MOLDOVA STATE UNIVERSITY
FRIEDRICH-SCHILLER-UNIVERSITY JENA

Fortified sites

from the 1st millennium BC

IN CENTRAL AND SOUTH-EASTERN EUROPE

Materials of the Moldovan-Romanian-German Colloquium
Saharna, July 24th-26th, 2014

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Summary

Saharna Summer Colloquium

Prof. Dr. Ion Niculiță
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The Moldova State University has acquired the right to conduct archaeological research in 1966. Since this year until today the researchers of our institution conducted systematic archaeological investigations at several sites in the territory of the Republic of Moldova: Hansca, Suruceni, Dănceni, Bălăbăneşti, Butuceni etc., and since 2001 we have focused on studying archeological sites in the micro-zone of Saharna. During this time, along with teachers of archaeology, the process of research involved students and postgraduate students not only from our university, but also from other institutions of higher education in Moldova and abroad: from Romania, Russia, Ukraine and since 2014 from Germany.

Thus the archaeological excavations organized by the Moldova State University received the status of a school, already 49 groups of graduates participated.

In order to expand the range of knowledge of collaborators, to diversify research topics and to familiarize students and postgraduate students with research methods used in other universities, in 2011 the Saharna Summer Colloquiums began, which eventually gained a permanent status. It usually opens in July, within the most prestigious archaeological site in the Middle Dniester region – Saharna Mare. The Colloquium invites teachers and doctoral students from universities and scientific centers of the Republic of Moldova, Romania, Ukraine and other countries, and presents the latest results of scientific research to students.

Topics of the Colloquiums vary from year to year, but in terms of chronology they fit in the period of time from the late Bronze Age to the Iron Age, which corresponds, in general, to the specialization of our institute.

The Colloquium in 2014 was organized jointly with the Department of Prehistory and Early History of the Friedrich-Schiller-University Jena, and, accordingly, the subject chosen for our meeting covered a wider geographical area, including the territories of Central Europe. The topic of discussion was Fortified sites from the 1st millennium BC in Central and South-Eastern Europe. The participants from Germany, Romania and the Republic of Moldova have contributed in this project.

In the course of studying of this collection of articles both experts in the field, and all those interested can see the commonalities and differences between the fortifications of the Central European region and those from South Eastern Europe.

Foreword

Prof. Dr. Peter Ettel
Friedrich-Schiller-University Jena

Since the 19th century fortified hilltop settlements are in the focus of prehistoric research in Jena. Friedrich Klopfleisch (1831-1898), founder of our Institution and Nestor of prehistoric research in Thuringia, made numerous inspections and minor excavations on the hills around Jena and the Saale valley. Almost every professor of Pre- and Early History in Jena dealt with the height fortifications.

The hilltop settlements in central Germany were recently examined in a project founded by the DFG. The research in and around the Alter Gleisberg near Graitschen is an important part of the Jena research and teaching.

The visit of Dr. Zanoci as a EMERGE (Erasmus Mundus) scholarship at our Institute has not only attracted the interest of our staff and students on the Moldovan Prehistory, it also gives us the opportunity to start an exchange of both, research results and students/ scientists due to the similar research focus of our institutions .

As a first positive aspect, a small delegation has already traveled to Saharna Mare for talks with local colleagues. The results of this work are summarized discussions in this edition. They show that the amount of settlements of the Bronze Age and early Iron Age offer a promising, broad and still untapped field of research for the future.

This book was created as the first characterization of a good cooperation and we hope to enter into an even more intensive and extensive exchanges in the coming years.

Fortified hilltop settlements of the late Bronze Age and early Iron Age in central Germany – The height of fixtures near Jena

Daniel Scherf

Teritoriul Germaniei Centrale se remarcă printr-un număr sporit de fortificații, în special, din perioada târzie a epocii bronzului şi cea timpurie a epocii fierului. Acestea sunt atribuite, în cele mai dese cazuri, culturilor câmpurilor de urne (Urnenfelderkultur) şi lusaciană (Lausitzerkultur).

În articolul de față sunt analizate fortificațiile din bazinul mijlociu al râului Saale: Rudelsburg, Jenzig, Johannisberg şi Alte Gleisberg, situate în preajma oraşului Jena. Cetățile au fost amplasate pe locuri înalte, fiind fortificate cu elemente defensive artificiale. Datorită poziției dominante din aceste fortificații puteau fi supravegheate căile de acces şi comerciale din bazinul râului Saale, prin al cărui intermediu, la rândul său, se putea face legătura cu bazinul Elbei.

Dintre fortificațiile din acest spațiu se evidențiază cea de la Alte Gleisberg, studiată în ultimii ani de către cercetătorii de la Universitatea din Jena (Bereich für Ur- und Frühgeschichte). Ca urmare a cercetărilor s-a stabilit ca aceasta ocupa o poziție-cheie în viața economică şi socială a regiunii şi a servit, probabil, drept centru administrativ.

In this paper, some hilltop settlements of the middle Saale valley will be presented (fig 1). For the treated time period many settlements are known from surface findings. From the altitude settlements the Saale river was monitored as a transport route. The middle Saale valley is situated between the typical limestone plateaus and already existed in prehistoric times as an important transport route between north and south. The area around Jena is especially interesting because the existence of a hilltop-settlement-system lead to the assumption of an east-west connection in this area (fig 2). The most important hilltop settlements of that catchment area will be briefly introduced, and if possible, up to date research results will be presented. A very large number of hill settlements is already found in the Compendium of K. Simon (Simon 1984), which still forms a profound basis. However, further investigations were carried out in recent years, which show that the debate about these settlements has still not come to an end.

The hilltop settlements in the central Saale valley were all built in secure places provided by natural conditions like steep limestone slopes and undercut

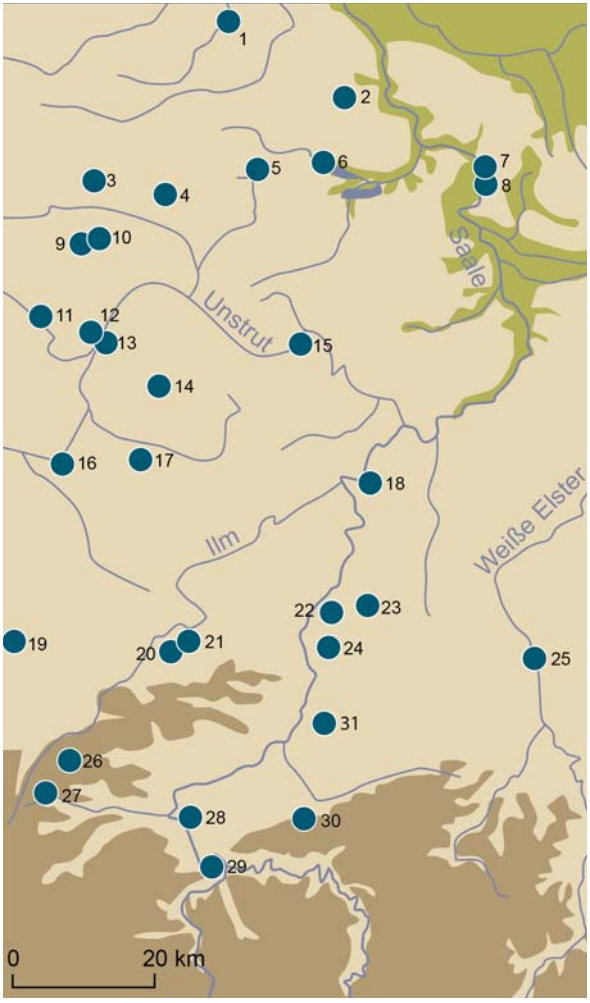

Fig. 1. Late Bronze/early Iron Age Fortifications in the Saale Area.

Fig. 1. Răspândirea fortificațiilor din perioadele târzie a epocii bronzului şi timpurie a epocii fierului în regiunea Saale.

1 - **Quenstedt**, Landkreis Mansfeld-Südharz, Schalkenburg, BD/HaA1; 2 - **Bösenburg**, Landkreis Mansfeld-Südharz, Kirchberg, HaA2 - LtA; 3 - **Questenberg**, Landkreis Mansfeld-Südharz, Arnsberg, HaD/LtA (?); 4 - **Sangerhausen-Ost**, Landkreis Mansfeld-Südharz, Großer Schlößchenkopf, HaB3/HaC1 (?); 5 - **Bornstedt**, Landkreis Mansfeld-Südharz, Kirchberg, HaB3/HaC1 (?); 6 - **Seeburg**, Landkreis Mansfeld-Südharz, Schloß, HaB3/HaC1 (?); 7 - **Halle Giebichenstein**, Stadt Halle, Amtsgarten/Alte Burg and Burg, HaB3/HaC1 (?); 8 - **Halle Giebichenstein**, Stadt Halle, Heinrich-Heine-Felsen, HaA2 - LtA; 9 - **Bad Frankenhausen**, Kyffhäuserkreis, Oberburg Kyffhausen, HaD/LtA; 10 - **Tilleda**, Kyffhäuserkreis, Pfingstberg, HaA2/HaB1; 11 - **Günserode**, Kyffhäuserkreis, Schwedenschanze /Kohnstein, HaB3/HaC1; 12 - Sachsenburg, Kyffhäuserkreis, Wächterberg, BD/HaA1 (?) - HaA2/HaB1; 13 - **Gorsleben**, Kyffhäuserkreis, Scharfer Berg, HaB3/HaC1 (?); 14 - **Beichlingen**, Landkreis Sömmerda, Monraburg, BD/HaA1 (?), HaD/LtA (?) and HaA2/HaB1; 15 - **Nebra**, Burgenlandkreis, Altenburg, HaB3/HaC1; 16 - **Schallenburg**, Stadt Sömmerda, Schallenburg, HaA2/B1 (?); 17 - **Vogelsberg**, Landkreis Sömmerda, Clausberg, HaB3/C1 (?) - HaD/LtA; 18 - **Bad Kösen**, Burgenlandkreis, Rudelsburg, HaB3/HaC1; 19 - **Erfurt-Möbisburg**, Stadt Erfurt, Kirchberg, HaB3/HaC1 (?) - HaD/LtA; 20 - **Hetschburg**, Kreis Weimarer Land, Martinskirche/Heidingsburg, HaB3/HaC1 (?) - HaD/LtA (?); 21 - **Oettern**, Kreis Weimarer Land, Burggraben/Otternburg, HaD/LtA (?); 22 - **Wenigenjena**, Stadt Jena, Jenzig, HaA2/B1 and HaD/LtA; 23 - **Graitschen**, Saale-Holzland-Kreis, Alter Gleisberg, HaA2/B1 - HaD/LtA; 24 - **Jena-Lobeda**, Stadt Jena, Johannisberg, HaB3/HaC1 - HaD/LtA; 25 - **Gera-Untermhaus**, Stadt Gera, Hainberg, BD/HaA1 (?), HaA2/B1, HaD/LtA; 26 - **Singen**, Ilmkreis, Singerberg, HaB3/C1(?) - HaD/LtA (?); 27 - **Stadtilm**, Ilmkreis, Haunberg, HaA2/B1 (?); 28 - **Oberpreilipp**, Landkreis Saalfeld-Rudolstadt, Weinberg, HaB3/C1; 29 - **Obernitz**, Landkreis Saalfeld-Rudolstadt, HaA2/B1 and HaD/LtA; 30 - **Öpitz**, Saale-Orla-Kreis, Felsenberg, BD/HaA1 - HaD/LtA; 31 - **Kahla**, Saale-Holzland-Kreis, Dohlenstein, BD/HaA1 (?) - HaD/LtA (According to Simon 1984).

banks. Ledge-, plateau- or outlying areas were used almost exclusively for the fortifications (Brandt 1999, 261). Since the Triassic the Saale river dug here into the subsoil of red sandstone and limestone, so the river bed is now up to 250 m below the plateaus. The area of the middle Saale valley is dominated by the influx of many smaller watercourses, such as the Gleise, Magdel

or Leutra, which have created many side valleys. Due to the limestone slopes sunlight is reflected, but also heat stored. With conditions like that a partly pseudo-mediterranean climate has developed at the slopes, where rare orchids and dry grassland crops thrive (Rau 1974, 975-977; Zündorf et al. 2006, 18). The average annual temperature is approximately 6.7 to 9.6 ° C. The annual precipitation decreases due to the high evaporation on the lime areas and is 450-891 mm (http://www.tlug-jena.de/umweltdaten).

The Alter Gleisberg near Graitschen is an isolated mountain of 343 m above sea level (fig. 3). Today the limestone mountain today has a rich stock of natural beech- and beechmixed forests and various forms of dry grasslands. The favorable conditions make the Alte Gleisberg to a habitation for over 50 different biotypes, which are composed largely of endangered or protected species. The local orchid species are especially important (Peter, Wagner 2004, 9; Ettel 2009, 17). The mountain rises about 200 m above the surrounding landscape, which is dominated by extensive loess-areas (fig. 4). In addition to the low valley plains in the east rugged limestone surfaces above the valleys and the creeks Löbnitzbach and Gembdenbach characterize the field of view to the west. The spatial analysis of the viewable area from the highest point of the mountain shows the dominant position of the Gleisberg in the cultural landscape significantly (Ettel 2014, 133) (fig. 5). Throughout the slope of the mountain range there are sources or layer water withdrawals to be found (Simon 1962, 4; Ettel et al. 2013, 97). The plateau is of nearly triangular shape and covers a total area of 7 hectares. Overall, it is divided into three sections: the north and

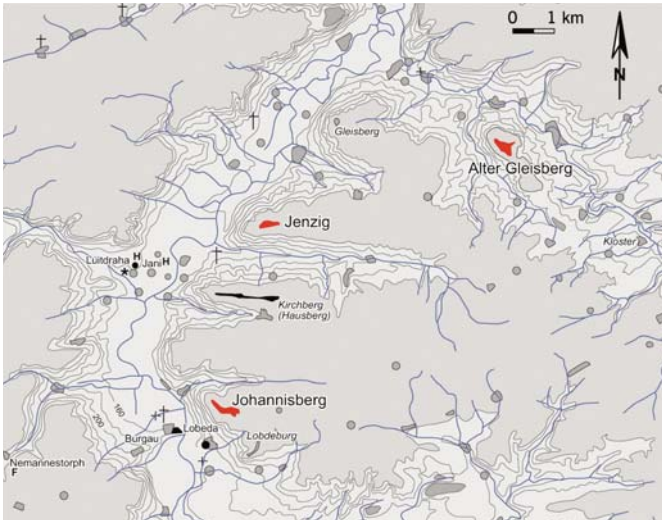

Fig. 2. The middle Saale valley near Jena. Red – fortified hilltop settlements (Ettel 2014).

Fig. 2. Bazinul mijlociu al râului Saale în apropiere de Jena. Cu roşu – fortificaţii din epocile bronzului şi a fierului (Ettel 2014).

Fig. 3. Alter Gleisberg near Graitschen, view from the south (Ettel 2009).

Fig. 3. Alte Gleisberg bei Graitschen, vedere dinspre sud (Ettel 2009).

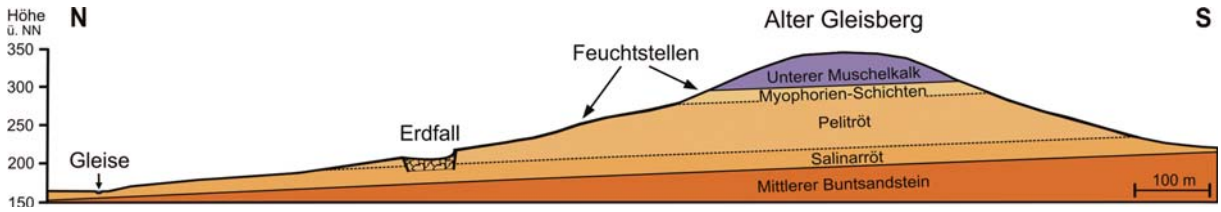

Fig. 4. Geological structure oft the Alter Gleisberg (Ettel 2014).
Fig. 4. Structura geologică a Alte Gleisberg (Ettel 2014).

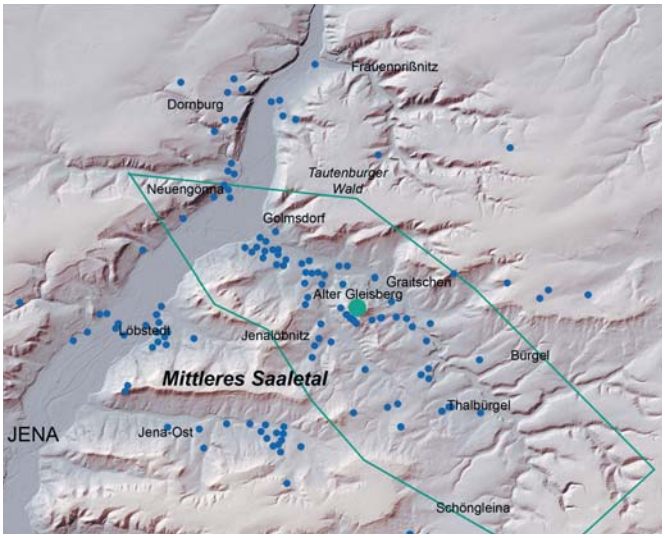

Fig. 5. Viewable space from the highes point of the Alter Gleisberg (Paust in Ettel 2014).
Fig. 5. Vizibilitatea de pe Alte Gleisberg (Paust in Ettel 2014).

the south terrace and the center bolt. There are three entrances to the plateau, the southern one leading from Graitschen is only the only one accessible by car – in dry weather and soil conditions. The other approaches have their origin in Graitschen and Löberschütz and lead to the middle bolt or the north terrace and are accessible only by foot. Although the hillfort located on the Gleisberg backs a bit into the Gleise valley, it dominates the middle Saale valley impressively (Ettel 2013, 97).

