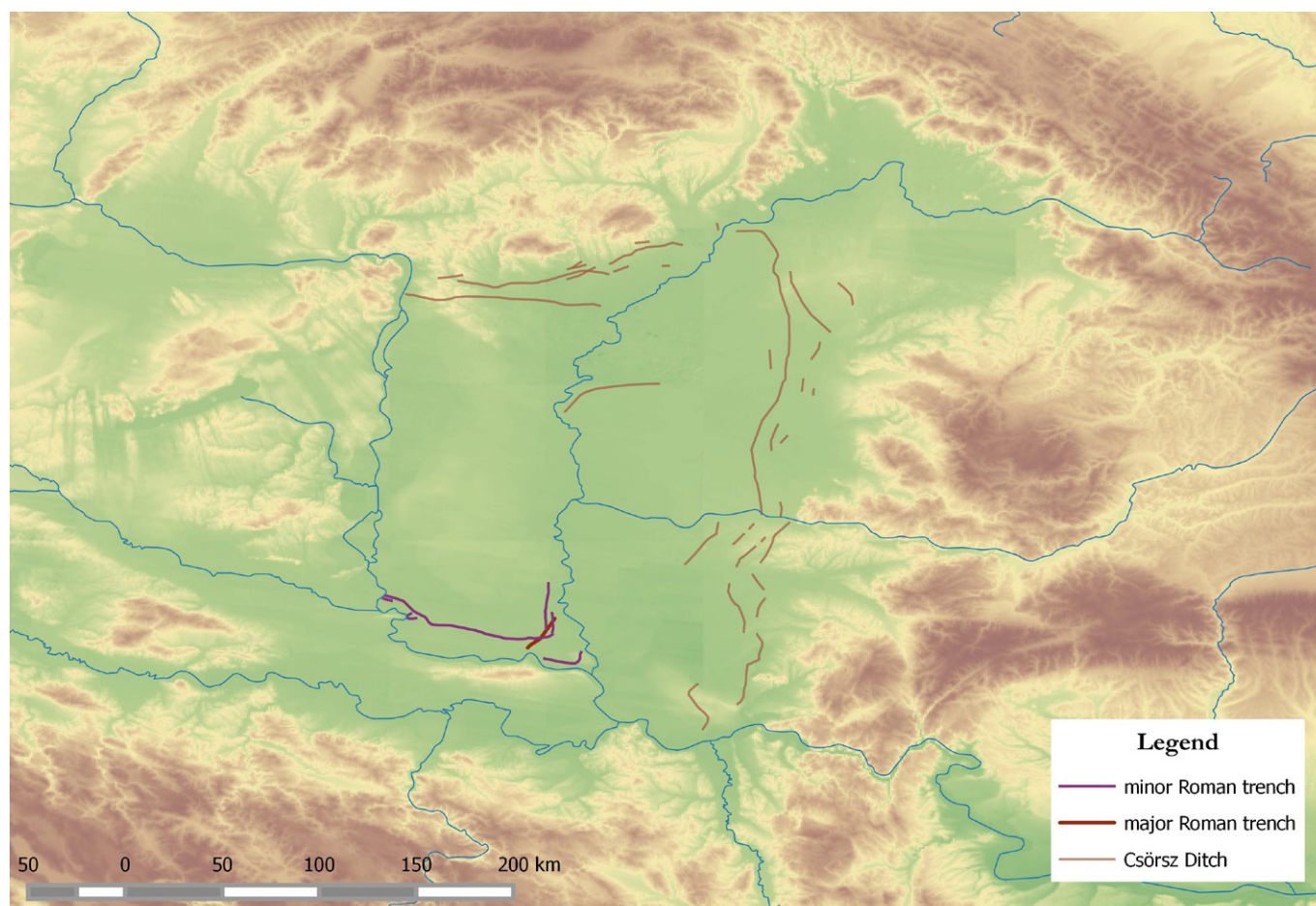


Fig. 1: Earthworks in the Pannonian Basin

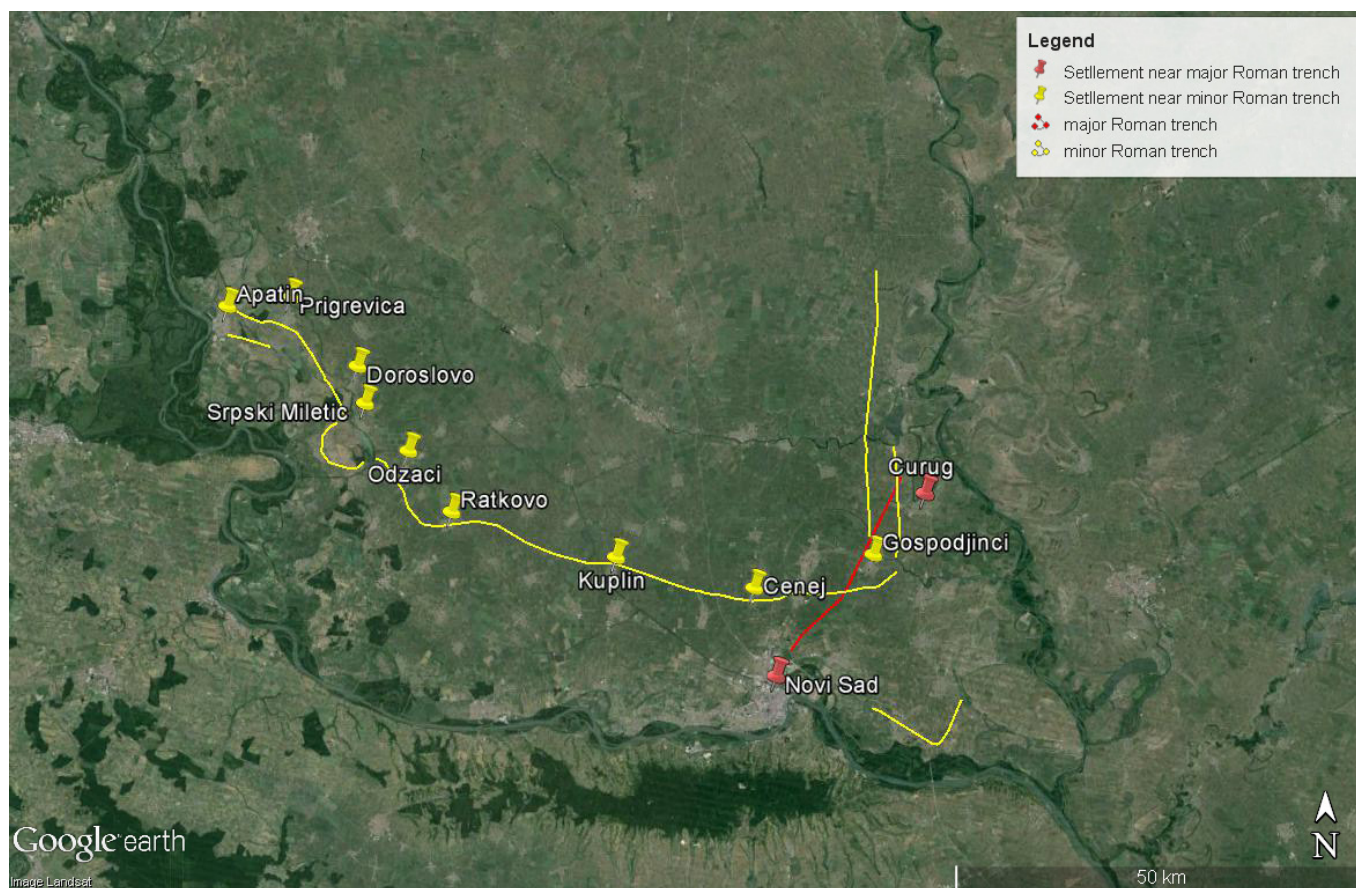


Fig. 2: Earthworks in South Bačka

the south Bačka district (Fig. 2). In this area, there are two main structures under this name, the so-called “minor” and “major” Roman trench. Their spatial distribution and arrangement differ by their orientation, dimension, supposed chronological framework, attribution of the builders, even in terms of their construction technique. Yet, they share a common feature. Both of the trenches rely with their endpoints on two major river flows in this area. No doubt that, there is a spatial connection between the rivers and trenches although present day topography has undergone a huge change due to modern day regulations of river flows and creation of artificial canals.

