

**Are there cities and fairs in the neolithic?
Part I – from PPN to late Neolithic
(Part II is referring to Copper Age)**

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Abstract: *In this study we have resumed the problem of Neolithic settlements with a complex architecture (defense systems with ditches, palisades, towers, bastions; residential buildings; cult constructions; social constructions) which support the idea of a proto-urban organization since the PPN. We have analyzed current definitions of cities and fairs, which mainly reflect situations from classical antiquity and the Middle Ages, but they cannot be applied to prehistoric realities, which, according to interdisciplinary research, offer another perspective. We also believe that religion too has played an important part in these sites, some of them being real centers of worship.*

We start our study with some definitions from Dexonline.

CITY, cities, 1. A complex form of human settlement, with multiple municipal facilities, usually with administrative, industrial, commercial, political and cultural functions.

An important human settlement with a large population, with businesses and institutions, which is an industrial, commercial, cultural, political and administrative center.

City (Hung. város, Bg. Serb. varoš, city; Turk. varoš, suburb, alb. varrôš, ngr. varósi). The association of a large number of houses and courtyards lined up along the streets.

Fair, 1. once city: villages and fairs.

From the above definitions, an important function has been forgotten, the religious function. We consider it important, because in Prehistory, and especially in the Pre-Pottery Neolithic (PPN), just as the first “cities” appeared, there were monumental temples and sanctuaries (Schmidt 1995; 2000; Hauptmann, Schmidt 2000; Schmidt K. WEB; *** 2007), and religious life played an important role in this period.

Metropolis. A city-residence of a metropolitan bishop, in accordance with *Micul dicționar academic* (*Micul dicționar academic*, ed. a II-a 2010: in this dictionary is mentioned that the word has an obsolete and rare meaning; Metropolis means also a state or large city of Antiquity, considered in relation to its colonies, or in our days a great city, capital of a country, regions, etc.). During Prehistory, temples and sanctuaries are more important than the economical buildings. In the PPN (Nevali Çori, Göbekli Tepe, etc.) and in the first settlements of the Ceramic Neolithic, judging by their architecture, we have to deal with cities (Çatal Hüyük and Hacilar: the center of power is religion (temples, columns, thrones, statues, altars), the communities being involved in other activities such as hunting, crafts (stone, marble, flint), pottery, etc. They serve several communities, being cultic centers.

In the Romanian literature there have been different opinions for and against the term proto-cities. It is not the case to analyze them, this is not our objective. But we want to give some examples: Dan Monah, a good connoisseur of the Cucuteni civilization, wrote an article with the title ***O stafie bântuie prin Europa proto-orașele neolitice*** (A Ghost Haunts Europe the Neolithic Proto-Cities), in *ArhMold*, XXVII, 2004, pp. 261-264 (the author is confined to the critique of the giant settlements in Ukraine, considered protorbane). However, one year before he had published the monography ***Poduri-Dealul Ghindaru. O Troie în Subcarpații Moldovei*** (Poduri-Dealul Ghindaru. A Troy in the Subcarpathians of Moldova), Piatra Neamț, 2003. It is known that Troy was a city with fortifications, temples, sanctuaries, with an impressive stratigraphy over time. According to the stratigraphy and the monumental architecture, a “similarity” between Poduri and Troy is plausible.

The first cultic cities

Recent research and extraordinary discoveries at the PPN settlements in the Near East, in the so-called *Fertile Crescent* or *Golden triangle* (*** 2007: Hauptmann, Özdoğan M., p. 27), between the Taurus and Zagros mountains beginning in 10,000 BC, when there was an optimal climate, are no less important and impressive than many of the medieval towns.

Although D. Monah doubted that Jericho or Çatal Hüyük were cities, according to the conditions imposed by him in his analysis (Monah 2004, p. 264: collective life involved: sustainable housing, fortifications, artisans, military, priests a.s.o.), there were many impressive religious monuments and buildings with a gigantic architecture during the PPN (Göbekli Tepe, Nevali

Çori, Çayönü, Hallan Çemi, Cafer Höyücek, Jarmo, Mureybet, Abu Hureira, 'Ain Mallaha, Nahal Oren, Wadi en-Natuf, Jericho, Beidha – Kovács 2016, p. 45).

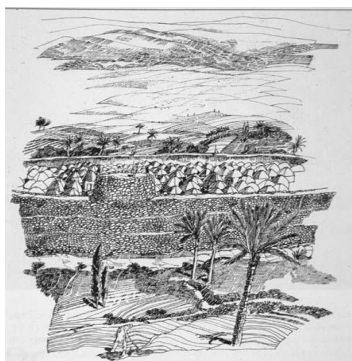
In many of these settlements there are sanctuaries with benches, columns (2, 4, 13, 13+2), hearths, stone statues and idols, stone vessels, columns with figures in bas-relief, some columns reach 3 m high and others:

- Jericho (the city mentioned in the Bible) Müller-Karpe 1968, Kat. 66, Taf. 105/20 (Jerichon: Eliade 1981, p. 46; Kovács 2016, p. 48-49);
- Göbekli Tepe, Löwenpfeilergebäude East, Anlage B (Schmidt 2007, p. 74-75, 84-85, kat. 2; Kovács 2016, p. 49-50);
- Nevali Çori, sanctuary 2 Building 13 has 3 phases (Hauptmann 1993; 2007, p. 86; Hauptmann, Schmidt 2007; Özdoğan A. 2007, p. 58, 61; Gh. Lazarovici, C.-M. Lazarovici 2006, p. 29, fig. I.17; Kovács 2016);
- Çayönü (Özdoğan M. 2007; Hole 2002, p. 200; Kovács 2016, p. 51-53);
- 'Ain Ghazal sanctuaries, Yamukian (Rollefson 1998; Shaw, Jameson 1999, p. 322; Kovács 2016, p. 56-57);
- and others (Cafer H., Akarçay, Mezraa Teleilat, Quermez Dere – Kovács 2016, p. 46-48);
- Sanctuaries with T-shaped pillars: Göbekli Tepe II, *Löwenpfeilergebäude East*; III, Anlage B, Nevali çori, Anlage B, Nevali çori, sanctuary, 2 Building, 13 has 3 phases and others (Özdoğan A. 2007, p. 58; Hauptmann 1993; 1999; 2007, p. 86; Hauptmann, Schmidt 2007, p. 79; Schmidt 2007, p. 85, kat. 4, 27; Özdoğan A. 2007, p. 61; Gh. Lazarovici, C.-M. Lazarovici 2006, p. 29, fig. I.17).

At this point, these seem to be the kind of city-state with a territory belonging to it, related to hunting according to some representations on the columns, but also with many other representations and symbols related to the serpent cult and many more.

In the PPNB period, but especially in the Ceramic Neolithic, there are genuine cities with surroundings, with several sanctuaries inside; some are community sanctuaries, others domestic, so that everyday life was closely interwoven with religion. The best example is from Çatal Hüyük (fig. 2),

where extensive research has been carried out and continues with new discoveries.



a.



b.

Fig. 1. Jericho, the wall with tower and stone constructions (b), but also with round huts, covered with animal skins (a): a, apud Religious Studies passim; b, apud Müller-Karpe 1968.

For these reasons too strict definitions are not in line with archaeological realities, which change as research, investigation and interpretation methods progress. The magnetometric prospects and the great rescue excavations from us also change the perception of prehistoric times. With fewer sources available, prehistoric archaeologists are more sensitive to novelties and modernization of research than classical archaeologists.

In PPN A and PPN B, the architecture and spiritual life reach the apogee (fig. 2). At Çatal Hüyük, the dynamism of architecture offers new possibilities for understanding the evolution of the Neolithic and, obviously, the Copper Age architecture with great periods of favorable weather.

The frescoes from Çatal Hüyük (fig. 3e-f) provide us with a lot of information about the costume, the weapons of the hunters (the bow, the quiver, the boomerang etc.), but also about the annual calendars related to the behavior of animals, reptiles and others. From the reconstructions, we have proof of the houses with upper floors (fig. 3a-d), way of life and defense.

The researches of Hacilar (Mellaart 1962; Mellaart 1975) are also particularly important, because we have models of fortified Neolithic cities, interior arrangements, spaces for the animals and activities (fig. 4a-b).

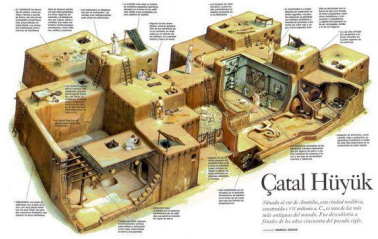


Fig. 2. Çatal Hüyük, plan with the sanctuaries on levels 2-6b, apud Mellaart 1967.

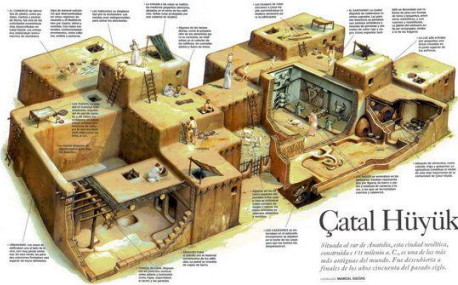
We do not want to insist too much on Anatolia, although the examples from Nevalı Çori (fig. 4a), with the four temples and numerous stone constructions, with monumental columns with incredible decorations made with flint, obsidian and stone tools show us the greatness of those civilizations.



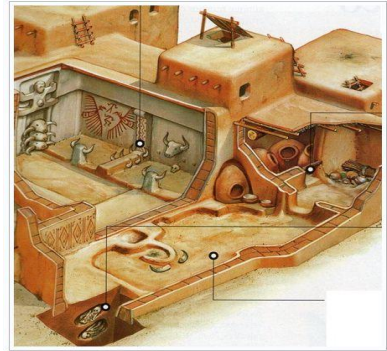
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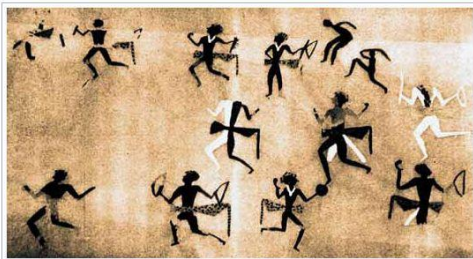
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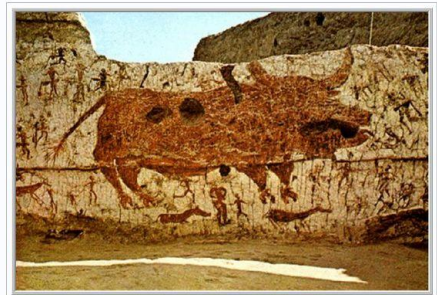
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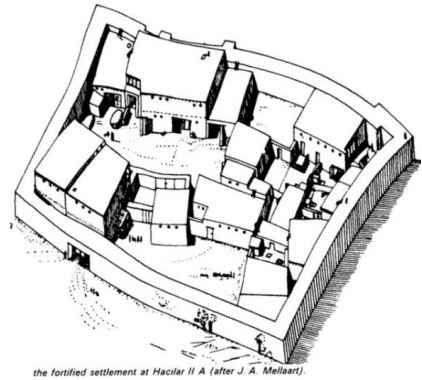
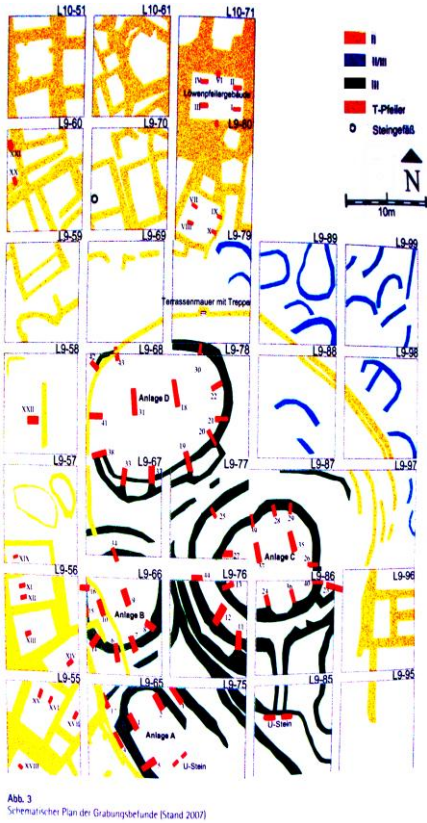
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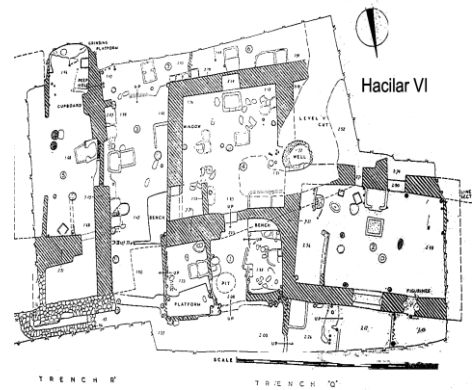
f.

Fig. 3. Çatal Hüyük, reconstructions, frescoes, way of life, occupations (apud http://www.catalhoyuk.com/news/wall_paintings_2011.html).

Without descending further south in the Plain of Mesopotamia, where superior cities and civilizations flourish, but also in other parts of the Near East (Hacilar fig. 4b-c), if we only mention some without insisting (Hassuna, fig 5b) (Mellaart 1962; Mellaart 1963; Mellaart 1964; Mellaart 1965; Mellaart 1966; Mellaart 1967; Mellaart 1975; *** 2007, Çatal Hüyük and bibl.) about that *Fruitful crescent* or *Golden triangle* (center-north and north of Mesopotamia, east of the Levant).



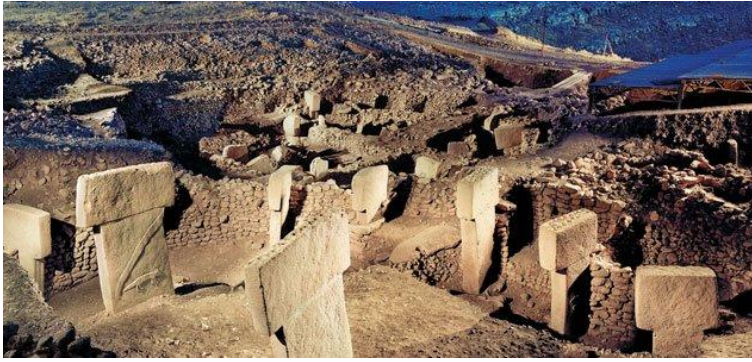
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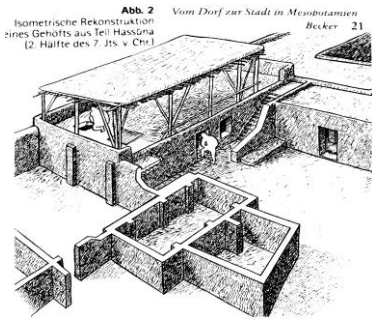
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a.
Fig. 4. Nevalı Çori (apud Schmidt 2011, fig. 2); b, Hacilar II, 5200-5000 BC; c, Hacilar VI, approx. 5400 BC (apud Mellaart 1975).

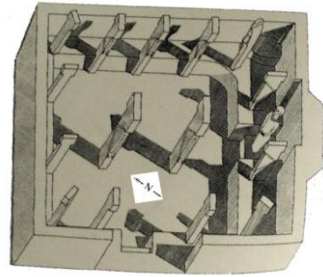
A feature of the first sanctuaries is the presence of massive T-shaped columns, sometimes beautifully decorated (fig. 5c-f). Such columns also appear at Serefen Tepe, Yeni Mahalle, Karahan Tepe, Hamzan Tepe, Çayönü – The Terrazzo building, Göbekli Tepe Löwenpfeilergebäude East (fig. 5a) (Özdoğan A. 2007, p. 59; Schmidt 2007, p. 84-85).



a.



b.



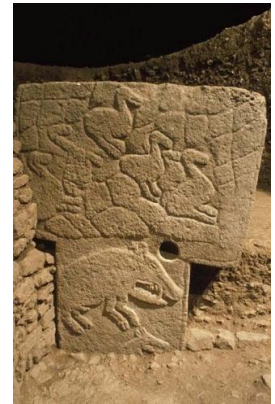
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d.



e.



f.

