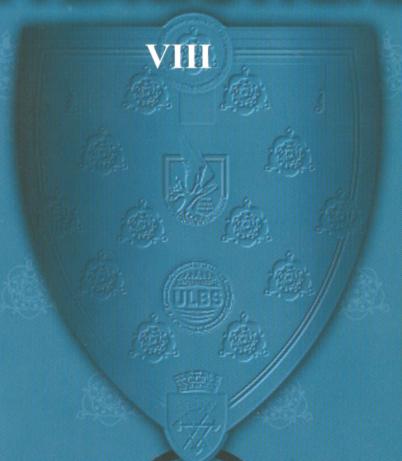
# "LUCIAN BLAGA" UNIVERSITY OF SIBIU FACULTY OF HISTORY AND PATRIMONY INSTITUTE FOR THE STUDY AND VALORIFICATION OF THE TRANSYLVANIAN PATRIMONY IN EUROPEAN CONTEXT

## ACTA TERRAE SEPTEMCASTRENSIS













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### CONSIDERATIONS ON THE TOPOGRAPHY, TOPONIMY AND SECTORS OF THE COMPLEX OF PREHISTORIC SETTLEMENTS FROM LIMBA<sup>10</sup>-OARDA DE JOS (ALBA COUNTY)

Marius CIUTĂ Romanian Police of Patrimony, Alba Iulia, Romania

**Keywords:** Neolithic, Copper Age, Bronze Age, Iron Age, Limba, archaeological excavation

**Abstract:** The paper deals with the complex problematic of the results of the more than 50 years of researches on the prehistoric settlements existing between Limba and Oarda villages, situated along the first terrace of the Mures River, around 2000 x 50m. After 8 years from the last excavation, the author is decided to reopen the scientific researches in this ensemble of prehistoric archaeological sites, rich in the deposits of the human activities during from the early Neolithic to the medieval times. The medium thickness of the archaeological layers is around 2,5 m, proving a very intensive human habitation, especially in the Neolithic and Copper Age, but also in the Bronze and Iron Age period. After the description of the geo-morphological characteristics, the author presents all the sectors (points) of the ensemble, the topographic coordinates, particularly the stratigraphic successions of the cultural layers. At the end, is presented a brief history of archaeological researches, field and systematical, the actually stage of knowledge's about the evolution of the human communities and the general coordinates of a new archaeological project, using modern methodologies and techniques of research.

#### Argument

The imminent debut of some large investment projects in the infrastructure of Alba County (like the construction of the Sibiu-Arad highway, of the Sebeş-Cluj expressway etc.) the sprawling of areas destined to housing constructions and the necessity to update the *List of Historical Monuments* (2004), require the release of some necessary clarifications related to some of the archaeological sites that are being systematically investigated and which, under the present circumstances, are situated in the way of the above mentioned investments, and therefore require

<sup>&</sup>lt;sup>10</sup> At the time of the first archaeological researches the name of the locality was the original one: Limba (Berciu, Berciu 1949). From reasons that are not worth mentioning in the present paper, starting with the seventies and until 1989 the place was named Dumbrava, and after this year it regained its former name. Therefore in the Archaeological Repertoire of Alba County (1995) and in the List of Historical Monuments (LMI 2004), the place (and the archaeological site) can be identified under the name of "Dumbrava" (RepAlba 1995, 92-93; LMI 2004, Monitorul Oficial al României, year 172 (XVI), nr. 646 bis, 16 July, 2004, page 8 – nr. crt. 66, cod LMI AB-s-B-00035).

archaeological research in the form of preventive excavations with the aim to clarify their archaeological status<sup>11</sup>, according to Romania's current law<sup>12</sup>.

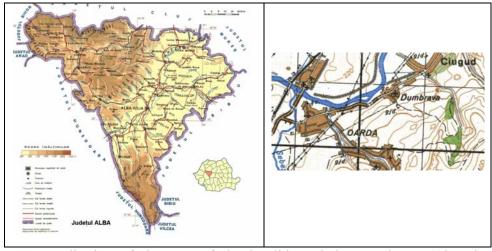


Fig. 1. Localisation of the area of the localities Limba *Dumbrava* (Ciugud commune) and Oarda de Jos (Alba Iulia) within Alba county (a) and a detail of the physical and administrative map of the county (b).

The prehistoric (Neolithic) site from Limba, as it is known in the specific literature<sup>13</sup>, will definitely be one of them. Therefore, in the following we shall try to introduce some punctual specifications which are necessary in order to understand the actual on site situation (as it is currently known, almost 8 years

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<sup>&</sup>lt;sup>11</sup> That is why, as a researcher who was responsible for 7 consecutive campaigns (1995-2001) for the coordination of the on-site research (in the frame of the general systematic investigation of the archaeological site from *Limba*), we feel obliged to add these new specifications related to the topography, toponymy and delimitation of the complex of archaeological sites that is generically known as *Limba*. Even more so as, in spite of the release of numerous research reports as well as studies and articles (see the bibliography of the present article), there are still regrettable confusions in the specific Romanian literature related to the delimitation and cultural affiliation of those archaeological deposits.

<sup>&</sup>lt;sup>12</sup> Ordinance 43 from January 30<sup>th</sup> 2000, republished, concerning the protection of the archaeological patrimony and the declaration of some archaeological sites as areas of national importance (art. 5, paragraphs 4-6, 14-15). Law 422 from July 18<sup>th</sup> 2001, republished, concerning the protection of historic monuments (art. 3, 7-11) and Law 182 from 2000, republished, concerning the protection of the mobile cultural patrimony.

<sup>&</sup>lt;sup>13</sup> An error that needs correction from, the very beginning is that during the systematic archaeological investigations of the last decade, some sectors of the ensemble mentioned were designated as belonging to the locality of *Limba* (*Bordane*, *Vărăria*, *Şesu Orzii*), while the later thorough analysis of the administrative organization proved that they actually belong to the boundary of the locality of Oarda de Jos (at that time still a separate locality) (see the bibliography of the 90s.).

since the completion of the last systematic investigations done from 1995-2001<sup>14</sup>). They are determinative for the way the large area of this *ensemble of archaeological sites* will be approached thorough the means of archaeological investigations, irrespective of their character<sup>15</sup>.

#### Location and morphological and geographical characteristics

The station known generically under the name: *the archaeological site of Limba*, is situated in the south-west of Transylvania, on the middle course of the Mureş river, in the area delimitated by the river's thalweg. The area of the previous archaeological investigations lies on the left bank of the Mureş river, between the localities of Limba (Ciugud commune) and Oarda de Jos (suburb village of the town of Alba Iulia), on both sides of the county road (D.J. 107C) that links the two localities, at about 3.5 km south-south-east from the administrative centre of Alba Iulia. The sites, as we are speaking of several distinct sectors (points) of the archaeological ensemble – individualized by toponimy but also by the distinct characteristics of the successive archaeological deposits, conferring them therefore the status of proper sites – occupy a vast area, the entire surface of the 1<sup>st</sup> terrace of the Mureş river actually, in the place where the river changes its general flowing direction from south to the west in an ample meander. (fig. 1).