The “minor” Roman trench is located several miles north of the Danube, running parallel with the river’s flow at this section. It consists of a main route that stretches from east to west, along with at least four shorter side paths.¹ The approximate length of the main path is 120 km. The starting point of the trench can be traced from a site near Apatin and followed to the village Prigrevica where it makes a round turn and continues in a southeasterly direction. It passes by the village of Doroslovo towards the village of Srpski Miletić and the river Mostonga where this section finally ends. This is arguably the best-preserved section. Further to the east, evidence of a trench can be seen near Odzaci and the village of Ratkovo, from where it keeps an easterly direction with lesser deviation. From this point onwards up to the villages of Kuplin and Cenej, it is barely visible. It finally ends near the village of Gospodjinci where it turns to the north and makes a loop around the settlement. The minor Roman earthwork, in this case a rampart, is accompanied by a ditch, located on the southern side of the bank. At only one section of the minor Roman trench (from

¹ The side branches of the “minor” Roman trench are not integral elements of that. However, they are located very close to the main path and their construction is the same.



Fig. 3: Earthworks: the “major” Roman trench, rampart and the ditch between the villages of Pejićevi Salaši and Gospodjinci. Photo: Sanijela Stulic
Courtesy of the Institute for Protection of Cultural Monuments of Novi Sad

Fig. 4: Earthworks: the “major” Roman trench, eastern slope of the rampart between the villages of Pejićevi Salaši and Gospodjinci. Photo: Sanijela Stulic
Courtesy of the Institute for Protection of Cultural Monuments of Novi Sad

the village of Prigrevica to the river Mostonga) there are two existing ditches that have been dug on both sides of the rampart.

The “major” Roman trench is located in the same region as the “minor” Roman trench but its direction is congruent with the flow of river Tisza. The starting point of this trench is located near Novi Sad, at the peak of the old Danube riverbank where it heads in a northeasterly direction. It continues in the same direction for its entire length, passing the village Gospodjinci before terminating at the village of Curug. Its overall length is around 25 km. Opposite to the minor trench, it is more visible in the landscape and the state of its preservation is far superior (Fig. 3). One of its main characteristics is its narrow course as evidenced by the fact that it has only two points where the trench turns under an obtuse angle. Here the ditch exists only on the western side of the rampart and in some sections it is filled with water (Fig. 4). It is important to note that there are two points where the minor and major trenches meet at an intersection. Another key feature of the major trench is the existence of “gates” or openings that still remain in the rampart.

In the early 20th century, prominent Hungarian scholars began research on parts of the country that are nowadays located in Serbia.² Later on, particularly during the 60’s, organized and simultaneous excavations were conducted in the area of present day Hungary and Serbia. As a result of these works, several articles were published containing the results of investigation carried out in a different scope and on different locations.³ A few decades later, one of the most comprehensive and influential publications concerning the topic was issued in Hungary.⁴ The joint work of Soproni, Patay and Garam had a huge impact on the thoughts and conclusions of those archaeologists working in Serbia. Although the first attempts at answering the major questions surrounding the earthworks, based on archeological evidence, had limited outcomes, they allowed scholars to form a number of different opinions and theories

² Fröhlich, Róbert: A bácskai ú.n. római sánczok (The so-called Roman trenches in Bačka). *Archeológiai Értesítő* 7 (1887), 19–30, 132–138, 207–213, 304–310; Dudás, Gyula: A bogojevai római sánczról (On the Roman trench at Bogojeva). *Archeológiai Értesítő* 19 (1899), 409; Cziráky, Gyula: A bogojevai “római sánczok” (The Roman trenches at Bogojeva). *Archeológiai Értesítő* 20 (1900), 76; Dudás, Gyula: A bácskai ú.n. római sánczok a régi okleveleken (The so-called Roman trenches in Bačka in old charters). *Archeológiai Értesítő* 27 (1907), 191.