Fig. 5: a, d-f, Göbekli Tepe: a, Löwenpfeilergebäude East, apud Schmidt 2000; b, Tell Hassuna, apud Becker 2009, fig. 21; c, Nevali Çori, apud *** 2007.



a.



b.



c.



d.

Fig. 6: a-b, d, Nevalı Çori, apud Hauptmann 1993; c, Göbekli Tepe, apud *** 2007.

Climate change in the south and glacier retraction towards north after the last cold period of approx. 200 years between 6.300-6.100 BCE (fig. 7a) determined the communities from some areas of Anatolia to move to the

Balkans, where, after 6,100 BC, a climate favorable to the development of human communities begins.

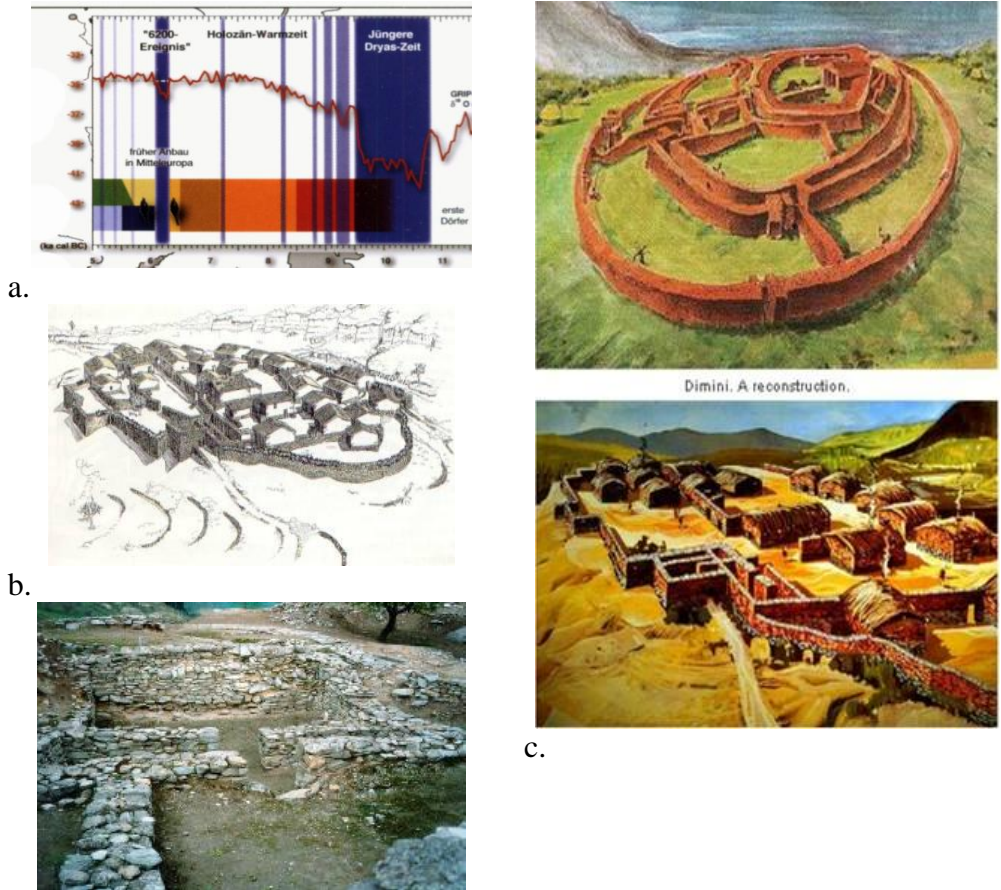


Fig. 7: a, Environment in Holocene with the “Ereignis” cold period, apud Daim, Neubauer 2005, Abb. 5b; b, the fortification of Sesklo (apud Theocharis 1973); c, Dimini (reconstructions WEB).

In Thessaly, during the Protosesklo culture, but especially later, during the Sesklo Culture, at Sesklo and Dimini, there is a stone architecture, not as monumental as in Anatolia, but here too real cities are built on natural hills where stone was available. Here, too, true stone fortifications were built, with stone buildings, with bastions at the gates or corners, with spaces between the defense systems for livestock, with squares, with some buildings with upper floor, with those large megaron buildings (Dimini:

<https://www.britannica.com/technology/megaron>: Kovács 2016, p. 16), that were supposedly sanctuaries. Now begins the development and role of tells in architecture (Rosenstock 2006).

To be honest, they started to appear during the Sesklo culture at Dimini (fig. 7c). Most of the buildings are made of stone wall (fig. 7b) (** 1973, fig. 1-5).

The carpathian-danubian region

After 6,100 BC, the Neolithic communities established in Greece, especially in the Thessaly region, in the neighborhoods of the Olympus Mountains, starting from the *Frühkeramik* or *Monochrome* Neolithic, started to evolve in Thessaly, Greek Macedonia, and from here they headed north to the Vardar Valley through the Republic of Macedonia, but also through Struma Valley, towards the Carpatho-Danubian region.

Towards the end of the Early Neolithic started to appear the first Neolithic fortifications with ditch and sometimes palisade. One cannot speak of cities yet. With the arrival of the bearers of the Vinča culture, both the Starčevo-Criș and Vinča communities began to fortify themselves.

We have called this period the Balkan-Anatolian Chalcolithic, because the first copper objects appear now, although small, but changes also take place in the behavior of the communities (Lazarovici Gh., Nica 1991; Lazarovici Gh. 1993). A new architecture develops, the dwellings are durable, the settlements begin to be fortified, there are some zonal centers in the neighborhood of which there are a series of secondary or seasonal settlements that gravitate around those fortified centers.

Vinča Culture (fig. 8-10)

Vinča-Belo Brdo

The most famous settlement, *Vinča-Belo Brdo*, with a stratigraphy over 10 m thick, had a defensive ditch excavated by Vasić (fig. 8) (Vasić 1932a-c). Extensive excavations are still taking place here, with modern methods of processing and interpretation of materials started by Nikola Tasić and Bogdan Jovanović, taken over and developed by Nenad Tasić (Tasić *et alii* 2015 and bibl.). The architecture of the Vinča A3 phases in Vinča D has a proto-urban development.



a.



b.

Fig. 8. Vinča-Belo Brdo: a, photo M. M. Vasić; b, the stratigraphy of Vinča, photo Gh. Lazarovici.

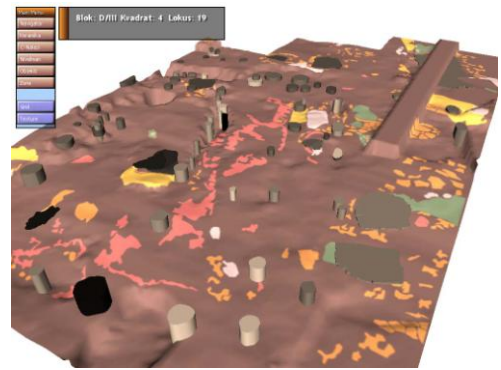
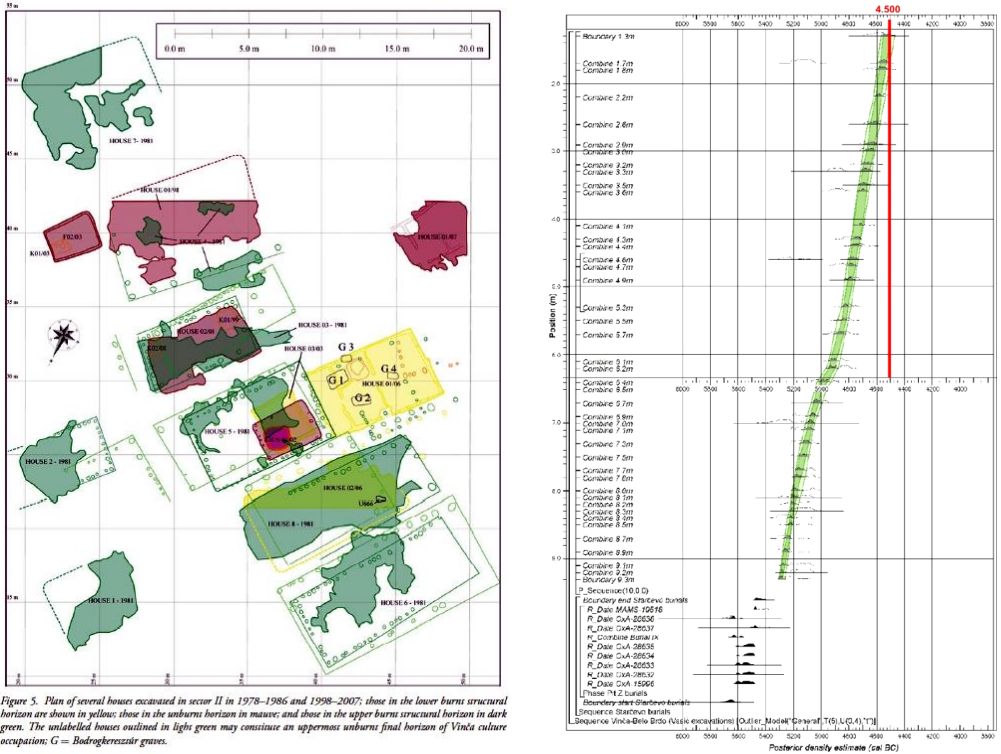


Fig. 9. The system of databases regarding the researches of Vinča-Belo Brdo, apud Tasić, Jevremović, ArheoPackPro!

Also there a large archaeological park was built there and is currently under development.

Future monographs will best show a proto-urban evolution with a special architecture, with the thickest stratigraphy from the Carpatho-Danubian region. For analysis and study, a relational database was created which allows the researcher to identify the archaeological contexts associated with information and details (fig. 9) on the content, descriptions, images,

reconstructions and many other details (Tasić, Jevremović, WEB *ArheoPackPro!*). A monograph would be necessary.



a.

Fig. 10. Vinča-Belo Brdo: a, plan with the researched features 1978-1986 (Tasić Nikola, Jovanović B.) and Nenad Tasić 1998-2007; b, absolute chronology (apud Tasić *et alii* 2015, fig. 44-45); red, late Vinča.

b.

From the plan one can see the layout of buildings with complex architecture, along streets.

Two rows of poles on the same construction plan suggest the possibility of buildings with upper floor, but also reconstructions on the same plane (fig. 10a). Future publications will provide details.

The architectural dynamics of Vinča and other parts of southern Central Europe (Banat culture, Zau Culture) are determined by climate change, too.

Corroborating the chronology, architectural, and climate change data, we notice that at Parța the transition from pit houses to massive wood

constructions at levels 7c (fig. 13 a-b) corresponds to a cold period. Also, the building of *dwelling-blocks* grouping together four dwellings, with suspended floors and ground floor, in some cases with clay walls only upstairs or from the suspended floors up, corresponds to a second cold period, with heavy rainfall, rain that may have affected the Banat Plain.

The correlated absolute chronology data provided by N. Tasić (Tasić *et alii* 2015, p. 44-45, table correlated after fig. 16-17) shows that the settlement of Vinča ceases its evolution around 4500 BC, period around which in other areas too (eastern Hungary, Banat, Transylvania) the civilizations of the Late Neolithic cease to evolve.

Zorlențu Mare

There is such a center at Zorlențu Mare. Without prospecting, and the research being grouped only in the central area (pit houses, houses, ovens, sanctuaries: Lazarovici Gh., Lazarovici C-M. 2003, fig. 41, 48; Lazarovici Gh. 1991b; Lichter 1993, kat. 120, p. 145-146, pl. 71; Kovács 2016, p. 18), no fortification systems could be found. Deposits over 2 m thick indicate that such a defense system is possible.

Also in Zorlențu Mare there are pottery workshops with specialized craftsmen, with kilns (fig. 11c-d), as well as a special architecture (dwellings with suspended floor) (Lazarovici C-M., Lazarovici Gh. 2006, p. 185-186). The research here has led to the discovery of a particularly rich plastic art (Lazarovici Gh. 1979, pl. 20-23, s.v. Zorlenț).

Around Zorlențu gravitate a series of secondary, seasonal settlements (5-6 points around the main settlement), at Ohaba Mâtnic, Ruginosu, Copăcele, connected through ridge roads (Lazarovici Gh. 1979, p. 27, 61, 206, 209-210).

A similar situation occurs at Balta Sărată (two sites), around which several settlements gravitate on the territory of the town Caransebeș and in the neighboring areas (Jupa, Păltiniș, Zăguzeni, etc. – Lazarovici Gh. 1979, p. 185 and next., repertory no. 2-3. 15, 27, 45, 46, 61, 74, 96-97, 102, 104).

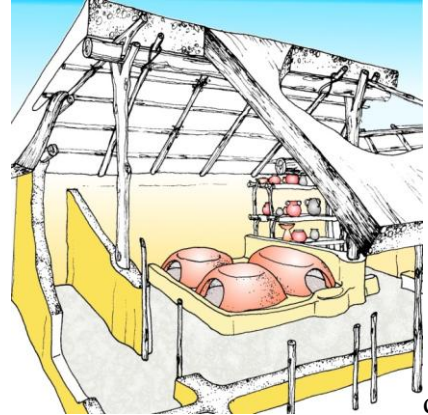
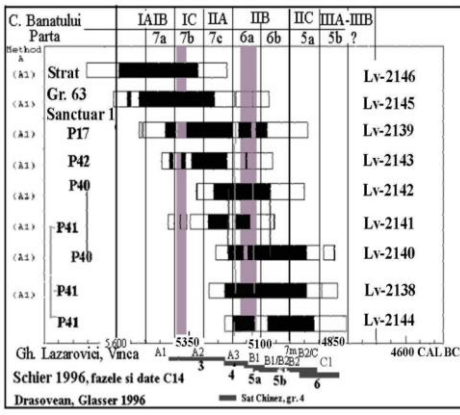
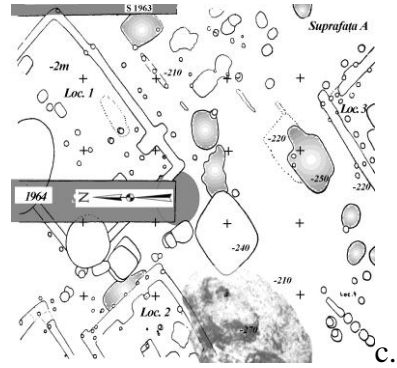
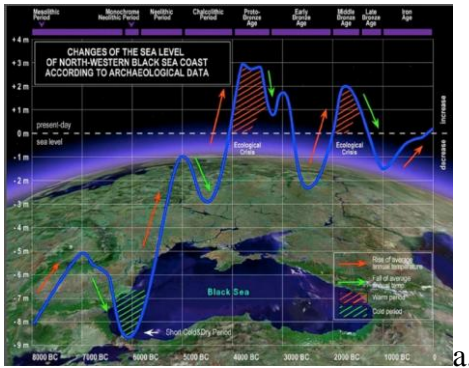


Fig. 11: a, climate evolution, apud Todorova, passim; b, evolution of the Banat culture, according to C14 data; c-d, Zorlențu Mare, Dwelling 1, level 7, ceramic workshop; b-d, apud Gh. Lazarovici.

Unfortunately, the lack of magnetometric prospects did not allow the identification of the fortification systems or of details regarding the density of dwelling on the entire surface of the site, over 7 ha. This kind of habitation tends towards a proto-urban habitation, but there are no arguments to prove it.

Tărtăria

Among the Vinča settlements in Transylvania, this was the most intensely researched settlement. It was famous at first for the discovery of the tablets by N. Vlassa (Vlassa 1962; 1963; 1965; 1970; 1971; 1972; 1974). Extensive excavations (fig. 12b) were performed by S.A. Luca, who published a monograph (Luca 2016, see also his previous bibl.).

Large areas are still being investigated (fig. 12b), for these reasons it is not appropriate to gamble with assumptions about what has been investigated so far. The stratigraphy that reaches 2 m and even 3-4 m in some places (fig. 12a) shows the intensity of habitation. As in other parts, the most developed architecture is in the Vinča A3-B1 level, when there is an evolution towards a proto-urban architecture (dwellings with upper floor and cellars fig. 12c-d, fortification systems, graves nearby, etc.). A similar dwelling with upper floor, ground floor and cellar is located at Parța, in the block of dwellings P41-P43 (Lazarovici Gh. *et alii* 2001, p. 126-143; Lazarovici Gh., Lazarovici C-M. 2003, fig. 52-65, 67), but also at Turdaș (Luca 2016) (fig. 12d). The very large thickness of some deposits (fig. 12a) certainly indicates features with upper floor, like at Parța in the “*blocks of dwellings*”.