In a broader meaning, the perimeter of the prehistoric settlements lies on the 1<sup>st</sup> terrace, having a wide and smooth aspect, situated in the interior of the area of confluence of the Mureş and Sebeş rivers, in the "contact zone" of the Secaş Plateau and the Mureş Valley, in its most western sector, delimitated by the two above mentioned rivers, between the western extremity of Limba (Ciugud commune) and the eastern part of Oarda de Jos (today a district of Alba Iulia).

Having the aspect of a wide plain, slightly precipitous to the north and north-east, the area is characterized by the fundament of a relatively high and well profiled non-floodable terrace, on the east-west direction, fully exposed to the sun, fragmented by numerous creeks and/or torrents that cross it radially, by strong water springs which are to be found especially in the contact area with the river meadow and the alluvial plain of the two large rivers, by very fertile soils, and also by the presence of the western hills and knolls of the Secaş Plateau (*Coasta Barbului and Hoanca Chişoii*), which dominate it in smooth slopes from the south to the east (image 2).

The course of the Mureş river, strongly pushed back to the east and south-east in this sector by the Ampoi river – which runs downstream from the west, from the Trascău Mountains and Ore Mountains, bringing with it massive quantities of alluvial

<sup>15</sup> Starting with 2009, the responsibility of coordinating the scientific investigations in the *ensemble of prehistoric sites from Limba-Oarda de Jos* was assumed by a team from "Lucian Blaga" University in Sibiu, under the coordination of Senior lecturer PhD Marius-Mihai Ciuta.

<sup>&</sup>lt;sup>14</sup>Done under the coordination of Prof PhD Iuliu Paul by researchers from the Department of History and the Centre for Pre- and Protohistoric Researches of the University "1 Decembrie 1918" from Alba Iulia, within C.N.C.S.I.S. projects of scientific research. For the preliminary results see the research reports from the bibliographical list of the present paper.

deposits and flows into the Mureş river near the north-eastern extremity of the archaeological site – and to the north by the course of the Sebeş river, influenced by the slightly slope of its alluvial plain, cause these two rivers to "dig" (erode) permanently the basis of the terrace, shaping it more and more clearly profiled, due to its geological fundament of sandstone and clay, typically for the entire western frame of the Secaş Plateau, made out of gravels and wind deposits of the *loess* type.

Its excellent position, as well as the advantages given by the above mentioned characteristics and by the abundance of fertile soils and useful mineral resources (gravels, sand, wood, clay etc.) turned this wide, fragmented terrace since the earliest times into an extremely favorable ecosystem for the human habitat. In pre- and protohistory, the terrace proved to be a true area of concentration of human inhabitance, which is proved by the systematic archaeological investigations done here in the last years and by discoveries, accidental or following surface investigations, done in the last 50 years<sup>16</sup>.

The administrative delimitation among the localities containing the sectors belonging to the ensemble of archaeological sites we are interested in lies on the thalweg of the "Pârâul Şcoalei" creek (fig. 6).

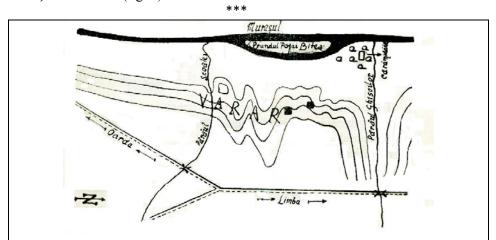


Fig. 2. Topographical blueprint of the *Vărar* sector publiched by D. and I. Berciu (Berciu, Berciu 1947). The orientation of the north is wrong by approx. 60 degrees to the east.

As we mentioned earlier, the ensemble of archaeological sites generically named in the specific literature as "Limba", is divided into several distinct sectors, built as fragments of terraces along the exterior area of the active meander of the Mureş river, delimitated by the presence of some distinct geological and morphological elements – usually small creeks – as well as by anthropic, artificial elements (the county road, bridges etc.), and is reflected by the specific toponymy (see fig. 3). Even more, being so wide, it overlaps the boundaries of several localities (Limba,

<sup>&</sup>lt;sup>16</sup> RepAlba 1995.

Oarda de Jos), which confirms once again the generic character of its "official" name.

From the administrative and territorial point of view, the entire area which is characterized by prehistoric, protohistoric, classical and medieval archaeological deposits belongs to the locality of Limba, and therefore to the commune of Ciugud (sectors: În Coastă, Vărar, Coliba Barbului), and to the locality Oarda de Jos as well, the later belonging to the town of Alba Iulia (sectors: Vărăria, Bordane, Şesu' Orzii, Şesu' Orzii-Balastieră), therefore the term "the archaeological site of Limba" is an improper one, but, we repeat, a generally accepted one by convention.

The successive sectors (points), following the course of the Mureş river downstream, from north-east to the west, are as follows:

Limba - În Coastă (code RAN 1106.05, latitude: N 46<sup>o</sup> 02<sup>o</sup> 333 <sup>o</sup>, longitude: E 23<sup>o</sup> 35<sup>o</sup> 530<sup>o</sup>, altitude: 238 m; date of first investigation: August 1997, I. Paul, M. Ciută).

At the western exit point from Limba, near the road that leads to Oarda de Jos (D.J. 107C), before the bridge across the Ghişoilor (Chişoilor) creek, that flows to the north into the Mureş river, lies an upper promontory (fragment of a terrace) relatively triangular in shape (with sides of approx. 30x50x50m and a peaked top to the south-west), having the aspect of a relative plane terrace, slightly inclined to the north and north-west, dominating the entire Limba-Oarda de Jos sector (the relative height against the Mureş river is about 18-19m), advancing slightly towards the Mureş river, like a spur, called by the locals: *În Coastă*.

The toponymy is due to the high aspect of this terrace fragment, as well as to the very abrupt slopes to the north, towards the Mureş river meadow, to the south and west, along the creek and the road that leads down, in parallel, towards the river's meadow.

The point În Coastă lies on the first terrace of the left bank, in the exterior area of the active meadow, being the most upstream situated point from the entire ensemble of sites. To the west, south-west, it meets the terrace fragment (sector) called "Vărar", being delimitated from it by the Ghisoilor creek, dominated to the south and east by the high crest of the Secaşelor Plateau (Coliba Barbului şi Hoanca Chişoii). Right beneath the terrace, to the west, across the Chişoilor creek, in the flood plain, lie the ruins of an old brick factory, from the 40s and 50s of the last century <sup>17</sup>.

The terrace fragment containing the archaeological deposits from the point  $\hat{I}n$  Coastă was used exclusively for agriculture. Considering how it looks like today, it seems that the entire perimeter has been parceled and will be occupied by constructions, requiring therefore archaeological discharge.

On the occasion of the archaeological investigation done here, with the help of a probing of control and stratigraphic information (SI/1997), a distinct archaeological layer was found, having a single level of inhabitancy, belonging to

<sup>&</sup>lt;sup>17</sup> Berciu, Berciu 1949.

the late Eneolithic, more precisely to the Coţofeni<sup>18</sup> culture (second evolution phase), followed by modern deposits<sup>19</sup>.

