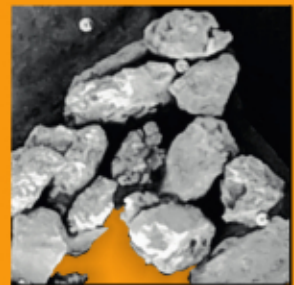
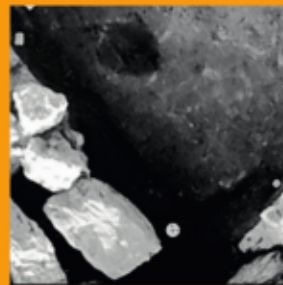
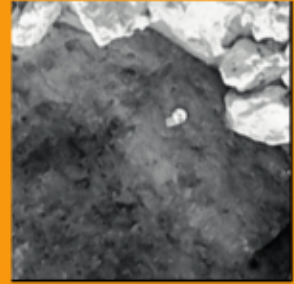
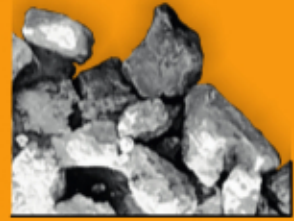
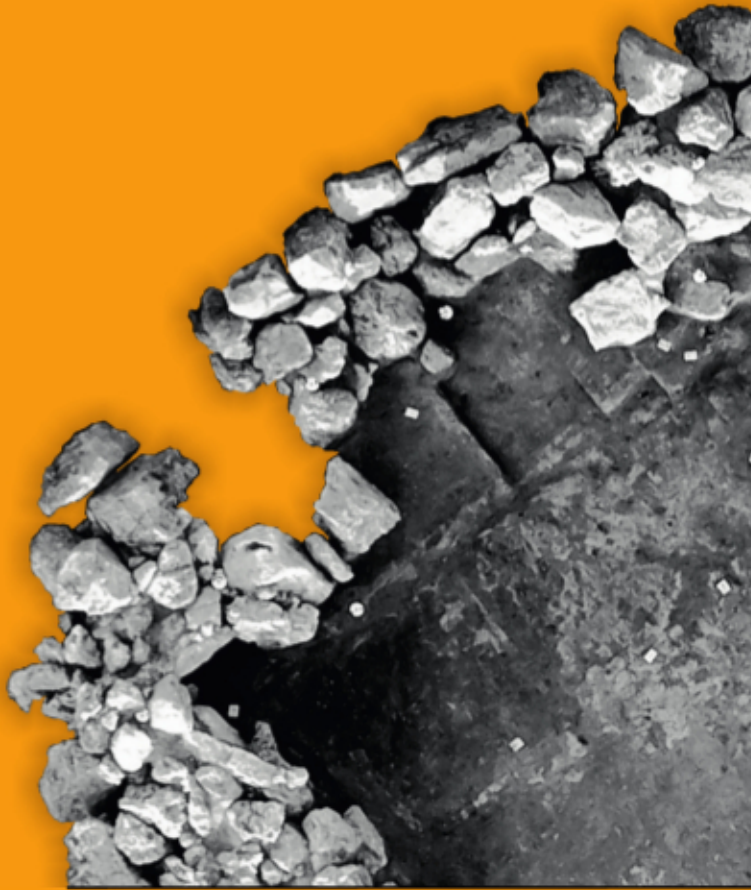


DISSERTATIONES ARCHAEOLOGICAE

ex Instituto Archaeologico Universitatis de Rolando Eötvös nominatae



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Archaeological research of the Hussite castles in the Sajó Valley

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Abstract

Abstract of PhD thesis submitted in 2016 to the Archaeology Doctoral Programme, Doctoral School of History, Eötvös Loránd University, Budapest under the supervision of István Feld

Introduction, hypothesis

According to everyday language, hill forts are places or buildings developed in historical ages and fortified by earthworks, ramparts and trenches. From a historical point of view, hill fort is also a comprehensive name which refers to destroyed fortifications, irrespective of the building material of the former structural elements. Most of our medieval castles remained only as geomorphological elements, such as the above-mentioned shapes of the field, and can be discovered as part of the landscape. In most cases, we cannot even tell at first whether the fortification of the castles really consisted of homogenous earthworks or we can identify only the traces of collapsed structures, such as walls or palisades in the ruins.

