

THE BIRTH OF THE “ÁRPÁD PERIOD” VILLAGE OF NYIRES

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Together with my colleague, the archaeologist György Tompa, we constructed a section of a town made up of buildings and related objects excavated from Árpád Period archaeological sites on the grounds of the Sóstó Museum Village. This was performed in the context of the Hungary-Romania Cross-Border Cooperation Programme 2007-2013 Cult-Tour grant program. Due to budgetary restraints we chose from various structures excavated from sites within the territory of present-day Hungary along and to the east of the Danube River. Although our article is primarily informational in nature, to introduce the recently opened section of the Árpád Period village, we also touch upon a portion of the problems observed during construction through the example of a few building reconstructions at this open-air museum next to Nyíregyháza.

During the planning of the Sóstó reconstructions, the houses, other buildings and structures (oven, workshop, granary, well, etc.) were constructed based upon excavation observations and historical sources as well as utilizing the results of ethnographic study. The experiences of experimental archaeologists also provided essential information. Of the latter, we drew from existing contemporary archaeological open-air museums² (Kisrosvágy, Emese Park) and examined certain exhibitions (for example that of the Museum of Hungarian Agriculture). Considerable guidance was also provided by casual discussions with colleagues. Naturally we also attempted to peruse the library of professional literature on Árpád Period settlement details. Essential aid was provided by the house reconstruction research history summaries noted by M. Iván Balassa and Miklós Takács.³ The considerable merit of these, along with the work of Tibor Sabján, is that – in addition to raising numerous questions – they also reported on the observations made during their experiments with scientific accuracy.⁴

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² According to some opinions sections of towns comprised of structures based upon archaeological reconstructions cannot really be considered open-air museums (“skanzens”), because archaeology (due to its limited opportunities) does not present the reality in a manner that can be precisely measured and experienced. Despite this, the international literature refers to them as archaeological open-air museums, see e.g. Gancarski, J. (ed.): *Skanseny archeologiczne i archeologia eksperymentalna* (Krosno: Muzeum Podkarpackie w Krośnie, 2012). In English they are commonly called *open-air museums*, see e.g. Paardekooper, Roeland: *Archaeological open-air museums across Europe. Their 125 years history and a debate on their future. Ibid.*, 13–34.

³ Balassa, M. Iván: *A magyar parasztház évszázadai. A magyar lakóház középkori fejlődésének vázlatja* (The Centuries of Hungarian Peasant Houses. An Outline of the Medieval Development of Hungarian Dwellings) (Békéscsaba: Tevan Andor Nyomdaipari Szakközép- és Szakmunkásképző Iskola, 1985); Takács, Miklós: *Lakóház-rekonstrukciók az Árpád-kori telepkutatásban (Tudománytörténeti áttekintés)* (Dwelling Reconstructions in Árpád Period Settlement Research [Survey of the Historical Scholarship]). In: Bencze, Zoltán – Gyulai, Ferenc – Sabján, Tibor – Takács, Miklós: *Egy Árpád-kori veremház feltárása és rekonstrukciója* (Excavation and Reconstruction of an Árpád Period Pit Dwelling) (Budapest: Budapesti Történeti Múzeum, 1999), 93-129; Takács, Miklós: *Az Árpád-kori köznépi lakóház kutatása, különös tekintettel az 1990-es évekre* (The Research on Common Dwellings of the Árpád Period with Particular Attention to the 1990s). In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga* (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 7–54.

⁴ Sabján, Tibor: *A veremház rekonstrukciója* (The Reconstruction of a Pit Dwelling). In: Bencze, Zoltán – Gyulai, Ferenc – Sabján, Tibor – Takács, Miklós: *Egy Árpád-kori veremház feltárása és rekonstrukciója* (Excavation and Reconstruction of an Árpád Period Pit Dwelling) (Budapest: Budapesti Történeti Múzeum, 1999), 131–176. Lőrinc Tímár also drew attention to the “boldness” of certain reconstructions based on prehistoric models. He also dealt with several problems that were also significant to us. Tímár, Lőrinc: *A negatív struktúrától a rekonstrukcióig* (From the Negative Structure to the Reconstruction). In: *Régészeti dimenziók* (Archaeological Dimensions), ed. Anders, Alexandra – Szabó, Miklós – Raczky, Pál (Budapest: L’ Harmattan, 2009), 93–104.

We thought it was important to depict the variety of Árpád Period settlements. It has been typical in general for earlier house reconstructions to present a type of stereotypical image, despite the experience that even in specific excavations differing types and variants of buildings can be found.⁵ Due to the character of the remains that can be observed archaeologically from the results of excavations, conclusions can be made primarily from phenomena that were dug into the ground and the collection of everyday objects made from durable materials. From the combination of this evidence an image of the entire village emerges. The ground plan that is revealed through digging provides assistance in the estimation of dimensions and possibly in determining the structure’s composition, but its documentary value related to the superstructure is limited. In general only minimal details about wall and roof structures made from organic materials are found, whether the house burnt down by accident or in a violent event, was washed away by a flood or even just disintegrated over the years. The image provided on the basis of areas that were dug out is supplemented by additional information from the location of carbonized wooden remains, bits of daub and plastering or a carbonized beam or plank that has survived through a fortunate accident. We can only draw conclusions about wattle-and-daub walls from bits of the mud and plastering that have been burnt and retain imprints of branches, twigs or thatch.