II. Limba - *Vărar* (code RAN: 1106.01; latitude N: 46<sup>0</sup> 02<sup>2</sup> 256<sup>3</sup>, longitude E: 23<sup>0</sup> 35<sup>3</sup> 413<sup>3</sup>, altitude: 236 m). Date of first site investigation: December 1944 - Şt. Munteanu; August 1947 – probing of control and stratigraphic information D. and I. Berciu<sup>20</sup>; systematic investigations I. Paul, M. Ciută 2000. Sector (site) included in the *List of Historical Monuments of Romania*<sup>21</sup> (2004).

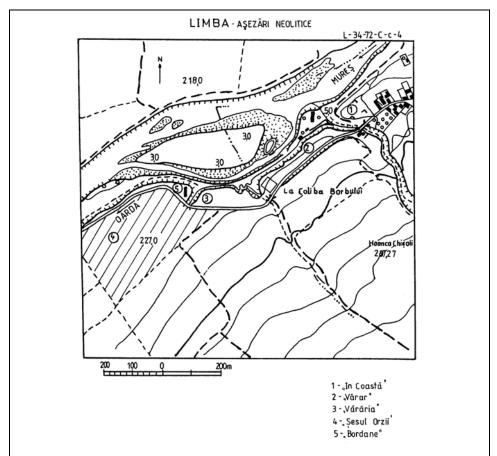


Fig. 3. Topographical blueprint with the areal designated for the investigations of the years 1995-2001 (Paul, Ciută 1996).

To the south-west and downstream from the sector În Coastă, on a lower terrace fragment (with an average height of 16 m above the river), having a triangular,

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<sup>&</sup>lt;sup>18</sup> Paul, Ciută 1998; Ciută, Gligor 1999.

<sup>&</sup>lt;sup>19</sup> Acording to the locals, these are the rests of the stable and dependencies from a local nobleman's farm, from the 18<sup>th</sup> or even 19<sup>th</sup> century.

<sup>&</sup>lt;sup>20</sup> Berciu, Berciu 1949.

<sup>&</sup>lt;sup>21</sup> Vezi nota 1.

prolonged shape, approximately 300 m long and 25-30 m wide, oriented north-east and south-west, delimitated to the south-east partially by the road and partially by the *Coliba Barbului* sector, to the north-west by the Mureş meadow, to the east by the Ghişoilor creek and to the west by the Şcoalei creek, lies the sector of site called *Vărar*. The point's toponymy can be explained by the possible presence in this place of some pits used to slake the lime. It is the best known sector, because the first archaeological investigations from the areal were done here (image 2). From the study of the topographic draught published in 1949 we can notice some morphological modifications that have happened, as well as the places where the investigation units were set Right beneath the terrace there is the eastern end of the former *Prund al Popii Bitea*, formerly an island delimitated by a southern arm of the river Mureş, presently clogged up. O first conclusion, presented initially by D. and I. Berciu, would be that it is possible for a part of the station to have been destroyed here by the river Mureş<sup>24</sup>. It is not excluded also a later anthropic intervention, in order to straighten the terrace's sides, which were much more fragmented at the time.

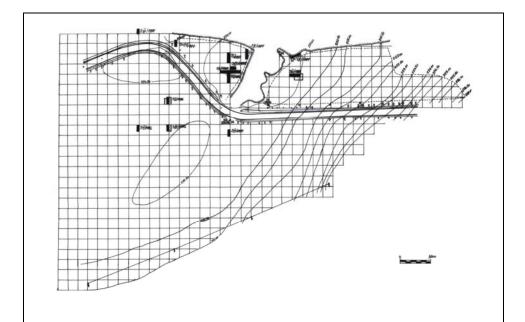


Fig. 4. Topographical mapping of the sectors *Sesu Orzii* (east area), *Bordane* (T), and *Vărăria* (L), (1:500), mapping, landmark system and the investigation units of the 1995-1999 campaigns. The research units of the 2001 campaign are missing.

<sup>&</sup>lt;sup>22</sup> Berciu, Berciu 1949

<sup>&</sup>lt;sup>23</sup> According to the information offered by some of the inhabitants of Limba, the sections executed by the brothers Berciu and St. Munteanu in the 1940s, were done in the western extremity of the terrace fragment, in the place where now stands a private farm.

The Vărar place is a plain terrace, slightly inclined towards north, north-west (towards the river Mureş), crossed by the county road from north-east to south-west and dominated by the crest of the Secaşelor Plateau (*Coliba Barbului* şi *Hoanca Chişoii*). Beneath the terrace there are strong water springs originating in the geological deposits. In the place of the southern arm of the river Mureş that delimitated the island in the past (*Prundul Popii Bitea*), there are now two ponds that are currently clogging up too.



Fig. 5. Satellite image of the surrounding area of the complex of arcaheological sites from Limba-Oarda de Jos, with the delimitation of the area of arcaeological sites (source Google Earth).

Confirming the reports of the brothers Berciu, there are rests of archaeological materials discovered also left to the county road 107C, suggesting that such extensions of the Neolithic inhabitance lie to the south and east, across the county road, on the *Coliba Barbului*<sup>25</sup>. The terrace fragment on which the settlement from *Vărar* lies was used for agricultural purposes. Nowadays, in its south-western extremity there is a live-stock farm<sup>26</sup>. Four houses were built in the year 2008, in the north-eastern half of the sector, and considering the current situation, it seems that the entire perimeter of the sector will soon be covered by such constructions<sup>27</sup>.

<sup>26</sup> The farm was built in the year 1955, from July to September, without archaeological discharge.

<sup>&</sup>lt;sup>25</sup> Berciu, Berciu 1949; Ciugudean 1978.

In this context, we mention that we are waiting for the reports concerning the preventive investigation of the perimeters occupied by these constructions, especially as the probing done in the year 2000 indicated there the layer of a culture of about 1.5 - 1.8 m thick



Fig. 6. Detail of the satellite image of the surrounding area of the complex of archaeological sites from Limba-Oarda de Jos, indicating the main archaeological sectors known and investigated as well as the delimitation of the boundry for the two localities (source Google Earth).

According to the older investigations (1944), the slope, slightly inclined towards north-west, led to land sliding, which makes the culture layer to appear under a level of almost 1 m of slid land, brought probably by the waters. The culture layer is thicker to the north-west, going from 0.75 m near the county road to more than 1.6m at the terrace's margin, near the river Mureş. The culture layer begins at -1.2 m and is 1.6 m thick, reaching occasionally to 3 m depth<sup>28</sup>.

In the profile of the stratigraphic probing from the year 2000 (6x2 m oriented NV-SE<sup>29</sup>), which was done to verify the vertical stratigraphic situation, two strata were found, each one with two inhabitance levels. Chronological placement: High Neolithic (Vinča culture, phases B1 and B1-B2).

