

NEOLITHIC AND ENEOLITHIC STRATIGRAPHY OF THE ARCHAEOLOGICAL SITE FROM TURDAȘ 'LUNCĂ', HUNEDOARA COUNTY: THE 1992 - 2019 RESEARCH CAMPAIGNS

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I dedicate this article to the memory of my colleague Radian Andreescu

Rezumat: săpăturile sistematice și preventive (de salvare) efectuate sub egida Universității 'Lucian Blaga' din Sibiu și a Muzeului Național Brukenthal din aceeași localitate stau la baza acestei remodelări a stratigrafiei cunoscutului sit transilvănean de la Turdaș 'Luncă', județul Hunedoara.

Abstract: the systematic and rescue excavations carried out under the auspices of the 'Lucian Blaga' University of Sibiu and the Brukenthal National Museum led to the reinterpretation of the stratigraphy of the well-known Transylvanian site from Turdaș 'Luncă', Hunedoara County.

Cuvinte cheie: neolitic timpuriu (cultura Starčevo-Criș), neolitic dezvoltat și eneolitic (cultura Turdaș, fazele I-III), eneolitic dezvoltat (cultura Petrești) și eneolitic târziu (cultura Coțofeni), stratigrafie, tipuri de locuințe și complexe arheologice, elemente ale tehnologiilor folosite pentru viața cotidiană.

Keywords: early Neolithic (Starčevo-Criș culture); developed Neolithic and Eneolithic (Turdaș culture, phases I-III); developed Eneolithic (Petrești culture) and late Eneolithic (Coțofeni culture); stratigraphy; dwelling types and archaeological features; elements of technologies used in daily life; Transylvania.

Introduction

Turdaș 'Luncă' (Map 1) was investigated through excavation by S. Torma in 1875 (Roska 1941). The published text of the archaeological research was prepared by M. Roska (Roska 1927). A synthetic discussion of the site was published later, in the Transylvanian Repertory from 1942 (Roska 1942) and in the Hunedoara County Archaeological Repository (Luca 2008). These works mention the Neolithic and Eneolithic discoveries of the Turdaș, Petrești and Coțofeni cultures.

Based on the interpretation of earlier discoveries, M. Garašanin proposed a chronological scheme of evolution for the discoveries of the Turdaș culture, the Vinča-Turdaș and Turdaș-Vinča pottery shapes (Garašanin 1993; 1994-1995). This terminology proposed by the Serbian professor was adopted by the Eastern and South-Eastern European Neolithic and Eneolithic historiography. When studying the Vinča culture in 1979, Gh. Lazarovici adapted the terminology mentioned above for Transylvania (Lazarovici 1979: 75-77, Tab. 7).

With the start of systematic research by teams from Sibiu (1992-1998) (Luca 2001; 2018), we observed that the Turdaș stratigraphy comprised only 'Vinča elements', and not a layer reflecting ceramic manufacturing technologies specific to the Vinča culture, and therefore, the three Turdaș horizons at the base of the Neolithic and Eneolithic deposits reflect the existence of a Turdaș culture independent of the Vinča one (Luca 2019; 2019a; 2020). Also, during these excavations, the association with Precucuteni elements was observed (Luca 1997). In our excavations, the Petrești culture overlapped the remains of the Turdaș culture, and the two cultural phenomenon were thus not simultaneous (Luca 2012a; 2019; 2019a; 2020).

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The rescue excavations, at a large scale and lasting many years (2011-2019), identified the stratigraphy by the systematic research (Luca 2012a; Luca and Suciuc 2014; Lazarovici *et al.* 2014; Luca 2019; 2019a; 2020; Luca and Perianu 2019; Luca *et al.* 2019; 2020; 2022; Perianu 2020).

The following section will discuss, from the base to the top, the Neolithic and Eneolithic levels uncovered during this research.