³ Balás, Vilmos: Die Erdwälle der Ungarischen Tiefebene. *Acta Archaeologica Academiae Scientiarum* 15 (1963), 309–336; Nagy, Sándor: Izveštaj o rezultatima istraživanja uzdužnih šančeva na području Vojvodine (Report on research results of longitudinal trenches in Vojvodina). *Rad Vojvodjanskih Muzeja* 15–17 (1968), 103–108; Soproni, Sándor: Limes sarmatiae. *Archeológiai Értesítő* 69/1 (1969), 43–53.

⁴ Garam, Éva – Patay, Pál – Sándor Soproni: *Sarmatischen Wallsystem im Karpatenbecken*. *Régészeti Füzetek* II/23 (1983).

concerning the more precise chronological span, attribution and function of these features. The attention on the dykes, trenches and ditches was renewed in the early 90's after several excavations organized mainly in Hungary.⁵ The latest contribution to the research concerning the earthworks found its place in the larger framework of conferences dealing with Roman and ancient border lines that were held over the last few years.⁶

From the earliest to the most recent works regarding the topic, there are several common characteristics that are repeatedly recognized throughout. Primarily, each of the authors dealt with the spatial distribution of the earthworks. Furthermore, the authors provided accounts of their physical characteristics by describing them together with their existing parts and also the possible reconstruction of the structures that do not remain. One outcome of the spatial analysis conducted on the extensions of the earthworks was that it became acceptable for most scholars to refer to them as two separate groups, one group as longitudinal and the other as inner earthworks. The longitudinal earthworks are usually considered to be the ones at the very edge of the Pannonian basin whilst the second group incorporates all lateral directions and other parts of the earthworks within this area. The sections of the earthworks situated in Serbia, according to some researchers, do not necessarily belong to the Pannonian system but associated with structures that stretch further along the river Danube.⁷ Ultimately, questions relating to the organization and mutual relationship of different parts of these earthworks are still very much open to debate. In close relation to this issue, the problem of chronology concerning not only particular sections, but also the entire area that contains the earthworks, is also up for discussion. Archeologists agree that these features were built over a broad time span and regarding their scale, they were most probably constructed over several different phases. Nevertheless, the majority of scholars share a common opinion that they were constructed in the Roman Period. Two other issues concerning the earthworks are their ethnic attribution and also the purpose of their construction. The archeologists who support the theory of creation in the times of Late Antiquity, tend to attribute the construction of the earthworks to Sarmatian tribes who were allies of the Romans. These claims are rooted in facts that relate to historical events, archeological findings and also building techniques. In terms of their purpose, again, most archeologists believe that earthworks were military constructions with an emphasized defensive role.

In order to begin any historical overview of the research carried out in the last fifty years in Serbia, it is necessary to mention the results of the excavation conducted on a minor Roman trench in 1966 by Sándor Nagy.⁸ This work was accomplished with international cooperation between Serbia and Hungary. The excavation took place near the above mentioned village of Doroslovo, at the site named Pusztaszentegyháza. The specific feature of this line of earthworks is that it has trenches on both sides of the rampart. The author made several cross sections cutting both the trench and the rampart as well as two separate high hills that are located nearby and were assumed to be watchtowers. Based on these results, he concluded that the minor trench probably served as a defensive line for protection of the inner part of south Bačka. Furthermore,

⁵ Istvánovits, Eszter – Kulcsár, Valéria: The History and Perspectives of the Research of the Csörsz Ditch ('Limes Sarmatiae'). *Limes XVIII*. Proceedings of the XVIIIth International Congress of Roman Frontier Studies Held in Amman, Jordan (September 2000), ed. Freeman, Philip et al. (Oxford: Archaeopress, 2002), 625–628.

