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# SOME DATA ON HOUSE-BUILDING TECHNIQUES AND FOUNDATION RITES IN THE ARIUŞD-CUCUTENI CULTURE

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The reconstruction of the building-techniques and of the original appearance of neolithic-aeneolithic houses has been a long-time preoccupation archaeological researches. Particularly of controversions were and still are carried on, especially in the literature dealing with the Ariuşd-Cucuteni-Tripolye culture, concerning the surface dwellings with "platforms", i.e. the houses having a floor made up of a thick layer of clay, with a chaff or sand admixture, applied in most cases over a bed of large split logs (PASSEK 1949, 7 sq., 132 sq.; DUMITRESCU et alii 1954, 18-201, especially 176-201; DRAGOMIR 1962; PAUL 1967; 1981, 10-211; 1985; DUMITRESCU 1968; MARINESCU-BÎLCU 1974, 25-37; MARKEVIČ 1981, 75-88; ELLIS 1984, 20, 48-54; A. LÁSZLÓ 1988, with further literature). An old-time dilemma, for which researchers still take sides, is whether the platforms were fired intentionally or whether their burning was caused by the fire that destroyed the house. Another question for archaeologists was the use of these platforms: were they floors placed on the ground, or were they "suspended" on posts at a certain distance from the ground, or eventually were they remains of the "ground-floor's" ceiling (respectively the "storey's" floor) of two storeyed houses? There has also been the problem of the plan and structure of the buildings, of the way of sustaining the roof and the walls of the houses. Last but not least, of equal importance are the attempts at retracing some foundation rites connected with the building of the houses and their annexes.

Without intending to analyse these vast and controversial problems on the whole, in the present paper we shall discuss some discoveries and observations made during the archaeological excavations carried out within the fortified neolithic site of Malnas Băi (South-Eastern Transylvania) which can contribute to a better understanding of some of the problems mentioned above.

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Malnas Băi health resort is situated in the north-western side of the Brasov Depression, at the southern extremity of the Eastern Carpathians, at an altitude of 565 m and having a moderate sub-Alpine climate (MIHĂILESCU 1969, 255; *Județele*, 215; SÎRCU 1971, 187; ROŞU 1980, 207-218, 260-268). Being first mentioned in archaeological literature at the beginning of the century (F. LÁSZLÓ 1910, 18-19, 44-45; 1911, 177; 1912, 62, 81; 1914, 14), the neolithic site constituted the object of our researches during several archaeological excavation seasons (1976-1989). The site is lying on a promontory 20-25 m high, surrounded on three sides by abrupt slopes, and situated at the confluence of the Olt river with one of its small tributaries, the Somos brook. The only possible road up to the site had been barred by a defence ditch and accompaning rampart. The site belongs to the Ariusd-Cucuteni-Tripolye culture and displays four habitation levels (I, II, IIIa, IIIb, numbered upwards), all of them belonging to the Cucuteni A phase (A. LÁSZLÓ 1980; 1988).

The following part of the paper discusses two platform dwellings built by different techniques and certains foundation rites connected with the building of the houses. The first one (L1) is part of the superior level, IIIb, and the second one (L2) is part of level II.

L1 displays the same characteristics as the known dwellings of Cucuteni and Tripolye area. The only extant traces are the remains of burnt clay-daub corresponding to the ruins of the house. Under the fallen remains of the walls -, a mass of fired wattle-and-daub fragments -, extending on a cca. 11 x 8 m area, the platform of the house could be clearly observed. The platform was prepared on a sub-structure of wrought wood (beams, boards) whose smooth surface was imprinted on the inferior side of the floor's clay layer. This clay layer, hardened by burning, is well preserved in the form of a cracked "plate", 6-10 cm thick. The only area where there is no platform is the north-eastern corner of L1, where the hearth of the house was situated. This missing part of the platform is not caused by any subsequent disturbance, but, as it appears, can be attribute to a building technique for this type of houses. Thus, it has been observed that in other

sites of the Cucuteni culture the platform is also missing under the hearths of houses, the hearths being built directly on the ground (DUMITRESCU et alii 1954, 182). Therefore, the hearth places had been previously established and avoidance of their building on the platform could be an anti-fire security measure: the suppression of the effect of hearth high temperature on the wooden parts of the platform. It this explanation is correct, it can constitute an argument against the theory according to which the platform was burnt intentionally.