In my dissertation, I examined the fortifications in the Sajó Valley designated as hill forts. The reason for this was not exclusively the fact that they situated really close to each other, but rather the historical traditions connecting to them and their origin. The aboveground morphological appearance of all the researched castles is a hill fort today. Moreover, besides the local naming, official records refer to them so. They have a central core surrounded by definitive ramparts and trenches. They can be connected by their common origin: folk memory believes that all of them were constructed by the Czech Hussites. These late medieval mercenaries used them as their strongholds of raids in the middle of the 15th century. My research was initiated by a source critical examination of these romantic historical conceptions based on traditions, and in the course of this I was looking at the fact whether the castles built along the Sajó River are Hussite castles.

The history of the Czech Hussite movement in Hungary was elaborated by Pál Tóth-Szabó circa one hundred years ago. According to him Hussite mercenaries of the 15th century captured and fortified almost all high grounds and strategic points in the eastern part of Upper Hungary. This point of view of Pál Tóth-Szabó is also confirmed by the following lines of Antonio Bonfini, 15th century court chronicler: *[the Czech Hussite mercenaries] “they built fortresses with the intention of robbery all over the country. [...] They had castles which they obtained by force, or built newly themselves”*. A recurring motif or trope evolved on the basis of the Italian historian and of the

later folk memory, according to which the public opinion reckons several castles of this area as hill forts with Hussite origin up to this day. Beside the smaller or larger fortifications of the Sajó Valley, this folklore is widespread regarding several castles in the North Hungarian Mountains.

During the research of the castles in the Sajó Valley which can be connected to the Hussites, I aimed to clarify the following questions.

First and foremost, I tried to answer that *how the Hussites received this central position in the folklore of the northern regions.*

Whether we observe medieval chronicles, historical monography that elaborated the subject, or the folklore, all types of sources make the Hussites appear as castle builders who constructed fortified structures on their own to bring the area under their sway from there. *But is it true that every castle which can be connected to them was a newly established object of Hussite origin? Or are there any other historical antecedents?*

If we assume an actual Hussite presence, then it is a requirement to separate the unique characteristics of their stay from the characteristics of the objects which have the same age but were definitely not used by them. Accordingly, it needs to be observed *whether there is a typical architectural feature or type of finds typical to Hussite castles.*

To answer the outlined questions, we need to observe that *to what extent the Hussite groups in the territory of the Hungarian Kingdom in the middle of the 15th century were Czech and to what extent they were Hussites.* What is the connection between the participants of the Bohemian Wars and their descendants in Hungary? The real role and significance of these castles in military history can be clarified by a thorough observation of these subjects.

Between 2008 and 2015, with the help of members of the Herman Ottó Museum, I investigated four fortifications which are considered to be Hussite: Vadna – Vár-tető, Sajóivánka – Vár, Sajógalgóc – Vár-hegy and Sajónémeti – Vár-hegy. During the archaeological research, I compared the individual object types to other Upper Hungarian castles with similar historical background, and additionally in a wider outlook, I examined their analogies outside the Carpathian Basin as well.

Historical background and the development of Hussite traditions

It is a well-known fact that the Bohemian Hussite Wars meant the most severe strike of the 15th century. Several participants of the battles, which lasted one and a half decade did not return to their original occupation, but became mercenary. They offered their services to the opposing sides of the Middle European conflicts in hope of life. Since 1434 they started to appear more and more often in the Hungarian royal military service, first against the Turks, and then they played a huge role in the Hungarian internal conflicts in the civil war which broke out in 1440. The mercenaries called Hussites went through remarkable metamorphoses throughout the years. They were not fighters of faith anymore – only in their name at the most – and their national composition became diverse as well. Beside the Czechs, this military class of the society consisted of a mass of Poles, Silezian and Moravian Germans, and Hungarians. According to contemporary sources, they called each other *bratry* which means brother (in Czech). During the civil wars in Hungary, their leader was Jan Giskra, who became pivotal