⁶ Istvánovits, Eszter – Kulcsár, Valéria: Gondolatok az Alföldi sáncok kutatásának jelenlegi helyzetéről (Thoughts on the present state of research of the Pannonian trenches) In: *Avarok pusztái: Régészeti Tanulmányok Lőrinczy Gábor 60. születésnapjára* (Deserts of the Avars: Festschrift for the 60th birthday of László Lőrinczy), ed. Anders, Alexandra – Balogh, Csilla – Türk, Attila (Budapest: Martin Opitz Kiadó, 2014), 73–84.; Matei, Alexandru – Gindele, Robert: Sistemul defensiv nord-vestul Daciei descoperit cercatările arheologice de la Supurul de Sus (jud. Satu Mare) și pe baza documentației din izvoalere scrise / Roman Defensive System from North-West part of Dacia. Field researches at Supuru de Sus (Satu Mare County) and literature sources. In: *DACIA AVGVSTI PROVINCIA. CREAREA, Actele simpoziului desfășurat în 13-14 octombrie 2006 la Muzeul Național de Istorie a României*, ed. Theodor, Eugen Silviu – Tentea, Ovidiu (București: Muzeul Național de Istorie a României, 2006), 1–25.

⁷ Velenrajter, Pavle: Dosadašnji rezultati ispitivanja limesa u Bačkoj (Results of conducted research on limes in Bačka). In: *Limes u Jugoslaviji I. Zbornik radova sa Simposiuma o limesu 1960 godine* (The problems of the so-called Roman trenches in Bačka), ed. Grbić, Miodrag (Beograd: Societas archaeologica Iugoslaviae, 1961), 51–58.

⁸ Nagy, Sándor: Über die Untersuchung der Längswälle in Jugoslawien. *A Móra Ferenc Múzeum Évkönyve* 2 (1969), 135–137.

he revealed that there are archeological remains that prove that there was a bridge over the trench as well as a passage running through the rampart at this location. He further made a possible calculation of the manpower and time used to erect this large structure and its side facilities. The text is accompanied by excellent drawings of the cross sections.

In 1986 the Association of Yugoslavian Archaeologists organized a conference with the topic “Defensive systems in Prehistory and Late Antiquity in the territory of Yugoslavia”, after which the presented papers were published. Amongst them was an article concerning the trenches in Bačka, written by László Szekeres.⁹ The author gave a description of the geographical diffusion of the trenches in South Bačka and called them longitudinal. In questioning their attribution and chronology, he recalled some of Soproni’s claims. According to him, the first account of Roman trenches in Pannonia was written in the charter of Sanct Gallen, dating back to 1196. In this document, the trenches are mentioned as (*h*)rings. He believed, in similarity to some other Hungarian authors, that the term “Roman trenches” had first been used by Luigi Marsili, an Austrian general from the 17th-18th century. Nevertheless, for Szekeres, the main issues are related to the attribution and function of these structures. He also wrote about the associated structures such as the gates in the major Roman trench as well as some side branches of the minor trench. He provides a calculation of how much manpower was needed for building these objects and the time period necessary for their construction. He concludes that the minor Roman trench must have been erected by Sarmatian tribes. He dated them to the second third of the AD 4th century, recalling a similar interpretation by Soproni, Garam and Patay. He concluded that the character of the minor Roman trench had to be defensive as that trench lies on two major waterways (the Danube and the Tisza River). For the major trench, he did not give any specific dates, but dated the construction in a wider timeframe, from AD 1st up to 4th century. He ended his work with an appeal for more organized and systematic support to help solve one of the oldest questions in Pannonian archaeology.