Miercurea Sibiului (fig. 12e-f)

At the Vinča level there is a palisade (fig. 12f) which diagonally crosses the surveyed surface. We believe it was encircling the large dwellings. The magnetometric prospects also showed other defense systems (fig. 12e). A survey confirmed the presence of the ditch and a gate, but the works have unfortunately stopped at this stage.

Banat Culture

In the Banat Plain, the archaeological investigations were more intense and they offer numerous examples of proto-urban organization. Surveys on large surfaces, magnetometric prospecting, field surveys in the area have allowed us to notice that at Parța there is an evolution towards a proto-urban habitation.

In the vicinity of the Parța settlement, between 500 m and 12-15 km, there are over 12 secondary or seasonal settlements (Surface research made by Fr. Resch, Andrei Agotha, Karol Germann, Adrian Fora, Gh. Lazarovici, Fl. Drașovean and other member of the team signaled those housing remains: Lazarovici Gh., Lazarovici C-M. 2003, fig. 27). The more than 2 m deep stratigraphy has seven large levels of habitation (fig. 13-14).



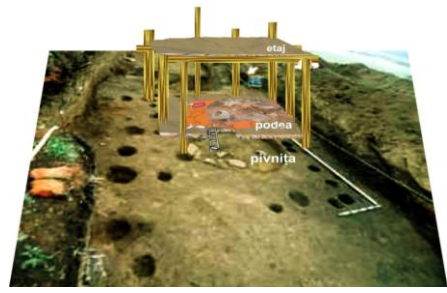
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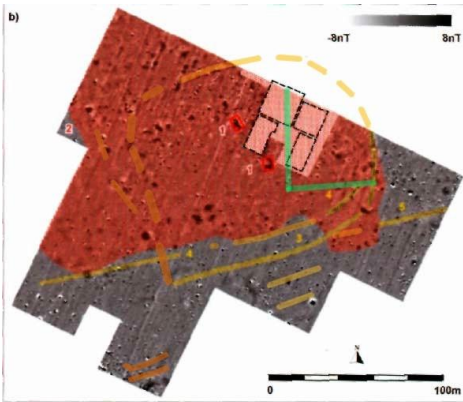
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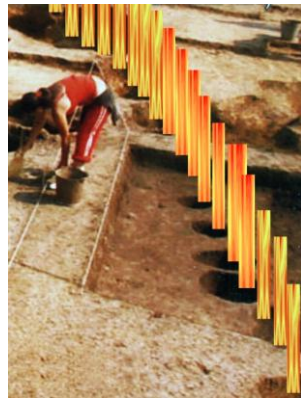
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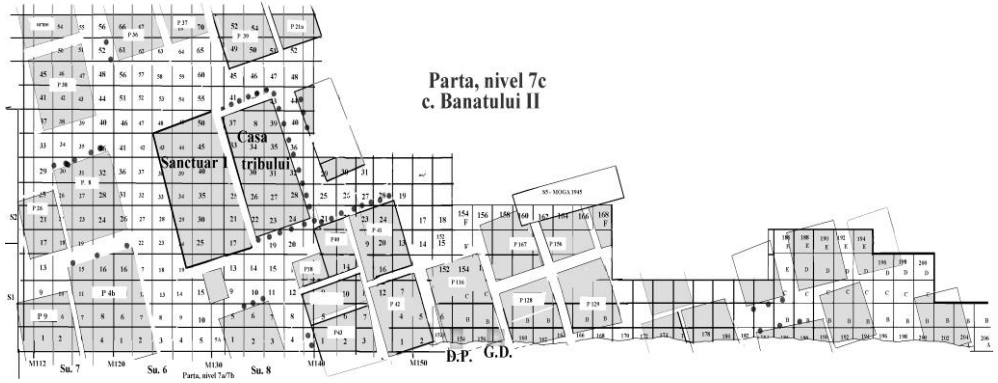


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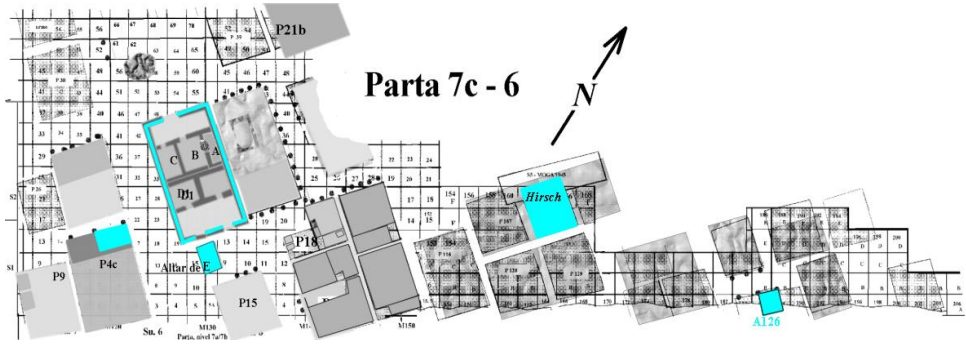
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Fig. 12: Tărtăria: a, stratigraphy; b, systematic excavation; c, rescue excavation L4 (apud Luca 2016); d, reconstruction Gh. Lazarovici; e-f, Miercurea Sibiului: e, apud Mischka 2012; e, f, processing Gh. Lazarovici.

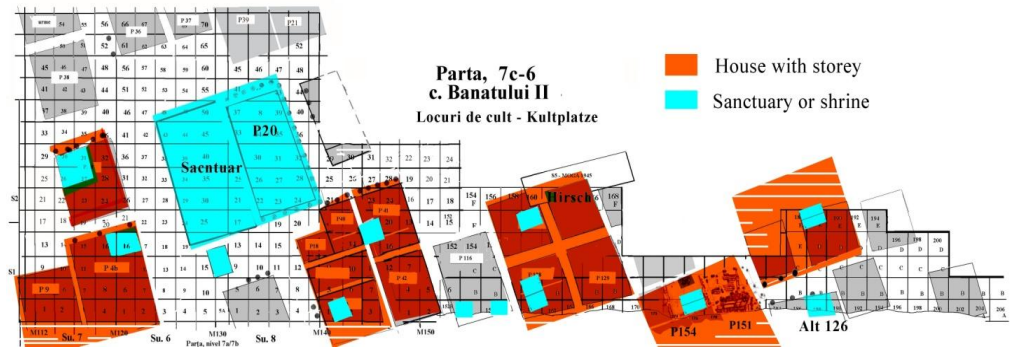


C.

Fig. 13. Plan of the Parța settlement with the features in levels 7 (apud Lazarovici Gh. *et alii* 2001).



a.



b.



c.
 Fig. 14. Parța: a-b, levels of dwellings and cultic constructions; c, dwelling blocks; d, House of the tribe.

The research extended to several cult buildings (temples in the center with monumental clay statues, fig. 17a-b), a social house (fig. 14d) (*House of the tribe* was near the *Sanctuary*), but did not have household items (cereal boxes, supplies vessels), tools.

Upstairs there was an altar and several sling balls, which, after weight, were for war not for hunting), communitarian or domestic sanctuaries (in the vicinity of the sanctuary and at various points of the settlement (in the center are related with sanctuaries and priestesses that care for sanctuaries; in other areas there are community sanctuaries of the various priestesses), four *blocks* of dwellings with upper floor rooms (fig. 14b, 18a).

One can notice the arrangement of the dwellings along streets with access to the gates (fig. 14b). Numerous kilns have been found, used to burn slingshot balls in situations of “war/battle”, but which could also serve for the burning of ceramics.

The large quantities of ceramics in some dwellings mark workshops (In the vicinity of the Sanctuary and the House of Tribe in a complex there were over 20 boxes of ceramics (cca. 12-15 kg one box).

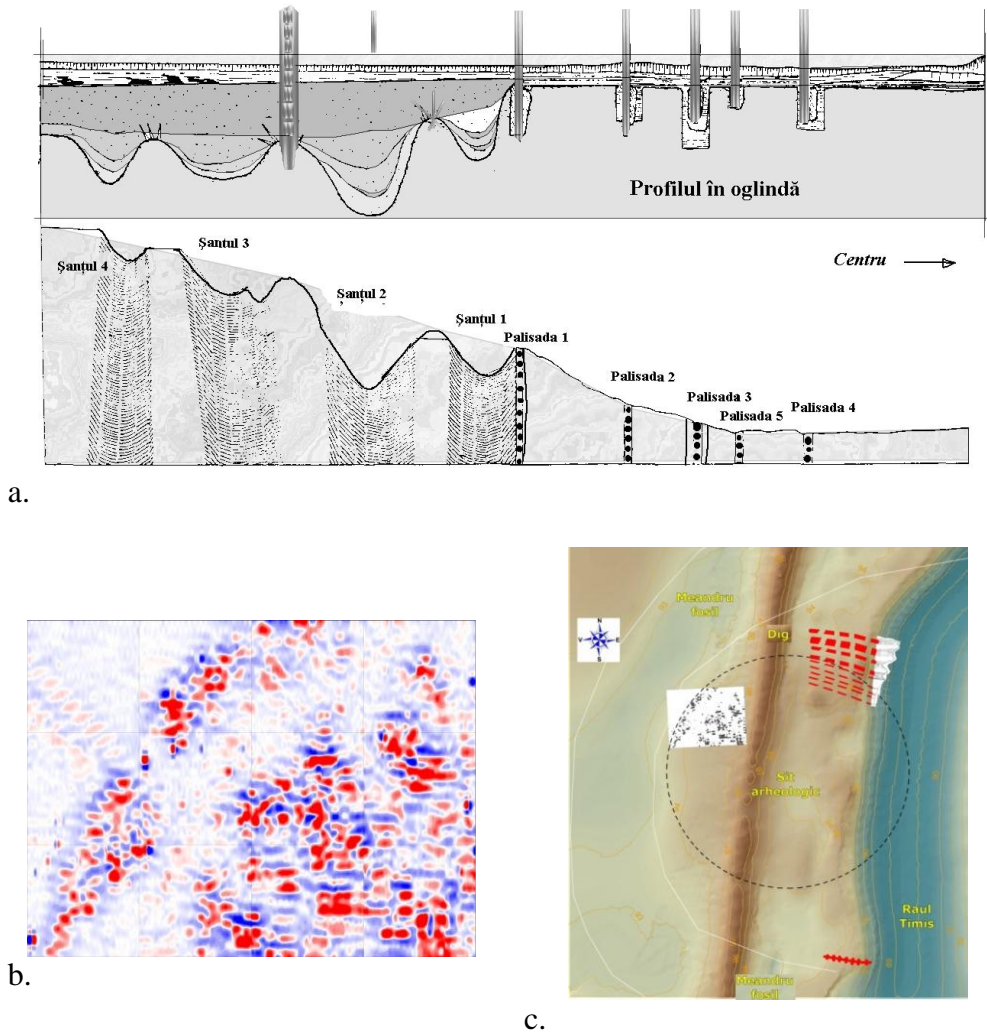
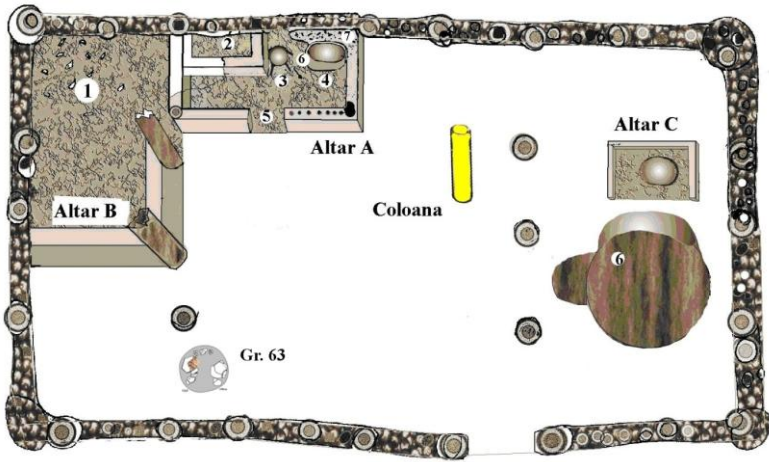
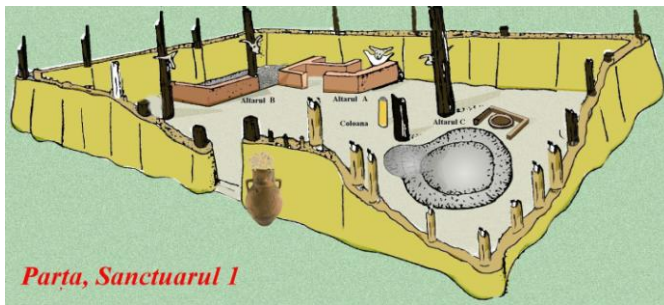


Fig. 15. Parța: a, the system of moats and palisades; b, the magnetometric surveys (L. Măruia, D. Micle); c, topographic survey of the site with the defense systems.

The *sanctuary 1* (fig. 16) had an altar located to the east for burning cereals and deposits in a pit of burnt spikes. In the center there was a small column of unburnt clay. In front of the entrance, there was Altar A with a place for depositing offerings (mark 2), a portable hearth for the burning offerings (meat and others, mark 3), a pedestal (mark 4) for a bust idol with a bull's skull (mark 6, item fig. 12c or a similar one) and a base for depositing the ash (mark 7).



a.



b.



c.

Fig. 16. Parța, Sanctuary 1: a, level 7, plan; b, reconstruction; c, some artifacts.

Researches at Sanctuary 1 allowed the study of what happens in a sanctuary during operation and abandonment.

Near the entrance on the southern side was discovered a large supply vessel with a face marked with symbols, the letter *M*, a specific decoration for the Szakálhát culture vessels too (Goldmann, Szenasky 2003).

Most likely, in the supply vessel with *M* were deposited spikes, as it happened in Sanctuary/Temple 2 on altar-table C. A hearth surrounded with a chime, forming a small altar, served for the regular ritual burning of some straw (successive layers of ash and charcoal have been found, which is repeated in Sanctuary 1 and 2 on altar A, fig. 16b, 17.8).

In the altar B were slaughtered animals (sheep, maybe lambs); the floor was made up of several layers of gravel and sand, on which large splinters of flint were found (no traces of wear).

Upon abandoning or construction of Sanctuary 2 a series of pots, some from painted amphorae with human face, were broken and laid in the pit on layers, along with fragments of unburnt vessels and loom-weights, as well as an oval, large clay object with holes.

These are rituals of foundation and abandonment, as they have also been discovered in other sites and cultures (Lazarovici C.-M. 2009; Lazarovici Gh. 2009b).

Sanctuary 2. It was well preserved, which allowed it to be moved to the Banat Museum. The space being confined, the empty spaces (between the entrance and the statue, the statue and the altar D, the altars A-C and the west wall) were reduced to the maximum.

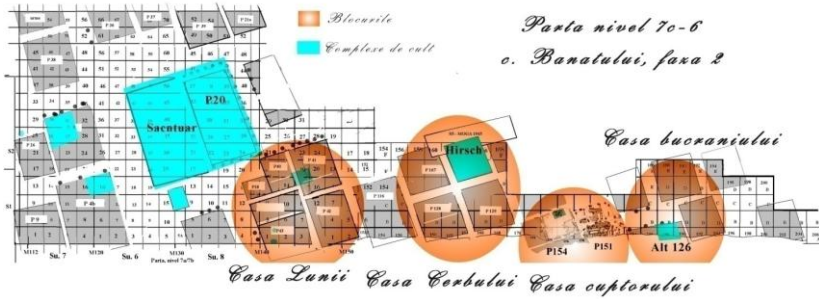
The monumental statue (1.70 x 1.30 m) represents the Great Mother and her partner, the Bull (mark m1). Next to them were portable hearths on which products were burned (No. 2, 13), a cassette and a pot for cereals (No. 4, 6 pot), a cup for blood (No. 3), vessels with offerings (No. 5, 7, 9, 14), the opening with Sun and Moon, the grinder (No. 9), the loom with seven weights (No. 10) and the orifice for the light (No. 15).

At a *block* of dwellings (marked as *the block of the Moon*: fig. 17a), from the four-five rooms (there were also porches) four had suspended floor and three had one upper floor each.