character of the national politics. The background of his power was ensured by his battle-hardened mercenaries. Giskra established a complete political and military authority in Upper Hungary, and he was endowed with several benefices and the title of captain-general and bailiff by Queen Elizabeth who hired him. Between two fights, the payment of the mercenaries was repeatedly neglected, thus they stroke out on their own, and ensured their livings by plundering. This controversial situation lasted in this region for nearly one and a half decade. The *bratry* mercenary chiefs became lords of the individual territories in Upper Hungary. They ensured their military superiority by building numerous fortifications. As their years-lasting presence was a mournful memory in Upper Hungary, the Hussites represented a “folk image of the enemy” in the region where the negative effects of the later Turkish occupation left less trace in the folklore. As a result of all this, the following folk memory referred – and refers even today – to all buildings, churches, structures and ruins of castles which seemed “old” to them as buildings of the Czechs, in other words, the Hussites.

The central power was solidified only by the enthronement of Matthias Corvinus, thus it became possible to force back the Hussites only around 1458-1460. At the same time, Matthias did not scatter the defeated *bratrics*, but integrated them into his newly formed mercenary army. This way these experienced soldiers made up the core of his army.

During these hectic public historical events, fighting tactics went through an intense development, and several innovations appeared. Foot-soldiers came into prominence, and the artillery became more significant. The demand on establishing effective defence against these methods set new tasks to the defenders of the castles. The Hussites and their descendants were advisors and executioners in these matters, as they gathered many experiences during the decade-long wars. Their innovations in war tactics and their technology in defence elements can be followed along in the wandering track of mercenary companions from Bohemia through the northern region of the Hungarian Kingdom to the Archduchy of Austria.

Archaeological research of the castles in the Sajó Valley

During the research of the castles of Vadna, Sajóivánka, Sajóalgóc and Sajónémeti, we used more non-destructive testing methods, such as micro-terrain survey, geophysical measurements, find detection with metal detectors and systematic find collection, which were followed by the test excavation of the fortresses. The results of the preliminary non-destructive research predicted, and the excavations confirmed that the Hussite establishment of the given castles were not without antecedents. In case of all four localities, prehistoric and late Arpadian Age material of finds indicated preceding usage, apart from Sajónémeti where finds of the Roman imperial period were present as well. While early historical finds were found in every locations, the castles gained their distinctive structural features only with the redevelopment during the 13th century. Their morphology was similar: a prominent central core with a surface area of 400-900 m² surrounded by trench and rampart. Beside these surface morphological forms and the discovered finds, which can be dated back to the 13th and the beginning of the 14th century, only one burnt-out, loam wall building with poststructure indicated the Arpadian Age. The later fortifications destroyed the features of these antecedents. Even so, it is certain that the fortifications of Vadna, Sajóalgóc and Sajónémeti – similar to other castles of the same

age – were Arpadian Age noble castles, or in other words private castles. The reason of their establishment was the fragmented land structure of their vicinity in the 13th century, since the disintegration of noble clans into several branches and families were characteristic in this period. In the course of this, each family built up their castle as their own pursuit of power. An important function of the fortifications was to symbolize the power of their owner. To prove this theory, I made the visibility modelling of each castle and their neighbouring area by the relief model of the castles of the Sajó Valley which originated from the 13th century. In addition, I suggested a simple, topographical analysis of the individual objects, resting on trigonometric foundation. According to the results, the castles did not have to indicate the power of their lord to the residents of the given land, but to the possessors of the neighbouring areas. The background of this psychologically triggered goal was that the phenomenon, namely owning a castle (or castles) served as basis of the territorial and political authority of private properties and individual nobles emerged in the Hungarian Kingdom precisely in the “long” 13th century – the period that lasted from the end of the 12th century until the beginning of the 14th century. According to the basic premises of Erik Fügedi a landlord without a castle could become easy target of his castle-owning fellows, thus: “castle bred castle”. These castles served as a basis of lesser or greater acts of tyranny, since beyond passive defence, they were suitable for active attacks. The process that unfolded in the castle-building programme of Béla IV of Hungary after the Mongol invasion, accelerated in the second half of the 13th century, because private landowners recognised that the castles gave opportunity to amplify their power. Only the central power consolidated by Charles I of Hungary was able to stop this. The role of the castles, captured during the wars against oligarchs, had increasingly changed since the 1320’s. They had become the judicial and economical centres of the lands. In these processes the abundance of fortifications, which sprung up everywhere, became superfluous and their abandonment began.