Nor do we know for sure what the depth of each structure dug into the ground was compared to the contemporary surface (in other words, how deep the houses were originally), since we cannot know where the former ground level was due to the excavation technology generally employed. This is because large projects do not provide enough time to remove the humus layer by layer, so the shovels of the machines dig down to the substratum immediately. Therefore – aware of the differing circumstances of humus formation – the basic pits have on average been dug 5-20 cm deeper than what was observed in the excavations.⁶

We must stress that we did not attempt to show the former construction processes, but the structures themselves, so we employed modern tools and construction materials. Our team was comprised of a carpenter, a joiner, masons and laborers. In terms of raw materials we tried to follow the information from the sources, but at times we were forced to adapt to the circumstances.

RAW MATERIALS AND CONSTRUCTION MATERIALS

Naturally we would have liked to have built using oak, but this was not possible due to our finances. We were left with durable acacia, easily worked pine and flexible, straight and pliant common osier proved most suited to making wattle. Thatch was an important raw material, which we used in place of straw. Modern-day reaping and baling technology cuts up straw into such small bits that it is unusable for roofing. However, fortunately thatch from sedges and reeds in flooded fields was widely available, and was perfectly suitable for our purposes.

The use of adobe may seem to be much more presumptuous. We erected a framework next to the basic pit of the houses to avoid collapse. This solution is attested to by a source from the 1820s, and is also recorded in one of the short stories of Péter Veres.⁷ Alojz Habovtšiak proposed that adobe may have already been used in construction in the Middle Ages, and ever since István Méri’s excavation in Kardoskút we have had a concrete example of brick construction in a rural environment – although in that case they used

⁵ Takács, Miklós: Az Árpád-kori köznépi lakóház kutatása, különös tekintettel az 1990-es évekre (The Research on Common Dwellings of the Árpád Period with Particular Attention to the 1990s). In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga* (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 31.

⁶ In my currently ongoing excavation on the outskirts of Nyíregyháza-Felsősimán we detected the traces of the Árpád Period ovens 40 cm below the current ground level, and these traces did not even indicate the domes, but only the walls.

⁷ Veres, Péter: Dankó János. In: *Asszonyhűség. Elbeszélések* (Faithful Women. Short Stories) (Budapest: Szövetkezeti Kiskönyvtár, 1957), 145; Sztrinkó, István: *Népi építészet a Duna-Tisza közén* (Vernacular Architecture between the Danube and Tisza Rivers) (Debrecen: Kossuth Lajos Tudományegyetem Néprajzi Tanszéke, 1987), 38–39.

fired bricks.⁸ However, due to the physical characteristics of adobe it can deteriorate to such a degree over the centuries that it is difficult to detect with archaeological methods. We also used adobe for plastering, since broken up adobe already contains chaff and husks so we only had to break it apart and soak it in water.

SURFACE TREATMENTS

The treatment of the timber was performed by so-called sapwood grinding. This method involves the removal of the bark and phloem (the sapwood, which is most exposed to damage from insects and fungus) of the log by grinding, providing a nice surface similar to hewing. As a second step, we treated the part of the timber that was to remain above the ground level with pitch, since wood does not rot as intensively in the ground but instead where it contacts the surface. It is our opinion that the use of pitch does not need to be ruled out during the process of reconstruction because even Roman sources (Pliny the Elder⁹) already report on its use.

WALL STRUCTURES

A portion of our buildings are pit dwellings, and these do not have vertical walls. For these, we employed some variants of the prop and purlin roof structure on the basis of the traces of postholes in the foundations found during excavations. We presented the “classic” basic variant with props on the longitudinal axis dug into the halfway point of the shorter side seen in the structure from Visegrád (*Fig. 1*), and a version reinforced with an additional prop in the center in the structure from Kiskunfélegyháza (*Fig. 2*). This latter building represents a transitional form, since its eastern wall – in accordance with the observations from the excavation – is in part vertical. The hut from Rozsrésztőlő (*Fig. 3*) is also a pit dwelling, but since no postholes were found here during excavation we constructed a special, so-called scissor truss roof. The essence of this is that there are no purlins, just pairs of rafters joined together at the peak, which are also held together by through-beams (“roosts”) in their upper thirds. The rafters on the two longitudinal sides are



Fig. 1: Semi-subterranean house with hatchway from Visegrád-Várkert



Fig. 2: Reconstruction of a semi-subterranean house from the outskirts of Kiskunfélegyháza

⁸ Méri, István: *Árpád-kori népi építkezésünk feltárt emlékei Orosháza határában* (Excavated Remains of Árpád Period Vernacular Architecture on the Outskirts of Orosháza). Régészeti Füzetek Ser. II. 12. (Budapest: Magyar Nemzeti Múzeum, 1964), 19–32; Habovtšiak, Alojz: Régészeti adatok a középkori népi építészet tanulmányozásához Szlovákiából (Archaeological Data for the Study of Medieval Vernacular Architecture from Slovakia). In: *Népi építészet a Kárpát-medence északkeleti térségében* (Vernacular Architecture in the Northeastern Area of the Carpathian Basin), ed. Cseri, Miklós – Balassa, M. Iván – Viga, Gyula (Miskolc–Szentendre: HOM Szabadtéri Néprajzi Múzeum, 1989), 12.