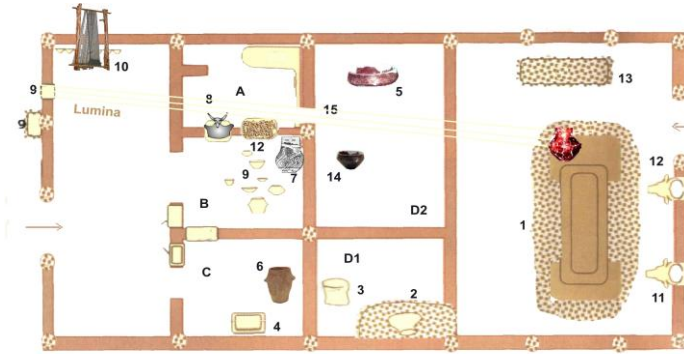
The arrangement of the space and the vertical development were determined by the fortification system, which had in some places four ditches and four palisades stretching over a 30 m area, with the purpose of protection against arson in intertribal battles.

Other dwellings had at least two rooms, and a total of over 15 had suspended floors. All this shows a high level of architecture, a beginning of urbanism.

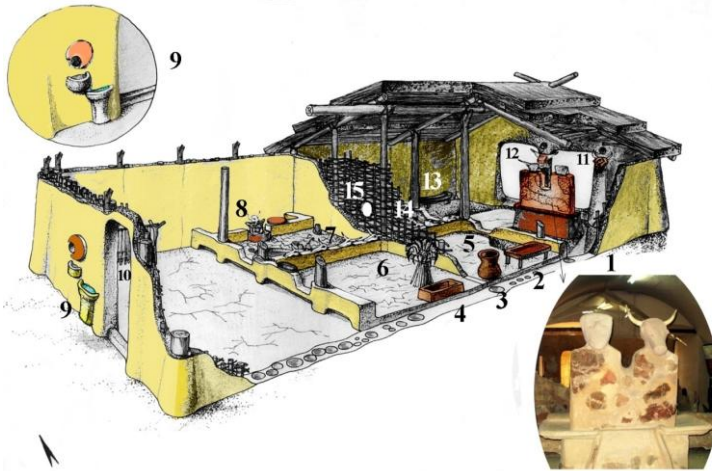
The evolution of urbanism, as well as the great natural changes, have affected the Neolithic communities.



a.



b.



c.

Fig. 17. Parța: a, “Blocks” of dwellings; b-c, level 7c-6, Sanctuary 2, plan and reconstruction.

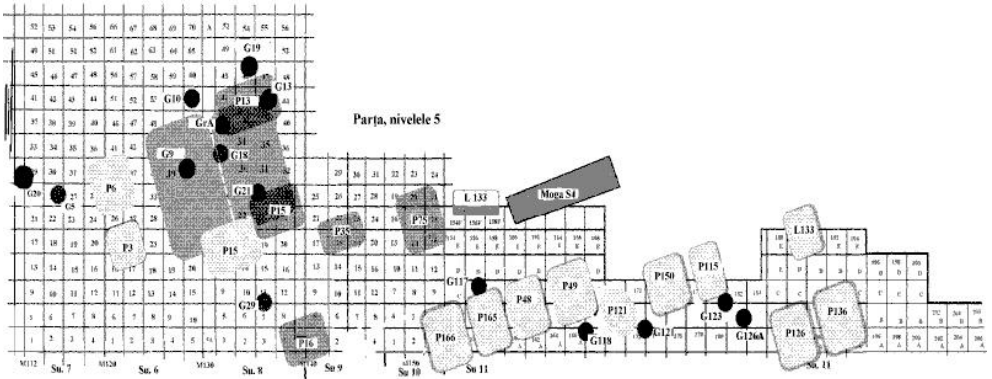
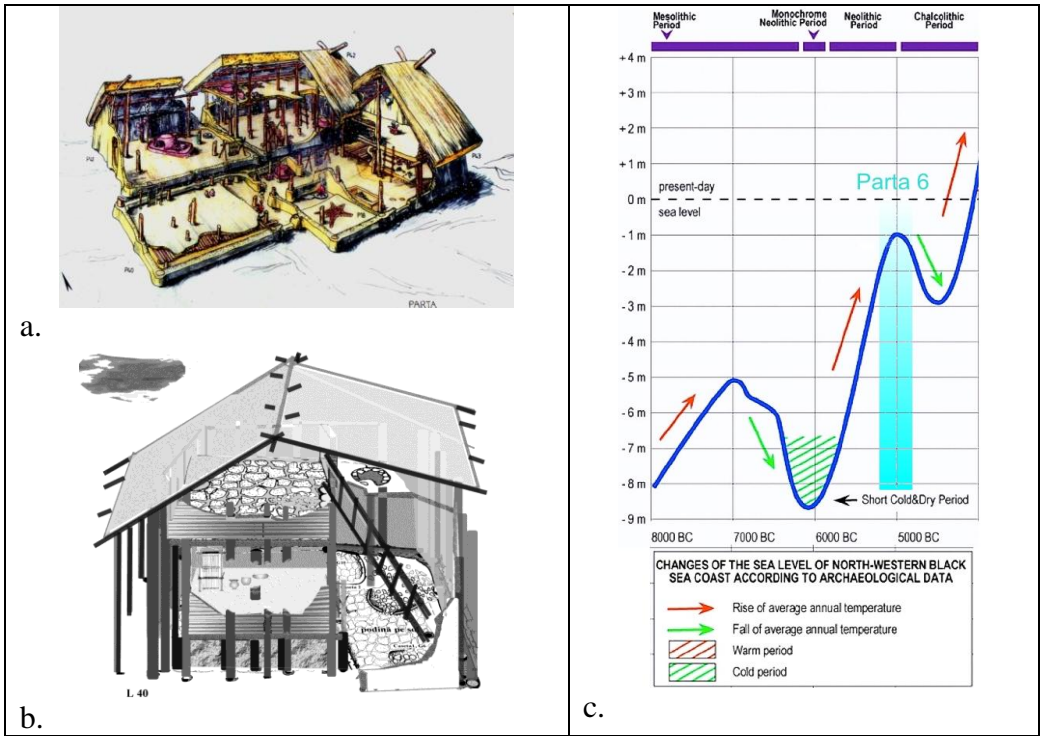


Fig. 18: a, c, Parța, dwellings with upper floor; b, periods of optimal climate related to the increase of the Black Sea level, apud Todorova, passim; d, Parța level 5a.

Henrieta Todorova outlined the evolution of the Black Sea level due to climate change in Central and Eastern Europe. We notice a decrease in sea

level of more than 2 m after 5000 BC, during which time the civilizations of the Late Neolithic begin their evolution: these changes are also observed at Parța in level 6 (fig. 18c).

The presence of workshops for ceramics or for the perforation and processing of flint or stone tools, the large number of idols, small cultic altars, community sanctuaries (situations from Zorlențu Mare and Balta Sărată) leave the impression of some settlements with a territory of association. Besides, in the north of Banat there are a number of cultural differentiations, sometimes defined as groups, but there may be local centers around which some settlements gravitate, which have common developments in the style of ceramics, decorations, types of idols and others.

This is the situation in Bucovăț with things common with Parța, but also with some differences in the decoration styles or the ceramics manufacturing techniques.

A similar situation is at Sânanđrei, where there are differences in the ceramic decoration compared to Parța, but especially to Bucovăț. To the west and north there are similar situations, given the neighboring cultures, Vinča to the south and west, Szakálhát culture to the northwest.

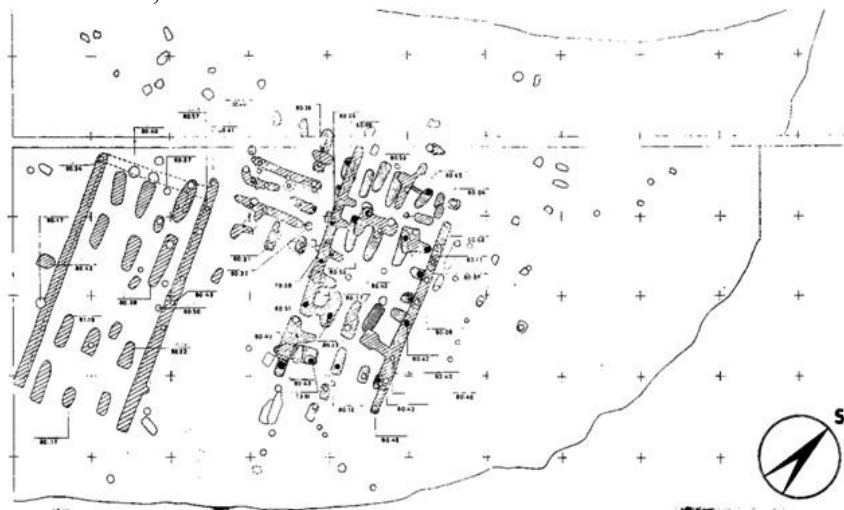


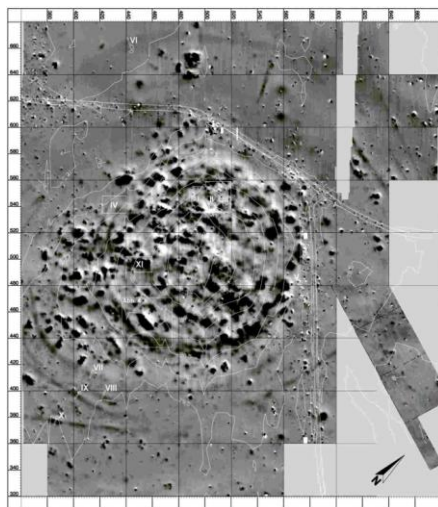
Fig. 19. Gomolava (apud Lazarovici Gh., Lazarovici C.-M. 2003, fig. 46, apud Brukner).

Climatic changes have affected the architecture of level 5a from Parța, in this period there are small dwellings arranged in two rows in the area investigated at NE (fig. 18d). These are most likely determined by the damage caused by the Vinča C phase bearers, who settle in Tell II. In some of the

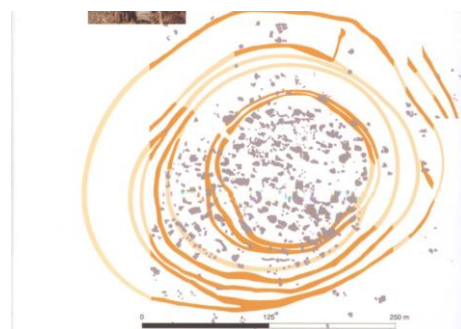
Banat culture dwellings in stage 5a there are also Vinča C materials. In Tell II, in the upper horizons and on the surface, there are numerous painted materials of the Foeni group. At Foeni (Lazarovici Gh., Lazarovici C.-M. 2003, p. 282, fig. 47), Gomolava (fig. 19), Zau level III (from Gomolava to Zau there are about 400 km) (Lazarovici Gh., Lazarovici C.-M. 2003, p. 457, fig. 46-47, p. 469, fig. 87) at Parța in Tell II, there are houses with long pits (Drașovean, Ciobotaru 2001; Lazarovici Gh., Lazarovici C.-M. 2003, p. 382), sometimes in steps, like those from Turdaș from levels II and III (fig. 27b, f-g).



a.



b.



c.

Fig. 20. Uivar: a, reconstruction of the dwellings; b, magnetometric and topographic surveys (H. Becker); c, fortification systems and traces of the features and magnetometric anomalies (a, apud Schier 2006; b-c, apud Schier et alii 2004).

Uivar (fig. 20-22)

During the German-Romanian researches in the Uivar project, complex research has been carried out with outstanding results: prospecting; analyzes of all kinds (pedological, palinological, anthracological, ceramic, etc.); complex studies; excavations on large surfaces; verification probings at different points of the open space to understand the evolution and development of the site; reconstruction; processing and recording of archaeological material in databases. Uivar is a natural mound on which the Neolithic communities settled (fig. 16a). There are several layers of culture with dwellings from the Banat culture, phase II – Vinča C, Tiszapolgár and others.

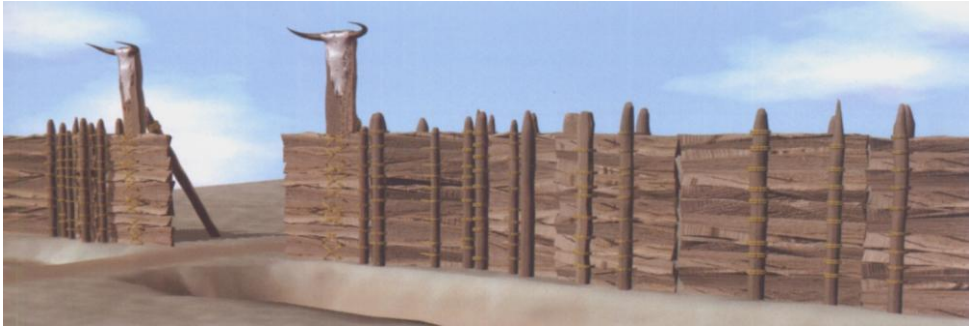
From the prospects one can see an acropolis (fig. 20b-c) surrounded by two, sometimes some three ditches of defense, some of them with a palisade on the inner edge. The dwellings in the vicinity of the palisades and ditches are organized circularly, so that the inhabitants in case of need are near the fortification systems. A monumental gate was investigated and reconstructed to the west (fig. 21a). Some ditches are restored, and in front of the gates there are obstacles that prevent a direct attack on the gate (fig. 21b).

The fortified area is wider, either for protection, or to accommodate/shelter members of neighboring, seasonal or secondary dwellings in case of battles. There are also protected places for livestock, fodder, etc.

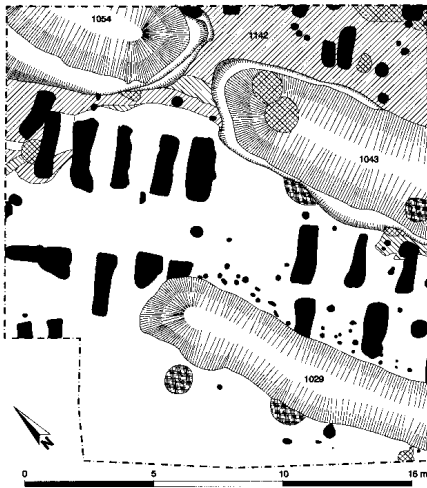
The dwellings have a superior architecture, similar to those from Parța, but also from other dwellings of this time (Zorlențu Mare, Vinča, Herpály, Polgár, etc.). The burning of early complexes belonging to the Banat II culture as well as level 6 from Parța, is determined by the Vinča C “shock”. The Vinča communities continue to develop the settlement. We believe that the fortification system was also restored and the habitation continues, while at Parța they moved to Tell II. The same thing happens in Zorlențu Mare, the main settlement is abandoned, and small, disparate settlements appear. It is the same at Balta Sărată. At Parța, the Foeni communities are in Tell II over the Vinča C dwelling and sporadically buildings appear over the debris of level 6.

The reconstructions at Uivar are correct and professional. *We have some observations regarding the reconstruction of the floor in fig. 22a.* Gh. Lazarovici was present at the preparation and turning of the floor. The reconstruction suggests that the beams were laid directly on the ground. From our experience the floor was suspended, which allowed the burning to be

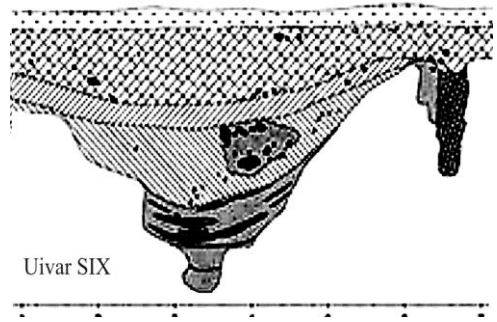
oxidizing, strong, with a lot of oxygen. Covering it with the two layers of clay would not have allowed such an oxidizing burning to occur on the entire surface. The same situation is at feature 191.



a.



b.



c.

Fig. 21. Uivar: a-c, details and reconstructions of the fortification systems apud Schier *et alii* 2004.