A discovery of the Early Neolithic

During the systematic excavations we did not find any ceramic fragments or archaeological features belonging to the Starčevo-Criș culture but during the rescue excavations an archaeological feature belonging to this culture (Luca 2012a: 47-54; 2019: 28-36; Luca *et al.* 2012) was revealed and assigned to phase IC-IIA (according to Gh. Lazarovici's chronological system, Lazarovici 1979, Tab. 5-6.).

The excavated pit seems to have been part of an isolated hut, with analogies throughout the Starčevo-Criș area (for analogies, see: Luca 2015; Luca *et al.* 2017; 2022a). We affirm this is an isolated dwelling because no other features belonging to this culture have been discovered among the more than 4000 archaeological contexts researched in these years with no trace of the spread of materials belonging to this chronological and cultural horizon that could be considered a specific culture layer. Therefore, we continue to believe, until proven otherwise, that Turdaș 'Luncă' is not a settlement belonging to this phase of the Starčevo-Criș culture. Furthermore, the archaeological materials taken for absolute dating did not confirm the existence of such a chronological horizon (Luca *et al.* 2020).

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Level I - Phase I

The features belonging to this phase also show a discontinuous culture layer. They were discovered during both the systematic (Luca 2001 – Hut 1/1992 and Hut 2/1992-1993; Luca *et al.* 2009) and rescue research (Luca 2019; 2020). The publication of these features in a series of volumes (Volume I.3 for area A; II.2-3 for area B; III for area C-D; IV for area E-F-G and V for syntheses by type of discoveries - fortification, technologies for obtaining tools, plastic art).

A general observation at this stage of research and associated data analyses is the existence of pits of different sizes belonging to this phase which we call phase I of the Turdaș culture. An absolute date indicates the chronological timeframe (6233±42 BP - 5975±31 BP). Being the oldest horizon of continuous habitation, most of the features were disturbed or even destroyed by the later occupation horizons - Turdaș, Petrești or Coțofeni. The Turdaș culture layer is thin, no more than 0.50-0.60 m (all three major layers together).

However, we can also see a dwelling pattern typical for Turdaș I levels, deep dwellings with a number of large pits (huts) arranged in a circular shape (a central pit around which are up to 7-8 huts next to each other and a central hut).

An example with a dwelling from G sector (unpublished research) is provided (Figure 1). A second dwelling of the same type was partially excavated during the systematic research of 1992-1993 (Luca 2001 – Hut 1/1992 and Hut 2/1992-1993). Among the other finds, a clay amulet decorated with symbols was discovered in this dwelling (Luca *et al.* 2009; 2009a).

Phases I/II and II

All the archaeological features of these phases are shaped like those of the previous phase. According to the typological-stylistic analyses of the pottery, we found that the main defining aspect of this phase is the black painted pottery, the so-called 'Tăușalaș' pottery from previous discoveries in the proximity, with same name from Deva (Dumitrescu 1984; Dumitrescu and Lazarovici 1985-1986). Our own discoveries from Orăștie 'Dealul Pemilor X₂', clearly indicate that the association with black painted pottery is characteristic of one of the developed phases of the Turdaș culture, and from a different culture (Luca 1997a). Also, during the systematic excavations we discovered such

associations in the pits horizon, which we called IIa level (Luca 2001). The same can be said about the discoveries from 'Peștera Cauce' (Luca *et al.* 2004), where the sacral character of the black-painted Turdaş vessels painted is confirmed.

Analyzing the pottery from the rescue excavation, we found a typological-stylistic evolution of black painting in features belonging to phases I/II (Luca 2019: 50-68; fig. 15-28) and II (Luca and Perianu 2019a). These two features were radiocarbon dated, the first at 5932±29 BP (Luca 2019: 314) and the second 5901±28 BP (Luca and Perianu 2019a: 53). The general absolute dating of phase II is between 5917±36 BP and 5883±36 BP (Luca *et al.* 2020). The archaeological features belonging to this level are scattered over the entire researched area of the site and their publication will continue in volumes that are in preparation (all areas of systematic research - Luca 2001; 2018, and in A-G areas of rescue excavations between 2011-2019).