The next article concerning the Roman trenches was published in 2000. The author, Nebojsa Stanojev, an archeologist from Museum of Vojvodina, published the results of his research and introduced a relatively new interpretation of the major Roman trench.¹⁰ He began his research by surveying and recording sites found around these earthworks and concluded that the majority of these settlements originate from the AD 4th century and are attributed to the Sarmatians. Furthermore, he agreed with other scholars that the earthworks had probably been erected during this period. However, he placed the trenches in the wider context of the Pannonian basin, defining them as waterways or canals. He claimed that the local populations had built them in order to obtain a better communication route, providing easier access to trade and transport of supplies. He added that they had not been built at the same time but over a long period of time. Although this idea was not new,¹¹ in order to support his theory, Stanojev used topographical records that indicated the origins of trenches as canals. He stated that Marsigli, who was the first person to name them as trenches, was a soldier and engineer, he accordingly thought that they would have served some military purpose and this was later adopted in the literature and among scholars. At one point, Stanojev turned to similar objects (structures) in Banat and described them physically. In order to substantiate his statements, he provided not only examples from the Danube region (Djerdap gorge), but also from the canal system that exist in Srem county and linked them with antique Sirmium and Bassianae. The author also declared, though in a very vague manner that suggests his opinion was far from concrete, that the minor Roman trench was built later than the major one. He viewed the minor trench as a possible route, saying that the existence of ditches on both sides of the rampart evidently proves that this path presented a dry road that had been created in a marshy area. When describing the major trench, he stated that it begins in the inundation plain of the River Danube and it goes along for approximately 25 km in a north and northeasterly direction. He suggested that

⁹ Szekeres, László: Problem takozvanih Rimskih šančeva u Bačkoj, Odbrambeni sistemi u praistoriji i antici na tlu Jugoslavije (The problem of so called Roman Trenches in Bačka). *Materijali* 22 (1986), 144–152.

¹⁰ Stanojev, Nebojša (Станојев, Небојша): Римски шанчеви- водопривредни систем Панонске низије (Roman trenches- the ecomomy of water supply). *Раd Војвођанских Музеја* 41–42 (2000), 29–42.

¹¹ Erduhhelji, Melhior: *Istorija Novog Sada* (Novi Sad: Municipality of free royal town of Novi Sad, 1894), 16.

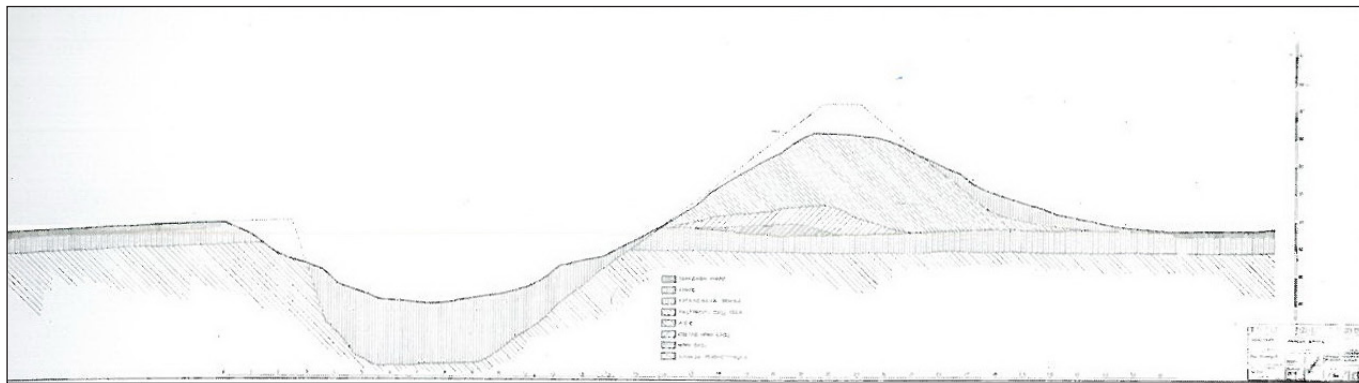


Fig. 5: The “major” Roman trench, cross section

Source: (Radovan Bunardžić) Радован Бунардџић: Ка убицацију Acimincuma [Locatin Acimincum], *Годишњак Музеја Града Новог Сада 1* (2005), 41.