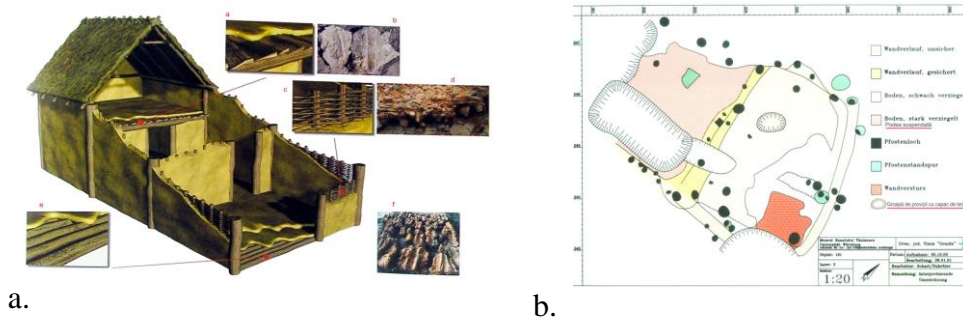


Fig. 22. Uivar: a, dwelling 373; b, feature 191; a-b, apud Schier *et alii* 2004.

With the permission of Prof. Wolfram Schier, Gh. Lazarovici completed the study of the floors in the two rooms of feature 191. In the NE room the floor was well smoothed. On it were small fragments of coal and ash from the roof. Gh. Lazarovici studied and emptied the pits on the NE side of the wall. In the center of the room there was a hole covered with a wooden lid whose remains were preserved. The NW room had suspended floors and allowed a strong burning (*stark verziegelt*). The floors that have a wooden structure and are mounted directly on the ground cannot be dismantled and no traces remain from the poles, because the burning without oxygen is poor, the wood is carbonized, the wood turns into charcoal, which was not the case here.

Zau Culture

A civilization of the developed Neolithic, the Zau culture has the largest settlement right in the center of Cluj-Napoca. It is even larger than the fortifications of the medieval city. But, being under the city, the settlement could not be studied. Only hurried surveys have been carried out with great difficulty, the mayors hurrying to build their own buildings.

The stratigraphy of the settlement in the main area has over 3.5 m of dwelling layers in the center (Vlassa 1970; 1970a; Vlassa, Daicoviciu 1974; Lazarovici Gh. 1977a; 1977b; 1987; 2009a; Maxim 1999, s.v. Cluj), and at the outskirts approx. 0.8-1.2 m (Lazarovici Gh. *et alii* 1984). Its extent is between 30 and 60/70 ha, judging by the accidental ceramic discoveries at the constructions.

No feature has been studied entirely, only in the foundations of recent buildings, in the medieval or modern cellars, under the buildings of the Roman city of Napoca. A bad grade for the mayors of Cluj!

Zau de Câmpie (fig. 23a)

The second settlement, as surface and stratigraphic deposits (over 3 m thick), was that of Zau de Câmpie with over 7 hectares (Lazarovici Gh., Alicu 1997; Maxim 1999, s.v. Zau; Colesniuc 2014) or even more, with satellite-settlements or annexes (cemetery, swarmings).

From the small surveys or researched areas (the largest had 80 m²), one can notice a special architecture, with large constructions, with a strong, double interior palisade (Lazarovici C.-M., Lazarovici Gh. 2006, p. 431-436, fig. IIIe. 2731, 3; Lazarovici Gh. 2013, fig. 30a-c), with ceramic workshops (especially painted ceramics).

The settlement is destroyed by the Turdaş and later Foeni communities, which settle over the central dwelling, having the same architecture of the dwellings specific to the Middle and Late Neolithic, namely Vinča C and Turdaş (Lazarovici Gh., Lazarovici C.-M. 2003, p. 478, fig. 118-119).

Iclod (fig. 23b-24)

It was the best researched settlement of the Zau culture. Originally attributed to a cultural group called Iclod (Lazarovici Gh. 1983; 1991a; Lazarovici Gh. *et alii* 1995; Lazarovici Gh., Kalmar 1982; 1986; 1986-1987; 1987; 1989; 1989-1993; 1990; Lazarovici Gh., Kalmar/Maxim 1993, a.s.o.), associated later with the discoveries from Cluj, Cheile Turzii and others, as research has evolved (CCTLNI or CCTLNIS Cluj-Cheile Turzii-Lumea Nouă-Iclod-Suplac – Lazarovici Gh., Alicu 1997; Lazarovici Gh. 2000; 2009a; Lazarovici Gh., Maxim 2014), after studying and publishing the first syntheses about Zau (Lazarovici Gh. 2014; Colesniuc 2014), it also received the name of Zau culture.

We remind that at Zau de Câmpie there were all phases of evolution, from the Developed Neolithic until the beginning of the Copper Age. After the 11 C14 dates, the chronological classification of the Iclod group is between 4900-4450 BC (Diaconescu *et alii* 2013).

The site has benefited from the first, rather experimental magnetometric prospects in Romania, due to some passionate specialists from Cluj-Napoca (Dărăban *et alii* 1988; Morariu *et alii* 1996; 2001).

Later followed the professional surveys of the colleagues from Kiel, led by C. Mischka (Mischka *et alii* 2010-2011; Mischka 2012, p. 153-166), with more advanced equipment, who continued to perform such researches in other

parts of the country, especially in Moldova, but also in Transylvania. The results obtained by Carsten Mischka are truly **revealing**.

The architecture of the dwellings did not offer too much data, but also the archaeological researches were done on trenches, not on surfaces, which is why the data about the dwellings were modest.

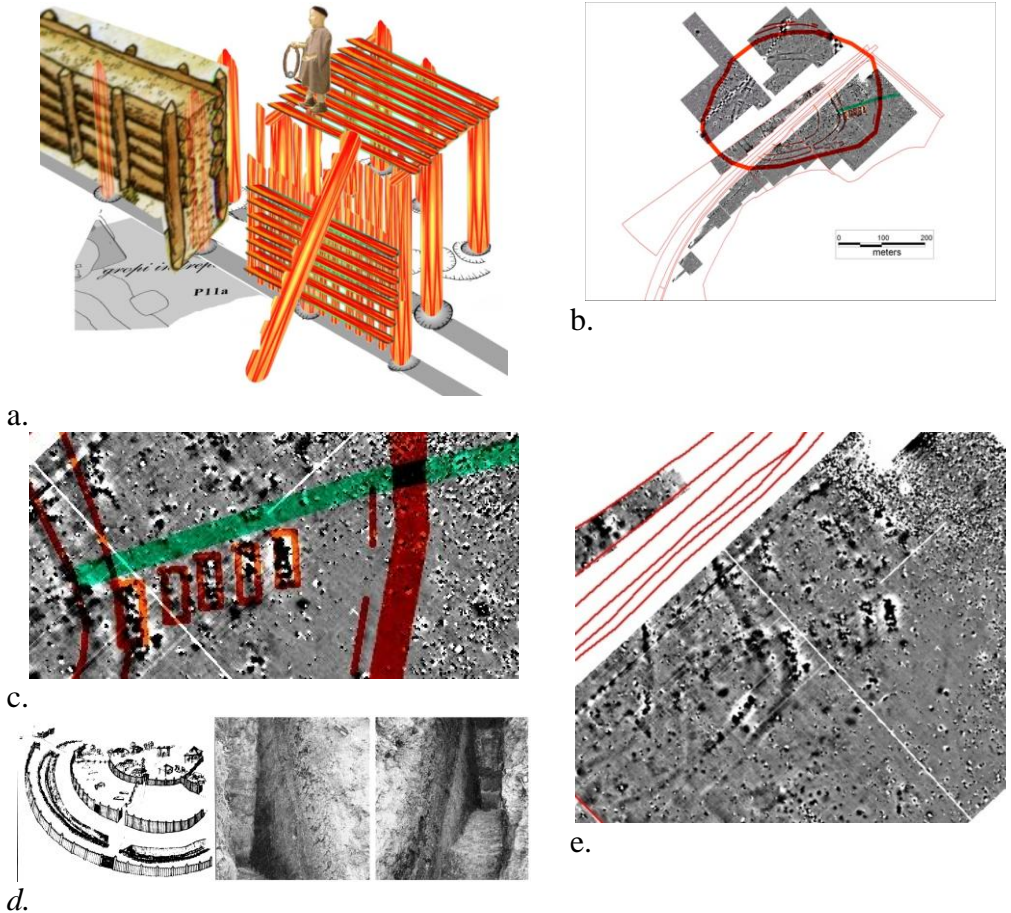


Fig. 23. Iclod, magnetometric surveys (Carsten Mischka) and reconstructions (Gh. Lazarovici).

The fortification systems, especially after C. Mischka's surveys (fig. 23) and the numerous trenches opened by us and our colleagues on the fortification systems, showed an evolution towards a fair, around which several secondary or seasonal settlements gravitated (Lazarovici Gh. 1983;

1991a; Lazarovici Gh. *et alii* 1995; Lazarovici Gh., Kalmar 1982; 1986; 1986-1987; 1987; 1989; 1989-1993; 1990; Lazarovici Gh., Kalmar/Maxim 1993, a.s.o.) (Livada, two points; Fundătura, fig. 24d; Gherla, etc.) (Lazarovici Gh. *et alii* 1989-1993; Lazarovici Gh. *et alii* 1996).

The dwelling begins with a two-phase *rondel* settlement (fig. 24b, mark F1, F2); later it extends with a strong fortification, with a double moat (fig. 24b mark F3), and finally a large moat surrounds a surface of almost 7 hectares (fig. 23d, photo 20, marks 4a, 4b). In the last phase of fortification the dwellings are placed circularly along the defense systems (fig. 24b, purple). Eastward, at the eastern gate, several houses were aligned along a road, and some of the houses seemed outside the defense system, although elsewhere (NE) there were some more palisades.

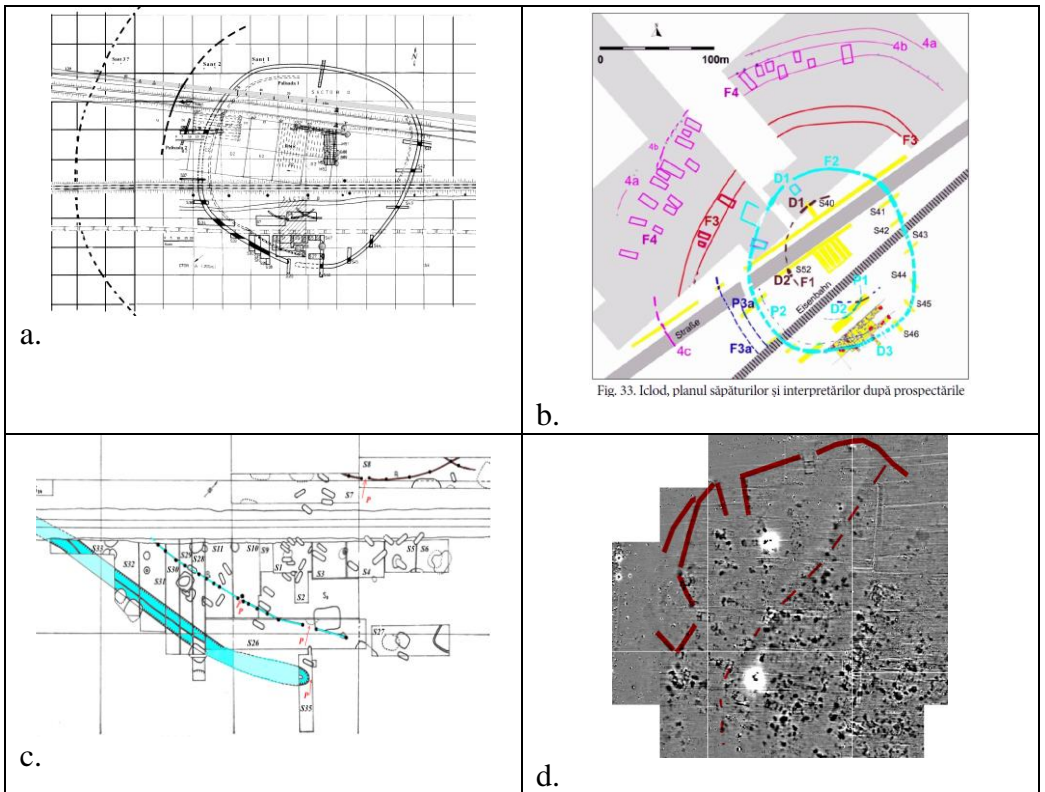
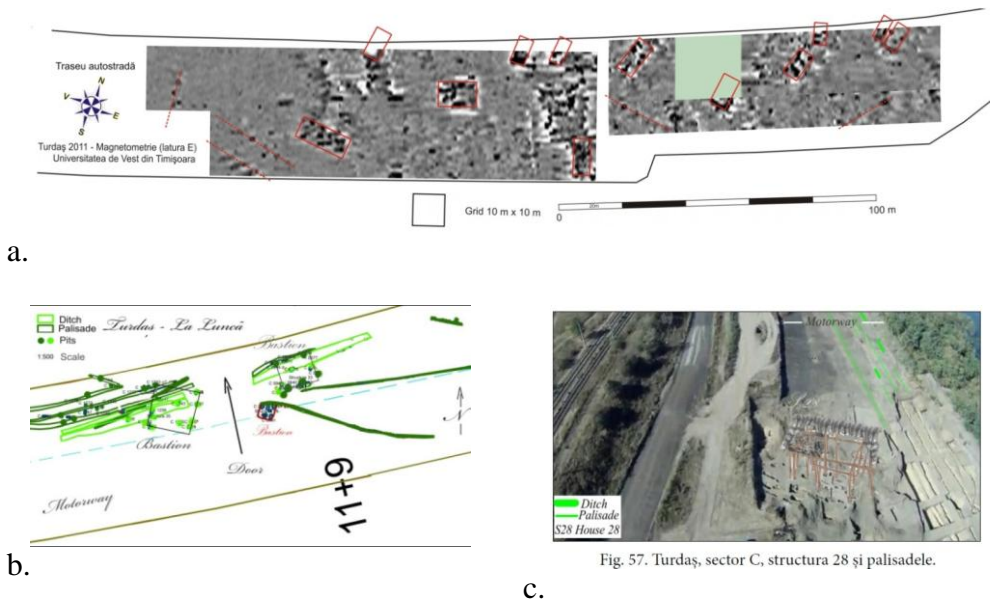
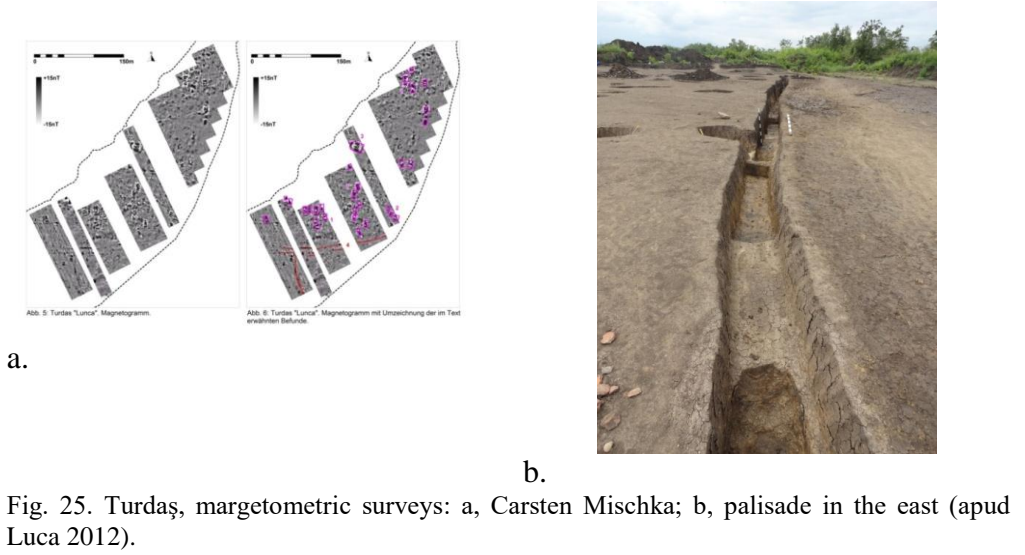
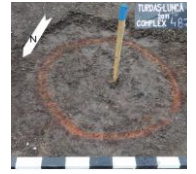
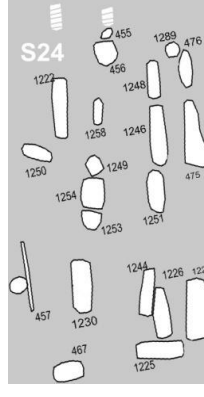
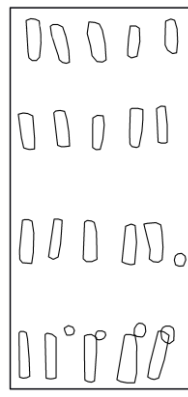
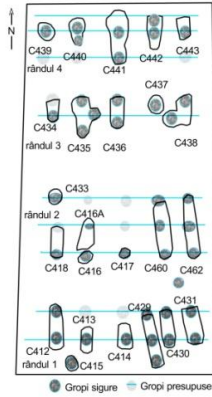
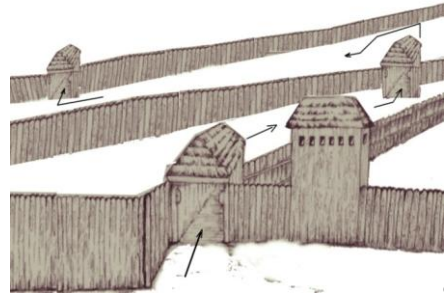
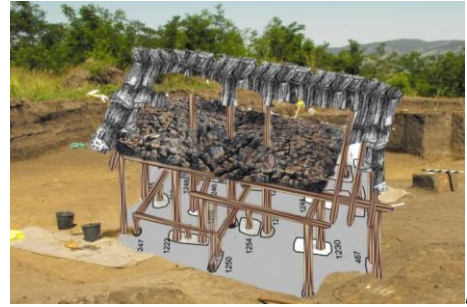
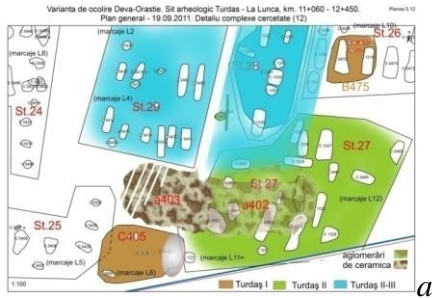


Fig. 24: a, c, Iclod, researches Gh. Lazarovici *et alii*; b, Iclod, surveys and excavations; d, Fundătura, surveys C. Mischka.