⁹ Pliny's *Natural History* translated by H. Rackham, W.H.S: Jones, D.E. Eichholz from the 10 volume edition published by Harvard University Press, Massachusetts and William Heinemann (London, 1949-54). Book XXXIV, XLIII. <http://www.masseiana.org/pliny.htm#BOOK%20XXXIV>



Fig. 3: Reconstruction of a scissor truss hut from the Nyíregyháza-Rozsrétszőlő archaeological site



Fig. 4: Reconstruction of a log house from the Edelény, Borsodi-földvár (earthwork) archaeological site

connected by a so-called weather board fixed in a transverse direction. The earliest depiction of this type is thanks to Ottó Herman.¹⁰

The roof structures of the second group of the houses, despite the fact that they have a pit foundation, are not supported by the ground but by some kind of wall structure. This type includes the log house from Edelény, constructed on the basis of the reconstruction drawing by Mária Wolf and Tibor Sabján (Fig. 4),¹¹ and the building from Szamoskér (Fig. 5). In the case of the latter we postulated the vertical wall on the basis of the double row of postholes visible for about 3 meters starting from the northwestern corner. For this we designed a corridor-like entrance and eaves.¹²

Here we will diverge to wall structures, which were made of wattle-and-daub except for in the case of log houses. Due to the traces of organic material detected at the excavations, the majority of researchers imagine that in general they had log walls or much more rarely walls made of wattle-and-daub, the latter on the basis of picket holes sunk into the pit foundation.¹³ During the excavation of the building from Szamoskér neither this nor wood impressions were found, so we decided on a wattle-and-daub wall. This could have been done in a manner where the stakes that made up the framework for the wall were attached to beams above and below or secured to slats, so they would not have left any archaeological traces. Furthermore, here we present the more developed – but in reality still prop and purlin – structural

¹⁰ The earliest depiction of the type is thanks to Ottó Herman. Sabján, Tibor: A veremház rekonstrukciója (The Reconstruction of a Pit Dwelling). In: Bencze, Zoltán – Gyulai, Ferenc – Sabján, Tibor – Takács, Miklós: *Egy Árpád-kori veremház feltárása és rekonstrukciója* (Excavation and Reconstruction of an Árpád Period Pit Dwelling) (Budapest: Budapesti Történelmi Múzeum, 1999), 155, fig. 4.

¹¹ The reconstruction was made on the basis of observations during the Edelény excavation, only they placed the door on the southern wall. We returned to the original observations, and in addition we increased the size of one of the smoke holes to an entrance. Wolf, Mária: 10. századi település Edelény-Borsodon (10th Century Settlement at Edelény-Borsod). In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga* (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 133, footnote 6; 145, fig. 21a.

¹² An outstanding ethnographic “analogy” for the gable eave was published in the 1930s from Monor. Borzsák, Endre: A régi istállók élete és a jószág takarmányozása Pest megye északi részén (The Life of Old Stables and the Feeding of Livestock in the Northern Portion of Pest County). *Néprajzi Értesítő* 28 (1936 [1937]), 44.

¹³ Fodor, István: Megjegyzések a középkori magyar lakóház fejlődéstörténetéhez (Observations on the Historical Development of Medieval Hungarian Dwellings). In: *Népi építészet a Kárpát-medence északkeleti térségében* (Vernacular Architecture in the Northeastern Area of the Carpathian Basin), eds. Cseri, Miklós – Balassa, M. Iván – Viga, Gyula (Miskolc–Szentendre: HOM Szabadtéri Néprajzi Múzeum, 1989), 31–35.



Fig. 5: Reconstruction of a house with a projecting roof supported on vertical walls from Szamoskér



Fig. 6: Reconstruction of an outdoor baking oven from the Nyíregyháza-Rozsrétszőlő archaeological site

solution, where the rafters lay atop a cornice beam.¹⁴ The gables of the Kiskukunfélegyháza, Rozsrét and Visegrád buildings were also constructed from wattle-and-daub. In contrast to this, the side walls of the Visegrád house were comprised of a structure of interlocked planks supported by posts set next to the pit foundation.¹⁵

Just like the posts for the Visegrád entryway, those for the lean-to roof of the Rozsrétszőlő oven (Fig. 6) seem to be noticeably oversized, since we had to work with the raw materials available. Archaeological traces of roof structures only survive in the rarest of cases, the reason for which may probably also be due to the fact that distinctly scrawny, flimsy uprights were used as supporting posts according to the ethnographic and historical sources.¹⁶

ROOF STRUCTURES

We made efforts to utilize the modern tools and materials in such a manner that the visitors would not see or perceive their use. In just one case we were not able to achieve this goal, in the case of the thatching. We were not able to find an expert who would have taken on the job in the time available without the use of wire and wood screws.

