Reconstructing an early iron age habitat at Saharna-Ţiglău on the middle Dniester

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Introduction
The basin of Middle Dniester has been an important historical and ecological zone in the North-Western Euxin Pontic space since ancient times. We have, as a proof, different archaeological monuments found in the neighbourhood of the village Saharna in Rezina district, Republic of Moldova. Nowadays, almost a hundred are known within this micro zone. The monuments are attributed to the Iron Age, mainly to Cozia-Saharna’s civilization (10-8th centuries BC) and the Getics culture (4-3rd centuries BC). All these monuments are attested to archaeologically as fortresses, open settlements, tumuli and necropoli (Kašuba, Haheu, Leviţki 2000; Niculită, Zanoci, Arnaud 2007; Kauyba 2000, 365-367; Kašuba 2008, 40; Niculită, Zanoci, Nicic, Mateev 2003; Niculită, Nicic 2002; 2007; 2008; Zanoci, Băt 2007; Никулицэ, Заноч, Матвеев, Ничик 2008).

The connection between EXARC and Scientific Lab “Tracology” has inspired the first experimental archaeology project in the Republic of Moldova, via the organization of an archaeological park with an open air museum at Saharna-Ţiglău.

The archaeological complex Saharna-Ţiglău is placed on a dominant terrace on the right bank of the river Dniester, on the northern edge of the Saharna village in Rezina district, almost 100 km from the city of Chişinău. It is represented by an open habitat (almost 6 hectares) and a plane necropolis with burials in stone caskets (around 30 such burials are being researched,) attributed to Cozia-Saharna culture. The level of material and spiritual culture reflects the peak period of the Early Iron Age civilization of South-Eastern Europe (Kašuba, Goltsen 1991; Kauyba 2000; Niculită, Nicic 2008).

The initiation of the project
The archaeological investigations of these monuments during the last decades has produced a lot of new data on the evolution of human communities in the basin of Middle Dniester in the period of the Early Iron Age, showing a high level of development and the original character of the Cozia-Saharna civilization in South-eastern Europe (Niculită, Zanoci, Arnaud 2007; Kauyba 2000, 365-367; Kašuba 2008, 40; Niculită, Zanoci, Nicic, Mateev 2003; Niculită, Nicic 2002; 2007; 2008; Zanoci, Băt 2007; Никулицэ, Заноч, Матвеев, Ничик 2008).

These criteria determined to a great part, the foundation of a prehistoric open air museum reconstructing the
archaeological discoveries of Cozia-Saharna recovered during archaeological investigations of the area of the basin of the Middle Dniester.

The museum is organised by the Archaeological and Museum Association Saharna-Ţiglău, whose founders is SRL „Max-Victor” from the Rezina town who possess agricultural lands reserved for the archaeological museum complex, and the Scientific Researches of the laboratory of “Tra- chology” from Moldova State University, that coordinates the process of arrangement and reconstruction of the prehistoric park “Saharna-Ţiglău”. All the reconstructive work is done by small volunteer student groups, in collaboration between MSU and SRL „Max-Victor”.

Archaeological context

Three houses in Alcedar III served as models for the reconstruction of the habitat of the Cozia-Saharna culture at Saharna-Ţiglău. Alcedar III was discovered by the Dr. M. Kašuba and their reconstructive variants were proposed by Ivan Litsuk (Kašuba 2007). A similar house with dimensions of 7x9 m (Construction I) was discovered during the archaeological investigations Saharna-Ţiglău, studied under the guidance of professor dr. I. Niculiţă and the undersigned during 2007-2008, whose materials are in the process of analysis and interpretation. Both archaeological contexts have created methodological documentary support for the experiment in reconstructing elements of Cozia-Saharna culture (fig.2).

The purpose of the experiment

One of the main purposes of house reconstruction is to estimate the relation between the amount of material used to build such construction in correlation to the human factor and the time needed for building. Another purpose of the experiment is the reconstitution and verification of the prehistoric construction techniques of houses attested by archaeological discoveries at Saharna-Ţiglău (fragments of walls with prints of construction materials; fragments of carbonated trunks; dimensions and graphical plan of trunk pits etc), which are reflected, in a part, by ethnographical data.

The development of the experiment

As the base of the first house reconstructed at Saharna-Ţiglău was house no. II from Alcedar III, which was rectangular in plan with dimensions of 9x9 m, oriented with the entrance to the South-west (fig.1).

The first part of the experiment was to construct the wooden „skeleton“ of the house, while maintaining the graphical plan, dimensions and the placement of the trunk pits and the orientation of the model house. Trunk pits were dug into the earth around the entire perimeter, which had diameters 0,3-0,4 m and a depth of 0,5 m. The vertical trunks were mounted at a distance that determined the contour the house skeleton. (fig.3, 4, 6, 7).

Fig. 5

Fig. 6

Fig. 7

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12
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**Fig. 13** Fix the roof’s lateral trunks of the house and wall plait with branches.

**Fig. 14** Walls plaited with twigs.

**Fig. 15** Walls plaited with branches.

**Fig. 16** Final aspect of the house’s wooden construction, north-eastern view.

**Fig. 17** Binding of construction elements with flaxen rope.

**Fig. 18** Binding of construction elements with flaxen rope with lime bast.

**Fig. 19** Final aspect of the house’s wooden construction, south view.

**Fig. 20** Roof arrangement with reed.

**Fig. 21** Coverage of the house with reed.

**Fig. 22** Reed roof, general view.
The trunks chosen were not over a diameter of 0.25-0.3 m, such as the calcinated trunks attested at Saharna-Ţiglău (fig. 2). Pits of larger dimension were dug in order to support the roof line on the long axis (fig. 4), in such a way as to install central trunks, as was observed in Construction I at Saharna-Ţiglău (fig. 2). The trunks were supported in the ground by gravel and earth, well tamped down with a wooden axe handle (fig. 3, 6, 7). The wood used was elm, oak, acacia and conifer that was taken, quickly and easily, from the surrounding forest due to its abundance.

The next part of the experiment was to connect the wooden trunks with horizontal beams marking the lateral walls or with top-sided trunks that give the roof its gabled form (fig. 11, 17, 18), finishing the house skeleton. The whole wooden structure of the house was tied together with ropes, made of lime peel (fig. 8-10) or flaxen ropes, as a fact that will help us to continue the reconstruction of the prehistoric period.

Conclusions

As a whole, the archaeological experiment initiated at Saharna-Ţiglău, is expensive when speaking about the materials used, along with the time and work volume both from the view of contemporary and probably prehistoric people, who would also need almost 25 m³ of wood, 300 m of rope and a large amount of manpower (the work took 6 days with 30 participants), both for preparing the materials and building a house with a wooden skeleton with dimensions of 81 m². This fact probably means that this was expression of a collective community work or a large extended family of the Early Iron Age.

Obviously this first archaeological experiment in Moldova, trying to reconstruct a habitat complex of the Cozia-Saharna Iron Age type at Saharna-Ţiglău, using archaeological or ethnographical data, represents a beneficial and decisive step for archaeology as practiced in Moldova. This fact, we hope, will allow us, in the future, to be the base for other categories of cognitive scientific research for interpreting and analyzing the archaeological materials of the Middle Dniester zones Early Iron Age.

Bibliography


Summary

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