The archaeological research on the Alte Gleisberg dates back to the 19th century. Friedrich Klopfleisch started initial investigations between 1864 and 1881. After Klopfleisch findings in large numbers were recovered especially by the local priest H. Brehmer. The research of the 20th century was almost exclusively done by the Germanic Museum of the University of Jena and, emerging from it, the Institute of prehistoric archeology. Especially K. Simon has found his tast in the processing of the considerably grown numbers of ceramic finds. His thesis (Simon 1962) still constitutes an important base for the investigation of the hillfort. In 1962 for the first time a detailed survey by C. Sesselmann took place.

Since 2004 the Alter Gleisberg is again focus of research (fig. 6). The new studies involve the Institute of Earth Sciences and Geology and the Institute of Photonic Technologies in addition to the Department of Pre- and Early History of the University of Jena and the Thuringian State Office Heritage Management. Annual excavation campaigns and geophysical surveys of the settlement areas are held since 2003, they provide systematically prospected and excavated settlement structures for the first time. Particular attention should also be given to a geo-archaeological internship held since 2005. It enables students of geography, geology and archeology to gain an insight into the various disciplines involved in the project and to participate directly in the interdisciplinary research. In the course of the internship pollen analysis, geophysical prospecting, pedological analyzes and geological surveys have been carried out to the substrate of the hillfort.

First large areas of the plateau were prospected. It was found that the wall areas partially mapped by C. Sesselmann are often eroded or barely visible under increasing vegetation (Schüler 2010/11, 91). In the whole area of the settlement, however, human interventions could be documented in advance of the excavations, which were used as a base for the selection of excavation areas. In the course of the investigation further geomagnetic prospections were made by the Institute of Geosciences, University of Jena during the geoarchaeological internships (Ettel et al. 2013, 104 f.). These were used to train the participants in the applied measurement methods, the graphical representation and the analysis of the data, to prepare the selected areas for excavation.

Fig. 6. Aerial photographie from the excavation campaign 2013 (FSU, Kasper 2013).

Fig. 6. Alte Gleisberg. Vedere generală asupra şantierelor arheologice din 2013 (FSU, Kasper 2013).

In 2004, the first systematic excavations at the Alter Gleisberg began in annual campaigns, and continued until 2014 (fig. 7). After a short time it turned out that the state of conservation of findings that sunk into the upcoming limestone was not that well. Nevertheless numerous holes of wooden posts and remains of settlement pits testify the high intensive settlement of the plateau. In the archaeological material, almost all eras of central german Prehistory were represented, but usually only in small numbers. However, the number

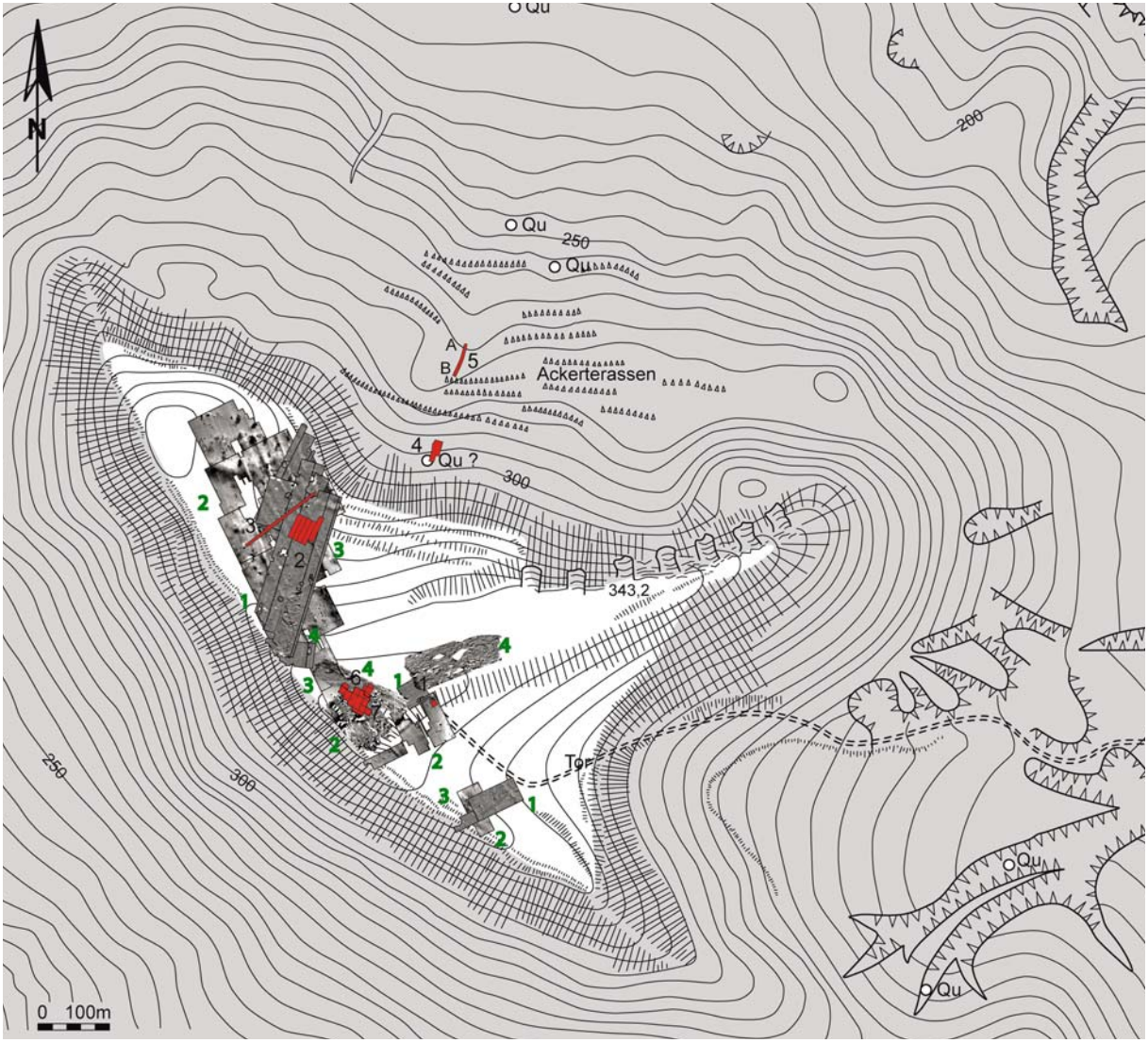

Fig. 7. Alter Gleisberg – geomagnetic and archaeological (red) investigated areas (Ettel 2014).

Fig. 7. Alte Gleisberg. Suprafața cercetată geomagnetic și arheologic (cu culoare roșie) (Ettel 2014).

of findings from the Late Bronze and Early Iron Age reveals a high intensive use of the plateau during those times. The finds of late Hallstatt / early La Tène period are also represented in large numbers. For Lt C and D, the settlement of the mountain is also demonstrated. In addition to the numerous ceramic fragments and metal finds, not only settlement but also manufacturing could be testified (Ettel 2009, 21). There were mold fragments and slags as well as loom weights. Among the finds of the 19th and 20th centuries also were briquetage cones that occupy the salt import at the Gleisberg. Most findings were found at the surface and collected in the 19th and 20th centuries. However, in the light of recent investigations they indicate the continuing importance of the Alter Gleisberg for the middle Saale valley from the beginning of the Late Bronze Age (Ettel 2009, 24).

Immediately above the Saale, northwest of the Alter Gleisberg, the Jenzig is located (fig. 8). This 4 km long ledge opens in a 540×150 m large, triangular plateau, whose slopes drop steeply down to the river Saale. The archaeological investigation of the Jenzig also goes back to Friedrich Klopfleisch. He recognized the wall remains as a prehistoric fortification and started first excavations in the second half of the 19th century (fig. 9). Above all the Jenzig was widely known for a hoard, which was recovered in 1936. The hoard consists of various bronze objects, which can be dated to the late Bronze Age. However, the composition of the inventory suggests that there are multiple small deposits of different times (Rüdel 2014, 40 f.). In addition to the fortification this also shows, that the Jenzig as well as the Alter Gleisberg was of particular importance at the end of the Bronze Age. The plateau of the Jenzig was highly embattled,

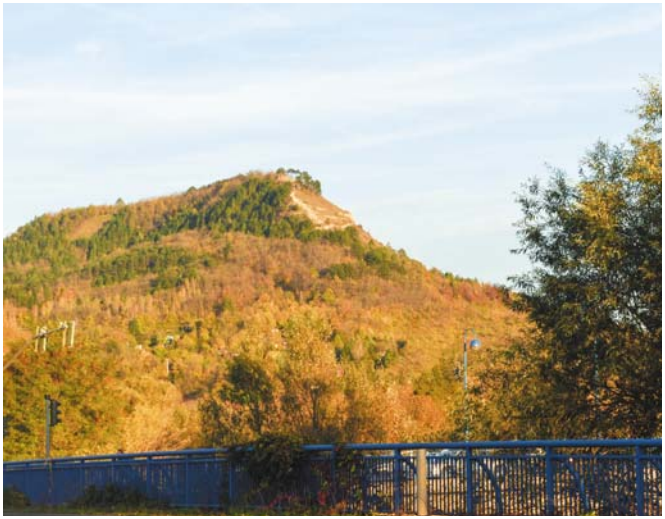

Fig. 8. The Jenzig from southwest (Scherf, Schüler 2014).
Fig. 8. Jenzig. Vedere dinspre sud-vest (Scherf, Schüler 2014).

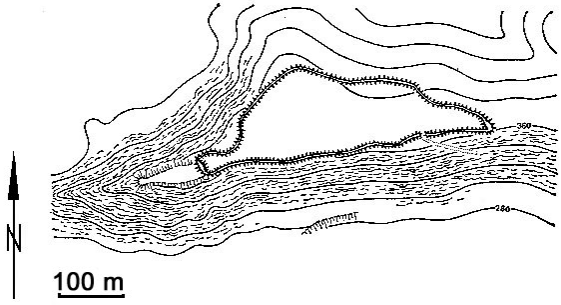

Fig. 9. The Jenzig with the fortification postulated by (Simon 1984).
Fig. 9. Jenzig. Conturul fortificației (Simon 1984).

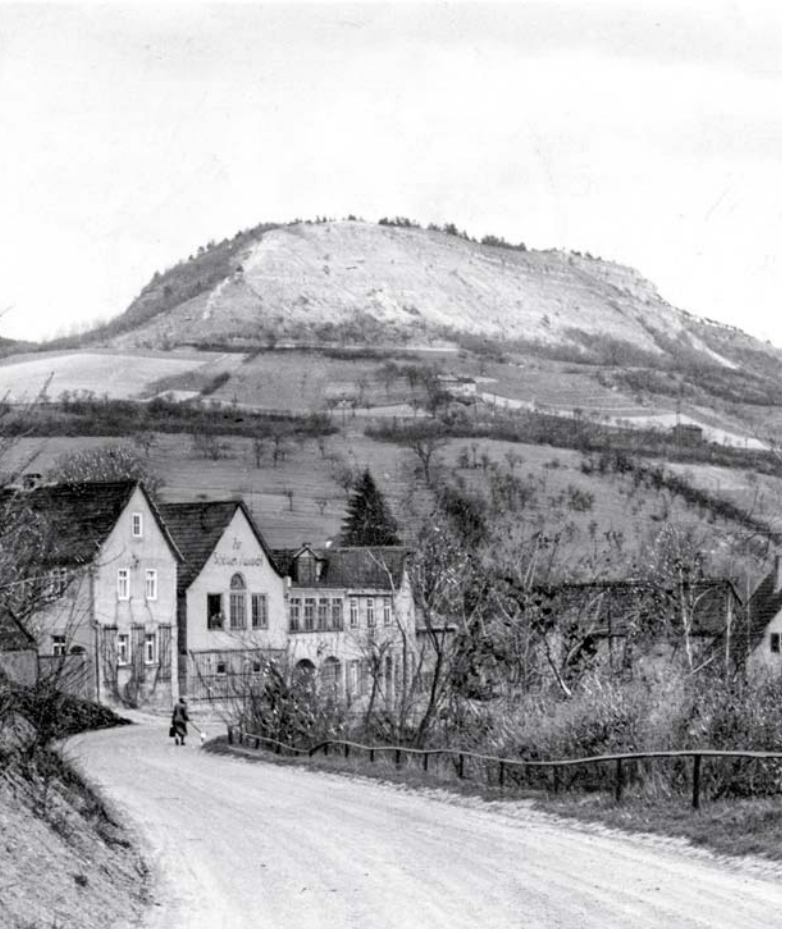

Fig. 10. The Johannisberg above Wöllnitz and Jena-Lobeda seen from north-west (Department of Pre- and Protohistory, University of Jena)

Fig. 10. Johannisberg. Jena-Lobeda. Vedere dinspre nord-vest (Departamentul de Pre- şi Protoistorie, Universitatea Jena).

despite the steep slopes. Today almost nothing is received from the walls and the postulated settlement because of the construction of the Jenzighaus and the corresponding roads across and to the plateau in the early 20th century. From the information given by F. Klopfleisch, K. Simon deduced a fortification of a wood and earth wall with a pre-appeared drywall of boulders (Simon 1967, 18 f.). The wall was built completely around the top of the Jenzig plateau and, because of the recent buildings, cannot be traced today. Furthermore F. Klopfleisch describes deepened herds behind the ramparts. Those belong to residential buildings, as is evidenced by the concentration of finds in these places. Also some indications on craft production, e.a. weaving weights and molds, were noted (Simon 1967, 22). For the usage time of the Jenzig, more intensive use phases can be detected from the archaeological material preserved. Intensive use and arguably the high time of the hilltop settlement occurs during the period in Ha A2/B1 (Simon 1967, 50; Ettel 2009, 24; Ettel 2010, 360).

4.5 km south of the Jenzig the Johannisberg is situated (fig. 10). It rises 220 meters above the Saale valley and is naturally protected to the south, west and north by steep limestone slopes. The plateau has a surface of 180×70 m, from which another 200 meters long ledge points to the northwest (fig. 11). This was separated by a 50 m long rampart against the rest of the plateau (fig. 12). The associated ditch was dug in the upcoming limestone and the removed blocks may be used for veneering of the wall with a drywall (Simon 1984, 49 f.). The prehistoric hillfort had a size of only 0.8 ha, which is very likely because the settlement was adapted to the surrounding environment (Simon 1984, 54). The

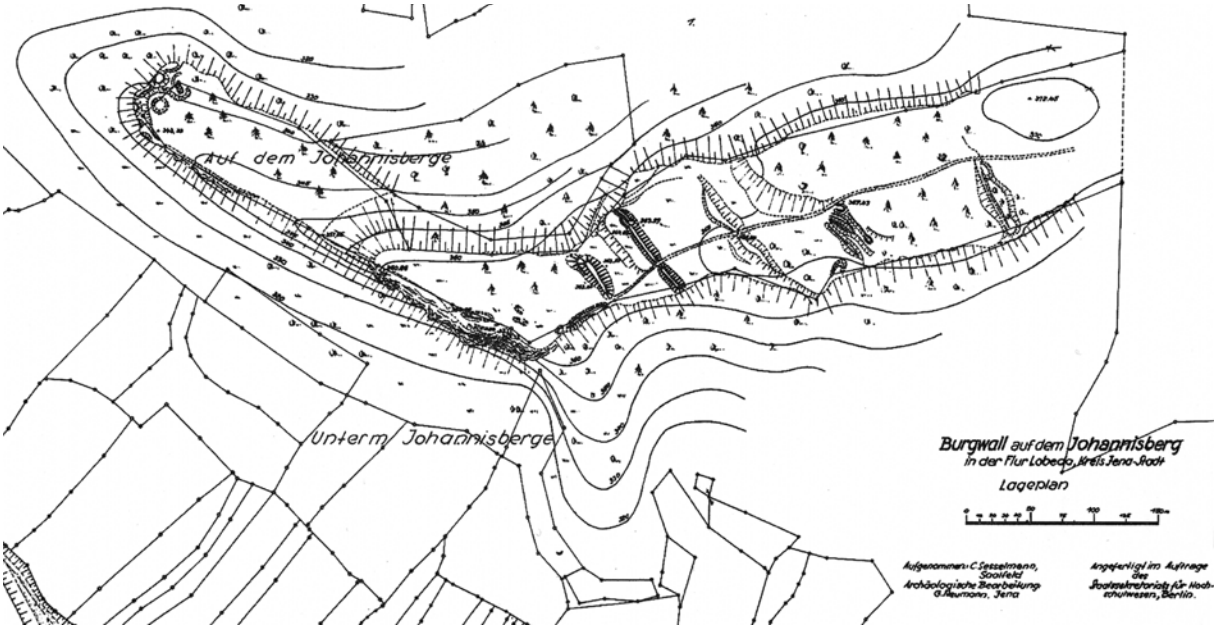

Fig. 11. Map of the plateau of the Johannisberg with the prehistoric and the early medieval ramparts (Grabolle 2007).
Fig. 11. Planul platoului Johannisberg cu indicarea elemetelor defensive din perioadele preistorică şi medievală timpurie (Grabolle 2007).

findings from Johannisberg suggest a date in Hallstatt B2/B3 near which it replaces the Jenzig as part of the fortification system Alter Gleisberg-Jenzig-Johannisberg (Ettel 2010, 360; Hage 2007). The settlement of the mountain by a Slavic-German castle in the 9th/10th Century AD complicates the investigation of traces of the prehistoric hillfort (Grabolle 2007, 43).