the points where the trench slightly changes its direction was as a result of the need to avoid depressions. The argument that this object served as a canal is constructed around a claim that the bottom of the ditch is more or less even, which is extremely important for sailing. Further to this, Stanojev supported his claim with the fact that many of the archaeological sites that were discovered near to the trench showed both settlements and graveyards from the period of Late Antiquity. He described the features of the rampart implying that one side was not so steep so boats could be pulled out on to dry land. He also mentioned result of the excavation where he had discovered remains of the houses, dated to the AD 3rd and 4th century, under the ramparts. According to him, this is a terminus ante quem for building the canals. He proposed the final dating for the major trench as the first third of 4th century and as possible designers he suggested Romans. The argument Stanojev used, as opposed to the idea that the trenches were fortifications, is an explanation that no engineer would have excluded major settlements for protection.

As a response to this theory, archaeologist Radovan Bunardžić briefly referred to the issue of the main purpose of the major Roman trench in an article dealing with the location of ancient Acimincum, published in 2005.¹² He claimed that this feature is a construction building and he treated it with mathematical equations. He cited older sources that mentioned the area east of the major Roman trench as an old Roman triangle, suggesting that the majority of Sarmatian tribes lived on this territory. He did not explain why there are two places where the trench diffracts under specific angles but implied that its hydraulic peak is placed almost at the exact middle of the feature. For the gates, he claimed that they were left open on the sites of medieval roads and this in turn explains that the local population must have been using it even in later periods (or that these roads existed in antiquity as well). In addition to this he criticized Stanojev concerning his dating calculations. According to him, the 4th century is a period of constant conflict between the Romans and the Sarmatians. He also tackled the issue of the transportation of goods, asking for whom these cargos had been intended. In the end, he posed a question of maintenance. During the construction of oil pipeline in 1977, the major trench was cut through. Bunardžić used this opportunity and conducted a small scale excavation, documenting the point of intersection (Fig. 5). He discovered that the bottom of the ditch was filled with uniformed deposits of soil, with no traces of sludge. The graphic records he obtained show great similarity to the one made by Marsili (Fig. 6). According to Bunardžić, this fact proves that Marsilii was right claiming that these objects had been fortifications for the defense of Roman territories, whilst the gates had served as checkpoints controlling the movement of the local population. He also criticized Stanojev for a lack of consistency in providing exact measurements and angles of the ramparts' slopes when talking about the idea of pulling boats up to the rampart.

¹² Bunardžić, Radovan (Бунардџић, Радован): Ка убицацију Acimincuma (Locating Acimincum). *Годишњак Музеја Града Новог Сада 1* (2005), 37–57.