The generally experienced flaw of the majority of reconstructions is the rather open lathing. If we really were to fasten the slats to the rafters as we see in the majority of the published conceptions, it would have difficulty not only holding up the earth, but also the straw below it. Not even to mention that most reconstructions calculate for straight slats often with the same diameter,¹⁷ while ideal timber such as this is rare in reality and the builders of the past worked with what they could obtain in the surroundings of

¹⁴ Gábor Vékony and József Kaszás elaborated a similar solution in the reconstruction of a house from Tatabánya. Vékony, Gábor: *Honfoglaló őseink szállása (Lodgings of Our Conquering Ancestors)*. *História* 2 (1980)/3, 29. In contrast to Miklós Takács we interpreted this depiction as a gable roof and covered it in thatch, which it was able to bear without problem. See: Takács, Miklós: *Lakóház-rekonstrukciók az Árpád-kori telep kutatásban (Tudománytörténeti áttekintés) (Dwelling Reconstructions in Árpád Period Settlement Research [Survey of the Historical Scholarship])*. In: Bencze, Zoltán – Gyulai, Ferenc – Sabján, Tibor – Takács, Miklós: *Egy Árpád-kori veremház feltárása és rekonstrukciója (Excavation and Reconstruction of an Árpád Period Pit Dwelling)* (Budapest: Budapesti Történeti Múzeum, 1999), 99.

¹⁵ Kovalovszki, Júlia: *Árpád-kori házak Visegrád-Várkertben (Árpád Period Houses at Visegrád-Várkert)*. In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001)*, ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 86; 91, fig. 13.

¹⁶ Méri, István: *Árpád-kori szabadban levő kemencék (Open-air ovens in the Árpád Period)*. *Archaeológiai Értesítő* 90 (1963), 279; Sabján Tibor: *Kenyerősítő kemencék* (Budapest: Terc, 2008), 118.

¹⁷ The work of Tibor Sabján represents an exception to this.

the village. To make the irregular slats line up along the rafters properly we cut them into shorter pieces and affixed them quite densely. Even so, we were afraid that the structure would not bear the burden. It was also a problem that the earth tossed up on the roof rolled back off. Guided by a sudden inspiration we decided to spread the straw over just a thin layer of earth, then place sod on this. The grass held the layer of earth together and the load on the covering became much lighter.¹⁸ To our knowledge no source rules out the employment of this method in the past, and there are even some known ethnographic analogies.¹⁹ We employed this method in the roofing of the Visegrád building, while for the Kiskunfélegyháza house we chose a similar but modern solution; we affixed rolls of sod purchased at a garden supply shop to the roof with wooden pegs.

ENTRANCES

During the research on Árpád Period dwellings perhaps the greatest point of debate deals with the location and design of the entrance: which direction did it face and what part of the wall was it in? From the literature it emerges that the location of the entrance can only rarely be precisely determined using archaeological methods, in general it is only hypothesized from the orientation of the oven, usually presumed to be on the opposite side.²⁰

Following the conception of István Méri, a popular element in reconstructions is an open hatch-like entrance covered with a flat or gabled roof that breaks the surface of the longitudinal side.²¹ The general belief that has developed in the literature is that the entrance to the houses is generally placed in the middle section of the longitudinal wall,²² in most cases on the southern side. However, this by no means could have been the only solution. In addition to earthen dwellings and pens described by ethnographers²³ it is possible to find excavated and well-documented Árpád Period houses where the circumstances are similar, but – after exhaustive study of the literature – we can see that entrances on the gable end must be reckoned with in quite a few cases. M. Iván Balassa posited that entrances opening on the gable end are not necessarily accompanied by covered hatchways, because there are cases where the location of the door opening on

¹⁸ The pressure from the earth was already a problem for the Szarvasgede reconstruction. Sabján, Tibor: A veremház rekonstrukciója (The Reconstruction of a Pit Dwelling). In: Bencze, Zoltán – Gyulai, Ferenc – Sabján, Tibor – Takács, Miklós: *Egy Árpád-kori veremház feltárása és rekonstrukciója* (Excavation and Reconstruction of an Árpád Period Pit Dwelling) (Budapest: Budapesti Történeti Múzeum, 1999), 143–144.

¹⁹ Dám, László: Földbe mélyített lakóépítmények az Alföld népi építészetében (Semi-Subterranean Dwelling Structures in the Vernacular Architecture of the Great Hungarian Plain). *A Nyíregyházi Jósza András Múzeum Évkönyve* 33–35 (1990–1992 [1993]), 140.

²⁰ Wolf, Mária: Régészeti adatok Észak-Magyarország középkori népi építészetéhez (Archaeological Data on Medieval Vernacular Architecture in Northern Hungary). In: *Népi építészet a Kárpát-medence északkeleti térségében* (Vernacular Architecture in the Northeastern Area of the Carpathian Basin), ed. Cseri, Miklós – Balassa, M. Iván – Viga, Gyula (Miskolc–Szentendre: HOM Szabadtéri Néprajzi Múzeum, 1989), 51; Gallina, Zsolt – Molnár, István: Épületek és szerkezeti elemeik egy késő Árpád-kori településen (Kiskunfélegyháza–Amler-bánya, Déli összekötő híd) (Buildings and Structural Elements in a Late Árpád Period Settlement [Kiskunfélegyháza–Amler-bánya, Southern Connecting Bridge]). *A Móra Ferenc Múzeum Évkönyve, Studia Archaeologica* 10 (2004), 529.