Another hilltop settlement of the Saale valley is the Rudelsburg near Bad Kösen, near the confluence of the rivers Saale and Ilm (fig. 13). The castle is naturally protected due to the steep limestone slopes that rise about 85 m above the Saale. The strong medieval overprinting of the hill makes locating unique prehistoric fortification and colonization difficult. However, in the archaeological material the late Bronze Age and early Iron Age are well represented. During this period the settlement seemed to focus on the southern slope, although erosion processes have to be considered as a cause of the accumulation of finds in this area (Schmidt 2012, 158). Already in Ha A the find precipitation increases strongly in comparison to previous periods,

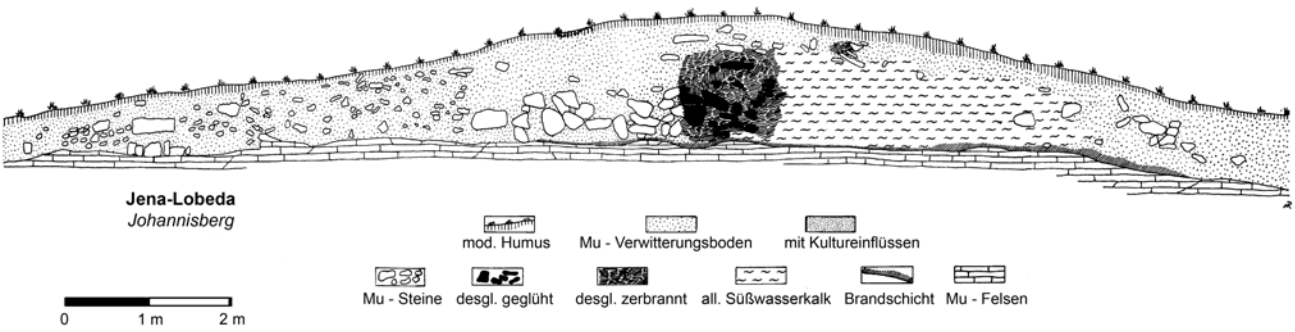

Fig. 12. Profile of the prehistoric rampart at the Johannisberg (Simon 1972).
Fig. 12. Johannisberg. Secțiune prin valul din perioada Urnenfeld (Simon 1972).

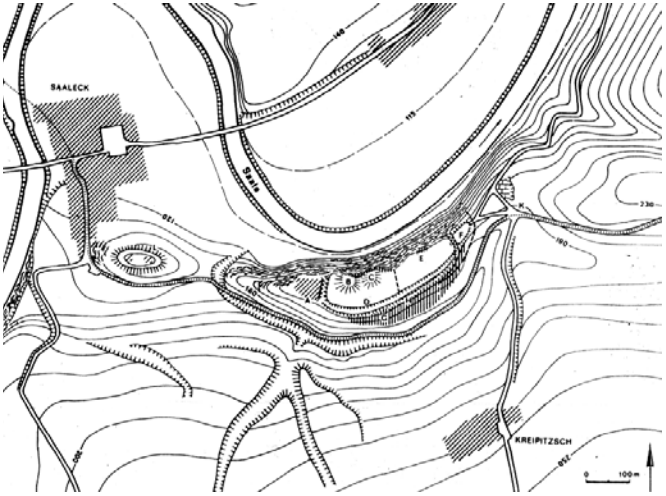

Fig. 13. Map of the Rudelsburg near Bad Kösen (Simon 1991).
Fig. 13. Planul sitului Rudelsburg bei Bad Kösen (Simon 1991).

but cannot clearly be assigned to any culture as the hillfort is located in the contact region of several Late Bronze Age culture groups (Simon 1991, 96; Schmidt 2012, 154). The most intense colonization took place in Ha B2/3, Ha C1 is already a significant decline (Schmidt 2012, 137).

Together, the fortifications on the Johannisberg at Jena-Lobeda, the Jenzig and the Alter Gleisberg form a system of hillforts for monitoring the Saale river. The proven east-west connection in this area was interrupted by the corresponding triangle of fortifications. The Gleisberg may apply due to its size and prolonged colonization as the main settlement of this system. At the confluence of Ilm and Saale the Rudelsburg is also at a very advantageous junction of roads. Common to the presented hillforts is the fortification with wood and earth walls that may have been reinforced with dry stone walls in two cases. However, these assumptions are mostly based on observations of the 19th century

and are no longer comprehensible nowadays. The profiles of the prehistoric wall on the Johannisberg show possible stone settings that may have served as the foundation of a wall like this. Another mutuality is, that all the fortifications seeming to be sectional ramparts in Late Bronze Age / Early Iron Age. In the notes of F. Klopfleisch only the Jenzig showed walls bordering the plateau itself at this time. The sectional attachments blocked the access roads to the plateau above the Saale, while the steep limestone slopes and impact crashes protected the remaining sides. Another common feature of the hilltop settlements is the situation on ledges. Only the Alter Gleisberg, as set-back "main settlement" was created on a singled mountain. All other fortifications are, as far as understandable up to today, applied on ledges. A proposal for the typological classification of the hilltop settlements is done by J. Brandt (Brandt 1999). Notably while the earlier fortifications were sectional walls, in later periods full surrounding walls were built at the same places. However, it must be considered that almost all the hillforts of the treated area were more or less strongly overprinted by later settlement activity, that's why a unique classification of architectural structures of the late Bronze Age and early Iron Age is difficult (Brandt 1999, 264). In the treated system to Jena this is particularly the case with Johannisberg and Jenzig.

The briquetage found on the hilltop settlements might originate in the territory of Halle/Saale and southern Saxony-Anhalt. They therefore demonstrate that salt was valued as a commodity and was transported across the Saale river to the south. The findings at the Alter Gleisberg reflect significant contacts with the Urnfield

Fig. 14. Mold fragments, Alter Gleisberg (Ettel 2014).
Fig. 14. Fragment de formă de turnat descoperit la Alte Gleisberg (Ettel 2014).

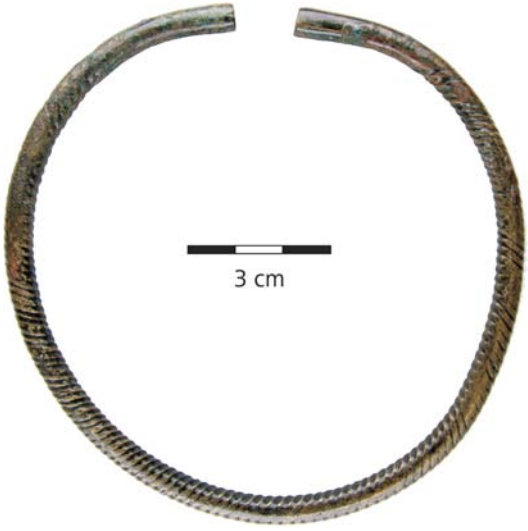

Fig. 15. Pseudo-twisted collar, Alter Gleisberg (Ettel 2014).
Fig. 15. Torques descoperit la Alte Gleisberg (Ettel 2014).

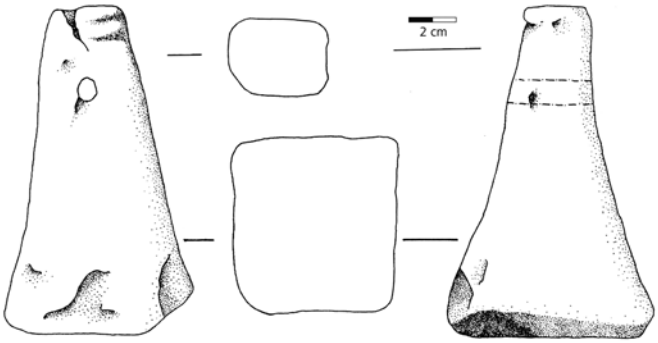

Fig. 16. Loom wheigt, Alter Gleisberg (Ettel 2014).

Fig. 16. Greutate pentru războiul de țesut descoperită la Alte Gleisberg (Ettel 2014).

culture of southern Germany, which can possibly be explained by the salt trade and the associated transfer (Simon 1984, 66).

The next hillfort up the Saale river is the Dohlenstein near Kahla, another hillfort, which cannot be discussed further in this paper. Similarly, there are other hilltop settlements near Saalfeld and Rudolstadt, which could have served as the last stations of the traded salt before crossing the Thuringian Forest. Copper might have been transported in the opposite direction from the northern Orla area (Ettel 2010, 360).

To what extent the aforementioned metal production on the hilltop settlements is associated with the salt trade, must remain open. But the fact is that there are settlements found over a large part of the hilltop, regardless of size or mounting, leads to the assumption of metal processing in form of molds, crucibles residues and waste (Simon 1984, 55) (fig. 14, 15). Further, of course, there are found traces of the house work, e.a. textile production (Fig. 16). However, the role of the hilltop settlements in trading matters should not be overstated, as corresponding results are known from simultaneous lowland settlements (Schmidt 2012, 163). The dense settlement around the hilltops and the position of the hilltop settlements at the edge of densely populated regions indicate the importance of

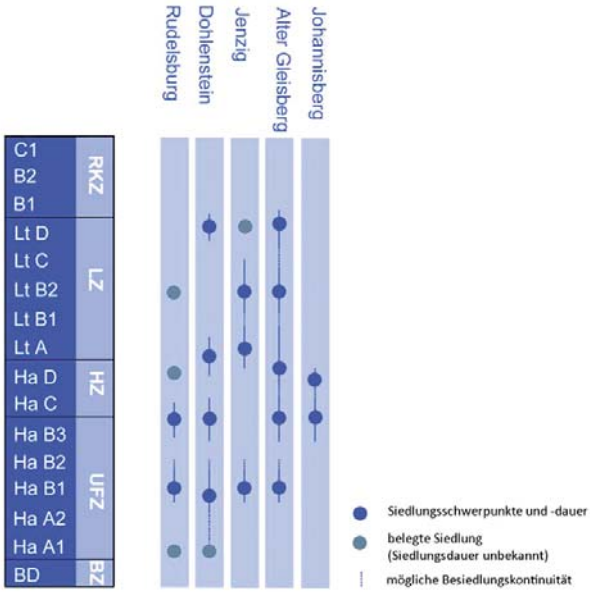

Fig. 17. Date range of the fortified hilltop settlements in the Saale valley (according to Simon 1984).

Fig. 17. Diapazonul cronologic al fortificațiilor (după Simon 1984).

the location, which has already been adopted earlier by K. Peschel (Peschel 1986, 30; Simon 1984, 61; Schmidt 2012, 162). The situation suggests that the middle of the settlement chambers was used more for agricultural production, while the higher surrounding limestone plateaus not only topographically offered good places for fortification, but also dominated the settlement area. The function of hilltop settlements was certainly the administration of the region in addition to protection. In the system near Jena this is reflected particularly in the fact that the Alter Gleisberg permanently and Jenzig and Johannisberg alternately were fixed and settled (fig. 17). If and how the hillforts had religious functionsreligious must remain open. The control of the trade routes was an important, but not singular role in height settlements.

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Thraco-Getic fortifications in Middle Dniester region. Sites from Saharna micro-zone[1]

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Grație condițiilor fizico-geografice prielnice, partea de sud a regiunii Nistrului Mijlociu a servit din cele mai vechi timpuri drept loc de trai pentru comunitățile umane, fapt documentat prin numeroase situri arheologice (fig. 1). Însă, o adevărată „explozie demografică" este atestată în aşa-numita perioadă traco-getică, de când în acest spațiu sunt cunoscute vestigiile a cca 39 fortificații şi 63 aşezări deschise (fig. 2). În urma cartării s-a observat că, de regulă, ele sunt grupate în „aglomerări/concentrări", constituite din câteva fortificații şi un număr variabil de aşezări civile. În regiunea de sud a Nistrului Mijlociu astfel de „aglomerări" de situri pot fi conturate în bazinele râurilor Ciorna şi Cogâlnic, precum şi pe malul drept al Nistrului, în microzonele Horodişte-Țipova şi Saharna.

Dintre acestea, cea mai intens studiată în ultimii ani este „aglomerarea" de situri din microzona Saharna, din care, la momentul actual, sunt cunoscute 13 fortificații (Saharna Mare, Saharna Mică, Saharna „La Şanț", Saharna „La Vile" etc.) şi 10 aşezări civile (fig. 7).

Ca urmare a cercetărilor perieghetice şi a investigațiilor arheologice s-a stabilit că un rol important în spațiul menționat a avut fortificația de la Saharna Mare, care se evidențiază prin poziția strategică, suprafață (cca 6 ha), complexitatea sistemului defensiv, precum şi prin descoperirile din incintă. Acestea permit să presupunem că cetatea de la Saharna Mare a funcționat ca un centru economic, administrativ, social-politic şi religios.

The southern part of the Dniester Middle region comprises an area of about 15-20 km, which is located on the right bank and partly on the left bank of the Dniester River, between the localities of Vertiujeni (47° 59' 36" North, 28° 32' 24" East) in the north and Țipova (47° 36' 18" North, 28° 58' 46" East) in the south.

The territory of the right bank is part of the Dniester Plateau and the left bank area represents south-western outskirts of the Podolian Plateau.

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The Dniester Plateau in this region has a moderate relief with absolute heights of 250-347 m above sea level, broken by a system of narrow valleys and ravines, sometimes in form of a gorge (density of fragmentation is 1.9-2.1 km/km^2) (Рымбу 1982, 12, 14; Boboc 2009, 164).

The Formation of contemporary landscape in the central region of the Dniester River basin began in Middle Pliocene, with the retreat of sea water caused by the general rise of the earth's crust in this area (about 5 mm/year). During the same period there appeared alluvial networks and started vast accumulations of alluvium on relatively large surfaces. Subsequent lifting of land, without causing plicative or disjunctive tectonic structures, occurred impulsively on a regional scale, forming a series of alluvial terraces in major rivers. The rise of the land surface is confirmed by the morphological character of the valleys of the La-Vale-Rezina, the Saharna and other small rivers. In the area of the lower reaches, near the Dniester River, these are represented by narrow canyons with depths of about 15-50 m. And as a result of the tectonic movements the right bank of the Dniester in the region became very steep (Ciubotaru 2014, 11-12). The Dniester terraces are shaped in the form of steps with a height of 5-10 m, where a process of selective erosion carved long horizontal caves and niches (Ciubotaru 2014, 12). The hills and banks of the river valleys are covered with loamy soils, ashen-gray soils, and chernozem deposited on reef massifs – deposits of clay, sand, limestone, and other rocks. They were formed in steppe conditions under deciduous forests, characterized by the presence of oak, linden, maple, beech, etc. Gray soils contain about 10% humus and have grain structure. Chernozems, also formed under the trees and are cumulative, with high humus content, well structured and loose. These soils have a high level of fertility and represent the main natural resource of this area (Ursu 2006, 160-175; Begu et al. 2006, 112-130).

Thanks to favorable physical and geographical conditions, the southern part of the Middle Dniester region since ancient times has served as a place to live for human communities, what is confirmed by numerous archaeological sites (Bubulici 1993; Haheu 1993; Levițki 1993). But a true increase of population in this space is attested during the Iron Age.

Thus, to the Cozia-Saharna culture (late 11th c. - early 8th c. BC), which is considered one of the earliest Iron Age cultures in this region (Кашуба 2011, 53-59; Кашуба 2013, 126-127), now can be attributed about 50 sites (Кашуба 2000, 340-352; Zanoci, Băț 2011, 16-17, table 1), including: two fortifications, 39 unfortified settlements and nine cemeteries (fig. 1) . For the next period – the Basarabi-Şoldăneşti culture (the 8th c. - early 7th c. BC) – the number of known archaeological monuments is much lower – 12 (fig. 1; Zanoci, Băț 2011, 17, table 1), consisting of 10 settlements and two cemeteries.

Since the so-called Thraco-Getic period (the 7th/6th-3rd BC) the number of archaeological sites in the southern part of the Middle Dniester basin increases significantly, reaching a peak in the 4th - 3rd centuries BC, when there were 39 fortifications and about 63 settlements (fig. 2; Лапушнян, Никулицэ, Романовская 1974, 41-46; Kašuba, Haheu, Levițki 2000, 119-130; Arnăut 2003, 183-279; Zanoci, Băț 2011, 17-19, table 1).

After their mapping (fig. 2) it was observed that as a rule they are grouped into "agglomerations/clusters" consisting of several fortifications and a variable number of open settlements. In the southern region of the Middle Dniester such "agglomerations" of sites can be specified in basins of the Ciorna and the Cogâlnic rivers and on the right bank of the Dniester in micro-zones of Horodişte-Ţipova and Saharna.

Among these "agglomerations" the most intensively studied in recent years is the "agglomeration" of sites from the Saharna microzone[2], where at present there are known 13 fortifications and 10 not fortified settlements[3] (fig. 1, 2, 4, 6, 7).

Starting from the idea that fortifications have played an important role in the life of human communities in this period of time, they were given special attention, while settlements remain to be known only as a result of surface investigation.

The degree of research of the fortifications also is different. Some, such as Saharna Mare, Saharna Mică, Saharna "La Şanţ", Saharna "La Revichin", and Ofatinţi were researched through archaeological investigations. Others (Saharna "La Şanţ" I, Saharna "La Şanţ" II, Saharna "La Vile", Buciuşca) were subject to smaller-scale surveys. And those of Stohnaia III, Stohnaia IV, Saharna "Dealul Grimidon", and Saharna "Hulboaca" remain to be known only from surface investigations.

In the investigated region, in terms of topography (fig. 4, 6, 7) it was observed that the majority of fortified sites from this period are grouped on the banks of the three canyons going from the Dniester river bed to the inland[4]. These canyons made the connection between the river and the related territories.

In the central part of the Saharna micro-region there is a deep canyon ("Valea Crac"), which splits in its western side, forming an interfluve in which the fortification of Saharna Mare was located. On the south side of the canyon the fortified sites of Saharna "La Şanţ", Saharna "La Şanţ" I and Saharna "La Şanţ" II were built, and on the north side – Saharna Mică, Saharna "Dealul Grimidon" and Saharna "La Vile".

At a distance of about 3.5 km north of the "Valea Crac", on the southern outskirts of the Stohnaia village there is another canyon, on whose sides the fortifications of Stohnaia III (in the south side) and Stohnaia IV (in the north side) were located.

At about 4.5 km south of the "Valea Crac", north of the Buciuşca village there is the third canyon. On its sides the fortresses of Saharna "Hulboaca" (in the north side) and Buciuşca (in the south side) were located.