We know very little about the establishment of the castles in the Sajó Valley and the role that they played in the given period, partially because of the later Hussite reconstruction, and partially because of the complete lack of written sources from the 13–14th century. In the same time, the available data that is in accordance with the national events and other castles of similar age can refer to identical historical processes. In connection with the history of the ownership of the wider area of the castles, it is certain that they were built on lands of different landowners. Therefore, they can be regarded as each other’s “actions and reactions”. In Vadna, based on the calibrated radiocarbon age of the charcoal sample taken from the bottom of the external surrounding rampart, the beginning of the construction can be dated to the 40’s or 50’s of the 13th century. Although in Sajónémeti – based on C-14 results as well – some utilization could have been occurred already at the turn of the 12th and 13th centuries. A decisive majority of the finds come from the 13th century, and a small amount of ceramics points towards the 14th century. Given the small quantity of the latter, abandonment of the castles might have occurred around the turn of the 13th and 14th centuries and in the first few decades of the 14th century. We have more direct information in the case of the excavation of Sajógalgóc, where the real time of the carbonised remains of a burnt-out building can be dated to the 1270’s. The building had supposedly fallen victim to a siege, according to the arrowheads that could be found inside it and also in several other places of the castle. After this siege, the fortification was not used again by its Arpadian Age owners.

The next period that was similarly tormented by internal conflicts like that at the turn of the 13th and 14th centuries, disturbed the peace of the country after nearly one and a half century. The main participants of this new crisis were Giskra's mercenaries and the *bratrics*, who spread their military authority to a significant area of Upper Hungary. The fortifications became, again, base for these operations. The castles, which had been destroyed – or only emptied at best – only a hundred years earlier, presented the opportunity to be used as the locations of building fortifications. It was the already existing ramparts, trenches and central cores of the hills, qualified for defence by the Arpadian Age predecessors, which needed to be adjusted to the medieval techniques of warfare. Thus the fortifications of *bratry* mercenaries from the middle of the 15th century were no more than the re-utilization of late Arpadian Age castles in most cases.

The capturing Hussites performed some remarkable earthwork in these castles. They levelled the previous remains of the castles and the abandonment layers in the central cores and formed a flat surface suitable for fights. The existing external defensive structures were used by them to some extent, but they also supplemented those with additional elements which were active, i.e. suitable for counterattacks. The characteristic of their construction was similar to building a camp: quick, with using raw materials that were the simplest to obtain, namely wood or earth.