Phase III

Phase III characteristic dwellings are totally different from the previous ones. Across extensive areas within the area surrounded by fortifications are large groups of surface dwellings with floors. They are distinguished by their shape visible in the virgin soil, by the presence of foundation pits, generally of rectangular shape, with 4 rows of rectangular pits with rounded corners (rarely with 5) lengthwise and also 4 rows (rarely 5) in width. Massive pillars up to 0.40-0.50 m in diameter from tree trunks (from 1 to 4) were driven into these pits. The short sides of the dwellings are oriented North-South and the long sides are East-West. The general data provided by all the excavations shows that these dwellings had hearths on the ground floor, positioned at the narrow ends. Also on the ground floor were polished or carved stone tools and potsherds. It seems that above the ground floor there were the resting places and 'țest' type ovens ('țest' is a traditional hemispherical/bell-shaped fired clay object, which is usually used to cover the bread baked on a hot hearth).

The observations from area C show that there are groups of rectangular dwellings with large pits in the middle, with various finds, in large quantities (Lazarovici *et al.* 2014; Perianu 2020) (Figure 2). Another, smaller, group of dwellings is also in area A (Luca 2019: 20-21, plan 6-7). The remains or the edges of such dwelling groups were uncovered also in area B during the rescue excavations (Luca and Perianu 2019) or in sector B during the systematic research (Luca 2018: 20, plan 11-12). Considering the examples above, we notice that a large part of the foundation and debris of these dwellings were covered by a subsequent levelling during the Petrești culture to improve the building level of the new dwellings. Here, two observations are necessary. First, there is no evidence to demonstrate that the surface dwellings of the 3rd phase of the Turdaş culture would have been destroyed by fire. The upper area was also sealed with clay, but it remained unburned. Secondly, the people of the Petrești culture arranged the locations where they built the dwellings in groups of 8-12, and these 'islands' indicate the size of the group itself.

Quantities of soil mixed with materials from previous Turdaş levels were gathered, and these surfaces were dedicated to future constructions. This manner of construction is was noted in area A during the systematic research, but also in several areas of the rescue excavation: area B (Luca 2019a) (dwelling no. 341 – set up on the remains of a previous dwelling from level III - Luca and Perianu 2019), area C (Lazarovici *et al.* 2014) as well as area F (Luca *et al.* 2019). The requirement for this way of building the base of the Petrești dwellings (which do not have a floor, according to our observations) results from the existence of large areas within the Turdaş 'Luncă' site where we identified that the archaeological layer was washed off by extremely heavy rains, and hundreds of square metres of sand replaced the cultural layer and hundreds of square metres were transformed into peat.

This evolution to peat can be seen in certain areas of the site and is still active today: in the systematically researched area C; in the rescue research, partly in area A where the archaeological remains are arranged under a 'cover' of black peaty soil almost 2 cm thick (Luca 2019); the B-East

and C-East areas where it can be clearly seen how the levels I-III are largely destroyed leaving in some places the feature remains and the surface filled with sand and pebbles that show the presence of flowing water (Luca 2019; 2019a).

This complex phenomenon of soil transformation under the influence of abundant water still exists today on the entire eastern area of the site, along the central part of the East-West axis, where it is no longer possible to excavate eastward because of an active peatland, over 200 m long, at the end of which prehistoric potsherds can be found. There are also documents that speak of extensive draining works in the area of the site carried out around 1975 with mechanized equipment that also contributed to the disturbance of the prehistoric stratigraphy.

Level II

The occupation of this level was apparently abandoned due to an internal cause (not a fire, as the habitation structures do not appear to have been burned, but rather a natural phenomenon – major flood, earthquake or other such event). It is certain that the inhabitants of this level moved to the north, following the line of the Mureş River. In the new research, near the site of Tărtăria 'Gura Luncii', we discovered a Turdaş construction similar to those characteristic of this level (Luca and Perianu 2019b). As we showed previously, we see this migration reaching the Satu Mare – Carei – Oradea area (Luca *et al.* 2020a: 19).