Judging on the only avaible element, the platform, one can state that the building had a rectangular shape of cca. 8 x 6 m. Because no post holes were discovered, we can accept an earlier hypothesis of Hubert Schmidt, taken over by Vladimir Dumitrescu following the uncovering of 44 houses of the Cucuteni A site of Hăbăşeşti (SCHMIDT 1932, 6-7; DUMITRESCU et alii 1954, 187). According to this hypothesis the walls were built on wooden beams, laid on the ground, which formed a frame all around the platforms. Into these beams were inserted the vertical upholding fork-poles for the roof and the walls, i.e. wood poles on which was interwoven the wattle subsequently plastered with a clay and chaff admixture.

Besides these observations concerning the building technique of L1, we remark the find of a whole ceramic pot under the platform of the house. The vessel was deposited (with its indeterminate content) as an *offering* at the beginning of the construction. Such custom, probably as part of a more complex religious ceremony, is a wide-spread manifestation form of the ancient foundation rituals (see: *infra*).

L2 was built on other techniques, similar to the technique applied for constructing the neolithic houses of Ariuşd (Erősd: F. LÁSZLÓ 1914a, 323-378, 401-414). After the cleaning of the platform, well preserved and burnt to a red-orange hue, there were observed round holes disposed in lines: the traces of the wooden posts that upheld the lateral and partition walls, as well as the roof of the house. The house, which underwent several modifications during its existence, was of rectangular shape of cca. 7,50 x 6,50 m. The clay-daub layer at the same level as the floor was observed outside the walls all around the house. The dismantling of the remains of the house and their sectioning along the line of the post holes made several observations possible concerning the way in which the house was built, the technique of fixing the posts included. Thus it could be established that the

whole operation began by the digging of several narrow and deep holes disposed in accordance with the previously conceived plan of the house. The holes had approximately straight walls and bottom, a diameter of only 35-45 cm and a depth of about 1-1,10 m from the superior limit of level I, from where they were dug. The upholding posts were placed one by one in these holes, the empty spaces being filled with well beaten yellow clay. The posts (whose places were filled with dark-coloured earth after their rottening) had a diameter of 18-20 cm and were fixed at regular intervals of cca. 1 m. After the putting up of the poles, the place of the future house was leveled by the spreading over it of an argillaceous earth layer 10-15 cm thick (which appears in the profile section as covering level I and the opening of the post holes, being pierced only by the poles perforations). It was only after these preliminary operations that they proceeded to the execution of the house floor (platform), to the making of the wattle skeleton of the walls, subsequently plastered with clay mixed with chaff, and the building of a double-gabled roof. It is obvious that when the floor was made, the wooden posts were already standing, a fact which makes the intentional burning of the platform improbable.

When some of the posts began giving in, it became necessary to strengthen the house structure by the introduction of secondary upholding posts. Unlike the original posts, these were not fixed in holes dug from the superior limit of level I, but they were placed directly from the surface of the house floor (platform). Moreover, both on the northern and eastern sides of L2 we identified a complete line of such holes for the secondary posts, fact which may indicate the moving, at a given moment, of the respective walls from the initial posts into the ones fixed at a later date, or a possible enlargement of the house by building up of additional walls. All these facts point to the existence of several phases in the functioning of this building.