The Hussites built their fortification, called *fortalicium* in certified sources, with the guide of captains Martin Komarowsky and Jan Valgatha in Vadna in the summer of 1458. However, Sebastian Rozgonyi, who controlled royal armies, sieged and captured the castle around St. George's Day. After that the castle started to decay once and for all. During the excavation an earthy layer, barely different from a hummus forest soil, was found that extended under the modern surface in the central core of the castle. Its bottom gradually dissolved into the undisturbed glacial erubase soil. In the upper hummus, we found 13th-century ceramics in great amount, and medieval materials. This age was not only represented by earthenware finds, but by a number of cross-bow arrowheads, horseshoes, stone-balls used in slings and a forged iron ball of a harquebus. The two Sigismund silver denars that we found during metal detecting also dated this layer to the 15th century. In addition, C-14 data of the animal bone sample taken from here indicated mid-15th century date too. Some pits were dug into this mixed hummus layer inside the castle for unknown reasons. Beside the cistern visible on the surface, no other internal objects were present. We discovered post-holes in a single line on the edge of the castle hill, on all four sides. Their appearance was completely uniform. They have a diameter of 35–45 cm and a depth of 40–50 cm in relation to the surface. Their lower part was indented into the cliff. Their stratigraphic situation proved that they cut across the hummus layer which was rich in divers finds. Larger post-holes were often followed by smaller ones, which can be interpreted as some sort of support. The shallow depth of these refers to modern-day erosion, but even so, it can be guessed that they designated the trace of a single-row wooden palisade which completely surrounded the edge of the castle hill. Based on the 15th century hummus layer, its construction took place unquestionably in the Hussite period. The interior of the castle and the surrounding rampart has a rather eroded surface today. According to an archived glass negative taken around 1920, the castle hill had considerably more strongly marked landscape elements, but the meadow-covered area was afforested after World War II. Only a torso could remain from the castle, which was disturbed by this afforestation, and only the bottom of the archaeological objects can refer to its medieval architectural structure.

The Hussites who fled from Vadna during the siege in 1458, took refuge in the fortification of Galgóc – built on the opposite side of the Sajó and remained intact until today – but they soon moved on, without waiting for the royal army to arrive. Thus Galgóc fell into Sebastian Rozgonyi's hand without any resistance.

On the basis of stratigraphic data it can be stated that the ruins of the Arpadian Age castle, which was destroyed by fire, was landscaped in the late Middle Ages. This “cleaning” was not the same everywhere. At the southern side of the castle core everything was levelled to the subsoil, but in the northern part they only smoothed down the burnt debris. The walking level used by the Hussites was formed this way, and it contained the Arpadian Age antecedents and the debris of the Hussite castle together.

On the edge of the hill we noticed a thin, cemented and hardened layer with 30 cm wide, pointy ended post-holes in it. The latter means that the posts were driven into the ground. The situation of the posts shows the possibility of a multiple-rowed wooden structure, the gaps of which were filled by the hardened soil. The soil also formed the embankment of the internal side. However, all of this is hypothetical due to the restricted surface area of the two trial trenches. The filling between the post-holes was dated by 15th-century ceramics, but it also contained Arpadian Age pottery. So the Hussites levelled the ruins of the 13th-century castle by serious earthworks, and they additionally filled up, and tamped the 85 cm distance between the post-holes with the subsoil which they reached in many places. This earth-filled palisade in Galgóc was never sieged.

The object in the Sajó Valley which was investigated most thoroughly was the fortification of Vár-hegy in Sajónémeti. According to known sources from the medieval period, Giskra's mercenaries started to fortify the object called *fortalicium* in 1460. The siege and capture of the castle took place with the participation of Matthias Corvinus in person in the last days of August, 1460.

The morphology of Sajónémeti and the extent of its development is entirely different from both Vadna and Galgóc. The aerial photograph and micro relief survey of the castle immediately showed that this was a uniquely arranged defensive structure. Although the base structure – the central core and the surrounding trench – possessed Arpadian Age characteristics, and significant amount of 13th-century finds proved this period, the archaeological objects of this period were missing. The excavations confirmed that the castle, abandoned at the turn of the 13th and 14th centuries, was captured by Hussite *bratrics*, and they smoothed the surface area of the castle to the subsoil. Therefore, traces of the former castle were removed. In the internal core, the first and at the same time the last significant layer under the recent surface is the hummus planished level, with both Arpadian Age and Middle Age finds. This spread out earth layer was mainly located on the subsoil. Several relatively large, 15th-century garbage pits plunged into the surface of the castle core. These contained 15th-century and earlier finds. We noticed similar holes in Vadna and Sajógalgóc in the internal core. The holes excavated in these castles were thought to be dug up for gaining raw materials for the stuffing or support of the wood- or earth-structured walls. In many cases we excavated deposited, human head-sized boulders in high amount in different spots of the castle. We can probably state that these are the remaining ammunition of the defenders of the castle.