Level III

As mentioned previously, the Petreşti population – this is a Petreşti culture level of deposition – set up 'islands' on which they built groups of 8-12 surface dwellings. Based on the available radiocarbon dates, this level dates to the period 5722±54 BP - 5493±56 BP (Luca *et al.* 2022: 12-13).

According to the typological-stylistic assessment of the *in situ* levels of the dwellings researched, it seems possible to distinguish at least two building horizons, very difficult to identify due to the characteristics mentioned above and related to the continuous human or natural intervention on the archaeological deposits (we have, for example, areas on the arable surface with many Petreşti potsherds without being able to connect them to any building remains, which means that the dwellings were totally destroyed in the modern times).

Regarding the description of the two building horizons, we can state that both indicate the existence of surface dwellings, without floors and much burning of the walls. Moreover, in the old Petreşti horizon, part of a sanctuary (L₂ dwelling - Luca 2001: 46-47) was available for study. Finally, the summary analysis of this cultural horizon also shows pits of large size dated to the Petreşti culture, originally part of a cultural layer no longer preserved *in situ* (an example is the feature no. 1819 - Luca and Perianu 2022).

Coţofeni culture discoveries

Throughout the site, there were archaeological features belonging to the Coţofeni culture, discovered at various locations. The culture layer was present only around these features (Luca 2001: 146-147). The Coţofeni dwellings are at large distances from one another (100-150 m), they are oval or circular in shape, with one pit (Luca 2012a: 112-113, plan 14, foto 31-32; 2020: 64-70) or two pits (Luca 2012a: 112, 114, plan 13, foto 33-34; 2020: 56-64) joined together. The settlement of the culture is highly extensive and appears to have been occupied in one stage only.

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The sites dating to the Turdaş and Petreşti cultures are surrounded and compartmentalized from the beginning by an extremely complex system of demarcation of living areas from the outside uninhabited areas. This demarcation consists of fences, simple palisades, massive palisades, filled palisades ('walls') and ditches. We defined these types by discovering tens of thousands of pillar pits or pillars of various diameters embedded in the trenches (trenches were dug and depending on the

height of the future obstacle, pillars or tree trunks were stuck either to each other or are at up to 20 cm distance from each other). Obviously, there were intertwined branches between these pillars.

The role of these 'fortifications' was not necessarily that of defences as we understand it today. It is, rather, a ritual role to highlight the importance of the 'inside' over the 'outside'. Of course they also have an intrinsic role of defence but, for us it is extremely difficult to understand why we did not find any burning remains across the few kilometres surveyed, even though the wood used would have left very clear traces of burning by those who wanted to conquer the premises. In my opinion, it was impossible to miss the evident burning in our excavations (there are only burnt remains of insignificant and very small size, which can be related to other phenomena, including natural ones, for example lightning).

Therefore, the ditches are actually the remains of the dismantling of some palisades by extracting their wooden core. We do not see the usefulness of defensive ditches with depths of maximum 1 m in this period.

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Note

The vertical stratigraphy of the site was apparently much deeper. This observation comes from the fact that various remains were preserved in wells, pits, graves or ditches that can be assigned to the Bronze Age, Iron Age, Dacian, Roman and Medieval periods (Luca 2012a).

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In the above, I have drawn attention to the stratigraphy and cultural composition of the Neolithic and Eneolithic periods at Turdaş 'Luncă', Hunedoara County. I have done this because so far much has been written about this site, and those texts have used unverified archaeological materials, discovered by chance or during the old excavations from the 19th or early 20th century.

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Map 1. Turdaș 'Luncă'. The area of the site (after Luca 2012a: 10, foto 1).

Turdaș 'Luncă'. Zona sitului (după Luca 2012a: 10, foto 1).