The stratigraphy was as follows:

0-0.25 m, vegetal/arable layer with black-grey soil, compact aspect of clay;

0.25-0.65 m (profile ESE) / 0.8 m (profile WNW), layer of deposits resulted from the sliding of the land. The ceramic material was in secondary position and mixed (Vinča and Coţofeni culture);

archaeological deposits – Paul – Ciuta et alii 2001. In the same context it is worth mentioning that across the road, to the south-east, in *Coliba Barbului*, less than 150 m far, a new series of houses are being erected, requiring according to the law, at least a strict specialized supervision.

28 The situation was revealed by the graphic in 1047 (Paulica Paulica).

<sup>28</sup> The situation was revealed by the probing in 1947 (Berciu, Berciu 1949, p. 29, fig. 23) and cinfirmed in the 2000 probing (Paul, Ciută et alii 2001).

<sup>29</sup> The section (S.I/200) was drawn perpendicularly to the terrace's margin, approximately 5 m from it (Paul, Ciuta and collaborators 2001).

0.65 / - 0.8 - 1.6 /- 1.9 m, layer identified with the culture layer, probably with several (2) levels of inhabitance, belonging to the classical phases of the Vinča culture (B1 and B1-B2). There is also a moat shaped at -1.64 m depth. It is oriented NE-SW and has a maximum width of 0.34 m and reached to -1.83 m in depth.

1.65 / - 1.95 (2.00) m grey-yellowish archaeological sterile.

On the other side of the road and nearby, in the point *La Coliba Barbului*, H. Ciugudean did some surface investigations in the year 1972 and discovered *Turdaş* (Vinča!) *ceramics* but also ceramics from the Hallstatt period and the Middle Ages<sup>30</sup>.

III. Oarda de Jos (Limba) - Vărăria (code RAN; 1106.03; topographic symbol "L"; latitude N: 46° 02′ 195″, longitude E: 23° 35′ 160″, altitude: 232-231 m). First investigation 1996-1997 - I. Paul, M. Ciută, systematic investigations 1998, 2001. To the south – west and downstream of Vărar, being separated from it by the Pârâul Şcoalei (which marks also the boundary between the two localities: Limba and Oarda de Jos – fig. 6), delimitated to the south by the road and the Mureş meadows to the north, there is the sector called by the locals Vărăria, which has the form of a lower rectangular terrace. Oriented E-W, 200x30 m wide, the Vărăria sector has a slight slope from east to west, being delimitated to the west by an unnamed season torrent, and beyond it there is a country road making the link between County Road 107 C and the Mureş meadows, in the western area of the old Prund al Popii Bitea, used today by the machines of the upstream ballast querry.

On the other side of the County Road 107 C, following a short plain area belonging to the sector *Şesu-Orzii*, the smoother slopes of the *Coliba Barbului*, *Coasta Stauni*, *Dealul Viilor* stream down to the south. The *Vărăria* terrace is destined entirely to agricultural purposes, its eastern extremity being covered with bushes, and there is for now no imminent danger to the integrity of the archaeological deposits here.

To illustrate the stratigraphy, we shall appeal to section SXIII/2001, the one that proved to be the most complete in the western area of the *Vărăria*, investigated repeatedly in the campaigns of 1997-1998 and 2001.

10x2 m wide, it was opened perpendicularly on the north end of the terrace, leaving a stratigraphic witness of 1 m against the southern extremity of the embankment from 1997 (L1-L2/1996-1997).

The stratigraphic situation is as follows:

 $0-0.30~\mathrm{m}$  – vegetal level, dark black, crumbly. The rich ceramic material of this level belongs to the B phase of the Vinča culture and was dragged here from the inferior level by the agricultural works. It is strongly fragmented.

0.30-0.60 m – dark grey level, belonging to the classical (B) phase of the Vinča culture. At its bases the stepping level was found, as well as ceramics agglomeration, river stones, bones, covers of pots, stems of cups and painted ceramics of the *Lumea Nouă* type etc.

<sup>&</sup>lt;sup>30</sup> Ciugudean 1978.

0.60-0.85 m – light grey level, light, belonging to the early phase (A3?) of the Vinča culture, proved by the ceramic material (fragments of black-grey pots decorated with fine pleats and narrow engraved bands, strongly polished, hollow stems of cups etc.)

0.85-1.20 m (1.50 m) – brown layer, poorly pigmented. The archaeological material is present only in small quantities: ceramics represented by decorated fragments, short cup legs made of paste with organic material, lithic material represented by pieces of silex and obsidian, river stones etc. This level belongs to the Starčevo-Criş $^{31}$  culture.



Fig. 7. Satellite image indicating the areas investigated by archaeological excavations. To be noticed that in 2003 no house was built yet on the *Vărar* sector.

On the *Vărăria* sector the investigations revealed a very intense Neolithic inhabitancy (Starčevo-Criş and Vinča). Large housing facilities from the early Vinča culture were found and investigated here (Vinča B1 and B1-B2?). They were built in the technique of the "stone bed" having massive walls, of which fragments of burned earth with prints of plants are still preserved<sup>32</sup>, having a very rich and varied inventory, funerary complexes (2 inhumation graves<sup>33</sup>), complexes

<sup>32</sup> Paul, Ciută 1999; Ciută, Daisa 2000; 2002.

<sup>&</sup>lt;sup>31</sup> Paul, Ciuta and collaborators 2002.

<sup>&</sup>lt;sup>33</sup> Under the house there was an agglomeration of grinding mills and rock slabs and nearby a human skeleton was discovered (-0.80 m). The grave, oriented south-west and north-east, represents an oval pit where the crouched skeleton was laid on its left side. The inventory consists of a gross ceramic pot laid on the skeleton's tibia, mouth down, and also shells of clams and snails. Close to the grave, in CI/2001, at 0.70 m depth a sleeked, blanched fireplace was discovered which presented at least two phases of reconstruction, directly

of cultic destination (pits of the *bothroy* type - G2/2001<sup>34</sup>), special materials (a cooper tool with double head<sup>35</sup>,painted ceramics of the *Lumea Nouă*, tools of bones and horn pot covers with prosopomorphic representations, objects of silex and obsidian) etc.

The intense inhabitancy of the Mureş terrace by the bearers of the Neolithic cultures is proved also by the thickness of the culture layer that goes down to 1.8-2 m deep. Like the case of the  $V \check{a} r a r$ , it is supposed that the north are of the terrace was destroyed to some extent by the waters of the Mureş, which builds here an active meadow, but also by the anthropic works of leveling and consolidation of the terrace.

IV. Oarda de Jos (Limba) - *Bordane* (RAN code of the sector: 1106.02; topographic symbol "T", latitude: 46° 4′ 5", longitude: 23 ° 34′ 23", altitude: 230 m, medium height 8-9 m above the creek). First research 1995 - I. Paul, I. Al. Aldea, Marius Ciută, systematic researches 1995, 1997-1999.

West of *Vărăria*, downstream, half way between Limba and Oarda de Jos, having the aspect of a promontory of triangular shape, of smaller size (approximately 40x50 m) is the point *Bordane*, approximately 9 m above the Mureş. It is delimitated to the south and west by the County Road 107C, which presents in this area two tight curves (across it lies the *Şesu Orzii*), and to the north by the Mureş meadow. To the east it is separated from the *Vărăria* by the road that follows down along a previously mentioned old torrent towards the Mureş meadow. Generally, the terrace fragment at the *Bordane* presents an easy slope oriented to the southeast, towards the mentioned torrent.