We discovered a bench on the very steep edge of the castle into which post-holes plunged in 35-40 cm diameter and in 80-90 cm deep in one row and situated 50–70 cm from each other. We can conclude the presence of a one-rowed palisade wall from these. The calibrated C-14 data of the animal bone which was found in the soil and which might have been used in puddling the posts into the ground resulted in a date of the middle 15th century. Thus we might attribute the building of the palisade to the Hussites.

We excavated a trial trench on the double rampart, situated south of the core of the castle. The outward rampart turned out to be only a sandstone ridge which was heightened with the soil from the trench at the internal side. As opposed to this, the inward rampart, which is well pronounced even today, is the result of a filling in without an internal wooden framework. The *terminus post quem* of the time of the construction was a Władysław III coin, which turned up from the upper layer of the rampart. According to this the building might have been Hussite.

In the field, triangle-shaped earth constructions could be noticed protruding from both the eastern and western sides of the rounded rampart that surrounded the castle. We observed the one on the western side. The excavation proved that the earthwork was built in the 15th century. We excavated the spot of the support, post-holes and post trenches of a wooden structure on the outward, eastern edge of the earthwork. This could have been closed towards the outside but opened towards the inside. As the bailey protruded from the line of the rampart and the trench, its shape made possible to keep the foreground of the castle under flanking fire from it.

A rounded mound with a diameter of 20 m could be identified as a separate unit in the field in 100 m distance west of the core of the castle. We can interpret this as an outpost defence. On its edge we found post-holes in two rows, 2.5–3 m far from each other. It can be reconstructed as traces of a wooden palisade structure which was filled up with earth. At the inner side of this, at a distance of 1.5–2.5 m, we discovered a concentrically running, deep foundation trench section in which post-holes were located in a row by every 40 cm. This latter post trench undoubtedly showed the existence of a one-rowed palisade which surrounded a rounded, protected courtyard with an interior height of 8 m, and presumably with a wickered wall structure.

According to the research conducted so far the external wall designated by two-rowed post-holes fenced the internal one-rowed palisade only in a semi-circular arch, and it was open towards the direction of the main castle. Beside these, the outer side of the external wall was cut off artificially to be steep as an additional defence. At last, the whole area between the two different wall structures was filled up with earth. From the bailey the blind spots of the main castle could be scanned, and the approaching route could be kept under fire.

After the siege of Némethi in 1460, the fortification was abandoned and its wood structure was disassembled. This was proven by pits found in many places and dated with beaten coins from 1465.

Unlike the castles of Vadna, Galgóc and Némethi, the castle of Sajóivánka is not mentioned directly in medieval sources. The fortification can be found in a 500 m distance from the castle of Vadna on the same mountain crest, therefore their tighter connection is probable. As a result of the test excavation the image of a semi-finished fortification came to light. Apart from the shallow trench and rampart which could hardly give any defence, we could not find any traces of usage. There was almost no find material at all. Although sparse ceramics from the 13th century indicated the Arpadian Age usage of the location, we cannot

tell for sure whether the earthwork took place at the same time or not. As a matter of fact, we found medieval iron tools (plough-shoe, peasant knives) during metal detecting conducted in the immediate foreground of the fortification. This means that the defence structure could have been built at the time of these finds. The reason why I discuss this puzzling fortification among the Hussite castles is the fact that Antonio Bonfini mentioned during the siege of Vadna that the castle of the Czechs had not been finished when the royal armies arrived. Since the castle in Ivánka stood only 500 m far from the one in Vadna, and in addition, its vicinity is called “ledge side”, the idea came up that it was the outpost defence structure of the unfinished castle of Vadna, as mentioned by Bonfini, which stood in Sajóivánka.