²¹ It is important, however, that the author also considered a gable roof to be possible. Méri, István: *Árpád-kori népi építkezésünk feltárt emlékei Orosháza határában* (Excavated Remains of Árpád Period Vernacular Architecture on the Outskirts of Orosháza). Régészeti Füzetek Ser. II. 12. (Budapest: Magyar Nemzeti Múzeum, 1964), 13, fig. A-B.

²² Ibid., 15; Fodor, István: Megjegyzések a középkori magyar lakóház fejlődéstörténetéhez (Observations on the Historical Development of Medieval Hungarian Dwellings). In: *Népi építészet a Kárpát-medence északkeleti térségében* (Vernacular Architecture in the Northeastern Area of the Carpathian Basin), ed. Cseri, Miklós – Balassa, M. Iván – Viga, Gyula (Miskolc–Szentendre: HOM Szabadtéri Néprajzi Múzeum, 1989), 25. An example of an opposing opinion: Bálint, Csanád: Az Árpád-kori falvak régészeti kutatása (Archaeological Research into Árpád Period Villages). In: *Fejezetek a régebbi magyar történelemből II* (Chapters of Previous Hungarian History), ed. Makk, Ferenc et al. (Budapest: Tankönyvkiadó Vállalat, 1992), 25.

²³ Dám, László: Földbe mélyített lakóépítmények az Alföld népi építészetében (Semi-Subterranean Dwelling Structures in the Vernacular Architecture of the Great Hungarian Plain). *A Nyíregyházi Jósza András Múzeum Évkönyve* 33–35 (1990–1992 [1993]), 138, 145.

these sections is indicated by steps cut into the side wall.²⁴ Disregarding some rare exceptions, ethnographic observations do not support the hatch concept either. It is far more likely that purlins extending beyond the gable wall formed eaves.²⁵ We made gable-end entrances for all of the houses we built with rectangular ground plans, since the excavating archaeologists identified this for the overwhelming majority of the selected examples in this area.²⁶

The situation is similar for excavated houses with ground plans that are square or close to square to the extent that in most cases the entrance was successfully identified in one of the corners.²⁷ Already by the 1980s a demonstrable group had been outlined in the regions of the Kisalföld, Northern Trans-Danubia, the Danube Bend and the northeastern section of the Carpathian Basin where the doors opened on the gable wall, and furthermore, next to the oven.²⁸ We also chose this model for the buildings from Szamoskér, Rozsrét and Visegrád, which came from this region.

The house from Kiskunfélegyháza is our only building whose orientation, together with the location of the entrance, was altered from the original – it had opened to the north. This was done to improve the appearance of the streetscape.²⁹

It is only on the Visegrád house where we constructed a hatch-like entrance, following the reconstruction drawing made by Tibor Sabján for Júlia Kovalovszki’s publication. The only problematic element for this was that here in fact we are dealing with a lean-to roof that does not protect the entryway at all from the weather coming from the east.³⁰ We altered it to the extent that we attached a row of short rafters to the eastern side, because the narrow section of roof provided in this manner helps a great deal against precipitation and

²⁴ Balassa, M. Iván: A Kárpát-medence északkeleti térsége lakóház fejlődéséről (On the Development of Dwellings in the Northeastern Area of the Carpathian Basin). In: *Népi építészet a Kárpát-medence északkeleti térségében* (Vernacular Architecture in the Northeastern Area of the Carpathian Basin), ed. Cseri, Miklós – Balassa, M. Iván – Viga, Gyula (Miskolc–Szentendre: HOM Szabadtéri Néprajzi Múzeum, 1989), 69–70.

²⁵ Sabján, Tibor: A veremház rekonstrukciója (The Reconstruction of a Pit Dwelling). In: Bencze, Zoltán – Gyulai, Ferenc – Sabján, Tibor – Takács, Miklós: *Egy Árpád-kori veremház feltárása és rekonstrukciója* (Excavation and Reconstruction of an Árpád Period Pit Dwelling) (Budapest: Budapesti Történeti Múzeum, 1999), 139.

²⁶ The Rozsrét hut did not have a perceptible entrance, but when listing the examples that served as models the author notes that for this type of building the entrance opens on the gable wall. Dám, László: *Földbe mélyített lakóépítmények az Alföld népi építészetében* (Semi-Subterranean Dwelling Structures in the Vernacular Architecture of the Great Hungarian Plain). *A Nyíregyházi Jósza András Múzeum Évkönyve* 33–35 (1990–1992 [1993]), 137.

²⁷ Alojz Habovtšiak presented several examples of this type of ground plan in his summary, although only from present-day Slovakia. In: *Népi építészet a Kárpát-medence északkeleti térségében* (Vernacular Architecture in the Northeastern Area of the Carpathian Basin), ed. Cseri, Miklós – Balassa, M. Iván – Viga, Gyula (Miskolc–Szentendre: HOM Szabadtéri Néprajzi Múzeum, 1989), 11, fig. 3.