[2] The investigated area is a strip about 2.0 to 4.5 km wide and about 8.5 km long, located on the right bank of the Dniester, between the villages of Stohnaia (47° 43' 37" North, 28° 57' 53" East) and Buciuşca (47° 38' 55" North, 28° 59' 35" East). Added to this is a small portion of land on the left bank of the Dniester, where the fortification of Ofatinţi is located.

[3] It is possible that the number of civilian settlements have been higher. However, given that the Saharna micro-zone is mostly covered by forests, the discovery of open settlements here is more difficult.

[4] Exceptions are only two fortresses, which are located directly on the high and steep banks of the Dniester – Saharna "La Revichin" (on the right bank) and Ofatinţi (on the left bank).

Cozia-Saharna

▲ – *Fortifications*
1. Saharna Mare
2. Horodişte „La Şanţ"

■ – *Open settlements*
3. Alcedar III
4. Alcedar „La Cordon"
5. Ciorna I
6. Cinişeuţi I
7. Cinişeuţi II
8. Curatura II
9. Cuşmirca
10. Echimăuţi
11. Glinjeni V
12. Glinjeni „La Şanţ"
13. Horodişte „Groapa Turcului"
14. Mateuţi
15. Mateuţi „Curtaia" I
16. Mateuţi „La Başne"
17. Mihuleni I
18. Mihuleni II
19. Odaia
20. Parcani I
21. Parcani II
22. Popăuţi II
23. Raşcov „Mlînî"
24. Stohnaia I
25. Saharna I
26. Saharna „Budei"
27. Saharna Mare/„Dealul Mănăstirii"
28. Saharna „Gura Hulboacei"
29. Saharna „Hulboaca"
30. Saharna „La Şanţ"
31. Saharna „Rude"
32. Saharna „Ţiglău"
33. Saharna „Valea de Mijloc"
34. Socol „Craina"
35. Solonceni „Hlinaia"
36. Solonceni „La Ursari"
37. Şipca I
38. Şipca II
39. Ţahnăuţi
40. Ţareuca
41. Ţipova II

● – *Necropolis*
42. Alcedar
43. Ciorna
44. Climăuţii de Jos
45. Mateuţi
46. Mihuleni
47. Poiana
48. Saharna „Gura Hulboacei"
49. Saharna „Ţiglău"
50. Ţareuca

Basarabi-Şoldăneşti

■ – *Open settlements*
51. Alcedar III
52. Glinjeni „La Şanţ"
53. Mateuţi „La Başne"
54. Olişcani II
55. Saharna I
56. Saharna Mare
57. Solonceni „Hlinaia"
58. Şoldăneşti I „La Perişori"
59. Şoldăneşti III
60. Şoldăneşti IV „Piscăreşti"

● – *Necropolis*
61. Mateuţi „Curtaia"
62. Şoldăneşti II

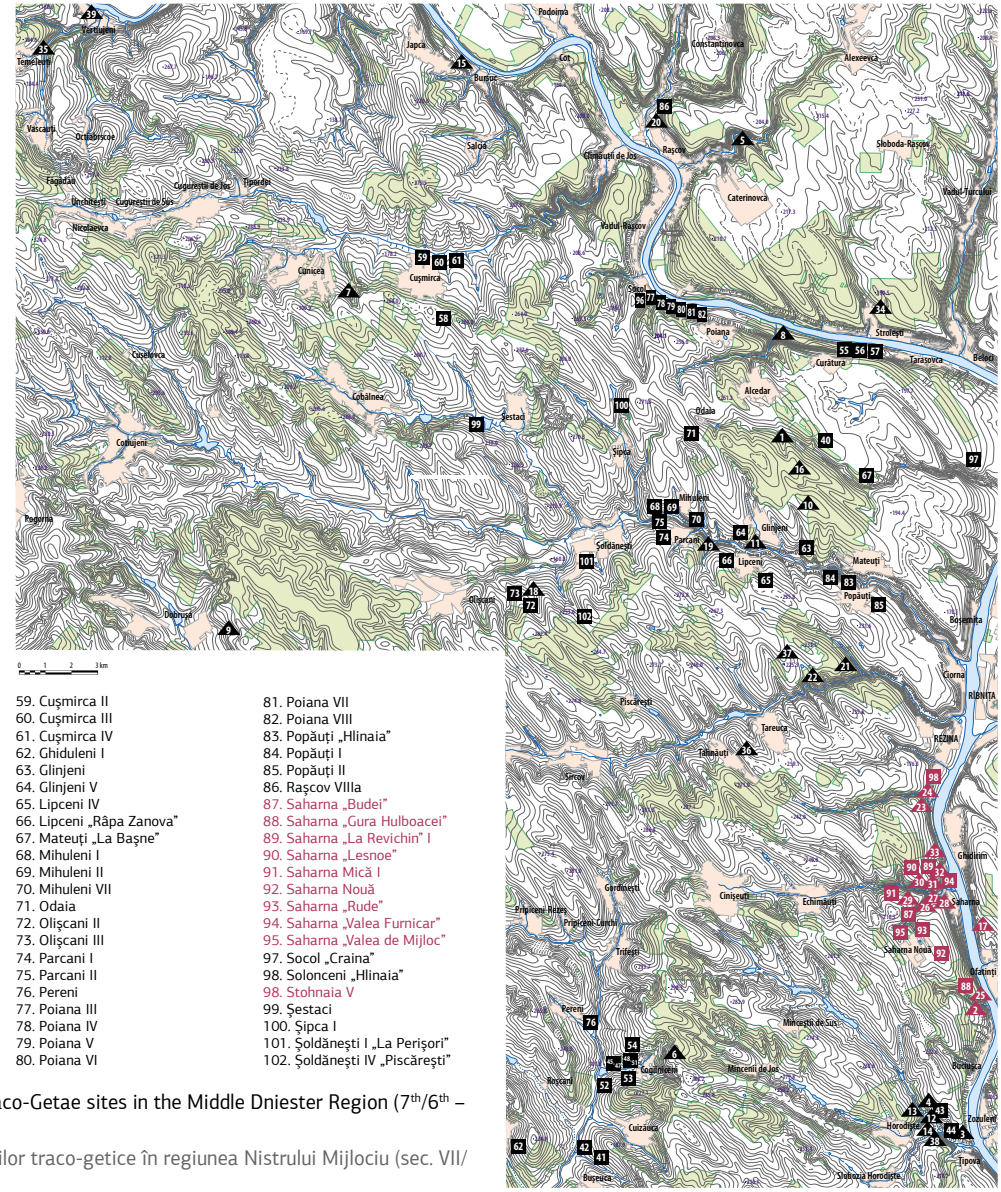
Note: The sites from Saharna micro-region are marked in red.

Fig. 1. Spreading of monuments of 11th – 8th/7th centuries BC in the Middle Dniester Region.

Fig. 1. Răspândirea monumentelor din sec. XI-VIII/VII a. Chr. în regiunea Nistrului Mijlociu.

▲ – *Fortifications*
1. Alcedar „La Cordon"
2. Buciușca
3. Buciușca II
4. Buciușca III
5. Caterinovca
6. Cogâlniceni
7. Cunicea
8. Curătura
9. Dobrușa
10. Glinjeni „La Lacuri"
11. Glinjeni „La Șanț"
12. Horodiște „La Șanț"
13. Horodiște II
14. Horodiște „La Cot"
15. Japca
16. Mateuți
17. Ofatinți
18. Olișcani
19. Parcani
20. Rașcov
21. Rezina
22. Stohnaia I
23. Stohnaia III
24. Stohnaia IV
25. Saharna „Hulboaca"
26. Saharna „La Șanț"
27. Saharna „La Șanț" I
28. Saharna „La Șanț" II
29. Saharna Mare
30. Saharna Mică
31. Saharna „Dealul Grimidon"
32. Saharna „La Vile"
33. Saharna „La Revichin"
34. Stroiești
35. Temeleuți
36. Țahnăuți
37. Țareuca
38. Țipova III
39. Vertiujeni

■ – *Open settlements*
40. Alcedar
41. Bușeuca I
42. Bușeuca II
43. Buciușca IV
44. Buciușca V
45. Cogâlniceni I
46. Cogâlniceni II
47. Cogâlniceni III
48. Cogâlniceni IV
49. Cogâlniceni V
50. Cogâlniceni VI
51. Cogâlniceni VII
52. Cogâlniceni VIII
53. Cogâlniceni IX
54. Cogâlniceni X
55. Curatura IIIa
56. Curatura IIIb
57. Curatura IIIc
58. Cușmirca I



0 1 2 3 km

59. Cușmirca II
60. Cușmirca III
61. Cușmirca IV
62. Ghiduleni I
63. Glinjeni
64. Glinjeni V
65. Lipceni IV
66. Lipceni „Râpa Zanova"
67. Mateuți „La Bașne"
68. Mihuleni I
69. Mihuleni II
70. Mihuleni VII
71. Odaia
72. Olișcani II
73. Olișcani III
74. Parcani I
75. Parcani II
76. Pereni
77. Poiana III
78. Poiana IV
79. Poiana V
80. Poiana VI
81. Poiana VII
82. Poiana VIII
83. Popăuți „Hlinaia"
84. Popăuți I
85. Popăuți II
86. Rașcov VIIIa
87. Saharna „Budei"
88. Saharna „Gura Hulboacei"
89. Saharna „La Revichin" I
90. Saharna „Lesnoe"
91. Saharna Mică I
92. Saharna Nouă
93. Saharna „Rude"
94. Saharna „Valea Furnicar"
95. Saharna „Valea de Mijloc"
97. Socol „Craina"
98. Solonceni „Hlinaia"
98. Stohnaia V
99. Șestaci
100. Șipca I
101. Șoldănești I „La Perișori"
102. Șoldănești IV „Piscărești"

Fig. 2. Spreading of Thraco-Getae sites in the Middle Dniester Region (7th/6th – 3rd centuries BC).

Fig. 2. Răspândirea siturilor traco-getice în regiunea Nistrului Mijlociu (sec. VII/VI-III a. Chr.).

Fortified sites in the central part of the Saharna micro-zone

The fortification of **Saharna Mare** (site coordinates: 47° 41' 37.3000" North, 28° 57' 27.7600" East) is located about 1 km southwest of the recent Saharna village and occupies the central and eastern part of the interfluve of approximately trapezoidal shape, which is part of the high terrace (altitude of about 130 m from the riverbed) of the right Dniester bank (fig. 4, 6, 7). The northern, eastern and southern sides of the interfluve are marked by high steep banks of the gorges that unite in the western part of Saharna village.

The first archaeological investigations were conducted by G.D. Smirnov in 1940s (Смирнов 1949a, 93-95). After a break of more than five decades, in 2001 archaeological investigations were resumed by employees of the scientific laboratory "Thracology" of the Moldova State University, and continue until these days. Thus, during 2001-2014 excavations were conducted on an area of 2202 m^2, being studied defensive system, as well as dwelling, household and worship complexes. Also there were found rich and varied archaeological materials[5].

As a result of archaeological research it was determined, that the first traces of habitation in the Saharna Mare interfluve dates back to the end of the 12th c. - 11th c. BC, when there existed an open settlement (Zanoci, Niculiță, Bățˌ 2013, 296-297, fig. 5/8-13). In the next phase, the Cozia-Saharna culture, in the south-west of the interfluve there was a fortified citadel (Niculiță, Zanoci, Bățˌ 2011, 226-236; Niculiță et al. 2012, 111-167). During early Thraco-Getic period (the 7th/6th -5th centuries BC) in the area of the interfluve there existed a fortification defended from the north, east and south by steep slopes, and from the west it was defended by means of a palisade (Niculiță, Zanoci, Arnăut 2008, 87-88, pl. 3, foto 11; Niculiță, Zanoci, Bățˌ 2013, 297, fig. 9/4, 5).

[5] The results of archaeological investigations have been published in journals and collections of papers in the Republic of Moldova (Niculiță, Zanoci, Arnăut 2007, 27-62; Niculiță et al. 2012a; Niculiță et al. 2013) and abroad (Niculiță et al. 2010; Niculiță et al. 2011; Niculiță et al. 2012b; Niculiță, Zanoci, Bățˌ 2011; Niculiță, Zanoci, Bățˌ 2013), as well as in a monograph (Niculiță, Zanoci, Arnăut 2008).

In the following 5th/4th-3rd centuries BC in the interfluve another fortress was built, equipped with a circular defensive system that surrounded the inner area of about 6 ha. The defensive elements on the west side had a length of about 385 m and consisted of a "wall" with adjacent ditch and three bastions with their ditches, located at sides and center. Archaeological investigations revealed that the "wall" had a width of about 5.6 m and was built as a wooden framework, which consisted of four facings filled with earth, sand, gravel and stone. The ditch had a width of 15 m in the top part and 6 m at the bottom and a depth of about 3.2 m. Bastions on the west side were located in front of the entrance gate and had a semicircular shape with a diameter of about 70 m – the central one, and about 30 m – bastions from the flanks (fig. 3; 5/1). In the construction of the bastions there was used the same techniques as in the construction of the "wall" – wooden framework with filling (Niculiță, Zanoci, Arnăut 2007, 27-62; Niculiță, Zanoci, Arnăut 2008, 89-99, pl. 5-7, foto 13-26). On the north, east and south sides, which today are quite steep, the site was also defended with a "wall", whose remains have been traced for a total length of about 650 m. In the eastern line this "wall"

Fig. 3. Saharna Mare. Orthophotomap (by http://geoportal.md/).
Fig. 3. Saharna Mare. Ortofotoplan (după http://geoportal.md/).

Fig. 4. Panoramic view of the Saharna micro-region from the southeast.
Fig. 4. Vedere panoramică dinspre sud-est a microzonei Saharna.

is wavy, forming eight bastions grouped in four at the northeast and southeast flanks. The Bastions have a semi-round shape 9-11m in diameter and are located at a distance of 5-6 meters from each other; the distance between the groups of bastions is 34 m. Bastions were placed in this way to protect the flanks and the front of the fortress (fig. 3, 5/2). As a result of archaeological investigations it was established that in the construction of the "wall" and the bastions the same technique of building was used: wooden framework consisting of two facings filled with earth and stone. The width of the "wall" thus created varies from one part to another, but within the limits 1.1-1.6 m (Niculiță et al. 2013, 220-237, fig. 13, 14, 18, 20, 21, 23).

The results conducted inside the Thraco-Getic fortress from Saharna Mare there were discovered traces of five surface structures, three hearths, over 150 household pits, nine cult hearths and a rich and varied archaeological material represented by working tools, weapons, parts of harness, adornments, local and imported pottery (Niculiță, Zanoci, Arnăut 2008, 102-140, fig. 92-159; Niculiță et al. 2011, 193-204; Niculiță et al. 2013, 257-286, fig. 45-69).

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Fig. 5. Saharna Mare. 1 - The “rampart” and the central bastion; 2 - bastions in the northeast side.
Fig. 5. Saharna Mare. 1 - Valul și bastionul central; 2 - bastioanele din partea de nord-est.

Fig. 6. Panoramic view of the Saharna micro-region from the east.
Fig. 6. Vedere panoramică dinspre est a microzonei Saharna.

Fig. 7. Orthophotomap (2006) of the Saharna micro-region (by Google Earth Pro).
Fig. 7. Ortofotoplanul (2006) microzonei Saharna (după Google Earth Pro).

The **Saharna "La Șanț"** site was located south of the Saharna Mare fortress, on a high and steep side of the canyon "Valea Crac" (fig. 7, 8/1), and consists of two inner areas. The first one[6] (site coordinates: 47° 41' 29.9000" North, 28° 57' 39.2400" East) has semi-oval shape with the size of about 175×60 m (about 0.9 ha) and was defended on the north by a steep side of the canyon and on the west, east and south – with an artificial defense system (a "wall" with adjacent ditch) forming a semicircle. The research conducted in this defensive system revealed that the "wall" consists of a

[6] This interior was discovered in 2002. In 2003, 2006-2008 there were undertaken excavations in an area of 288 m² (Zanoci, Moldovan 2004; Niculiță, Zanoci, Arnăut 2008, 151-162, fig. 160-173; Zanoci, Băț 2011).

casing made of wooden beams with a width of about 3 m and filled with earth and stone. In front of the "wall" at a distance of 2.7 m, there have been found traces of a ditch having a width of 2.2 m at the top and a depth of 0.5 m from the ancient ground surface (fig. 8/2). The small proportions of the ditch does not correlate with the characteristics of a defensive element, rather they testify that it was used to drain water (Niculiță, Zanoci, Arnăut 2008, 151-153, pl. 9, foto 27-30).

Archaeological research conducted within the fortress, although modest in size, have revealed nine household pits and various archaeological material related to the 5th/4th-3rd centuries BC (Niculiță, Zanoci, Arnăut 2008, 153-162, fig. 162-173; Zanoci, Băț 2011, 116-130).

The second interior[7] (site coordinates: 47° 41' 23.7000" North, 28° 57' 48.3800" East) was located to the south, representing, in fact, an annex of the first one. It had an irregular polygonal shape with dimensions of 307×254 m (about 7 ha) and was bounded on the west by the steep slope of the depression (fig. 7). On the south and east there was an artificial defensive system, represented by a ditch and perhaps "wall" or palisade forming a semicircle with a total length of 458 m (Niculiță, Zanoci, Băț 2013, 299).

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Fig. 8. Saharna "La Şanț". 1 - View of the headland from the north; 2 - ruins of a defensive structure

Fig. 8. Saharna "La Șanț". 1 - Vedere a promontoriului dinspre nord; 2 - ruinele construcției defensive.

[7] It was identified in 2008 as a result of study of orthophotoplans and field research.

Fig. 9. View of the headland from the southern part of the Saharna village.
Fig. 9. Vedere a promontoriului din partea de sud a satului Saharna.