Attributes and analogies of Hussite fortifications

The most important task in researching the castles of the Sajó Valley was to determine the characteristics of a Hussite fortification. Vadna, Galgóc and Némethi proved clearly that they usually chose previously fortified locations. According to the sources they only built *fortaliciums* with military purposes in these places and in a short period of time. Their partially excavated architectural structure indicates simple wood structure: one-rowed palisade, or hoarding made of multiple-rowed wood pillars and with earth-filling. The lines of defence were equipped with earthworks suitable for flanking, as we saw in the case of Sajónémethi. In the foreground of the castle, an advanced, asymmetrical defensive structure was developed. It was open towards the main castle, but closed towards the hostile fire. All of these were the constructions of the rapidly developing artillery in the 15th century.

These structures are known only from the northern regions of the Hungarian Kingdom, where in the middle of the 15th century the mercenaries of Giskra widened their authority. In the last decades, several topographical research of objects like these were conducted in Slovakia, and probing excavations were performed in a number of places (Egbeľény/Gbeľany – Hradisko, Sztrecsény/Strečno – Bašta, Saskő/Šašovské Podhradie, Vichodna/Východná – Zámčisko, Divény/Divín – Divínsky háj, Újvásár – Derenk/Rybník – Drienok, Jolsva – Óvár/Jelšava – Hradovisko, Komlóskeresztes/Chmeľov – Zadňa hura). All of these objects, which have been researched in different levels, can be related directly to the fortification in Sajónémethi.

Their architectural characteristics – mainly the advanced defensive buildings with wood- or earth-structure – appeared in many castle-foreground of Lower Austrian, Carinthian and Styrian castles, in regions (Liebenfels, Eppenstein, Deutschlandsberg, St.Martin im Sulmtal – Taborkogel) that were targeted by the Austrian campaign of Matthias Corvinus in the 70’s and 80’s of the 15th century.

It might not be surprising that the Hungarian royal army developed the same objects, since the Black Army consisted of former Hussite mercenaries and their descendants in the middle of the 15th century, and practiced camp-like building of defence with wood and earth structure by their instructions. Therefore, it seems that the idea of wooden or earth defensive structures can be undoubtedly originated from the Hussite mercenaries, whose idea became widespread, and gave the basis of artillery forces.

Publications by the author in the topic

- SZÖRÉNYI, G. A. 2010: Késő középkori előretolt védművek és elővédek a Sajó-völgyében. [Late medieval castle fortifications in the Sajó Valley.] *Herman Ottó Múzeum Évkönyve* 49, 103–127.
- SZÖRÉNYI, G. A. 2011: Gondolatok a késő Árpád-kori nemesi várak funkciójához és terminológiájához a Sajó-völgyi huszita erősségek előzményei kapcsán. *Castrum* 13, 25–70.
- SZÖRÉNYI, G. A. 2011: Egy huszita vár romjai a Sajó völgyében (Beszámoló a vadnai erősség kutatásáról). In: TEREI, Gy. – KOVÁCS, Gy. – DOMOKOS, Gy. – MIKLÓS, Zs. – MORDOVIN, M. (eds.): *Várak nyomában. Tanulmányok a 60 éves Feld István tiszteletére*. Budapest, 251–260.
- SZÖRÉNYI, G. A. 2012: Befestigungen der Hussiten in Nordost-Ungarn. [Hussite fortifications in north-east Hungary.] *Burgen und Schlösser* 3, 180–186.
- SZÖRÉNYI, G. A. 2012: Huszita erődítések Északkelet-magyarországon. [Befestigungen der Hussiten in Nordost-Ungarn.] *Herman Ottó Múzeum Évkönyve* 51, 113–126.
- FELD, I. – SZÖRÉNYI, G. A. 2014: Várak külső védművei és elővédművei Közép-Európában. *Castrum* 17, 17–40.
- FELD, I. – SZÖRÉNYI, G. A. 2015: Außenwerke und Vorwerke der Burgen in Mitteleuropa. In: BITTERLI, TH. – HOFFMANN, Y. – HOFRICHTER, H. – KÜHTREIBER, TH. (eds.): „*Dem Feind zum Trutz*”. *Wehrelemente an mittelalterlichen Burgen*. Braubach, 205–217.