²⁸ Fodor, István: Megjegyzések a középkori magyar lakóház fejlődéstörténetéhez (Observations on the Historical Development of Medieval Hungarian Dwellings). In: *Népi építészet a Kárpát-medence északkeleti térségében* (Vernacular Architecture in the Northeastern Area of the Carpathian Basin), ed. Cseri, Miklós – Balassa, M. Iván – Viga, Gyula (Miskolc–Szentendre: HOM Szabadtéri Néprajzi Múzeum, 1989), 25; Takács, Miklós: Az Árpád-kori köznépi lakóház kutatása, különös tekintettel az 1990-es évekre (The Research on Common Dwellings of the Árpád Period with Particular Attention to the 1990s). In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga* (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 32.

²⁹ We note, however, that at this precise site the excavators observed doors opening in this direction on several houses. According to the opinion of the two authors Gallina and Molnár, the northern side orientation was genuinely rare in the Árpád Period, but in their collections they list several examples from the Great Hungarian Plain. Gallina, Zsolt – Molnár, István: *Épületek és szerkezeti elemeik egy késő Árpád-kori településen* (Kiskunfélegyháza-Amler-bánya, Déli összekötő híd) (Buildings and Structural Elements in a Late Árpád Period Settlement [Kiskunfélegyháza-Amler-bánya, Southern Connecting Bridge]). *A Móra Ferenc Múzeum Évkönyve, Studia Archaeologica* 10 (2004), 2004, 526, 528; 529, footnote 9.

³⁰ Kovalovszki, Júlia: Árpád-kori házak Visegrád-Várkertben (Árpád Period Houses at Visegrád-Várkert). In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga* (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 89; 90, fig. 10; 91, fig. 12.

the plant covering of the roof is not as subject to damage from erosion. Another improvement of ours is a section of wattle wall between the stakes stuck in the ground next to the eastern side of the hatch, which provides protection from blowing snow. We did not make this for the full length of the entryway roof, so that it is possible to step into the hatchway from the eastern side as well.³¹ We employed a similar woven railing on the side of the gable-roofed entrance to the Szamoskér house.

WINDOWS

A portion of our windows are simple smoke hole-like openings with no structural elements that would serve to cover or protect them. However, the data from the literature confirms that the need of the residents to block off these primitive openings from time to time must be taken into consideration. The solution to the problem in the case of the northern windows of the Rozsrétszőlő hut is a piece of sheepskin attached to the gable wall that could be used to cover the opening. Wooden sliding windows that could be moved along tracks – so-called *tolitu* windows – represented a more advanced solution, but the windows of the most up-to-date Árpád Period vernacular houses in all probability had a thin membrane covering from an animal bladder or skin.³² Due to limited financial opportunities³² we only fully installed membrane windows in the Szamoskér house,³³ while for the Visegrád, Edelény and Kiskunfélegyháza buildings we also used *tolitu* windows. The membrane windows were set at the entrance or the gable wall, while the sliding windows were near the stoves, with the exception of the Szamoskér house, where we placed one of its windows on the eastern side due to the light conditions.

FLUES

Already from the beginnings, the excavators of Árpád Period houses observed that often close to one of the corners a 1-2 meter trench led out from one side of the building's pit. A debate over the function of the trench ensued until Erzsébet Molnár found an example during the excavation of the Esztergom-Zsidód settlement where a tunnel-like flue ran in the location of the trench. The role of the funnel was determined to be the conduction of smoke, which was uniformly accepted by researchers.³⁴ However, she noted that this house had an unusually deep pit originally, so it was not only less favorable excavation conditions that led to only a trench-like form remaining from the flue in other cases. We also experienced that a significant portion of the houses with flues were not sunk as deeply into the ground. As a possible solution we did not reproduce the flue of the Szamoskér house as a tunnel, but as a trench with a removable cover, whose (hard) wood cover did not only make cleaning easier, but the perishable material provides an explanation for why traces of it were not observed in the excavations. In his study Tibor Sabján reconstructed the use of the flue and proposed that at times it was practical to cover the opening at the ground level.³⁵ We covered the opening with a simple house form made from wood.

³¹ This solution was inspired by house no. 12 of the aforementioned Kiskunfélegyháza excavation, where the entrance heads into the interior of the house after a right angle turn. Gallina, Zsolt – Molnár, István: *Épületek és szerkezeti elemeik egy késő Árpád-kori településen (Kiskunfélegyháza-Amler-bánya, Déli összekötő híd) (Buildings and Structural Elements in a Late Árpád Period Settlement [Kiskunfélegyháza-Amler-bánya, Southern Connecting Bridge]). A Móra Ferenc Múzeum Évkönyve, Studia Archaeologica 10 (2004), 545, fig. 2.*

³² In summary: Bóna, Bernadett: *Az ablakok fejlődéstörténete (Párhuzamban Filkeháza ablakaival) (The History of the Development of Windows [in Comparison with the Filkeháza Windows]). A Herman Ottó Múzeum Évkönyve 44 (2005), 581–604.*

³³ We were not able to acquire animal bladders in time, so we substituted animal skin that had been worked to a translucent thinness.