The **Saharna "La Șanț" I** fortification[8] (site coordinates: 47° 41' 34.0300" North, 28° 57' 53.1200" East) is located about 200 m east of the site "La Șanț" (fig. 4, 6, 7, 9). It was built on a ledge of the nearly triangular shaped hill and defended by a circular defensive system which enclosed an inner area of about 0.9 ha. Remains of the defensive structures represent a "wave" having a width of about 3-4 m at base and a height of about 0.4-0.5 m. On the northern and eastern sides the defensive line is wavy, forming a kind of "bastions" (three on the north side and four on the east side) of arcuate shape in plan, with an opening of about

[8] It was discovered in 2014 as a result of study of orthophotoplans and field research.

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9-10 m (fig. 10/1). In order to clarify the technique and time of the "bastions" construction, there was made an archaeological excavation with dimensions of 10×2 m. As a result of archaeological research the existence of a defensive construction of about 1.1 m width, which consisted of two facings of wood and earth and stone filling, was discovered (fig. 10/3). Among the remains of the "wall" fragments of pottery of Thraco-Getic texture and several animal bones were found (Niculiță et al. 2014, 27-28).

The **Saharna "La Șanț" II** site[9] (site coordinates: 47° 41' 31.4300" North, 28° 58' 8.0700" East) was located about 250 m southeast of the previous one and also occupies a ledge of a hill, which rises above the Dniester valley (fig. 4, 6, 7, 9). The estimated area of the fortress is about 0.45 ha. Remains of the defensive

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Fig. 10. Ruins of bastions at present: 1, 3 - Saharna "La Șanț" I; 2 - Saharna "La Șanț" II.

Fig. 10. Ruinele actuale ale bastioanelor: 1, 3 - Saharna "La Șanț" I; 2 - Saharna "La Șanț" II.

[9] It was identified in 2014 as a result of study of orthophotoplans and field research.

system could be traced only on the north and east sides and represent a wavy "rampart" forming a series of "bastions" (fig. 10/2). On the eastern edge of the hill they are curved outward, and on the north – inwards. The archaeological survey (10×2 m) conducted in one of the "bastions" on the north side revealed the same way of construction as in the case of the Saharna "La Şanţ" I site. Here, however, were not certified chronological indicators, but based on the similarity of design, we assume that this defensive construction belongs to the Thraco-Getic period.

The site of **Saharna Mică** (site coordinates: 47° 41' 52.3800" North, 28° 57' 22.9800" East) lies north (opposite) of the fortification from Saharna Mare, being located on a promontory with absolute altitude of about 155 m that have steep and almost impregnable slopes on the south-west, south and southeast (fig. 4, 6, 7).

The first excavations were conducted by G.D. Smirnov in 1940s (Смирнов 1949b, 195). The investigations were resumed in 2003 and continued, with little interruption, until now[10].

It was determined that on the promontory of Saharna Mică there were: an open settlement (late 12th c. - 11th c. BC), a fortification dated the 7th/6th-5th centuries BC, and a fortress of the 4th-3rd centuries BC (Niculiță, Zanoci, Arnăut 2008, 13-50; Niculiță, Zanoci, Băţ 2013, 296-298).

The fortress of the 4th-3rd centuries BC, with an area of about 1 ha, was defended to the north and northeast by two bastions. The northern bastion was in semicircular shape with a diameter of about 50 m. Its "wall" was constructed of a framework of wooden beams, with a width of about 8 m, filled with earth and stone (Niculiță et al. 2010, 374, fig. 14). The northeast bastion had a stone foundation, which represented a semicircular wall with a total length of 37 m and a width of between 5 and 9 m. Of the wall from two to nine rows of broken stone were preserved (Niculiță, Zanoci, Arnăut 2008, 25, 169, fig. 2).

As a result of archaeological investigations in the habitation layer dated the 4th-3rd centuries BC four constructions, over 25 household pits and varied archaeological materials were discovered (Niculiță, Zanoci, Arnăut 2008, 28-46, fig. 12-39).

The fortress of **Saharna "Dealul Grimidon"** (site coordinates: 47° 41' 51.0400" North, 28° 57' 49.8200" East) was discovered in 2014 as a result of field research (fig. 4). It is located on the northern side of the "Valea Crac" ravine, opposite the fortress of Saharna "La Şanţ" I, at a distance of about 500 m east of the Saharna Mică site. Due to the fact that the place is covered with forest, the defensive system can be traced only partially, on the south side, where several "bastions" similar to those in neighboring sites were discovered. Estimated area of the fortification is about 0.4 ha.

[10] During 2003-2009, 2011-2013 there was archaeologically investigated an area of about 450 m^2. The main results are published in: Niculiță, Arnăut, Zanoci 2007; Niculiță, Zanoci, Arnăut 2008, 13-50, fig. 1-39; Niculiță et al. 2010, 371-374, fig. 12-14.

Fig. 11. View of the headland from the northern part of the Saharna village.
Fig. 11. Vedere a promontoriului din partea de nord a satului Saharna.

The **Saharna "La Vile"** fortification[11] (site coordinates: 47° 41' 56.0100" North, 28° 57' 58.9600" East) is located on the northern side of the „Valea Crac" ravine, opposite the fortress of Saharna "La Şanț" II and in a distance of about 200 m east of the Saharna "Dealul Grimidon" fortress. It was located on a promontory formed by the confluence of the Dniester valley and the ravine mentioned above (fig. 11). The defensive system is still attested only from the eastern and southern sides and represents arched "bastions" with an opening of about 10 m (fig. 12/1). Archaeological survey conducted in one of the "bastions" on the eastern edge of the promontory not resulted in the discovery of chronological indicators, but revealed the same way for construction of the "wall" – two wooden facings with filling of earth and stone (fig. 12/2).

[11] It was attested in 2013 as a result of study of orthophotoplans and field research. In 2014 a survey with the dimensions of 10×2 m was conducted.

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Fig. 12. Saharna "La Vile". Remains of a defensive structure
Fig. 12. Saharna "La Vile". Ruinele construcției defensive.

Fortified sites in the northern part of the Saharna micro-zone

The **Stohnaia III** fortress[12] (site coordinates: 47° 43' 32" North, 28° 57' 33" East) is about 0.5 km southwest of the village of Stohnaia and 1 km north from the site of Saharna "La Revichin" (fig. 13/1). The fortification of quasi-polygonal shape with an area of about 4.5 ha is located on a high bank of the Dniester that in this place rises to about 100 m above the water level. On the north side the site is bordered by a deep canyon, on the east by the steep bank of the river, on the west by a rampart with the adjacent ditch and on the south by a rampart. The best preserved is a defensive line on the west side, where the rampart has the width of about 6 m at base and height of 1.5 m and the ditch has the width of 7 m and a depth of 1.5 m (fig. 13/2, 3).

The **Stohnaia IV** site[13] (site coordinates: 47° 43' 46" North, 28° 57' 36" East) is about 1.3 km south of Rezina, north (opposite) of the Stohnaia III fortress (fig. 13/1). The quasi-triangular shaped fortification with an area of about 0.5 ha is located on a promontory with relative altitude of about 100 m, formed at the confluence of a canyon with a high bank of the Dniester. Remains of the defensive system can be traced only on the east side and represent a small rampart of about 0.3-0.4 m height and width of about 3-4 m.

[12] It was attested in 2013 as a result of study of orthophotoplans and field research.
[13] It was discovered in 2013 as a result of study of orthophotoplans and field research.

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Fig. 13. 1 - View of the canyon between Stohnaia III and Stohnaia IV from the east; 2 - view of the Stohnaia III headland from the north; 3 - ruins of the "rampart" from Stohnaia III at present.

Fig. 13. 1 - Vedere a canionului dintre Stohnaia III și Stohnaia IV dinspre est; 2 - vedere a promontoriului Stohnaia III dinspre nord; 3 - ruinele actuale ale valului de la Stohnaia III.

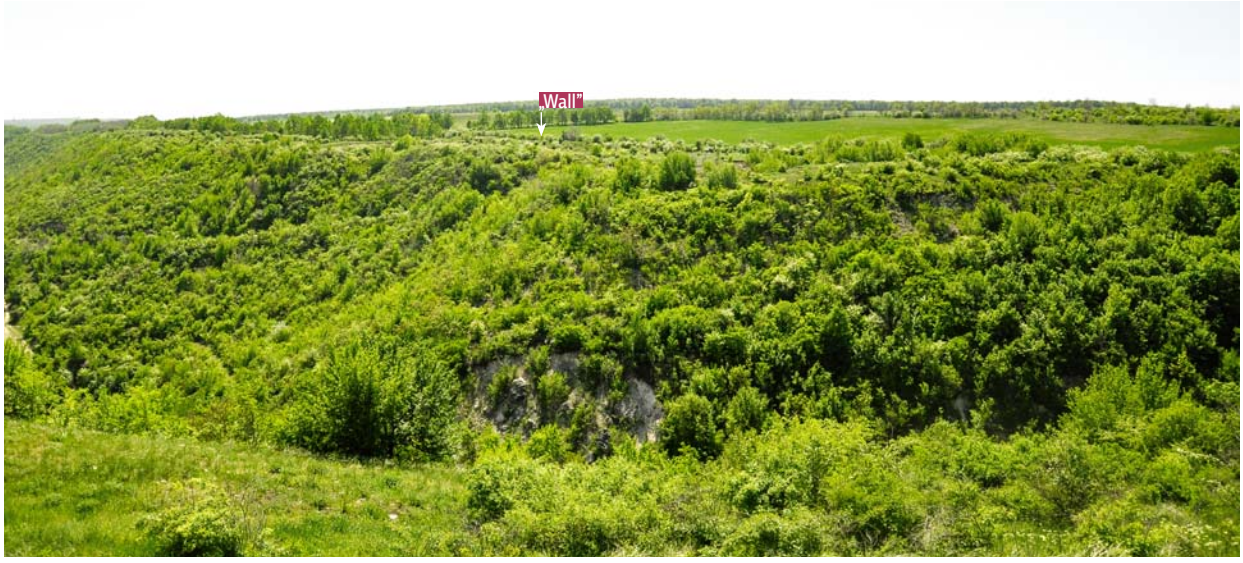

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Fig. 14. Orthophotomap showing the location of the fortifications of Saharna "Hulboaca" and Buciușca (by http://geoportal.md/).

Fig. 14. Ortofotoplan cu localizarea fortificațiilor Saharna "Hulboaca" și Bucuiușca (după http://geoportal.md/).

Fortified sites in the southern part of the Saharna micro-zone

The **Saharna "Hulboaca"** fortress[14] (site coordinates: 47° 39' 32.5034" North, 28° 59' 17.9042" East) is located about 1.2 km north of the Buciuşca village on a promontory with relative altitude of about 70 m, formed by the high bank of the Dniester and a canyon. The semicircular fortress with an area of about 0.2 ha was bounded on the east by the steep bank of the river, on the edge of which there probably was an artificial defensive system (fig. 14). Its presence is attested by a defensive structure of the bastion type located on the northeast edge of the fortification. The bastion currently has semicircular shape with dimensions of 6.0×3.5 m (fig. 15). Its rampart retains a width of about 1.7 m and height of about 0.5 m. On the southern, northwestern and northern sides the fortress was defended by a ditch that currently has a width of about 11 m at the top, about 4 m at the bottom and the depth of about 2 m.

The **Buciuşca** fortification[15] (site coordinates: 47° 39' 20" North, 28° 59' 07" East) is located 0.65 km north of the Buciuşca village, on a high bank of the Dniester, opposite the site of Saharna "Hulboaca". It occupies the north-eastern extremity of a plateau bounded by the Dniester River on the east and a deep canyon on the north side. The inner area of about 450×250 m (about 10 ha) was bounded on the north and east by relatively steep slopes and on the south and west by a rampart with adjacent ditch, which can be traced on a total

[14] It was discovered by G.D. Smirnov in 1946 (Смирнов 1949b, 195). The archaeological reconnaissance was carried out in 2010 and 2015.
[15] It was attested in 2010 as a result of study of orthophotoplans and field research.

length of about 600 m (fig. 14). At present, virtually the entire surface of the fortification is agricultural land, except the east and north ends, which are covered by forest. On the area subject to agricultural processing remains of the rampart have been preserved over a width of about 15 m, and it hardly reaches the height of 0.3 m (fig. 16). The ditch is visible over a width of about 8 m and its depth is about 0.4 m. The defensive system is better preserved on a stretch of about 37 m from the north-western extremity of the fortress, on the wooded area, where the rampart is about 11 m wide at the base and has a height of about 1.3 m, and the ditch has an opening at the top of about 6 m and a depth of 0.9 m.

To clarify the structure of defensive elements and the period of their building, on the south side of the fortress an archaeological survey with dimensions 10×1 m was conducted. As a result of archaeological investigations it was established that the so-called rampart is the ruins of a defensive structure of about 3 m width, consisting of a wooden framework filled with earth and gravel. Of the wooden structure there was preserved *in situ* a pit of a post with a diameter of 15 cm and a depth of 20 cm. Also, wood burning led to vitrification of the filling in some parts of the rampart.

In the vicinity of this defensive structure, beneath the debris, fragments of Thraco-Getic pottery were discovered (Niculiță, Zanoci, Băț 2012, 17-19).

Fig. 15. Saharna "Hulboaca". Remains of a bastion.
Fig. 15. Saharna "Hulboaca". Ruinele bastionului.

Fig. 16. Buciușca. Remains of the defensive system.
Fig. 16. Buciușca. Ruinele sistemului defensiv.

Fortified sites on intermediate territories

Along with fortifications located on the sides of the three canyons, in the Saharna micro-zone there are two sites located between them. Thus, between the groups of fortresses in the central part ("Valea Crac" canyon) and those in the northern part of the micro-zone there is the site of Saharna "Revichin". And between the fortifications of the central part and those from the south of the Saharna micro-zone, on the opposite (left) bank of the Dniester, the fortress of Ofatinți is located.

The **Saharna "La Revichin"** fortress[16] (site coordinates: 47° 42' 56" North, 28° 57' 46" East) is located about 1.7 km north of the Saharna „La Vile" site and about 1 km south of the Stohnaia III fortification. It lays on the right bank of the Dniester, which in this place reaches a height of about 100 m above the water level and has a semicircular shape, occupying an area of 150×70-75 m (about 0.9 ha). On the east-north-east side it is defended by high and steep bank of the Dniester, and on the remaining sides – by an artificial defensive system consisting of a "wall" with adjacent ditch. As a result of archaeological research it was determined that the "wall" was built out of a wooden casing of about 5 m width filled with earth and sand. The ditch has a width of 8 m and a depth of about 5.5 m (Levinschi, Covalenco, Abâzov 2002, 41-44, fig. 1; Levinschi 2004, 64, 74).

During the excavations inside the fortress there were attested three underground constructions, 12 surface constructions and varied archaeological materials, represented mostly by Thraco-Getic and imported pottery (Levinschi, Şcipachin, Negură 2000, 87-100; Levinschi 2001, 103-111; Levinschi 2004, 65-80, fig. 1-6).

The **Ofatinți** fortification[17] (site coordinates: 47° 41' 13" North, 28° 59' 15" East) is located about 400 m north of the village of Ofatinți, Râbnița District, on the left bank of the Dniester, which in this place has relative altitude of about 85 m. The semicircular fortification with an area of about 10 ha was surrounded by an artificial defensive system. On the west side, on the high and steep bank of the river there was built a defensive line whose remains, which now is presented as a "wave" with a width of about 2-3 m at the base and a height of about 0.5 m (fig. 17/1). Also on this side there are remains of two constructions of the "bastion" type. The first, located around the southern flank of the fortress, have semicircular shape with dimensions of 4×2 m. The second – in the middle of the defensive line on this side – has the same semicircular shape with dimensions of approximately 20×10 m (fig 17/3).

On the northern, eastern, and southern sides the site was fortified with a rampart with the adjacent ditch[18] (fig. 17/1, 2, 4).

[16] It was discovered by G.D. Smirnov in 1946 (Смирнов 1949b, 194). Archaeological excavations were conducted during 1998-2002 by the employees of the National Museum of History of Moldova (Levinschi, Şcipachin, Dulea 1999; Levinschi, Şcipachin, Negură 2000; Levinschi 2001; Levinschi, Covalenco, Abâzov 2002; Levinschi 2004).

[17] It was discovered in 1946 by G.D. Smirnov (Смирнов 1949b, 192-193). In 1952 A.I. Meljukova undertook archaeological research in an area of 336 m² (Пассек 1952, 78-86; Мелюкова 1954, 65-67; Мелюкова 1955, 64-67). In 2015, there was conducted surface research by I. Niculiță, A. Zanoci, M. Băț and S. Fidelschi.

[18] In 1952, when excavations were conducted by A.I. Meljukova, the rampart height was about 2 m, and the ditch had a width of about 6.7 m and a depth of 2.6 m (Мелюкова 1955, 64-65). Currently the defensive system remnants are better preserved on the northwest portion , where the rampart has a width of about 5 m at the base and a height of about 1.2 m. Further along the line, the rampart and the ditch were affected by agricultural works, being strongly flattened.

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Fig. 17. Ofatinți: 1 - orthophotomap (by http://geoportal.md/); 2 - view from the south; 3, 4 - remains of the defensive system at present.
Fig. 17. Ofatinți: 1 - ortofoplan (după http://geoportal.md/); 2 - vedere dinspre sud; 3, 4 - ruinele actuale ale sistemului defensiv.

As a result of archaeological investigations inside the fortification there were discovered remains of a surface dwelling, three household pits, and numerous fragments of Thraco-Getic pottery (Мелюкова 1954, 65-67, рис. 31; Мелюкова 1955, 64-67, рис. 14, 15; Kašuba, Haheu, Levițki 2000, 41-48, pl. XIX-XXIII).

Open settlements in the Saharna micro-region (fig. 1; 2) usually are located in the immediate vicinity of the fortifications, forming the so-called "extra-murus" zone. For example, near the Saharna "La Șanț" fortress there were two civilian settlements (Saharna "Budei" and Saharna "Rude"), and in the vicinity of the Saharna Mică, Saharna "La Revichin", Stohnaia V and Saharna "Hulboaca" fortifications – one more.