Turdaș



e

f

g

h

Fig. 27. Turdaș, area C: a-b, dwelling with upper floor (Str. 28 plan, reconstruction); palisades and bastions: c, south; d, east; e-g, Structure 28 and plans of similar dwellings; h, kilns for ceramics (233, 486, 234, 487); apud Luca 2012.

The settlement of Turdaş benefited, alongside that of Tărtăria, of large rescue excavations, coordinated by S.A. Luca. C. Mischka's surveys signaled some palisades to the south (fig. 25a), confirmed by the surveys of the colleagues from Timișoara (fig. 26a) and by excavations (fig. 26b, 27c-d).

The archaeological complexes were organized with the long side perpendicular to the palisades and moats (fig. 25a). A row of palisades surrounds the northern part, being covered with levels with Precucuteni I-Petrești materials, with small features (fig. 26c).

The dwellings of the Turdaş II and III phases are of large size, with prolonged pits, sometimes in steps, for 2-3 pillars (some from the floor, upper floor or structure, as the case may be, fig. 27e-g).

In the west, due to erosion and clogging over 0.80-0.90 m, a complex system of moats and palisades has not been discovered. However, the rescue excavations have highlighted them (fig. 25b one of the four palisades) and other complex defense systems with moats, palisades, bastions or gates, some obvious being reconstituted (fig. 27c -d), others being under analysis.

In the first phase of habitation there were a few pit houses, of which B6 (=C486 over which there was a Turdaş III dwelling) with Vinča B2/C and early Turdaş items, but in phases II and III there were palisades, moats, dwellings with upper floor (fig. 27b, Str. 38) and dwellings with suspended floor. The houses are organized along streets or depending on the defense systems. The amount of ceramics is huge (several hundreds of thousands of fragments), dozens of reconstructable vessels, ceramic burning kilns (fig. 27h), traces of metallurgy.

S.A. Luca was right to compare it to a city (Luca 2012). The evolution of the Turdaş dwelling was sometimes stopped or changed by the arrival of the Foeni group (4550 BC) in the area, which gave birth to the Petrești culture. The same thing happened at Zau de Câmpie, but also in the south in other cultures. The dynamics of dwelling in Turdaş are impressive. The amount of wood needed to build the houses and palisades is huge. Besides, the forest felling in the southern area had consequences: the torrents of water flooded the eastern area, which became a marsh. The southern area was eroded by a brook, which then moved west between areas B and C. Besides some palisades in the southern area many elongated pits with burned edges were discovered, where we believe the pots were burned.

C14 data for the Late Neolithic and Early Copper Age

those seen by us is Pit House 3 = C405, above which is a surface dwelling L3 from the period of the Turdaş II or III stages; *in-situ* materials were few, and those at the edge of the feature were mixed with others (At Turdaş in the zone C, where we have researched some complexes, we have found that in the dwellings there were always orders (only a few hundreds of ceramic fragments resulted from the dwelling and pits), and the broken vessels were stored between the large dwellings, the real crowds of materials thrown without any order. Similar situations we found in Scania in the L14 area in the 2016-2017 research; in L14 area were 2800 ceramic fragments, with those from the edge 3250, and in the household waste areas approx. 4,000 registered plus unprocessed, more than 2000 at a general appreciation. At Gura Baciului, about 5,000 fragments came from complexes and another 11,000 from outside or were found over abandoned dwellings as household waste. We also have other statistical data from Ruginoasa and Iclod, where the abandoned ditches were more shards than in dwellings).

Herpály (fig. 29)

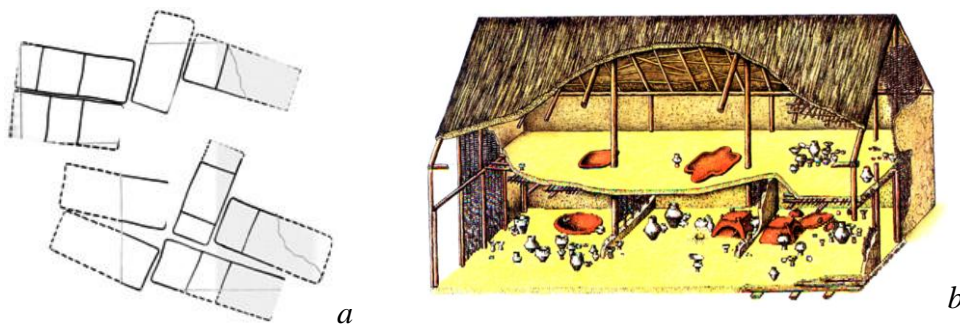
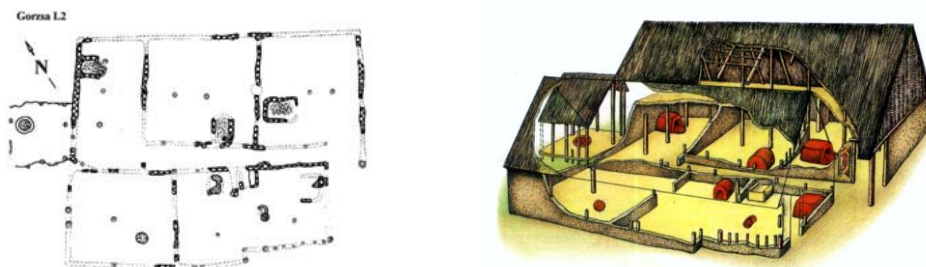


Fig. 29. Herpály, Tisza – Herpály culture, level 7-8, plan of the researched areas and reconstruction of one of them (L11), apud Kalicz, Raczki 1987, p. 110.

In the tell of Herpály, investigated by N. Kalicz and Pál Raczky with their teams (Korek, Pattay 1956; Kalicz 1982; Kalicz, Raczky 1987; Kalicz *et alii* 2010; Raczky 1988; Raczky 1990; Raczky 1991; Raczky 1992; Raczky 1992a; Raczky 1994; Raczky 1995; Raczky 1995a; Raczky 2002 a.s.o.), there is an area where large dwellings have been discovered, some with upper floor, with monumental pieces of architecture and art, with quality kilns, with hearths, and altars for sacrifices, with a very large number of pots (over 80). Worth noting is the architecture of the six levels of habitation (levels 5-10) (Kalicz *et alii* 2011, p. 14 and next). Magnetometric prospects and surveys

showed the existence of defense ditches (Kalicz *et alii* 2011, p. 12). There are Petrești imports.

Gorzsa (fig. 30)



a.

b.

Fig. 30. Gorzsa, L2, level 10, apud Horváth 1987, p. 38.

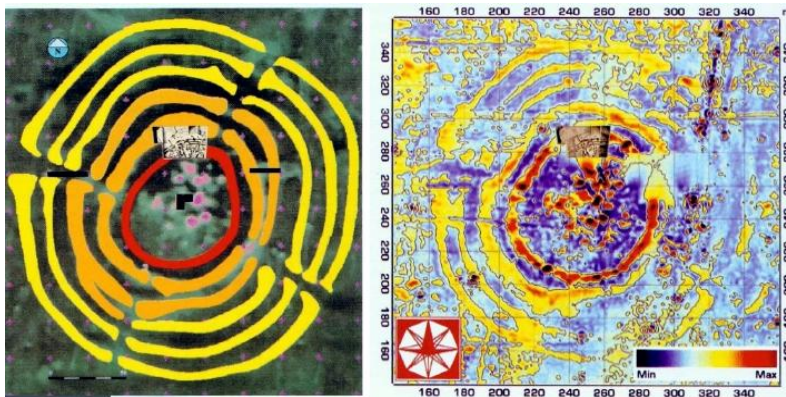
Another systematic excavation by Ferencz Horváth and his teams (Horváth 1982; 1987; 1989; 1991; 1992; 2000; Horváth, Paluch 2005 a.s.o.) is in Gorzsa and in the area, where the research studied fortification systems (ditches and palisades), a special architecture with *blocks* of dwellings, some with upper floor or suspended floor, community and household sanctuaries (idols on thrones, monumental altars) with hundreds of complete and reconstructable vessels, with many other objects (idols, tools, weapons).

The residential features are quite special. Often inside the *block* of dwellings there are corridors that allow access to several rooms, some of which have suspended floor, and in some cases they also have an arranged attic. The ovens are cylindrical and have a trapezoidal canopy (fig. 30). Sometimes there are also simple ovens. House 10 also had a porch at the entrance. All these elements are found with a different arrangement at Parța and sometimes in the Vinča culture, where there are very few reconstructions (Jovanović 1991). These characteristics confirm dynamic communities with a proturban evolution of the architecture.

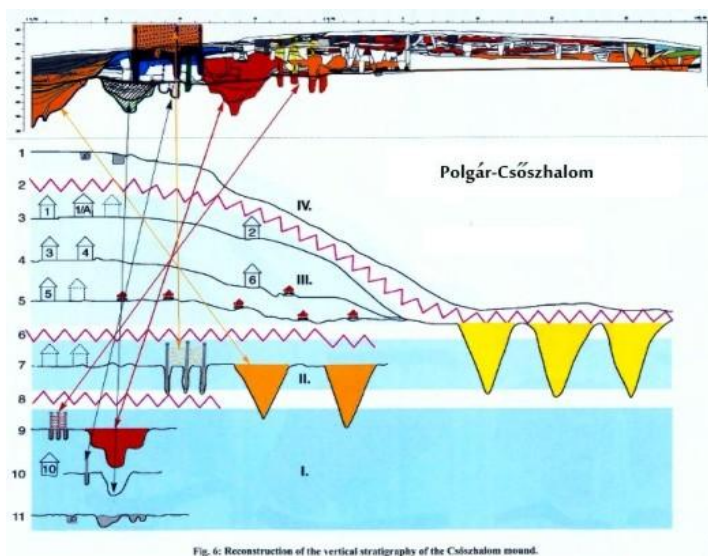
Polgár-Csőszhalom (fig. 31)

The magnetometric prospects and rescue excavations at Polgár-Csőszhalom, as well as in the area, made by Pál Raczky with his teams and collaborators (Raczky 2002; Raczky, Anders 2009; Raczky *et alii* 2002; 2007; 2014; 2015), confirmed the existence of an acropolis and a vast settlement in the neighborhood. Within the acropolis, four major stages of

evolution with 11 levels were reported, of which three periods of hiatus (Nos. 2, 6, 8). Each of them has one or three large moats and 1 to 3 palisades (fig. 27, level 9 and 7 filled with dirt). We notice that the fortification is smaller, just like at Iclod, and in the next stages it is also of *rondel* type. But unlike at Iclod, here remains an acropolis, and in parallel there is a vast settlement outside.



a.



b.

Fig. 31. Polgár-Csőszhalom: a-b, surveys and reconstruction of the six defense systems; c, stratigraphy, apud Raczky *et alii* 2007, fig. 2, 6 and others.

Several fortification systems around the acropolis, the dwellings with special architecture, some with upper floor, likes at Herpály, show that in Hungary there is an evolution of architecture towards urbanism. C14 dates are between 5050 and approx. 4500 BC (Raczky *et alii* 2014, fig. 10), contemporary with Iclod IB-III (fig. 28).

Two other settlements from the late Neolithic (Polgár-*Cibo-hat*, -*Kigyós-domb*) (Raczky *et alii* 2014, fig. 3, no. 35, 37) gravitate around the settlement. The Vinča C and Foeni movement interrupts urban development bringing technology and interest in copper and then gold processing. In the south, in Vinča D and Sălcuța – Gumelnița, as well as in the southern groups (Kodžadermen-Karanovo VI) similar architectural and urbanistic developments occur. In many places acropolises appear, and around them large sites evolve. The appearance of an elite is evidenced by the discoveries of graves with gold in the Varna area.

Țaga

The settlement from Țaga belongs to the Late Neolithic, but its last level makes the transition to the Copper Age civilizations determined by the Iclod-Petrești synthesis. The settlement is important for the archaeological research in the Transylvanian Plain (fig. 30a), where several settlements belonging to the Zau culture are mentioned in the archaeological repertoires.

However, the cultural attributions are unreliable, as they are most often declared Neolithic dwellings based on ceramic fragments of red, yellowish, brown ceramics with simple shapes (bowls, pots, storage vessels), stone axes, and carved tools.

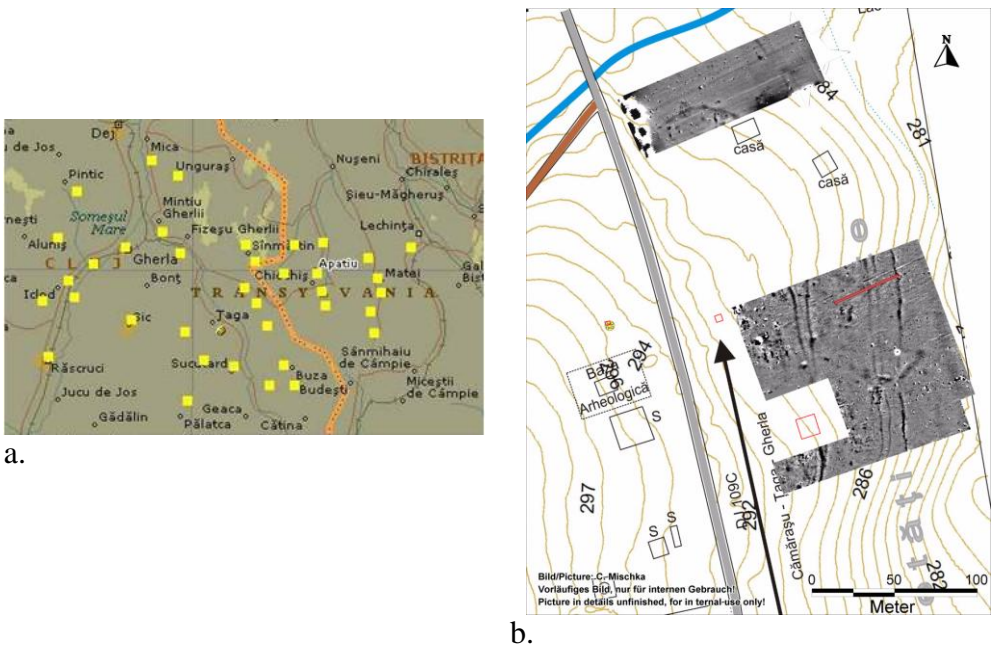


Fig. 32: a, Late Zau settlements in the High Plain of Transylvania; b, Țaga, magnetometric surveys (Mischka) on the eastern part of the site.