The *Bordane* point represents the lowest part of the entire archaeological complex Limba-Oarda de Jos. The Mureş river eroded stronger the exterior terrace in the 1940s, a fact revealed by the older maps which confirm the existence, right beneath terrace I, in the terrace's *hinge*, the western extremity of a south arm of the

linked to the grave and the agglomeration of grinding mills. At -0.50 m depth, in the northeastern corner of the CII/2001, there was a compact agglomeration of adobe. After cleaning the adobe the skull of a human skeleton appeared (M2/2001). After digging it out it was noticed that it belonged to an adult (unlike M1 which seems to have belonged to a child), laid crouched on its right side, having an inventory made up of a pot laid at its head and bone tools around it. The dead was laid on a platform made of rests from walls, and pieces of adobe were also laid on the sides giving the impression of an arranged "cista" (Paul, Ciuta and collaborators 2002)

<sup>34</sup> Found from the first layer of inhabitancy, in squares 4-5, the pit goes through all levels down to the sterile to 2.10-2.30 m depth. The pit is circular having a diameter of about 1.5 m. Having the aspect of a bell, it has several levels of successive fillings with several layers of ash. At 1.10 m depth, central, a 5 cm thick smoothed and fragmented fireplace was found, with the head of an ox placed upon it. Fragments of this fireplace were also discovered in the inferior layers of ash. On the bottom of the pit, in the layer of ash, there were discovered an antler, broken ceramic pots and bones from large animals. In the agglomeration of broken ceramic pots to the western wall of the pit there were two groups of four bones each. The rich quantity of ceramic material allows the classification of the complex to the early phases of the Vinča culture (Paul, Ciuta and collaborators 2002).

<sup>35</sup> Paul, Ciuta and collaborators 2002.

river that isolated an elevated river bank (*Prundul Popii Bitea*<sup>36</sup>). Right beneath the *Bordane* point there lies the most western (and largest) of the ponds resulted from the clogging up of the river's arm, easily recognizable in the aerial picture (fig. 6). Nowadays, probably due to regularization works, the morphological configuration of the meadow is radically changed. Until now, the *Bordane* point was used exclusively for agricultural purposes.

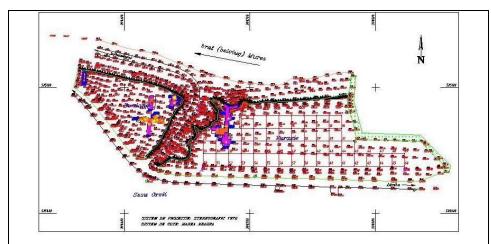


Fig. 8. Recent topographical mapping of the sectors *Bordane* and *Vărăria*, specifying the mapping and indicating the research units carried out.

The stratigraphy of the archaeological deposits found in several investigation units (SI/1995, SII/1995, SVII/2007, SVIII/2007, SIX/2007, SX/1998, SXII/1999), characterized by a considerable thickness of more than 2.5 m (!) in its central area, proves to be, certainly, the most complex and diverse from the entire complex of prehistoric settlements from Limba-Oarda de Jos, and its chronological classification covers a very long period of time: from the early Neolithic (Precriş, Starčevo-Criş phase IIIB), to the developed Neolithic (Vinča, phases  $A_2$  and  $A_3$ ,  $B_1$ ,  $B_1$ - $B_2$ ), followed by a sporadic inhabitancy belonging to the first Iron Age of the Hallstatt (Gava culture), and to the surface there is a mixture of prehistoric (Basarabi culture) and medieval materials.

To illustrate the stratigraphy we shall present the profile obtained in section X/1998, the one that provided the most complex and complete stratigraphy, where the following realities could be found<sup>37</sup>:

- the archaeological sterile from the *Bordane* sector (and practically from all other neighboring sectors) is made up of a thick deposit of the loess type, yellow in color, sandy in its aspect, having a denser and more compact (hard) structure as it goes deeper. In some places it undergoes a process of sand stoning and mineralization, this is a transformation into geological

<sup>37</sup> Paul, Ciută 1999, 66-67.

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<sup>&</sup>lt;sup>36</sup> See Berciu, Berciu 1949, fig. 14.

structure of a higher consistency, similar to that of sand stones and bedrocks. As the repeated sections executed in this sector have confirmed, the loess type sterile rises to the northern margin (edge) of the terrace up to only 1 m depth (presented in SI/1995), which proves that this terrace fragment had a different configuration in the past, being slightly inclined to the east and south-east. This situation also confirms a very important thing, the fact that the *Bordane* sector and the archaeological deposits here have not been eroded by the waters of the river Mures!

- at approximately 2.50 m depth, going sometimes deeper up to 3 m through the intermediary of some complexes, a yellow-brown layer was found, which was difficult to delimitate from the inferior sterile and even from the upper cultural layer, due to chromatic differences that were hard to notice, and which, from the point of view of the typological and stylistic analysis belongs to the Precriş culture, the first documented early Neolithic culture on Romania's territory<sup>38</sup>. There are few archaeological materials disclosed, and no inhabitance complex was yet discovered. The ceramic fragments with white painting on the red-dark-red background, very well polished, blades of silex and obsidian, bone rests etc. are some of the elements that made possible the definite classification of this level to the level of the Neolithic horizons north of the Danube and from Transylvania.
- above the Precriş level a distinct layer was disclosed of a yellow-brown color but with a darker shade then the previous one, belonging to the Starčevo-Criş culture, more precisely to one of its evolved phases. The basis of this cultural layer was easier to distinguish as it corresponds to the stepping level of a house situated on the surface (L3/1998), which preserved a very rich archaeological material <sup>39</sup>. The typological and stylistic analysis of the ceramic material in the house allowed its cultural and archaeological classification of the entire archaeological level to the IIIB stage/phase of the Starčevo-Criş cultural complex <sup>40</sup>.
- in its upper part, the Starčevo-Criş layer is covered on the entire section by an archaeologically sterile deposit, yellow in color, 20-40 cm thick, representing a kind of *hiatus* between the above-mentioned lower layer and the upper one.
- a brown-yellowish layer follows (0.90 1.40 m), having frequent limestone deposits and white-grey lens, corresponding to the inhabitancy of the early phases of the Vinča culture (A<sub>2</sub>, A<sub>3</sub>). The layer's basis was easy to delimitate, based on a strongly burned house on the surface (L2/1998-1999), that preserved a rich archaeological material. The house was built directly on that archaeologically sterile deposit. Later research done in this sector clarified the nature of this deposit, in the sense of its interpretation as an anthropic development having the purpose of thermal

<sup>&</sup>lt;sup>38</sup> According to some authors the first phase of the Starčevo-Criş (IA-IC-IIA) cultural complex (on this matter see Ciuta 2000).

<sup>&</sup>lt;sup>39</sup> Ciută 2002.

<sup>&</sup>lt;sup>40</sup> Ciută 2002.

and water insulation, made by the first groups of the Vinča culture in this place.