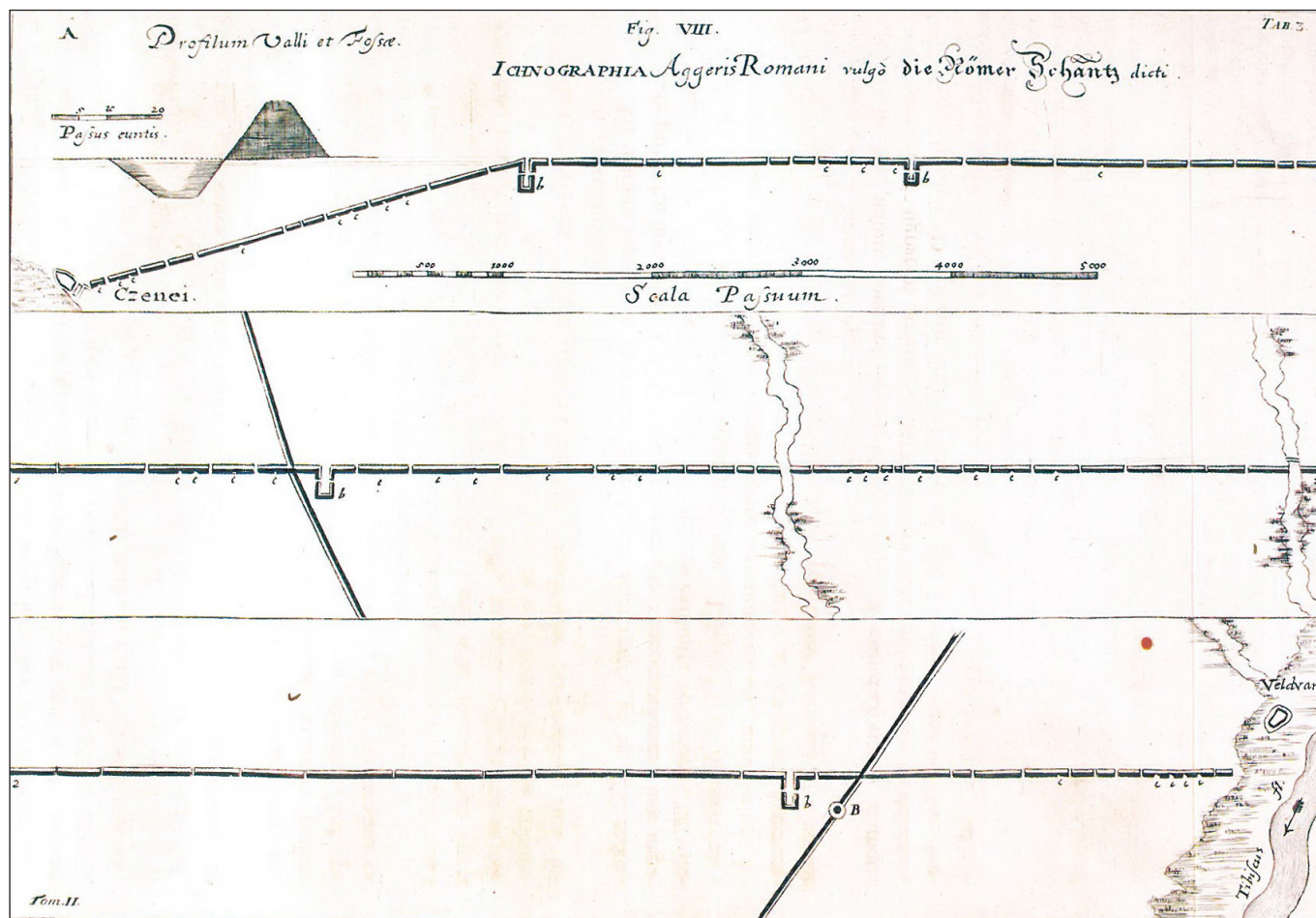


Fig. 6: The "major" Roman trench, graphic representation made by Marsigli Luigi F. Marsili: *Danubius Pannonico- Myscius*, Hagae 1726, Figure VIII, IX,7-8.
 Source: (Radovan Bunardžić) Радован Бунарџић: *Ка убицацији Acimincuma [Locatin Acimincum]*, *Годишњак Музеја Града Новог Сада* 1 (2005), 40.

OUTLOOK FOR THE FUTURE

Despite the constant scholarly interest, the question of the legal safeguarding of earthworks has remained on a level of unofficial recommendations and suggestions. In the light of new approaches in the field of heritage protection and management, the issue of protection under the law imposes itself. The need to preserve is even more evident as a result of a range of modern day threats. In order to move forward with the aim of the preservation of the earthworks in their original environment it is necessary to determine their chronology, historical value and authenticity. This can be achieved in relation to each section of the earthworks respectively, but taking into account their scale, a common framework is highly desirable. With this goal, the Institute for Protection of Cultural Monuments in Novi Sad decided to launch a project of recording and documenting the current state of major Roman trench situated in the area under their control. With a detailed examination of this relatively small sample of a much larger construction, a proposal for listing could be made according to the requirements of Serbian law and international conventions. Besides producing the obligatory documents concerning the present state of this earthwork, the idea is to propose detailed measures and conditions of the usage of the earthworks together with a suggestion of a possible presentation that emphasizes both the cultural and natural values. If successful, this example can be used for further expansion and protection of earthworks in international context.