Observations regarding the house's platform can be mentioned to the same effect. The initial floor of the house was made of a thick layer of clay laid directly over the leveling layer without wooden sub-structure. (This fact excludes the possibility that the platform had been "suspended" on posts at a certain distance from the ground. For such a hypothesis see PAUL 1967; 1985). At a given moment, probably on one occasion of the reconditioning of the house, the floor was thickened. Over the initial floor

was found a thick layer made up of fragments of burnt clay-daub carrying imprints of poles and wattles, as well as fragments of pottery. This mass of rubble was carefully leveled and covered with a new layer of clay, the result being a 30 cm thick "platform". During this operation there had been placed into the platform structure numerous ceramic vessels of different types, also covered with the uppermost layer of clay. Some of these pots were entirely buried, others fragmentary, and part of them must have been intentionally broken on the spot, in a ritual way. All these vases, which can be considered as offerings dedicated to some divinities, were put in the ground during rituals, with the aim of securing the durability of the building and the welfare of its inhabitants. (For the question of foundation sacrifices in neolithic sites, with further references, see MAKKAY 1979; 1986).

There are indicia that in the Malnas site bloodless foundation sacrifices were not the only ones practised. Thus, under the southern part of hearth 8, situated in close proximity of L2 and belonging to habitation level II as well, very many animal bones were discovered. Half of a vasesupport (reclining on a larger flat stone) as well as two small whole vases were imbedded in the body of the hearth and partially beneath it. Beside the hearth were also discovered two fragmentary feminine statuettes. The hearth is badly preserved, with broken edges and this is the reason why we cannot be sure whether the statuettes were intentionally put under it. Regarding the animal bones, they are very fragmented, broken, most of them carrying traces of burning, as it they were part of the left-overs of a feast. By species, the bones come from four or five stags (*Cervus elaphus*), at least two deer (Capreolus capreolus), three sheep or goats (Ovicaprinae) and one beef (Bos taurus) to which can be added two pigs, one of them domestic (Sus scrofa dom.) and the other probably a wild boar (Sus scrofa ferus). The bones come from all parts of the skeleton so one cannot therefore speak of any preference for a certain part of the animal's bodies. Besides the above mentioned animals, a fragment of a marten's (Martes martes) jaw was also identified. Statistically speaking, the above mentioned figures generally correspond to the frequency of the different species of domestic and wild beasts identified in the neolithic site of Malnas Băi (the animal bones were determined by Prof. Sergiu Haimovici, University of Iași).

Instead of a final conclusion, we can consider that, very probably, both the hearth 8 and the neighbouring "house" L2 had been a particular destination in the system of religious worship of the Malnaş Băi settlement's prehistoric community.

## **ADDENDUM**

This paper has been prepared for the *Third Symposium on Upper Palaeolithic, Mesolithic and Neolithic Populations of Europe and the Mediterranean Basin, Budapest, September 3-7, 1990.* As the proceedings of the Symposium were not edited, we are going to publish here the text of the paper with sightly adjustements, without the unrecovered illustrations. (For some details as concerne the pictures see A. LÁSZLÓ 1988).

Meanwhile, concerning the neolithic settlement of Malnaş Băi, the following studies have already been published, which complete the information included in this paper: A. LÁSZLÓ 1993; 1993a; 1993b; 1996; 1997; 1998, 21-23 and 50-53 (= plates XVIII-XXI); LÁSZLÓ, HAIMOVICI 1995.

Regarding the chronological position of the Malnaş Băi – settlement, for the habitation layers I-II the following uncalibrated radiocarbon data were obtained in the Laboratories of Heidelberg, Germany (Dr. B.Kromer) and Gliwice, Poland (Prof.dr. Anna Pazdur):

$5663 \pm 42 BP \text{ (charcoal)}$
$5497 \pm 100 BP (charcoal)$
$5407 \pm 20 \text{ BP (bone)}$
$5349 \pm 40 \text{ BP (bone)}$
$5940 \pm 60 BP (charcoal)$
$5880 \pm 80 BP (charcoal)$
$5490 \pm 80 BP (charcoal)$
$5420 \pm 150 \text{ BP (charcoal)}$
$4950 \pm 100 \text{ BP (charcoal)}$

Without analysing at the moment the value of these data, there is to be mentioned, that, generally, these datings are in concordance with the radiocarbon chronology of the phase A of the Cucuteni Culture (see: MANTU 1998, especially p.171-192 and tables 7-8).

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