- the next culture layer (0.35-0.70 m), corresponds to the developed phases in the evolution of the Vinča culture (B1, B1-B2). The stratigraphy presented two distinct levels of inhabitancy that cannot be distinguished yet from one another typologically. At 0.60 m depth, in the central area of the section, the hole of a Hallstatt pit house (semi-cottage) was found (B1/1999<sup>41</sup>). The upper part of the most recent layer is affected by agricultural works, and archaeological materials can be gathered (in huge quantities!) from the plough-land.
- on the surface, in the vegetal layer (0-0.35m), there are small quantities of ceramic materials belonging to the first Iron Age (Hallstatt), more precisely to the Gava culture, but also to the Basarabi culture together with Neolithic materials.

**V. Oarda de Jos** (*Limba*) – *Sesu Orzii* (RAN code of the sector: 1106.04<sup>42</sup>, Latitude: 46<sup>0</sup> 4 5", Longitude: 23<sup>0</sup> 34 23", Altitude: 227-230 m). First investigation of the site: 1996, I. Paul, M. Ciută, I. Al. Aldea.

On the left, southern side of the road between the localities of Limba and Oarda de Jos (D.J. 107 C), that forms there a double curve, beyond the points *Vărăria* and *Bordane*, begins the site area named by the toponymy *Şesu' Orzii*, in the form of plain field stretching on the first terrace up to the locality of Oarda de Jos (image 3-5). Right under the terrace fragment bearing this name flows the river Mureş, just after it leaves the strong meander situated near the locality of Limba. Under this terrace and in its north-western extremity, at the entrance into the locality of Oarda de Jos, in the Mureş meadow, there is a ballast quarry<sup>43</sup>.

The terrace fragment is about 10-12 m higher than the river and is plain and relatively flatten, also due to intensive agricultural works, and it is crossed by the county road. It is dominated to the south by the crest of the Secaşelor Plateau (*Coasta Stauni, Dealul Viilor, Bordani*), and delimitated practically to the north by the river Mureş (respectively by the county road)to the east by a season torrent, the same that delimitates also the sectors *Vărăria* from *Bordane*, and to the west by Valea Orzii, at the entrance into the locality Oarda de Jos. Beneath the terrace, which had a forehead with a very abrupt slope, in its hinge, there are strong water springs as well as an alluvial plain – flushing meadow – with an irregular shape <sup>44</sup>, and about 400 m long.

The total dimensions of this terrace fragment, identified by the toponymy *Şesu'* Orzii, are of about 700 m long (between the sector *Bordane* and the entrance into Oarda de Jos) and about 60-70 m wide. To be noticed that approximately at the half of this sector there is a slight elevation of the terrace (1-2 m), in the area

<sup>&</sup>lt;sup>41</sup> Rustoiu, Ciută 2001.

<sup>&</sup>lt;sup>42</sup> In the report published in 2001, there are also these codes, referring to this sector: *1053.01, 1053.02*.

<sup>&</sup>lt;sup>43</sup> Property of S.C. Mova S.A.

<sup>&</sup>lt;sup>44</sup> In this sector there was a mobile bridge, probable the one that is mentioned in L. Blaga's work "Luntrea lui Caron".

where the county road comes closer to the river Mureş. In this sector, the recent rehabilitation works done at the road<sup>45</sup> revealed, in the embankments near the south gutter, a definite continuous stratigraphy.

In the ensemble of the investigated area, during the campaign of 1996, situated right next to the *Bordane* (see image 4, sections IV-VI/1996), a very consistent archaeological layer was found, evolving down to 2.30 m, having three main cultural levels that belong to the early Neolithic (a late phase of the Starčevo-Criş cultural complex), followed by another one belonging to the early Vinča culture (Vinča A2 - Vinča A3), followed by another one belonging to the classical phase of the Vinča culture (phases B1 and B1-B2)<sup>46</sup>. To be noticed the presence of a large V-shaped moat in SVI/1996 (of about 1.2 m deep and a maximum opening of 1.3 m), belonging to the developed phases of inhabitancy of the Vinča culture. This complex, revealed transversally, proves the existence of some large developments, similar to the ones found already in other similar and/or contemporary settlements on the Mureş valley, having a clear destination of protection of the settlement.

On the surface, in the layer affected by agricultural works, archaeological materials belonging to Eneolithic cultures (Petrești, Coţofeni), to the Iron Age, Hallstatt (Gava, Basarabi), and to the Roman Age, come to light sporadically, indicating the existence of some less intense inhabitancies.

**VI. Oarda de Jos (Limba)** – *Şesu` Orzii-Balastieră* (RAN code of the sector: 1106.04 - *1053.01*, *1053.02*), Latitude: 46<sup>0</sup>4<sup>7</sup>5, Longitude: 23<sup>0</sup>34<sup>2</sup>3, Altitude: 227 m. First investigation of site: 2000 I. Paul, M. Ciută 2000<sup>47</sup>).

As the place situated right at the entrance in Oarda de Jos – where a probing was carried out in the 2000 campaign – is nominated by the same toponymy as the point where the archaeological excavations of the 1996 campaign were carried out (see ante), because they belong organically to the same unit of relief, we shall treat them distinctively, without establishing for now a demarcation line between them, adding to the later a distinctive toponymy: *La Balastieră* (At the Ballast Quarry) according to its presence nearby. We are talking about the western extremity of the fragment of wide, plain terrace (hence the name), approximately 2 km long that stretches practically between the two localities, having a relative rectangular and elongated shape evolving parallel to the road that links the above mentioned localities. It is situated on the terrace's margin, which is also parallel to that road.

For a more precise localization of the excavation site, we specify that it is delimitated at about 50 m to the east by the last house at the entrance to Oarda de Jos, 100 m to the south from the above mentioned road, close (5-8 m) to two

<sup>&</sup>lt;sup>45</sup> It is the enlargement and repair of D.J 107C and its gutter, done in the summer and fall of 2008, when a series of complexes and very rich archaeological materials were discovered.

<sup>&</sup>lt;sup>46</sup> Paul, Ciută and alii 1997, p. 2-3

<sup>&</sup>lt;sup>47</sup> A series of later investigations were done in this sector, for instance surface investigations in the year 2000 and an archaeological excavation aiming at an objective from the Roman epoch (*villa rustica*), both in cooperation with Birbeck College in Londra (coord. Ian Haynes), (Paul and collaborators 2005, 246-247).

neighboring high voltage poles. Between the road and the investigated area the archaeological deposits were destroyed when the soil here was used to build the protection dike of the Valea Orzii.

The surface researches in this point were carried out in the 1990s when a series of materials belonging to various epochs<sup>48</sup> were identified: Eneolithic (Petresti phase B, Cotofeni), Early Bronze (Gornea-Orlesti). Middle Bronze (Wientenberg), Early Hallstatt, Roman, post-Roman, early medieval<sup>49</sup>.