³⁴ Molnár, Erzsébet: *Esztergom-Zsidód Árpád-kori település lakóházai (Dwellings of the Esztergom-Zsidód Árpád Period Settlement). In: Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 114–119.*

³⁵ Sabján, Tibor: *Kürtő az Árpád-kori házban (Flues in Árpád Period Houses). In: Hagymány és változás a népi kultúrában. Tanulmányok a 60 éves Dám László tiszteletére (Tradition and Change in Vernacular Culture. Essays for the 60th Birthday of László Dám), ed. Szabó, Sarolta (Nyíregyháza: Szabolcs-Szatmár megyei Múzeumok Igazgatósága, 2005), 83–94.*

FURNISHINGS

During excavations, relatively few remains of everyday objects and furnishings besides ceramic vessels are found. The iron items and related objects that were so valuable during the period are considered very rare finds. It is well known that in the world of peasants, iron objects were reused time and time again, even for different purposes, until they had completely worn away. This is precisely why it is not surprising that only very few iron implements are found in Árpád Period villages. Therefore, we are more dependent upon the aid of ethnographic sources for everyday objects, particularly those made from organic materials without iron. The situation is also similar for the interiors. Without the knowledge of the longest surviving vernacular architectural elements, such as the huts of foresters or fishermen, gypsy shacks, and their furnishings it would be problematic to reconstruct the medieval furniture. In this portion of the task, the monograph by Klára K. Csilléry based on historical and ethnographic sources and material relics provided an indispensable foundation.³⁶

The material culture during the 300 years of the Árpád Period was not uniform, several phases can be identified. However, any particular type of object was in use for a long period, so it would be difficult to create ensembles that could be precisely distinguished chronologically. There were times when in the interiors we placed certain objects known from earlier periods, but not as of yet known from the given period. We entrusted master craftsmen with the making of our objects, who in part employed the techniques of the period.

SETTLEMENT STRUCTURE AND LIFESTYLE

As has been mentioned, the structures were made in part on the basis of our own designs and in part we used the drawings of Tibor Sabján,³⁷ modified slightly here and there. We selected the exhibited structures from several sites, and the buildings represent various construction techniques, lifestyles, occupations and regions.³⁸ The building excavated near the earthworks of Borsod is a log structure with vertical walls supporting the roof, for which the former forest provided plenty of raw materials. In addition to the use and working of the trees of the forest, its owner supplemented his subsistence with hunting (*Fig. 4*). The house from Kiskunfélegyháza that was dug into the ground presents the everyday life and home of a typical peasant farmer from the Hungarian Plain (*Fig. 2*). A point of interest in the building is the oven, which it was possible to reconstruct in full on the basis of the excavation observations. The Szamoskér house is the

³⁶ K. Csilléry, Klára: *A magyar lakáskultúra kialakulásának kezdetei* (The Beginnings of the Development of Hungarian Interior Decoration) (Budapest: Akadémiai Kiadó, 1982).

³⁷ Kovalovszki, Júlia: Árpád-kori házak Visegrád-Várkertben (Árpád Period Houses at Visegrád-Várkert). In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga* (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 90–91, figs. 10–13; Wolf, Mária: 10. századi település Edelény-Borsodon (10th Century Settlement at Edelény-Borsod). In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga* (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 145, figs. 21a–c.

³⁸ The hypothesis that there were possible regional differences in Árpád Period architecture is not a recent development. See Takács, Miklós: Lakóház-rekonstrukciók az Árpád-kori telepkutatásban (Tudománytörténeti áttekintés) (Dwelling Reconstructions in Árpád Period Settlement Research [Survey of the Historical Scholarship]). In: Bencze, Zoltán – Gyulai, Ferenc – Sabján, Tibor – Takács, Miklós: *Egy Árpád-kori veremház feltárása és rekonstrukciója* (Excavation and Reconstruction of an Árpád Period Pit Dwelling) (Budapest: Budapesti Történeti Múzeum, 1999), 98; Takács, Miklós: Az Árpád-kori köznépi lakóház kutatása, különös tekintettel az 1990-es évekre (The Research on Common Dwellings of the Árpád Period with Particular Attention to the 1990s). In: *Népi építészet a Kárpát-medencében a honfoglalástól a 18. századig: A 2001. október 9-10-én Szolnokon megrendezett konferencia anyaga* (Vernacular Architecture in the Carpathian Basin from the Hungarian Conquest to the 18th Century: Materials from the Conference Held in Szolnok on October 9-10, 2001), ed. Cseri, Miklós – Tárnoki, Judit (Szolnok – Szentendre: Jász-Nagykun-Szolnok megyei Múzeumok Igazgatósága – Szabadtéri Néprajzi Múzeum, 2001), 31.