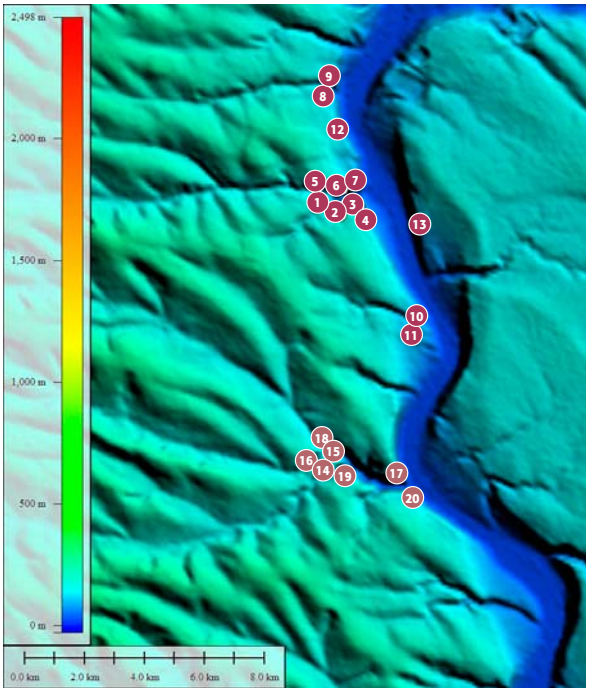
Conclusions

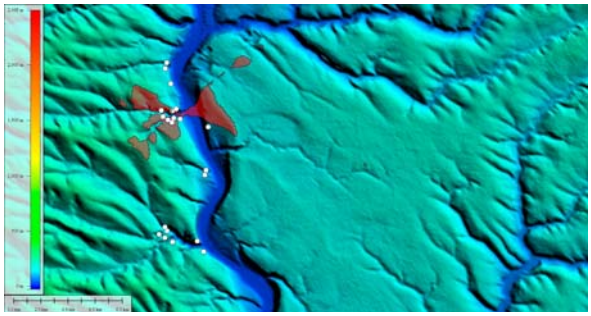
Based on the results of geospatial and field investigations, it appears that most sites, both fortified and unfortified, are concentrated in the central part of the Saharna micro-zone, on the sides of the "Valea Crac" canyon (fig. 18/1). This fortress of Saharna Mare occupies a special position here, being located on the most secluded place (about 1 km west of the Dniester) and less exposed to direct attacks from the east. Access to the site from the river was possible only through the canyon. In order to control this corridor, on its northern side there were built the fortifications of Saharna "La Vile", Saharna "Dealul Grimidon" and Saharna Mică, and on the southern side – the fortresses of Saharna „La Șanț" II, Saharna „La Șanț" I and Saharna „La Șanț". The visibility analysis (after Global Mapper) showed that the possibilities to observe the Dniester valley, both upstream and downstream, from Saharna Mare are reduced (fig. 18/2). However, this could be done very easily from the fortifications located on the high bank of the Dniester – Saharna "La Vile" and Saharna "La Șanț" II. The visibility analysis also shows that the sites from the sides of "Valea Crac" canyon had a perfect visual contact with each other. Accordingly, any "information" about the "movements" in this space could come directly or through other fortresses in the Saharna Mare site.

It also can be observed the existence of visual contacts between sites in the central part of Saharna micro-zone and those in the northern and southern flanks. Thus, the link between the fortifications of Stohnaia III and Stohnaia IV located on the northern side and those located on the sides of the "Valea Crac" canyon was possible through the site of Saharna "La Revichin", which occupies an intermediate position between them. And the link between the fortifications in the southern part (Saharna "Hulboaca" and Buciușca) and the fortifications in the center part was possible through the fortress of Ofatinți, located on the left bank of the Dniester (fig. 18/3, 4).

The visibility analysis performed for the entire Saharna micro-zone shows that from the fortifications described above, they could monitor the territory east of the Dniester at a distance of about 6 km from the river. Similarly, the Dniester basin was controlled not only on the portion between the fortifications of Stohnaia IV (in the north) and Buciușca (in the south), but also about 15 km upstream and about 6 km downstream (fig. 18/3).

After studying the topography of sites in the Saharna micro-zone, we can assume that, in terms of strategy





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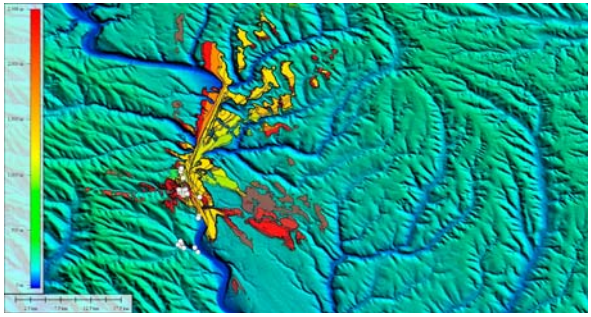

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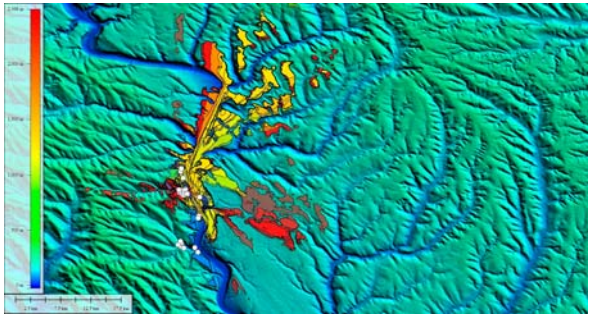

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Saharna micro-region:

1 - Saharna Mare;
2 - Saharna "La Şanț";
3 - Saharna "La Şanț" I;
4 - Saharna "La Şanț" II;
5 - Saharna Mică;
6 - Saharna; "Dealul Grimidon";
7 - Saharna "La Vile";
8 - Stohnaia III;
9 - Stohnaia IV;
10 - Saharna "Hulboaca";
11 - Buciușca;
12 - Saharna "La Revichin";
13 - Ofatinți

Horodişte-Ţipova micro-region:

14 - Horodişte „La Cot";
15 - Horodişte „La Şanț";
16 - Horodişte II;
17 - Buciușca II;
18 - Buciușca III;
19 - Ţipova III;
20 - Ţipova IV

Fig. 18. 1 - Map of fortifications of the Saharna and Horodişte-Ţipova micro-regions; 2 - 25 km visibility range for Saharna Mare site; 3 - 25 km visibility range for sites no. 1-9, 12; 4 - 25 km visibility range for sites no. 1-13.

Fig. 18. 1 - Harta fortificațiilor din microzonele Horodişte-Ţipova și Saharna; 2 - raza de vizibilitate de 25 km pentru situl Saharna Mare; 3 - raza de vizibilitate de 25 km pentru siturile 1-9, 12; 4 - raza de vizibilitate de 25 km pentru siturile 1-13.

the fortification of Saharna Mare occupies a key position in this space. The important role of the fortress is demonstrated by the large surface (6 ha) and the complexity of the defensive system – the "wall" surrounding the interior, bastions erected on the flanks, etc. the "privileged" status of the Saharna Mare site is confirmed by the discoveries in the fortress – surface dwellings, pits for storing supplies, places of worship, as well as rich findings. Among "prestigious" materials from this site there is a fragment of quartzite scepter (Niculiță, Zanoci, Arnăut 2008, 181, fig. 159/1), adornments made of silver and amber (Niculiță et al. 2013, 262-265, fig. 50-52) and imported pottery (Niculiță, Zanoci, Arnăut 2008, 136-140, fig. 142-144; Niculiță et al. 2013, 278-280, fig. 68, 69)[19].

Based on the above, at the current state of research we can assume a certain hierarchy of sites in the Saharna micro-zone. Thus, the fortification from Saharna Mare can be seen as a central location, which possibly had some economic, administrative, social, political and religious functions.

Smaller fortifications (0.4-0.9 ha), with an insignificant cultural layer, but placed on the dominant places, with wide possibilities of surveillance of space around, from our point of view, acted as outposts – Saharna "La Șanț" (small inside), Saharna "La Șanț" I, Saharna Mică, Saharna "Dealul Grimidon", etc. and large fortifications[20] – Stohnaia III (4,5 ha), Saharna "La Șanț" (large inside, 7 ha), Buciușca (10 ha), where the cultural layer is absent or insignificant, can be considered as a refuge for communities from the open settlements.

[19] See the article by N. Mateevici in the present collection (p. 47-61).

[20] Interesting to note that these sites are located proportionally, one in the northern part of the Saharna micro-zone, other – in the center, and the third – in the south.

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Distribution of Greek amphorae at the fortifications from Saharna micro-zone

Natalia Mateevici

În articol este analizat materialul amforologic grecesc, provenit din cercetările efectuate la patru situri importante din microzona Saharna, raionul Rezina, Republica Moldova. Lotul de piese databile include fragmente de amfore din mai multe centre producătoare de ambalaj amforistic ale Greciei continentale şi insulare: Thasos, Heracleea Pontică, Chios, Samos, Peparethos, Mende, Sinope, Chersones, Cos, tip Soloha şi din alte câteva centre încă neidentificate.

Cadrul cronologic al importurilor greceşti în zona Saharna cuprinde perioada plasată între sfârşitul sec. VI şi sfârşitul sec. III a. Chr., ceea ce, în linii generale, corespunde perioadei de pătrundere a mărfurilor greceşti în mediul barbar getic al spațiului nord-vest pontic. Tabloul ponderii anumitor centre greceşti în comerțul greco-indigen (getic) din regiunea Saharna, este analogic celui general al mediului barbar din spațiul menționat. Locurile de frunte în importul greco-barbar în sec. IV - prima jumătate a sec. III a. Chr. îl mențin Thasosul şi Heracleea Pontică, ambele cunoscute centre de vinificație. Acelaşi interval cronologic, este considerat ca perioada de maximă dezvoltare a relațiilor comerciale dintre civilizația greacă şi cea a tracilor septentrionali, în epoca antică. Printre piesele databile depistate la siturile din microzona Saharna au fost descoperite şi nouă ştampile de amfore, a căror descriere este făcută în catalogul de la finalul articolului.

Amphorae represent the largest category of Greek imports in the indigenous environment of the northwest Pontic region, being a telling indication of the level of development of trade relations between the northern Thracian tribes and Greek merchants in the 6th - 2nd centuries BC.

Findings of Greek amphorae in the fortifications of the Saharna micro-zone (Rezina District, Republic of Moldova) indicate the import of basic Greek products – wine and olive oil – in remote areas of the Getic habitat between the Dniester and the Prut rivers, i.e. in the regions located at a considerable distance from the seashore[1].

This paper analyzes pieces of Greek amphorae found in four fortifications of the Saharna micro-zone: Saharna Mare (campaigns of 1946, 1947, 2001-2013), Saharna "La Revechin" (campaign of 1998-2002), Saharna Mică

[1] About 200 km in a straight line, and about 430 km along the Dniester River.

(campaign of 2003-2007), and Saharna "La Şanț" (campaigns of 2003, 2006-2008).

The amount of amphora material is uneven, what can be explained by the intensity of excavations at the various sites. There were particularly analyzed datable fragments of amphorae (the profiled ones – lips, feet, as well as amphora stamps).

Saharna Mare

The fortress of Saharna Mare, which is located west of the Saharna village, in an interfluve on the right bank of the Dniester, has provided the largest group of Greek amphora artifacts. The analysis of these allowed us to highlight 12 identified or partially identified Greek centers of production, as well as goods from still unidentified centers. The earliest artifact of the Greek imports in Saharna Mare is a foot of a **Chios** amphora „with swollen neck" (Niculiță, Zanoci, Arnaut, 2008, fig. 143/2) of the type III-C, after Monakhov (fig. 1/1), dated 420s - 430s BC (Монахов 2003, таб. 7/5). The capacity of such amphorae varies between 22.4 and 19.6 liters. Chios amphorae are present in the range of Greek amphorae from Sahrana Mare during the 4th century BC as well: three lip fragments of amphorae (Niculiță, Zanoci, Arnăut 2008, fig. 143/1, 4; Niculiță et al. 2013, fig. 69/1) of the type V-B (after Monakhov), so-called amphorae of "new type", with a sleeve-shaped foot, which dates from the first and third quarter of the 4th century BC (Монахов 2003, таб. 12/5) (fig. 1/2-4). The amphorae of this type totally repeat the capacity of the vessels of the type III-C.

Early amphorae of the 5th century BC at Saharna Mare are also represented by the production from Mende. A Rim fragment of an amphora of **Mende** belongs to a cone type container (Niculiță, Zanoci, Arnăut, 2008, fig. 143/5), dating between the second half of the 5th century and the beginning of the 4th century BC. Standard vessels of this type have a capacity of 16.4 liters (fig. 1/5).

The Amphora production of **Thasos** is present in multiple fragments of feet, lips, and some stamped handles. The first foot is part of a complex: pit no. 47 (Niculiță, Zanoci, Arnăut 2008, fig. 111/10) and belongs to a Thasos amphora of truncated type, variant II-C-3, dating between the last quarter of the 4th century - the first half of the 3rd century BC (fig. 1/6). Another foot also belongs to the same type of Thasos amphora (fig. 1/7) (Niculiță et al. 2013, fig. 69/8). These amphorae of Thasos had a full standard capacity between 16.4 and 19.7 liters.

The same typological affiliation and dating have other profiled pieces of Thasos, from both the cultural layer and the filling of the defensive "wall" of the eastern part of the Saharna Mare fortress (Niculiță et al. 2013, fig. 19/14, fig. 31/14), which are represented by lips of amphorae of the late truncated type, variant II-C-3, dating between the fourth quarter and the first half of the 3rd century BC (fig. 1/8, 10). The capacity of these containers is between 16.4 and 19.7 liters. A fragment of another lip belongs to a truncated amphora of the type II-C-2 dated from the first half of the 4th century BC, with a capacity between 9.4 and 13.13 liters (fig. 1/9).

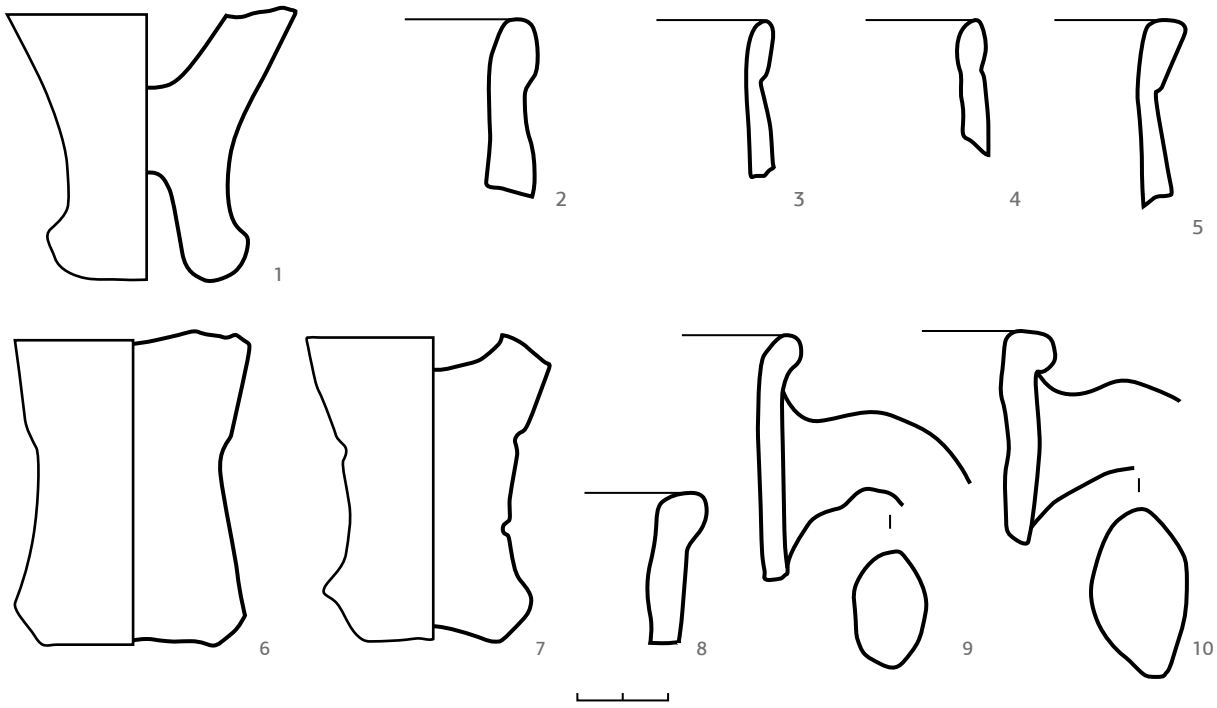


Fig. 1. Greek amphorae from Saharna Mare; 1-4 - Chios; 5 - Mende; 6-10 - Thasos.
Fig. 1. Fragmente de amfore de la Saharna Mare: 1-4 - Chios; 5 - Mende; 6-10 - Thasos.

Four fragments of stamps of Thasos amphorae were found at Saharna Mare, the first one during the Smirnov's excavations in 1947 (cat. no. 1). It is part of the category of recent stamps belonging to the Πρηξίπολις magistrate, with a ladle logo, which is the emblem of the workshop (i.e. manufacturer). The activity of this magistrate dates from 273-267 BC (Mateevici 2007, cat. nr. 55; Mateevici, Zanoci 2009, fig. 17/24). Another Thasos stamp is on a fragment of the handle, so we can read only the last two letters in each line, which allow us to assume (although uncertain) that the name of magistrate could be Θάσων (?) and the other line represents the demonym Θασίων (cat. no. 2). If we assume that we have read the name correctly, the stamp dates from the last decade of the 4th century BC. The emblem has not been preserved (Mateevici 2007, cat. nr. 60; Mateevici, Zanoci 2009, fig. 17/22).