Systematic investigations were carried out during the 2000 campaign with the help of a single investigation unit: SI/2000 = 6x2x1.5 m, oriented north-south. The positioning was done according to the high-voltage poles nearby. The distance from the section to the Mures river, to the north, was of about 150 m. Stratigraphy:

- 0-0.25 m vegetal layer, with black soil belonging to the Roman Age.
- 0.30 m 1.10 m layer of culture, probably with two levels of inhabitancy. belonging to the Petresti culture, the final A-B phase (B) of this culture.
- 1.10 m layer of loess type, white-yellowish sterile.
- The richness of the materials that appeared on the surface, in the ploughed land, prove the fact that practically only the Eneolithic deposits remained affected, and they too, were slightly touched in their upper part.

The investigations carried out in the 2004 campaign, this is the surfaces A/2004 –  $25 \text{m} \times 10 \text{ m}$  – and  $B/2004 - 20 \text{ m} \times 10 \text{ m}$  – revealed a Roman villa rustica<sup>50</sup>, and an additional probing C/2004 of 2m x3 m revealed prehistoric ceramics... belonging to a multitude of epochs and cultures... the greatest preponderance being attributed to the first Iron Age (cultures Gava, Basarabi and "protodacian" ceramics – HaD), followed by the Neolithic (Vinča, Lumea Nouă), Bronze Age (early Bronze – BT I, middle Bronze – Wietenberg) and the Eneolithic (Petresti, Cotofeni)<sup>51</sup>.

From the report's text results clearly that the two large surfaces (A and B) stopped on the Roman level<sup>52</sup> (!), and the probing did not reach the archaeological sterile (!), therefore, it is at least curious to hear the preliminary conclusion of the report's authors, according to which: ... the continuation of works in this points could bring very few supplementary information<sup>53</sup> ... The more curious as the next sentence of the same report states that: the richness of the discovered material proves the intense inhabitancy of this area in time and the importance the first terrace of the Mureş river had for the human habitat $^{54}$ .

#### History of the investigations

<sup>&</sup>lt;sup>48</sup> Rustoiu 1999, 70-71. The point is designated as Oarda-Nord village.

<sup>&</sup>lt;sup>49</sup> Rustoiu 1999, 70-71, PLate I- Plate III <sup>50</sup> Paul and collaborators 2005, 246.

<sup>&</sup>lt;sup>51</sup> Paul and collaborators 2005, 247. It is not specified though where this probing was carried out, but only that it was not finished.

<sup>&</sup>lt;sup>52</sup> Paul and collaborators 2005, 247.

<sup>&</sup>lt;sup>53</sup> Paul and collaborators 2005, 247.

<sup>&</sup>lt;sup>54</sup> Paul and collaborators 2005, 247.

The Neolithic stations of Limba entered the archaeological circuit in December 1944 under the lead of Prof. Stefan Munteanu, in the form of an informative probing of 8 x 6 x 1.80 m, executed in the abrupt slope of the *Vărar*<sup>55</sup> point, leading to the establishing of the stratygraphic situation of that point<sup>56</sup>.

For a more precise definition of the stratigraphy and of the cultural and chronological elements, the investigations are continued in 1947, in the same place, by the brothers D. and I. Berciu. The special thickness of the archaeological layer (over 2 m), the variety and complexity of the cultural layers and levels, the richness of the archaeological materials, demonstrated an intense inhabitancy of this point in the Neo-Eneolithic Age, belonging to the "Turdaş culture" and to the west-Dacian circle of painted ceramics" <sup>57</sup>

Ramifications of this station were signaled since that moment, the periegetic approach, across the county road and in *Vărăria* and *Bordane*<sup>58</sup>.

Although the results proved to be remarkable, contributing substantially to the clarification of some important cultural and chronological sequences of the Neolithic and Eneolithic in the Mureş valley, the investigations were abandoned in the year 1972, when the researcher H. ciugudean, from the National Museum of the Unification in Alba Iulia, realized a serried of periegeses in the points *Coliba Barbului*, *Vărăria* and *Şesu' Orzii*, gathering a rich and diverse archaeological material, belonging to various historical periods<sup>59</sup>.

#### The evolution of systematic investigations

In the year 1994, under the coordination of a team of specialists from the **Center of Pre – and Protohistorical Research**, the investigations of the sites in Limba were resumed, this time in a systematic, planned way, in the perspective of several successive campaigns of excavations corroborated with other forms of research, processing, analysis and determination of archaeological materials and information.

The spotlight, regarding the layout of the points, is constituted by the area *Bordane*, *Vărăria* and *Şesu Orzii*, which offered the best archaeological material, brought to light by agricultural works, following the periegetic investigations done repeatedly by lecturers from the Department of History within the University "1 Decembrie 1918" in Alba Iulia.

A first result was constituted by the topographical measurements for the site area mentioned above, completed by landmarks and mappings of the area's perimeter, together with carrying out some pedological and archeological borings to delimitate the area of the settlements and the thickness of the strata of archeological culture.

The first topographical plan was done in the years 1995-1996, at a scale of 1:500 and comprises the three main sectors of the site, specifying some fixed and definite elements of reference (reporting) and recognition (fig 4). Concomitantly, a

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<sup>&</sup>lt;sup>55</sup> Berciu, Berciu 1949, 39-53.

<sup>&</sup>lt;sup>56</sup> Berciu, Berciu 1949, 39.

<sup>&</sup>lt;sup>57</sup> Berciu, Berciu 1949, 26; RepAlba 1995, 92.

<sup>&</sup>lt;sup>58</sup> Berciu, Berciu 1949, 39-53.

<sup>&</sup>lt;sup>59</sup> Ciugudean 1978, 39-53.

landmark system for the site was elaborated, in order to place precisely the sections and other research units that were to be practiced, setting up a register and inventory of rectangular coordinates which had to contain also the geographical coordinates of the landmarks, calculated with graphical and/or analytical methods, with the appropriate definitions. The landmarks were in the same time the link between the archaeological and the topographical mapping as well as the link to the geographical coordinates, allowing the mathematical and geographical placing of the elements of archeological interest (fig 4)<sup>60</sup>.

The site was approached in the year 1995 through archeological excavations, intending in the first phase to carry out some sounding-sections for control and stratigraphic information, of various dimensions and in different points (as it was not possible to carry out some large sections due to the land proprietorship and the presence of the road that crossed practically the middle of the archaeological station), in order to clarify, even partially, the stratigraphic successions, this means the vertical and horizontal stratigraphy, knowing the fact that we have there several levels and cultural layers.

It is also important to mention that most times, the "approach" order of archaeological objectives was dictated by the situation of the agricultural works<sup>61</sup>. The first sections of the first campaign of systematic excavations from Limba (1995), were carried out in the point called *Bordane*, nominated on the topographic plan with the symbol "T" (from "triangle", as this fragment of terrace resembles with one), oriented north-south, according to the mapping, as follows: SI/1995 = 10x2m şi SII/1995 = 10x2m (image 1). In the same year a smaller section SIII/1995 = 6x2m, was done across the road, in *Şesu' Orzii*, continuing the first two, right near a small bridge built for the evacuation of a season torrent that streams down from the surrounding hills (*Bârc*, *Bordan*, etc). The goal of the latter was to verify the stratigraphy of the place. It was demonstrated that the present relief differs from the ancient one, as the materials discovered were found in secondary position, rolled probably by a water stream that was once permanent, but has dried up now.