other building with vertical walls supporting the roof. The basis of its unique structure is the long gable-roofed eaves in front of the door opening in the northwestern corner and the innovative form of the flue (Fig. 5). The imagined resident of the house is the leading individual of the village, the castle-serf in armed service of the king, whose standard of living is reflected by a few “luxury items” (a bronze reliquary cross, bronze bowl and a stone mortar). With the small wood-framed hut from Rozsrétszőlő on the outskirts we conjured up the residence of a marsh-dweller leading a hunter-gatherer lifestyle, with a surprisingly rich



Fig. 7: Reconstruction of a well sided with an interlocked plank structure from the outskirts of Pácin

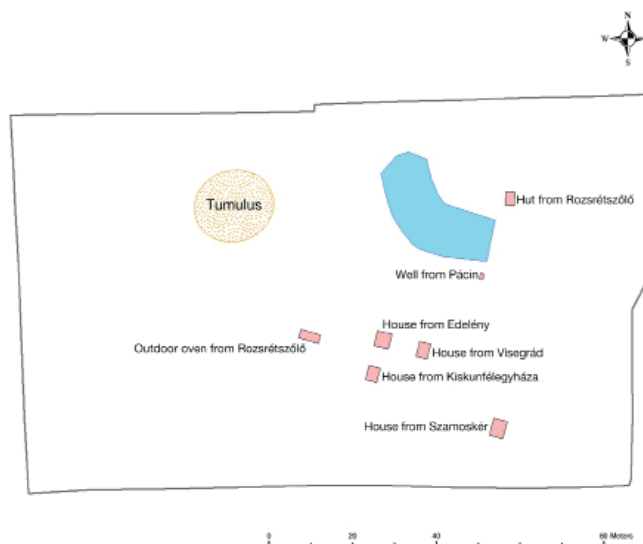


Fig. 8: Map of the village

set of implements reconstructed on the basis of ethnographic sources (Fig. 3). The Visegrád house is the interactive portion of the exhibit; during each program a relatively large number of visitors can enter it, its furniture can be used and the implements in it can be picked up and tried out. The participants in heritage preservation festivals and craftspeople can organize activities in the house or present their tools and goods. The outdoor oven that is also from the Rozsrét site was built to be used as well, so that on any occasion (even for previously registered groups) it can be used to prepare food (Fig. 6). We were easily able to reconstruct the section that was under the ground and the rim of the well from Pácin from the conserved wood parts, as well as the bucket that was found in it (Fig. 7). However, due to the lack of archaeological traces we selected a pulley mechanism known on the basis of medieval illustrations and miniatures for its hoisting apparatus.³⁹

From the buildings a streetscape made up of a few houses emerged, including the well and baking oven essential for the community. The hut standing a bit further away presents the use of the outskirts as well as a special way of life and occupation. Even the limited number of structures is able to conjure up the grouped townscape alongside the roads. At the same time, the small number of buildings provides a kind of farmstead character to Nyires, a type of settlement form that was already known in the Árpád Period.⁴⁰

³⁹ Pl. Chronicon Pictum p. 99, in: Csapodiné Gárdonyi, Klára: A Képes Krónika miniatúrái (Illuminations in the Chronicon Pictum). In: *Képes Krónika. Chronicon Pictum. Hasonmás Kiadás* (Faximile edition), 2 vols. (Budapest: Helikon, 1964), 45-64; Nemcsics, Ákos: Adalékok a középkori építéstechnológiához egy Árpád-kori körtemplom rekonstrukciója kapcsán (Additional Data on Medieval Construction Technology in Connection with the Reconstruction of an Árpád Period Round Church). *Magyar Építőipar* 2010/2, 66, figs. 5 A-B. Subsequently we discovered an outstanding analogy for our well and bucket from the 1930s in Uri. Borzsák, Endre: A régi istállók élete és a jószág takarmányozása Pest megye északi részén (The Life of Old Stables and the Feeding of Livestock in the Northern Portion of Pest County). *Néprajzi Értesítő* 28 (1936 [1937]), 51.

⁴⁰ Laszlovszky, József: Tanyaszerű települések az Árpád-korban (Farmstead-like Settlements in the Árpád Period). In: *Falvak, mezővárosok az Alföldön* (Villages and Market Towns on the Great Hungarian Plain), ed. Novák, László – Selmeczi, László. Az Arany János Múzeum Közleményei 4. (Nagykőrös: Arany János Múzeum, 1986), 131–153.

We reproduced a man-made section of channel imitating a bend in a river for the water that is always essential for inhabitants. The other important element of the panorama, however, was born from necessity; we needed to find a place for the earth dug up to make the river channel and the foundations of the buildings, so through slight alterations we formed a tumulus from the pile (*Fig. 8*).

The further development of the settlement is in our long range plans; in time we may be able to supplement it with grain storage pits, workshops, animal pens and naturally a church from the period. Until then, the man-made lake with its plant and animal life will add to the already picturesque setting. With the aid of experts we are planning on introducing proper native species of flora and fauna to the lake and its immediate surroundings. The natural environment of the entire area of the village will conform to the natural vegetation of the Carpathian Basin and species that were known to be introduced in the Árpád Period.

We have documented the entire process of the construction and our experiences, and this should be published in the form of a book within the year. This will be followed later by a second part dealing with the furnishings, the ovens and the interiors, which will also include a catalogue of the objects.

RECOMMENDED LITERATURE

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