Based on these descriptions, they may belong to the Zau culture in different phases, especially since the materials are from fortuitous discoveries, rarely traces of painting are mentioned, but they are not described or published. Țaga is at the center of this area, Iclod at the western boundary, but from there begin other cultural groups related to Iclod (Suplac, Pericei, etc.).

The magnetometric prospects in the southern part of the settlement (limited due to gas wells) associated with surveys, systematic excavations on the surface, allowed the interpretation of some data about the defense systems. There were bastions or towers at the gates or along the walls, simple palisades, double palisades, palisades with round road. Some were verified through excavations.

Analyzing other surveys too, we have noticed similar situations at Iclod, Fundătura, Zau.

On the north side



Fig. 33. Țaga: a, N and W, location of the moats; b, points with fortifications; c, the great moat – N.

The ditches 1-3 (fig. 33a, c-e) were observed and surveyed. Ditches 2-3 have been rebuilt, but they were smaller. Ditch 1 was deeper, it had a rebuilding phase (a gas pipe was on the way). The ditch continued north.

The east side

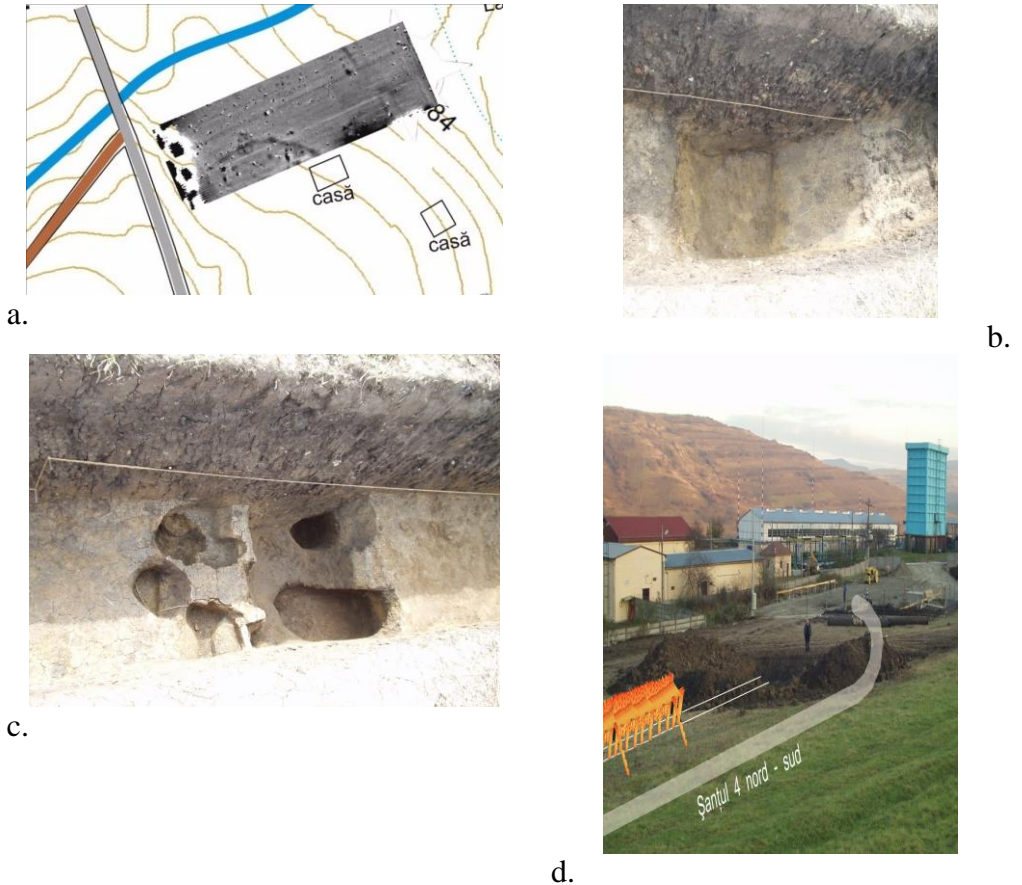


Fig. 34. Țaga, surveys by Carsten Mischka: a, route with the gate of moat 4(with tower); b, moat 1; c, palisade with round road along moat 4, centre-east area; d, palisade and route at centre-south.

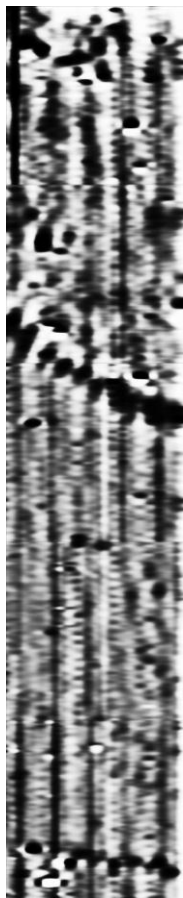
On the east side there are two gates: one to the west, another to the south. The latter was investigated. In that area there were also the largest magnetometric anomalies, caused by pipelines and gas wells. Ditch 4 enclosed a smaller area, but wider in the N-S direction. Inside at approx. 6-7

m there was a double palisade. In the central area supporting pillars were found from a round road on the palisade (fig. 34b).

Ditches 2-3 most often double ditch 1. A ditch so large and obvious in the surveys was reported at Iclod (fig. 23a-b, e); there, too, in some places a double palisade was found.



a.



b.



c.

Fig. 35. Țaga: a, centre, moats and palisade with round road; b, survey with verification excavations: C1, Double palisade, C2, Moats 2-3.

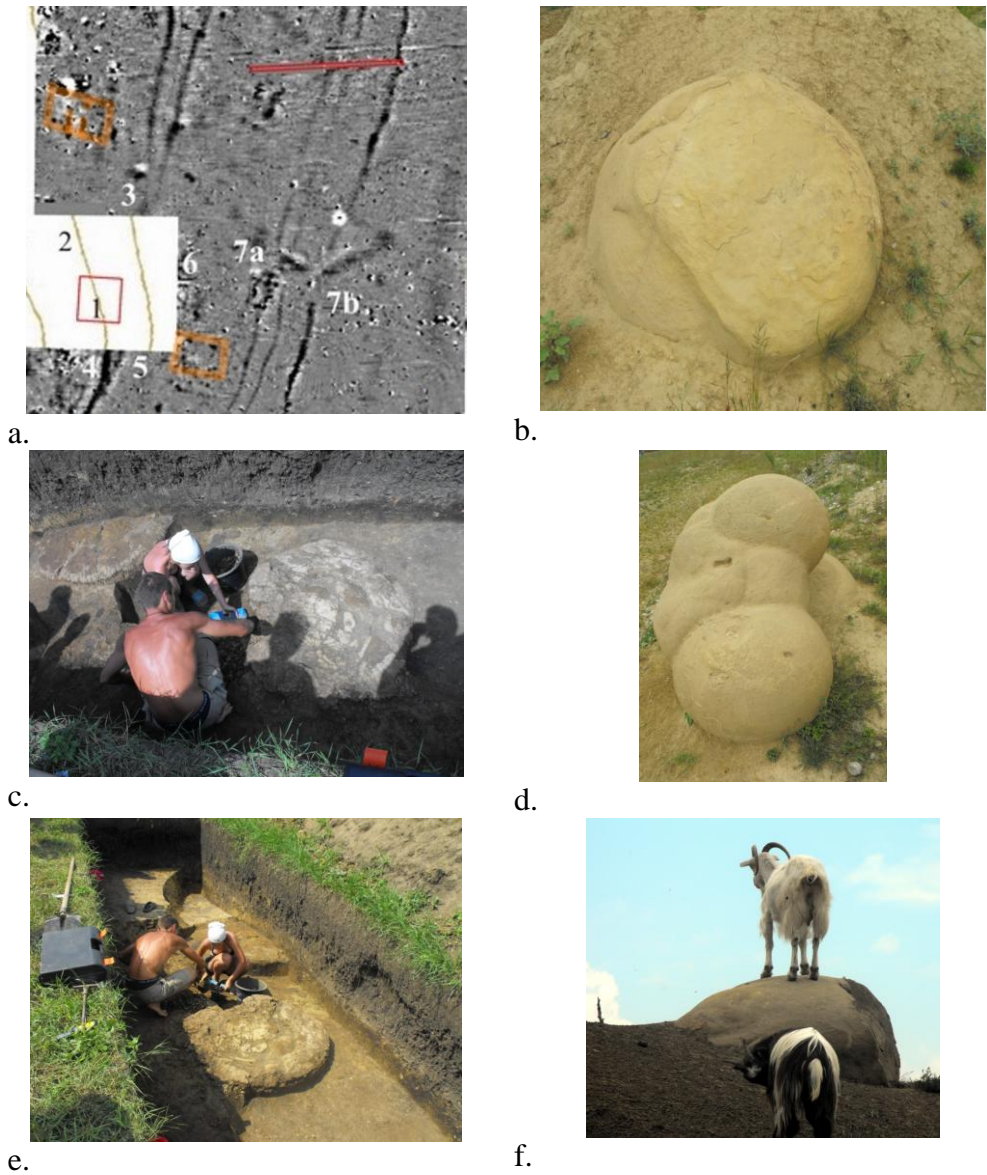


Fig. 36. Ҙага, The gate bastion.

The double palisade with round road was reported in three situations, two on the east side (fig. 35a) and one on the south side (fig. 37c). The most impressive discovery at Ҙага is a gate bastion (see the survey anomalies, fig. 36a, No. 7a), with stone foundations for groups of poles (fig. 36c, e). At the

base of a group of poles there were sections of boulders (36c, 36e), originating from nearby, from the NW of the site (fig. 36b, 36d).

On the west side, the ground was leveled to make several cooling and storage tanks for the gas. With that occasion in two places, a larger ditch (ditch 1) was investigated alongside two other (ditches 2 and 3, fig. 37a-b). The ditches were rebuilt three times, and in some cases the bottom of the ditch was moved (fig. 37b).

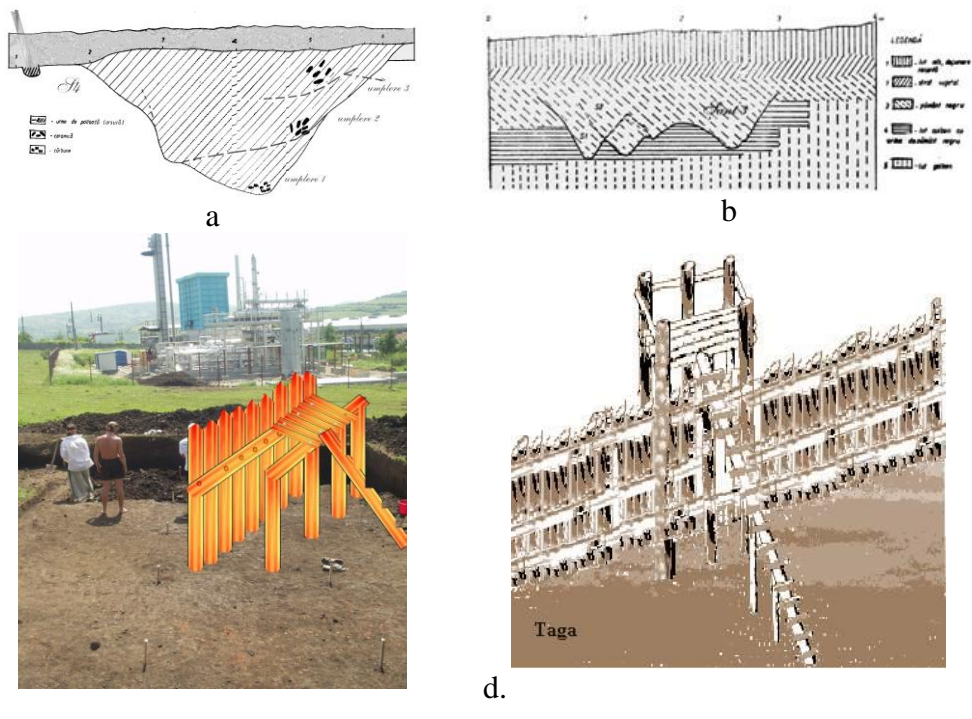


Fig. 37. Țaga, west side: a-b, moats; c, palisade near moat 4; d, palisade with the(reconstruction). Later, in that area, a pump house was built, on which occasion we found on a palisade six holes and we reconstructed a palisade tower (fig. 37d)

The rescue excavations caused by the construction of the gas installations at the neighboring station allowed the gathering of data on the route of the fortifications. The surveys allowed the verification of the information.

For Țaga we have a number of surveys, but we have no clear clues about the first fortification. There are some palisades that cut through later features, others could not be dated. We do not have C14 data for Țaga, the reports are just stratigraphy compared to Iclod and Zau de Câmpie. In the earliest features there is incised ceramic similar to Iclod IB (as it appears in Cemetery A, but also in some dwellings in Iclod II).

In Țaga III there are Petrești imports and an Iclod-Petrești synthesis or some features with Precucuteni I materials, as well as in Iclod and Fundătura. But for Precucuteni in Transylvania there are no C14 data, such materials are only in unreliable stratigraphic relationships with Turdaș II-III, Iclod II-III, with the Iclod-Petrești synthesis at Fundătura, and at Țaga.

The dwellings

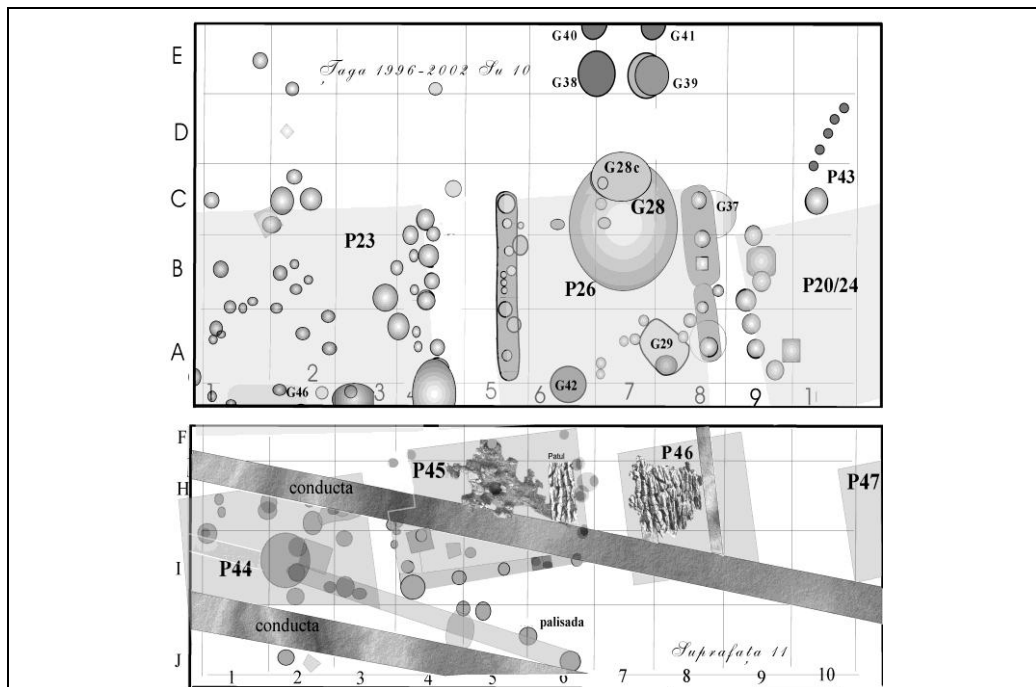


Fig. 38. Țaga, plan of the two researched areas, Su 10 and Su 11.

In the researched areas we found dwellings starting with pit houses (G28), dwellings with walls raised on ditches in which the poles were installed (fig. 38, P26), from daub and poles (fig. 38, P46) with beds inside

(fig. 38, P45), with a well-preserved structure that was reconstructed with the help of Dr. Ioan Cojocaru, first graphically (fig. 39b), then effectively, using the pits from the structures (When digging new pits for reconstruction, other postholes were found, unobserved during the excavations) (fig. 39b, 39c below).