The next year, because the area "T" *Bordane* was cultivated with corn, the sector Sesu' Orzii was excavated with three sections of information and stratigraphic control:  $SIV/1996 = 6 \times 2m$ ,  $SV/1996 = 6 \times 2m$  and  $SVI/1996 = 6 \times 2m$ , oriented

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<sup>&</sup>lt;sup>60</sup> The topographical mapping and putting landmarks and mapping of the investigated site areas were carried out under the direct coordination of lecturer topographer Valerian Bărbuță. As an archeologist who has always placed his research units using this topographical mapping, I feel obliged to insist upon its remarkable quality, as the precision of spotting these research units on site reaches the highest standards (errors of  $\pm 1$ -5 cm are exceptional for a topographical mapping done in the "classical" way, using theodolite without total station. Unfortunately, the recent works for the renewal of the road and upkeeping of the gutters for the evacuation of water **removed all these landmarks (!)**, making it practically almost impossible to perfectly report the new topographical mapping, this is the new mapping to the old mapping – fig 4.

<sup>&</sup>lt;sup>61</sup> The situation of land proprietorship had constituted a major impediment for the normal carrying out of the excavations, as the proprietorship is not clearly regulated, and the situations, from this point of view, differs each year (!?).

north-south, following the topographic mapping (fig 1). Following the discovery of some complexes with sizes that exceeded those of the sections, a series of adjacent cassettes were excavated in order to uncover them completely, so that SIV, 1996 was finally 6 X 4 X 1 m and SV/1996 6 X 6 X 1.8 m (fig 1).

The 1997 campaign approached, due to the above mentioned reasons, the marginal areas of area T, *Bordane*, as follows: SVII/1997, in the western extremity of the sector – where the road closes to the margin (forehead) of the terrace and delimitates a narrow strip of 7-8 m – oriented north-south, having the dimensions 6 x 2 m; SVIII/1997, situated 30 m to the east and parallel to SVII/1997, size 8 x 2 m; SIX/1997 , oriented north-south and placed in the north-eastern extremity of sector T, size 8 x 2 m (fgi 1).

In order to clarify the stratigraphic situation of the *Vărăria*, sector, nominated with "L", the topographical mapping suffered a successive alignment of the of the profile into a downfall of the terrace's edge, 12 m long, started in the 1996 campaign and finalized in 1997, nominated LI-LII/1997 (fig 1).

In the same year, 1997, the eastern area of the complex of prehistoric settlements in Limba was also investigated, more precisely the sector  $\hat{I}n$  coastă, where a section of control and stratigraphic information SIbis/1997 = 10 x 2 m was done in order to detect possible extensions of the neo-Eneolithic settlements up to this point, recommended otherwise at first sight as a very favorable one thanks to its position.

The 1998 campaign allowed finally the reanalysis of the central area of the *Bordane* (T) point, where the most complex stratigraphic situation still required some clarifications after the 1995 excavations. A new section was executed,  $SX/1998 = 20 \times 2m$ , oriented this time east-west, perpendicularly on the northern end of SII/1995, where the archaeological layer had proved to be the thickest.

In addition to the probe sections done in the previous years, in the sector  $V\Breve{ar}\Breve{ar}$  (L) was executed a section of control and stratigraphic information, SXI/1998, oriented east-west, about on the same line with SX/1998. A complex (housing) of very large size was found and therefore new adjacent cassettes were opened so, in the end, the section had in its east end the aspect of a surface of 6 x 6 m (fig 1).

The year 1999 meant for the researches in the archaeological station of Limba a relative stint of the investigated area, as a single area section was executed, SXII/1999 = 6x3m, in order to completely reveal some complexes that were partially discovered in SX/1998.

The campaign of the year 2000, lacking consistent funding, focused on detecting the extension of the Neolithic and Eneolithic inhabitancy along the entire terrace between Oarda de Jos and Limba, being characterized exclusively by probings-sections of control and stratigraphic information (as well in Limba – *Vărar* as in Oarda *Şesu Orzii – La Balastieră* – see previous).

In the campaign of 2001 the attention of the researchers was focused exclusively on the sector *Vărăria*, which, together with *Bordane* and *Şesu-Orzii*, proved to be characterized by the most complex and complete stratigraphic and cultural sequence, especially related to the deposits from the early and developed Neolithic.

The campaign of 2004, characterized by the *systematic*<sup>62</sup> periegesis and investigations focused exclusively on the relevance of context of Roman epoch, plays a distinct role within the investigations carried out in the ensemble of sites from Limba-Oarda de Jos, and in spite of the preliminary and slightly demonstrative declarations related to the expected results of the investigations, until now, there is no more exhaustive, *systematic* investigation of them.

Recent topographic mappings, from the years 2008-2009, using the total station and the system Stereo 70, were done by T. Borşan, C. Florescu and I. Maican, with the main goal to extend the measured area, as well as to overlap the odl topographical mapping with a new and modern one, in order to make it compatible and to connect it to the national system of topography and land register.

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It is obvious that the above mentioned stratigraphic successions and their content are not identical, nor resembling for all sectors of the investigated sites. The entire researches detected deposits, archeological contexts and materials belonging to several epochs: early Neolithic (the cultural complex Starčevo-Criş), developed Neolithic (Vinča culture), Eneolithic (Petreşti, Coţofeni); Bronze Age (Wietenberg), early Hallstatt (Gava), middle Hallstatt (Basarabi culture); Roman and Post-Roman, medieval.

#### Perspectives of research

In the campaigns of the next years, in a first stage, the intention is to extend in a modern way the existing topographical mapping to all archaeological sectors (points) (using also the GPS-GIS) system, followed by land marking and mappings, and in the second phase there will be an investigation using geophysical prospections and archeological bores (probes), in order to detect the extent and the intensity of inhabitancy of the various prehistoric settlements.

It is intended to make prospections of different kinds (electrical, electromagnetic, magnetometric) followed by drawing some maps and implicitly of some electro—and magnetometric diagrams, needed for the extension of investigations and of the actual excavations in these settlements, as well as for the cultural and chronological connection to their contemporary and/or neighboring settlements.

It is intended to open some large areas ( $10 \times 10 \text{ m}$ ;  $10 \times 20 \text{ m}$ ;  $20 \times 20 \text{ m}$ . etc.) in order to uncover completely some housing complexes, with a permanent relation to the prior detected stratigraphic situations.

Regarding the excavations and processing of the resulted archaeological materials, it is proposed to generalize modern methods and techniques of investigation and dating in archaeology, based on the own endowments and installations, which in their turn will require compulsory selection, promoting and organizing of some complex teams of interdisciplinary research (IMDA study, paleobotanics, palinological, archaeozoological, archaeometric, magnetometric, etc.) with well defined responsibilities for each of the members.

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<sup>&</sup>lt;sup>62</sup> The term used here is most improper and redundant. In the archeology of the third millennium there are *surface investigations* (periegesis) that are by themselves o form of systematic investigation.





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