The third stamp belongs to the magistrate of Αἰσχρίων 1, with the emblem „horn of plenty" (cat. no. 3), and also is part of recent stamps (campaign 2013). Activity of the Αἰσχρίων 1 magistrate corresponds to the period falling between 294-287 BC. As in the previous cases, the emblem is an attribute of the workshop. The last stamp, found also during the campaign 2013, is rather a stamp corner, in the lower part of which there is a vertical line in relief, which could be the letter N at the end of the demonym. We suppose that the stamp could be dated from the 4th - the beginning of 3rd centuries BC.

Like in other Getic sites of the northwest Black Sea region, the amphora production of **Heraclea Pontica** is presented in full. In Saharna Mare, Heraclean amphorae are represented by fragments of lips and feet. The earliest are fragments of lips from pithoid amphorae, variant I-4, dated from the first quarter of the 4th century BC (fig. 2/1, 2). Such vessels had the capacity of 9.85 liters (Монахов 2003, 143). Another lip comes from an amphora of the type II-A-2 dated from the end of the 4th - the beginning of 3rd century BC, with a capacity of 4.3 liters (fig. 2/3). In the filling of a defensive wall in the eastern part of the fortress was found a fragment of another Heraclean amphora – the lip belonging to an amphora of the type II-A-3, which is dated from the early 3rd century BC (fig. 2/5), of truncated conical shape (Niculiță, Zanoci, Arnăut 2008, fig. 144/3). During this period the standard size of amphorae from this polis reduces, so the containers of standard volume are between 4.2 and 5.6 liters (Монахов 2003, 143). Another amphora lip that may belong to a vessel of the type II-A, variant II-A-2, dated from the end of the 4th century - beginning of the 3rd century BC (fig. 2/6) also

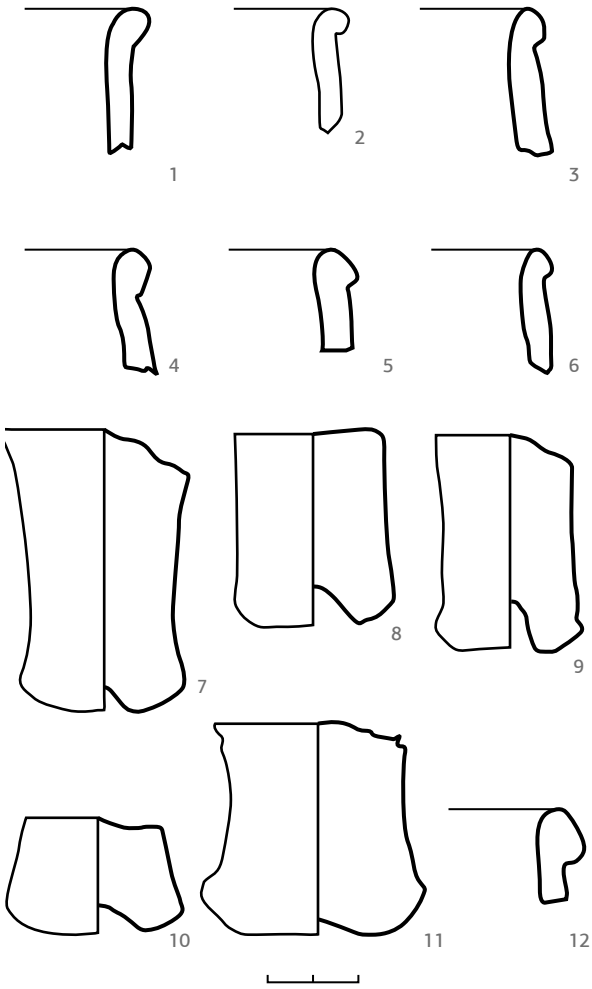


Fig. 2. Greek amphorae from Saharna Mare; 1-10 - Heraclea Pontica; 11-12 - Peparethos.

Fig. 2. Fragmente de amfore de la Saharna Mare: 1-10 - Heraclea Pontica; 11-12 - Peparethos.

came from the filling of the defensive "wall", sections 21-22. A fragment of another lip of a Heraclean amphora (fig. 2/4) belongs to a vessel of truncated conical type, variant II-1, which was prevalent in the 2nd and 3rd quarters of the 4th century BC. The capacity of these vessels amounts 8.2 to 8.4 liters (Монахов 2003, 144).

Another datable artifact is a foot of a Heraclean amphora (Niculiță, Zanoci, Arnăut, 2008, fig. 144/7) of the type I-A-2, with a capacity of 8.2 to 8.4 liters (fig. 2/7), which chronologically belongs to 370s - 330s BC (Монахов 2003, 143). A fragment of the lower part of a Heraclean amphora foot comes from the filling of the moat (Niculiță, Zanoci, Arnăut 2008, 307, fig. 89/9). This fragment belonged to an amphora of the pithoid type, variant I-4, with 9.85 liter capacity (fig. 2/10). Such vessels date back from the first quarter of the 4th century BC (Монахов 2003, 143). The foot of another container from Heraclea (fig. 2/8) was discovered in filling of the rampart of the southwest bastion. It belongs to a truncated amphora of the variant II-A-2, dated to the end of the 4th - beginning of the 3rd centuries BC, of small capacity between 4.2 and 4.3 liters. A foot of a Heraclean amphorae (fig. 2/9) belongs to a container of conical type, variant II-3 (Niculiță et al. 2013, fig. 69/10), which dates from the 360s - 330s BC. Such vessels had only a small capacity, about 5.5 liters (Монахов 2003, 144).

Among other fragments of Heraclean amphorae there is a stamp on a piece of the neck, which is printed in relief, representing a circular cartouche, in the middle of which there are placed two letters: I and Φ (cat. no. 5). This stamp dates the early 3rd century BC, and the amphorae with such stamps belong to the so-called Geaferca type, variant IV (first discovered in Islam Geaferca, Dobrogea, Romania). Such vessels are small, their capacity ranging between 2.8 and 4.2 liters.

Import of amphorae from **Peparethos** is not large, being represented by only two fragments of datable pieces, including the foot of an amphora of the variant I-A ("Solokha"), which was found in the cultural layer (Niculiță et al. 2013, fig. 69/11) and is dated the first half of the 4th century BC (fig. 2/11). Such vessels had a volume of 14.7 up to 19.7 liter. A fragment of a lip (fig. 2/12) dated the middle - the 3rd quarter of the 4th century BC belongs to another type of Peparethos amphorae (variant I-B), with a capacity of 13 to 16.4 liters (Монахов 2003, 100).

Also less numerous and representative are **Chersonesus** amphora fragments. A fragment of a lip with handle (fig. 3/2) was found in the cultural layer and belongs to a vessel dated to the middle - the 3rd quarter of the 4th century BC. From the pit no. 56 comes another fragment of a **Chersonesus** amphora lip (Niculiță, Zanoci, Arnăut 2008, fig. 116/10), which belongs to a vessel produced at the end of the 4th - beginning of the 3rd centuries BC (fig. 3/1). A fragment of an amphora foot of Chersonesus, although incompletely preserved (Niculiță, Zanoci, Arnăut 2008, fig. 144/10), allowed us to date it to the middle - the 3rd quarter of the 4th century BC (fig. 3/4).

Another Pontic center represented by its goods at Saharna Mare is **Sinope**. A small number of Sinope

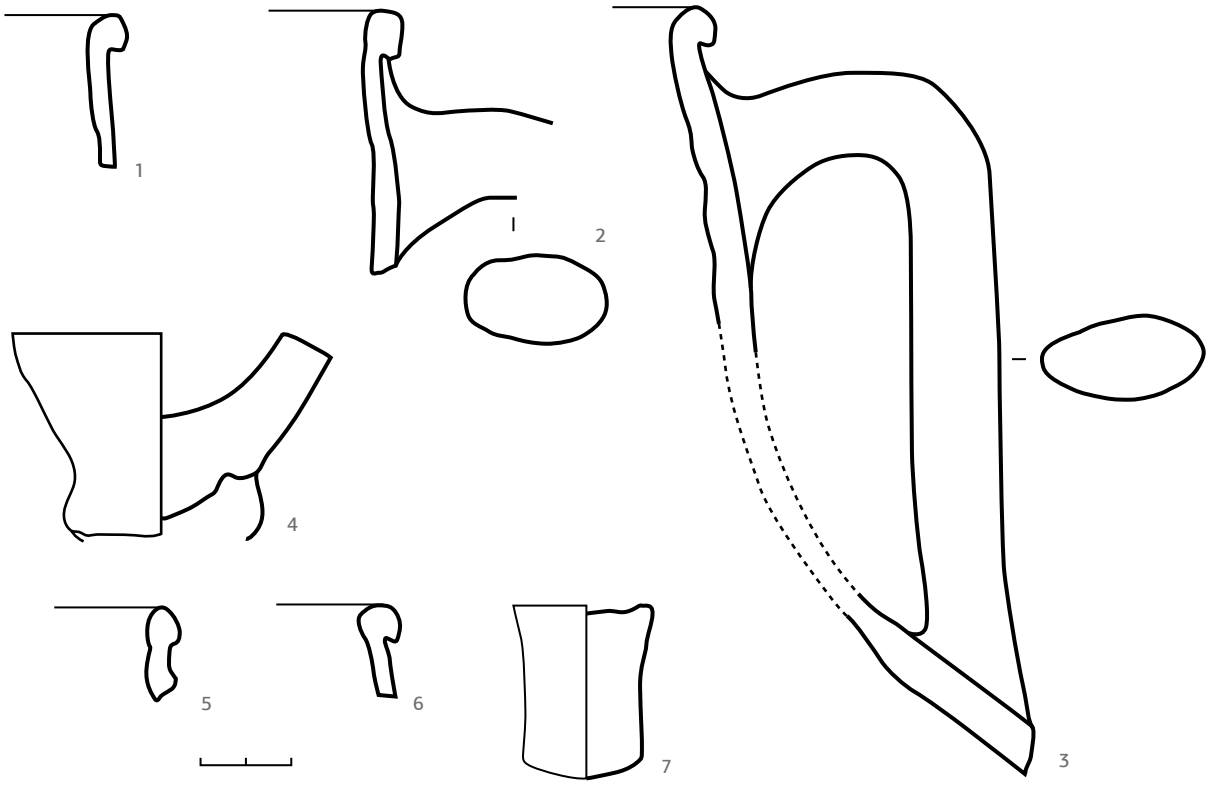


Fig. 3. Greek amphorae from Saharna Mare; 1, 2, 4 - Chersonesus; 3, 5-6, 7 - Sinope.
Fig. 3. Fragmente de amfore de la Saharna Mare: 1, 2, 4 - Chersones; 3, 5-6, 7 - Sinope.

amphora fragments include one neck of Sinope amphora with handle (reconstituted graphically) (Niculiță, Zanoci, Arnăut 2008, fig. 89/8), which belongs to a container of the pithoid type II-E (fig. 3/3) dated to the second quarter of the 4th century BC. Amphorae of this type have the capacity between 26.2 to 21.9 liters (Монахов 2003, 159). One of the two lips of Sinope amphorae belongs to a vessel of the type I-E (fig. 3/5), which dates from the second half of the 4th century to the first third of the 3rd century BC (Niculiță, Zanoci, Arnăut 2008, fig. 143/10) and has a capacity of 8.75 liters (Монахов 2003, 159). The other fragment of a lip (fig. 3-6)

belonged to a vessel of pithoid type, variant II-D, dated from the end of the 4th century - beginning of the 3rd century BC (Niculiță, Zanoci, Arnăut 2008, fig. 143/11) and its volume hover around 17,5 liters (Монахов 2003, 159). A single fragment of a foot belongs to an amphora of pithoid type II-B (fig. 3/7) dated to the second half of the 4th century - the first half of the 3rd century BC; vessels of this type have the capacity of 19,7 liters (Монахов 2003, 158).

Among other fragments of Sinope amphorae there are two stamps on a handle. The first one belongs to the magistrate Φήμιος 1, whose activity is dated between 295-280 BC (cat. no. 7). The second belongs to the magistrate Μικρίας 3 Πυθοκρίτου (cat. no. +8) dated to the 220-208 BC. Usually this magistrate stamps have grapes as an emblem, but the stamp from Saharna Mare does not contain this element due to damage. It should be mentioned that this is the third stamp of this magistrate, which was obtained from the Getic environment. Two more were found in the famous Getic settlement of Hansca (Mateevici 2007, cat. nr. 254) and in the Ciobruciu settlement (Mateevici 2007, cat. nr. 238).

Quite impressive is the number of artifacts coming from **Cnidos**, which are presented at Saharna Mare by multiple fragments of amphora lips. Some of them were found in the cultural layer. Among them there are two very flared lips (fig. 4/1, 5) in the shape of a "mushroom", which belonged to vessels with high cylindrical neck, of the pithoid type II-B, dated to the third quarter of the 4th - the beginning of the 3rd century BC (Niculiță, Zanoci, Arnăut 2008, fig. 93/14; fig. 144/11). The capacity of

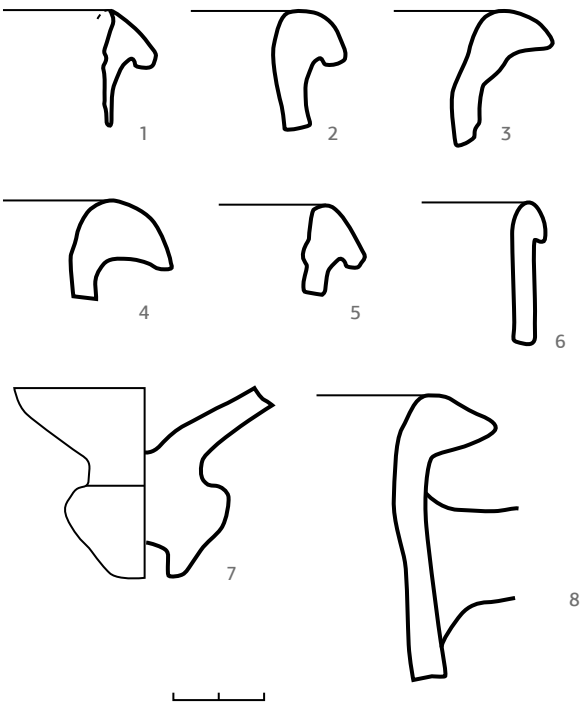


Fig. 4. Greek amphorae from Saharna Mare; 1-7 - Cnidos; 8 - Solokha I type.

Fig. 4. Fragmente de amfore de la Saharna Mare: 1-7 - Cnidos; 8 - tip Solocha I.

amphorae of this type was around 29.5 liters (Монахов 2003, 110). We suppose that the other fragment of a Knidos amphora lip (fig. 4/2) discovered in the cultural layer (Niculiță, Zanoci, Arnaut, 2008, fig. 143/14) may belong to the same period.

Another lip of a Knidos amphora belongs to a container of the type I-B "Gelendzhik" (fig. 4/3), dated from the middle to the third quarter of the 4th century BC (Niculiță, Zanoci, Arnăut 2008, fig. 144/12), with the capacity of 45.92 liters (Монахов 2003, 110). Pithoid amphorae of the variant II-B are represented by a lip fragment (fig. 4/6) and a foot (fig. 4/7), which dates back to the third quarter of the 4th century until the beginning of the 3rd century BC (Niculiță, Zanoci, Arnăut 2008, fig. 144/14). Usually vessels of this amphora type could hold around 36.1 liters (Монахов 2003, 110). In recent excavations at the fortification of Saharna Mare (Niculiță et al. 2013, fig. 69/3) there was also found a fragment of lip belonging to a Knidos amphora of the type I-D, with cylindrical neck and mushroom-shaped lip (fig. 4/4), which dates back to the second and the third quarter of the 4th century BC.

The capacity of amphorae of this type was around 29.5 liters (Монахов 2003, 110).

Amphorae of the type **Solokha I** are represented by several fragments and a mushroom-shaped lip (fig. 4/8) dating back to the 4th - beginning of the 3rd century BC (Niculiță, Zanoci, Arnăut 2008, fig. 144/15). Several bifurcated amphora handles indicate their belonging to the Cos amphorae, which in the indigenous environment of the north-west Pontic area are dated no earlier than the beginning of the 3rd century BC.

Among fragments of amphorae, which belonged to certain manufacturing centers, there were also fragments belonging to some unknown centers. Thus, a foot of an amphora with wide solid base with a slight indentation in it (fig. 5/2) belongs to an unidentified

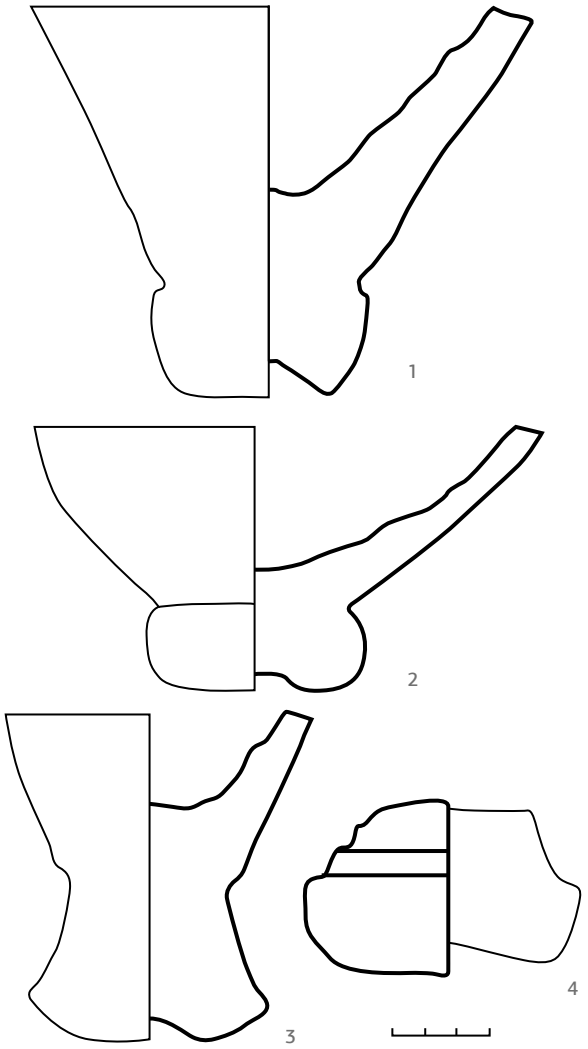


Fig. 5. Greek amphorae from Saharna Mare; 1-4 - unknown centers.
Fig. 5. Fragmente de amfore de la Saharna Mare: 1-4 - centre neidentificate.

center. This fragment, which certainly has been part of a large vessel, can be dated from mid 4th century BC to 320 BC Niculiță et al. 2013, fig. 43/1). S.Y. Monakhov suggests, that this type may belong to a new type of Chios amphorae (sic!) (Монахов 1999, 369, таб. 161/3). There are also a few pieces of still uncertain origin, among them a foot with pseudo-sleeve (fig. 5/1) and the other (fig. 5/3), belonging to an amphora from the northern Aegean islands, which may be dated to the end of the 4th century BC (Монахов 2003, 83, таб. 58/3). Another fragment of an amphora with undetermined origin could be dated to the 4th century BC (fig. 5/4).