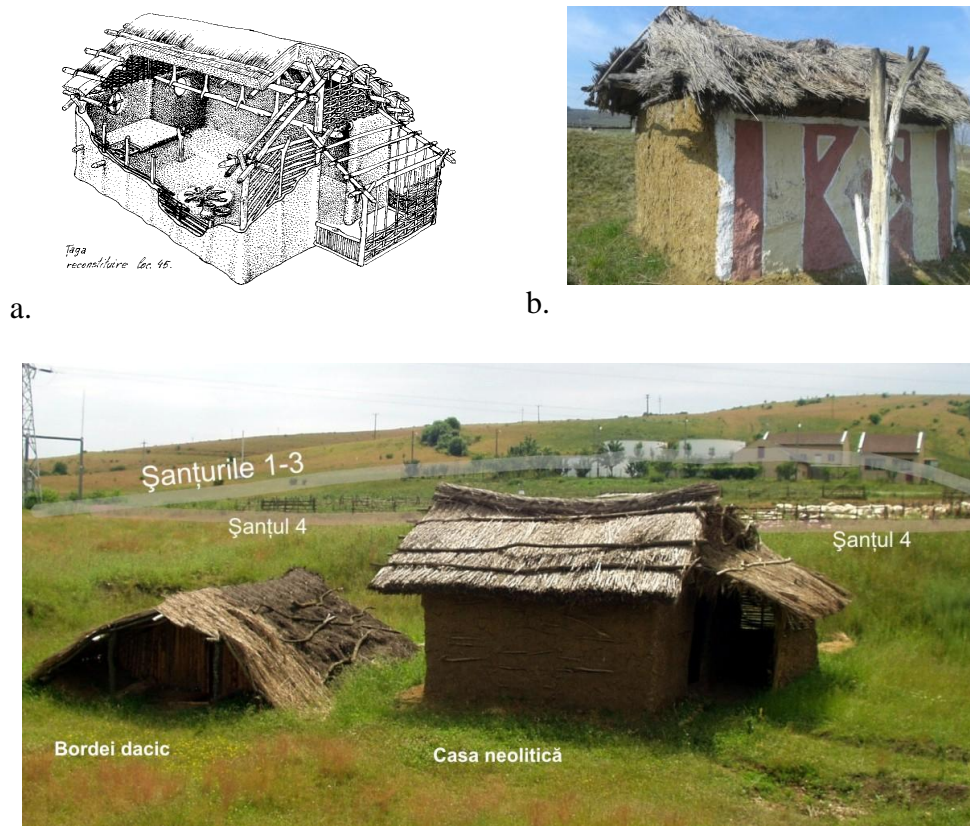


Fig. 39. Reconstructions in the Țaga archaeological park; Neolithic house and Dacian pit house (under Moat 4).

The prospecting shows the presence of large dwellings similar to those of Iclod, Fundătura and Turdaș, the ones from Țaga being from the late phase, from the time of the Iclod-Petrești synthesis. The dwellings with elongated, large, sometimes stepped pits occur in the Țaga II level. In the Țaga III level, the community efforts are linked to the fortification systems. They reflect the same situation as in Turdaș, the communities here being marked by several

southern migrations defined by Gh. Lazarovici as “*the Vinča C shock*”, consisting of three successive migrations: Turdaş, Vinča C, Foeni (see also fig. 28). After the destruction of the fortification system, at Țaga one can find the presence of pit houses outside the defense system, with poor quality ceramics, marking a retardation process. Such processes were also observed at Parța, Zorlențu Mare and Iclod, where we conducted statistical analyzes on archaeological materials.

Several complexes were investigated, in one of the campaigns in the area of house L15 a total of 2,474 fragments (26%) were recorded in the database out of a total of 10,220 fragments. In the categories predominates the semifine ceramic 67%, followed by the coarse 20% and the fine 13% (fig. 40). This shows a preoccupation of the community for functionality, luxury being of secondary importance. The vast amount of pottery reflects the dynamism of the community.

Fig. 40. Țaga, ceramics.	Fine	Coarse	Semifine	Sum	Percent
Sum	1335	2025	6860	10220	
Strat	803	1330	4569	6702	65.571
L15a	227	146	903	1276	12.484
P16	91	52	402	545	5.332
zL15	57	72	362	491	4.804
L15b	38	314	115	467	4.569
DITCH	69	35	345	450	4.403
L15	45	58	137	240	2.348
L2	5	18	24	47	0.46
Percent	13.061	19.812	67.117		100
Total L15, 2474 ceramic fragments, 26%					

Conclusions

Definitions of urban settlements (from DEX or used by archaeologists) have been given according to the current concept of city. From our knowledge, people organized themselves over time as it fitted them best, and the community was ruled by elites, and such elites have always existed, since the Paleolithic.



Fig. 41. Ҙаға. East Bastion: a, in situ; b-c, reconstruction.

It is believed that at the base of the Neolithic way of life there were elements from the Epipaleolithic, eloquently illustrated by constructions such as the Tower and the monumental wall of Jericho (13th-11th millennia BCE). The wall was designed to protect the inhabitants from the sandstorms, but at the same time it served to observe and defend against enemies. Of course, an evolution of two millennia, two millennia and a half occurred until Göbekli Tepe and Nevali Çori in the PPNB (Hauptmann, Özdoğan M. 2007, p. 29) and two more millennia to the *Stone Age City* – Çatal Höyük, as J. Mellaart (1967) called it (Mellaart 1967, apud Hauptmann, Özdoğan M. 2007, p. 29). During these periods of the *Fertile Crescent*, in the area of the salt lakes of Cappadocia, in the Levant, in northern Mesopotamia, the process of neolithization with urban elements took place: residential districts, monumental constructions, cultic constructions, monumental art, workshops, social differences, hierarchical structures, prestige items made of obsidian, flint, pyrotechnic knowledge used to process copper jewelry, commercial exchanges (Anatolia, Levant, Cyprus), if we were to mention only some of the innovations, although they are much more numerous. These are the basis of the *Neolithic Revolution* (Hauptmann, Özdoğan M. 2007, p. 28-30), which, as one can see, lasted for millennia, benefiting from an optimal climate between approx. 8200-6200 BC.

In the Carpatho-Danubian region at that time there were cold periods, especially during the period of optimal climate in the *Fertile Cescent*. The end of the optimal climate in the aforementioned areas coincides with the last cold period in our areas (6200-6000 BC).

This is where the Anatolian Chalcolithic begins (Hauptmann, Özdoğan M. 2007, p. 28), and we specified new migrations defined as the Balkan-Anatolian Chalcolithic (Chalcolithic Balcano-Anatolian – CBA – Lazarovici Gh., Nica 1991; Lazarovici Gh. 1993; Lazarovici Gh., Székely 1990-1994, p. 6). At this time, the first fortifications appear in our regions, and with them an organization that evolves towards urbanism. We believe it was the spread of technological knowledge in architecture, art, tools in some centers, but doubled by an intensified exchange.

These fortifications need to be defended, which leads to a social organization. The gates, the towers, the walls must be guarded during the day and night for the safety of the community, otherwise fortification alone is not enough. At Parța, in a small square in front of the sanctuaries, there was a large hearth that served to maintain during night-time a fire for emergency situations. Once the fortifications were erected, the idea of pomposity, of impressing the enemy appears. For example, at Țaga a real wooden bastion was built, with bundles of trees lined up in rows at the edge of the gate, and above was the Gate Tower.

The construction of temples/sanctuaries supposes a religious organization based on rituals: at Balta Sărată (in Vinča B, L18) we excavated a construction belonging to the sanctuary of a priestess, with tasks related to grinding, water and rain cult (when lifting the construction, 7 grinders were placed under the floor, while abandoning other priestesses put 6 grinders face down over the grinder in the house: Lazarovici Gh., Petrescu 2001; Lazarovici Gh. *et alii* 2003; Lazarovici C.-M., Lazarovici Gh. 2006, p. 168-174, fig. IIIa.54-58; Lazarovici Gh. 2009b); at Parța we found temples, domestic and community sanctuaries, as well as in the Cucuteni culture, Gumelnița culture, and others (Dumitrescu 1970, p. 5-24; Dumitrescu 1974, p. 170-171, 474; Enea 2008; Berciu 1956, p. 506-511; Aldea 1974, p. 40-47, fig. 1-4; Paul 1992, p. 107-108; Monah 1997, p. 34, n. 49; Monah 2001, p. 181; Lazarovici C.-M. *et alii* 2009, p. 110, fig. 3b; Mateș 2010, p. 214-215, fig. 206, p. 242-243; Lazarovici C.-M. 2004; a.s.o.).

Increasingly numerous magnetometric surveys, with the most spectacular results, show that in almost all settlements where surveys were carried out, there were fortification systems.



Fig. 42. Cerkvine: a, magnetic surveys, with the sanctuary marked (red); b-c, cultic feature in situ with masked characters carrying axes and clubs (apud Crnobrnija *et alii* 2009).

In Crkvine, in the Late Neolithic, Vinča C-D (less than 50 km from the Vinča-*Belo Brdo* site), is a communitarian sanctuary located in the vicinity of the fortification system on the west of the site (fig. 47a, red mark). On an oven in a building were discovered characters with military emblems: weapons (all types of brass axes), scepters, maces (Crnobrnija 2011; Crnobrnija 2014). The characters that hold them have masked figures (with bird's or eagle's beak?), they are part of the same fellowship or rather confraternity. They are grouped around chiefs/commanders, related to the defence of the fortification, or other functions. The exact original number of these figurines is unknown, because the area was affected by a later gravepit. It is one of the most important discoveries about fellowships, conclaves.

In many situations, the dwellings are grouped on streets or around squares, with several fortification systems. In the present paper we have

presented only a few, they are much more numerous, and our interpretations are still early.



Fig. 43. Salt sources in Transylvania.

In the Neolithic settlements from our country, workshops have also been found, that are often specialized in the production of various goods:

- ceramics, Cârcea (Nica 1977, p. 30, fig. 14; Lazarovici Gh. 1990, p. 94, fig. 1-2; Lazarovici C.-M., Lazarovici Gh. 2006, p. 114, fig. II.66a; Lazarovici Gh. *et alii* 2018; Lazarovici C.-M. *et alii* 2018) ;
- perforated axes, Lipova, Rupea 7 (Luca 1987);
- flint tools, Mușat-Orlea, Cândești (Nicolaiescu-Plopșor 1960; Bobi 1978);

- various crafts (Lazarovici C.-M., Lazarovici Gh. 2007, p. 114, 127).

They produce objects and goods for other neighboring, secondary, seasonal settlements too, that revolve around the main settlement, often mentioned above.

The commercial exchanges throughout the Neolithic in the Carpathian-Danubian region were from the large settlements that had areas with raw material sources nearby. It is primarily the obsidian from northern Hungary and the SE of Slovakia that arrives in Transylvania, Banat through the Bük culture, but also earlier (Nandris 1975; Lazarovici Gh. 1979, pl. XI.C; Lazarovici Gh., Lazarovici C.-M. 2015a; 2015b; Thorpe *et alii* 1984; Sălăgean *et alii* 1988; Biagi *et alii* 1995; Cârciumară *et alii* 2000-2001; Constantinescu *et alii* 2002; Constantinescu 2008; Simon *et alii* 2003 a.s.o.), most likely in exchange for salt that abounds in Transylvania (springs, lakes). Salt has played an important role in the neolithization of Oltenia, Transylvania, and later of Moldova and Crișana (** 2006; ** 2008; Cavruc, Harding 2008; Monah 2008; Lazarovici Gh., Lazarovici C.-M. 2018 and old bibl; 2018a).

Our answer to the question in the title of this study is YES. It is an evolution towards fair, fair and territory, city, city and territory. But almost everywhere, migration has stopped these processes both in Anatolia and southern Europe.

We reconsider the definition of the city, although in our view the evolution of the analyzed sites is rather *proto-urban*:

1. Complex form of human settlement

Following the descriptions in our study, with the examples we have given, those in Anatolia prove the existence of complex settlements. In Greece, at the time of the Sesklo culture, but especially at the level of the Dimini culture, the plans prove the complexity of the settlement. In the southern regions of Macedonia and Thrace, the tells prove the existence of complex settlements, although they are exhaustively researched only in Bulgaria (we will return to them in the second part – we did not insist here more about architectural problems because this subject was dedicated to more than one works: Lazarovici Gh., Lazarovici C.-M. 2003; Lazarovici C.-M., Lazarovici Gh. 2006). In a future study (Part II of the present) we will return to the issue of Protourban houses of the Copper Age). In the Vinča culture and the civilizations of the Developed Neolithic (the cultures of Banat, Zau, Dudești, Vinča, Vădastra, Szakálhát and others), by analyzing the discoveries from *Vinča-Belo Brdo* (with the most famous stratigraphy and architecture) as

well as Parța, Zau, Iclod, Turdaș, Gorzsa, Herpály, Polgár and others, we have proven the complex forms of human settlements.

2. **With multiple edilitary amenities**

We have insisted at every period on multiple public amenities, monumental architecture, imposing buildings (the Tower of Jericho), the stone constructions from the *Fertile Crescent* and Levant do not require comments. Of public interest are the megaron, the tribal house, the squares, the community sanctuaries (Kovács 2016, p. 60-61).

3. **Administrative function**

These definitions are vague in the Prehistory; during the Homeric period, there is plenty of evidence about settling the community's affairs through social organization, collective assemblies, debates in public squares, the needs of the community water, territory, imposed rules, customs imposed by the psychology of human communities through tradition and adaptation to the social needs of the community in its development. If we look at the Sumerian sources, we see how human communities were organized as early as that time (Krammer 1962: the first parliament, the first tax cuts, the first sentence of a court, the first school, the pharmacopoeia, the plow almanac, the curtains, etc. of the written ... but how many have remained unwritten....; Hole 2002).

4. **Industrial**

If we think of the efforts of carving huge columns with figures in bas-relief, with signs and symbols from PPN, of the huge quantities of stones, wood for fortifications, bastions, palisades, it is clear that specializations have developed and work has been divided according to collective needs; the workshops, the huge quantities of pottery, if we only think about Turdaș, Gorzsa, Polgár and others, as mentioned above, suggest the presence of specialized craftsmen; if we look at the Stubline-Crkvine prospecting plan, to give a single example, it illustrates the need to meet necessities (food, supplies, ceramics, tools, agricultural land, etc.).

5. **Commercial**

There is little evidence, but there are findings that indicate their presence: in some settlements, we saw many vessels carried on the back (for the transport of liquids over long distances, especially brine (Lazarovici Gh., Lazarovici C.-M. 2012), necessary for people and animals, for the preservation and keeping of products) or arrangements for the preparation of salt/brine for sale; the flint, the obsidian, later the copper, often defined by archaeologists as imports, may also be the result of exogamous marriages,

which we will soon know the broader senses through the results of DNA analysis.

6. Political

Regarding the Neolithic, we consider the meaning of attitude and activity (of a person, of a social group, etc.) in the field of internal and external affairs. A good example is the one related to the erection of fortification systems, involving lengthy, multi-stage work and even the presence of an elite.

7. Culture, learning (see Sumer)

The artistic masterpieces, countless in the Neolithic, appear as early as the PPN. Let us not forget the beautiful painted pottery of the Cucuteni culture, but no less important than the painted pottery of the Starčevo-Criș, Vinča, Zau, Turdaș, Dudești and Szakálhát groups, the Tisza culture groups (Herpály, Tisza, Polgár-Csőszhalom) etc., made by anonymous artists, who created true artistic masterpieces. But without craftsmen, apprentices, and craft schools, it was impossible for the Cucutenian painted spirals to surround the pot and fit into an artistic whole. We should not forget the signs, symbols, “religious script” that precede the writing of the first kingdoms and empires.

8. **Religious** we add (it is only defined for the metropolis). On religion, we insisted and insist by uncovering cultures with ancient traditions, from the painted sanctuaries of the French-Cantabric art, to the cave art loaded with signs, religious symbols, through which nuclei of myths and legends are transmitted, and no less to the *Danube Script*. This main theme and its various aspects have been debated by us in the seminars and symposia of ethno-religion (Nikolova 2003; *** 2004; Merlini 2005; Merlini 2009; *** 2008a; 2009; Lazarovici *et alii* 2011; *** 2014; *** 2015; *** 2016; *** 2017; *** 2018; Kovács 2016 a.s.o.).

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