Saharna "La Şanţ"

The small stronghold of Saharna "La Şanţ" is located on the edge of the "Valea Crac" lowland, south-east (opposite) from the Saharna Mare fortress. Archaeological research at the site started in 2003, and from 2006 to 2008 there were undertaken investigations in five sections. The Greek amphora material found at the site is very poor; it includes only a few inexpressive fragments of handles and walls of amphorae from Heraclea and Thasos having uncertain dating: the 4th - 3rd centuries BC.

The only datable fragment belongs to a lip of a pithoid Heraclean amphora, variant I-4 and is dated to the first quarter of the 4th century BC (fig. 6/1).

Saharna Mică

The fortification of Saharna Mică is located in the north (opposite) of the Saharna Mare fortress, on a high promontory of the gorge that separates them. Remains of a defensive structure (rampart) can be traced in the northwest of the promontory. First investigations at Saharna Mică were conducted in the late 1940s by G. Smirnov. The research was resumed in 2003 and continued intermittently until now.

Greek amphora fragments are negligible, among them there is a lip of an amphora from **Thasos** of developed truncated biconical type (Niculiță, Zanoci, Arnăut 2008, fig. 39/8), variant II-B-2 (fig. 6/2). This type of amphora is dated between the 2nd and the 3rd quarters of the 4th century BC. Vessels of this type (full standard) have the capacity from 8.2 to 11.6 liters (Монахов 2003, 76). The second datable piece from Saharna Mică is a lip of an amphora from **Heraclea** (Niculiță, Zanoci, Arnăut, 2008, fig. 14/14) that belonged to a vessel of the type II-A, variant II-A-3, dated from the beginning of the 3rd century BC (fig. 6/3). This second artifact was found in a complex (structure no. 5).

Saharna "La Revechin"

The small fortification of Saharna "La Revechin" is located northeast of the Saharna Mare fortress and was documented for the first time by G. Smirnov in 1946 (Смирнов 1949, 196). The fortification is semicircular in plan, placed on an inclined slope of the right bank of the Dniester River, at a height of 90 m from the riverbed

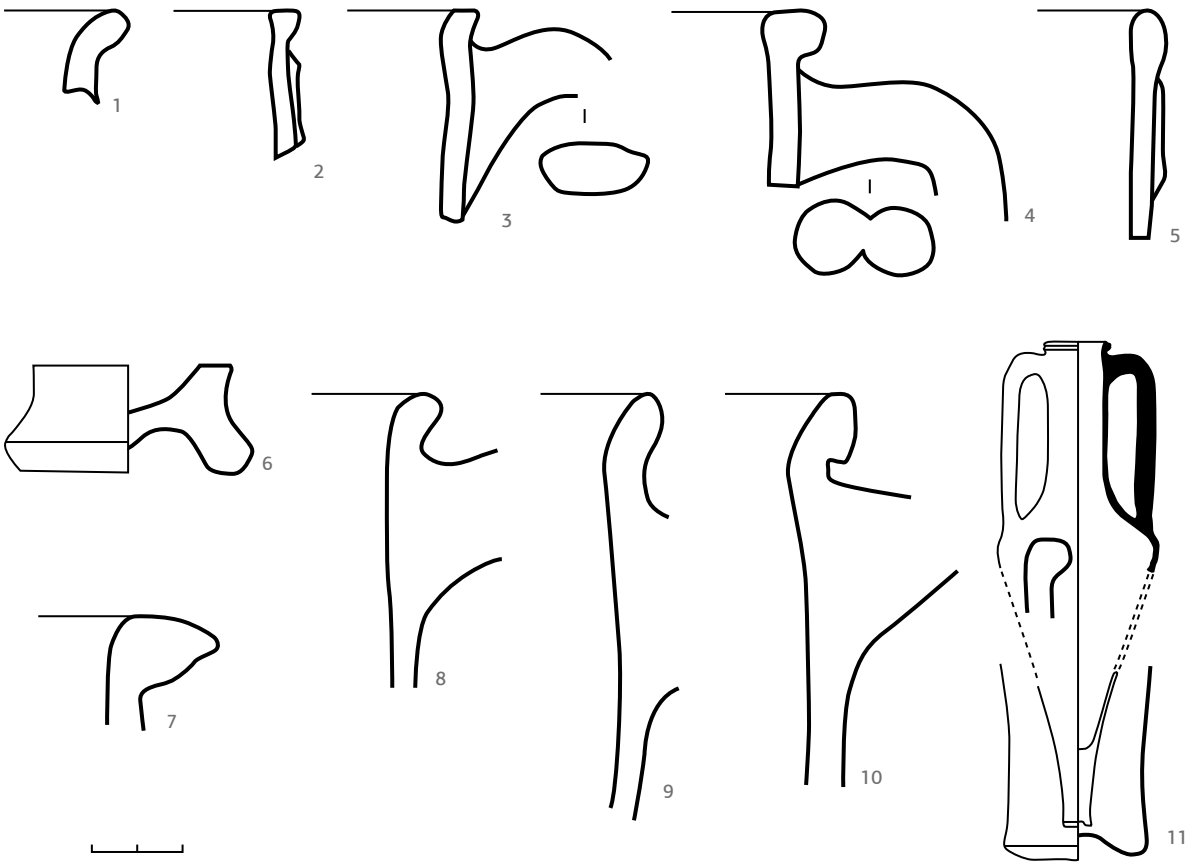


Fig. 6. Greek amphorae: Saharna La „Șanț" (1 - Heraclea Pontica); Saharna Mică (2 - Thasos; 3 - Heraclea Pontica); Saharna „La Revechin" (4 - Cos; 5 - Chios; 6 - Samos; 7 - Chidos; 8-11 - Heraclea Pontica).

Fig. 6. Fragmente de amfore: Saharna La „Șanț" (1 - Heraclea Pontica); Saharna Mică (2 - Thasos; 3 - Heraclea Pontica); Saharna „La Revechin" (4 - Cos; 5 - Chios; 6 - Samos; 7 - Chidos; 8-11 - Heraclea Pontica).

(Levinschi, Şcipachin, Dulea 1999, 52). Archaeological excavations were carried out in 1998-2002.

In the cultural layer of Saharna "La Revechin" was found a foot of an amphora from **Samos** (Levinschi, Şcipachin, Dulea 1999, fig. 14/3; Mateevici 2007, 228, fig. 10/12), which belonged to an amphora of the classic type II (fig. 6/6), that was spread in the Black Sea regions from the late 6th to the early 5th centuries BC. The average capacity of these vessels ranges from 23.4 to 27 liters[2].

Amphorae from Samos in the area of northwestern Black Sea barbarian world were found at Curteni, at Butuceni, at Ciobruciu and in a Scythian tumulus at Dubăsari (Кетрару, Серова 1992, рис. 14/6, 7; Mateevici 2007, 64). This Greek center, known as the largest exporter of olive oil, traded amphorae to the northwestern Pontic region only during the 6th - 5th centuries BC. This chronological interval is the first period of the Greek-barbarian trade in this area, therefore, the Greek vessels, dating from these centuries, are rare in the Getic sites.

Another center of production, the amphorae of which are found at this site, is **Thasos**. Among some inexpressive fragments of amphorae of Thasos there was noted an almost illegible stamp of a magistrate (Mateevici 2007, 179, cat. no. 59), which has kept a few letters from the end of the line: "μης" or "δης" (cat. no. 4), but they can not provide exhaustive information on the dating of the object. Apart from this fact the stamp could belong to an amphora of the second half of the 4th century BC.

A fragment of an amphora from **Cnidos** (fig. 6/7) of the type I-A (previously considered by us as belonging to the Solokha I type, Mateevici 2007, 96) was also found at Saharna "La Revechin". Such amphorae are dated to the second quarter of the 4th century BC an have the capacity of 36.1 liters (Монахов 2003, 110).

Several fragments of bifurcated handles, including one with a massive lip (fig. 6/4), indicate on the import of Greek wines from **Cos**, which dates from the early 3rd century BC.

Multiple fragments of walls and handles of amphorae from **Chios** show the presence of Chios wine in the Greek-barbarian trade in this area. Among datable pieces of Chios amphorae there is a lip fragment (fig. 6/5) belonging to a new type container "with sleeve-shaped foot" (type V-B) which dates to the first quarter – the third quarter of the 4th century BC (Levinschi 2002, 49; Mateevici 2007, fig. 33/1). The capacity of amphorae belonging to this type is between 19.6 and 22.4 liters (Монахов 2003, 24).

The largest group of Greek amphora fragments at Saharna "La Revechin" refers to the import from **Heraclea Pontica**. Most parts which can be interpreted as a chronological indicator are lips of amphorae. The first two lips of amphorae (Mateevici 2007, 237, fig. 19/33, 34) belong to the pithoid type, variant I-4 (fig. 6/9, 10), which dates back to the first quarter of the 4th century BC; the capacity of these containers oscillates around 9.8 liters. Another lip (Levinschi, Şcipachin, Negură 2000, 97, fig. 8/14; Mateevici 2007, 237, fig. 19/35) belongs to a vessel of the truncated type, variant

[2] Thanks to Pierre Dupont for this information.

I-A-3, which dates back to 370s - 360 BC (fig. 6/8). The capacity of this amphora type is from 6.5 to 7 liters (Монахов 2003, 143). Almost the whole amphora of the truncated type, variant II-A, that dates from the end of the 4th century - beginning of the 3rd century BC was also discovered in this site. Usually the capacity of these Heraclean containers varies between 5.6 and 4.2 liters (fig. 6/4).

Other two lips belong to late amphorae, whose main feature is the decrease in full standard. The first belongs to an amphora of the type II-A-3 (Mateevici 2007, fig. 19/29) dating from the early 3rd century BC. The other belongs to the type II-A-2 (Mateevici 2007, fig. 19/20) dating from the end of the 4th century - the beginning of the 3rd century BC, with the small capacity: 4.3 liters. Among the fragments of necks of Heraclean amphorae from Saharna "La Revechin" there was found a well preserved manufacturer's stamp showing the name of Ηρακλείδας 2 (cat. no. 6), manufacturer of the last period of stamping at Heraclea, which dates from the end of the 4th - beginning of the 3rd century BC.

Conclusion

Although field investigations at the sites of the Saharna micro-zone continue and are far from complete, the primary analysis of the fragments of Greek amphorae, which had been found there, gives some results on the development of trade relations between the Getic and the Greek worlds, represented by the pottery from multiple famous manufacturing centers: Thasos, Hercalea Pontica, Sinope, Tauric Chersonesus, Cnidos, Peparethos, Mende, Samos, Cos, as well as some still uncertain vessels of Solokha type 1, "Samothrace", etc. These Greek centers are representative mostly for the entire period of development of Greek-barbarian relations. The dating of the earliest pieces – a foot from Chios and, possibly, the lip from Mende found at Saharna Mare or the foot of a Samos amphora from Saharna "La Revechin" – further demonstrates, that the first period of organized penetration of goods in the Greek amphorae to the indigenous world of the northwestern Black Sea region covers the 6th - 5th centuries BC (Mateevici 2007, 115). The largest group of fragments of amphorae and amphora stamps belongs to the second period of Greek trade with the indigenous population: the 4th - first half of the 3rd century BC. Like in the overall picture of Greek-barbarian relations, imports of Thasos and Heraclea are not the largest and not the most representative (Mateevici 2007, 117). Most objects belonging to other Greek centers of production are dated between the first quarter of the 4th century and the beginning of the 3rd century BC. Most of amphora stamps also belong to this period. This information, like other data (Mateevici 2007, 117), allows us to say that namely the second period of the relationship between the northern Thracians and the Greek civilization is the culmination of these relations.

Catalogue of stamps:

1. Θασίων
   ladle ←
   Πρηξίπολις

Saharna Mare. *Thasos.* Stamp of the magistrate. Activity of the magistrate Πρηξίπολις is dated back to 273-267 BC. Similar in Bon 1957, 355, br. 1426; Exact same in Abram 1996, no. 438.


2. .....ων
   Symbol?
   [Θασί]ων

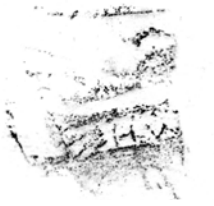
Saharna Mare. *Thasos* Stamp of the magistrate.


3. Θασί [ων]
   Horn of plenty ←
   Αἰσχρίων

Saharna Mare. *Thasos.* Stamp belonging to the magistrate Αἰσχρίων 1, the activity of which falls between 294-287 BC. Similar in Bon 1957, no. 113.


4. [...]δης
   Symbol
   [Θασίων]

Saharna "La Revechin". ***Thasos.*** The proper name in the first line may belong to both magistrate and manufacturer. But certainly, the text in the bottom line is a demonym. The artifact can be dated from the 4th century BC.

5. ΙΦ

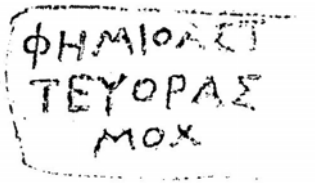
Saharna Mare. *Heraclea Pontica.* Stamp of manufacturer. Made in relief in a circular cartouche, representing two combined letters, which is the short name of the manufacturer, may be Φιλίσκος or Φιλότιμος – names of manufacturers who worked in the final period of stamping of Heraclean amphorae: end of the 4th century - beginning of the 3rd century BC (Кац 2007, 430). All known stamps of this manufacturer are the same, moreover, are executed with the same matrix, that suggests a short period of his activity. Exact same in Кац 2007, 244, рис. 57/5 (Gorgipia); Mateevici 2007, 154, cat. nr. 181 (Tulucești). One more stamp was noted at Tyras (working material of N. Mateevici, T. Samoylova).

6. Ἡρακλείδα

Saharna "La Revechin". ***Heraclea Pontica.*** Manufacturer's stamp from the final group of Heraclean stamping – end of the 4th century - beginning of the 3rd century BC. The stamp is engraved retrograde. Similar in Mateevici 2007, 154, cat. nr. 175 (Pivdennoe); Монахов 1999, таб. 190/2 (Beglitsk).

7. Φήμιο (υ) ἀστ [υνόμου].
Τεύθρας [grape]
[Θυ] μοχ [άριος]

Saharna Mare. *Sinope.* Stamp of a magistrate belonging to the astynome Φήμιος 1, the activity of which pertains to the group III (early 3rd century - 295-280 BC), that worked with the manufacturer Τεύθρας II, the son of Θυμοχάριος, who is known as working in the period of groups II-IV.



8. ἀστυνόμ [ου]
Μικρίου τ [οῦ] [grape]
Πυθοκρίτ [ου].
Π [άπης]

Saharna Mare. *Sinope.* Stamp of a magistrate belonging to the astynome Μικρίας 2 Πιθοκρίτου (after Garlan 2004, 286). Dates to the chronological group VI (between 220-208 BC). Similar in Mateevici 2007, 161, cat. nr. 238 (Ciobruciu); Mateevici 2007, 164, cat. nr. 254 (Hansca).

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Landscape and Getic populations in the upper course of the Botna river

Octavian Munteanu

În rândurile ce urmează, ne vom referi la două fortificații getice cărora le-am acordat mai multă atenție în ultimii ani. Este vorba de cetățuile getice intrate în circuitul ştiințific cu numele de Horodca Mare şi Horodca Mică, amplasate în zona Codrilor din centrul Republicii Moldova. Am considerat necesar să orientăm studiile noastre privind fortificațiile din preajma satului Horodca în direcția abordărilor multidisciplinare, în special, în direcția intercalării studiilor arheologice cu cele geografice. În acest sens, vom aborda respectivele situri în contextul relațiilor pe care le-au dezvoltat comunitățile getice din zona cursului superior al râului Botna cu mediul ambiant. Pentru aceasta, în etapa actuală, ne propunem să oferim un tablou general al peisajului în care sunt amplasate aceste situri, desprinzând câteva aspecte care pot fi accesibile la momentul actual: relieful, solurile, vegetația şi apele. Respectiv, vom prezenta fortificațiile amintite mai sus în contextul condițiilor geografice, dar vom urmări şi corelația lor în raport cu alte situri sincrone cunoscute în spațiile limitrofe.

We will refer next to two Getic fortifications that we paid more attention in recent years. The discussion will focus on the fortifications that are known in the academia as Horodca Mare and Horodca Mică, which are situated in the Codri area in central Moldova (fig. 1). Over several years, my colleagues and I conducted systematic research on these sites, many of the results are already published (Munteanu 2007, 295-310; Munteanu, Iarmulschi 2007, 279-286; Munteanu et al. 2009, 61-80; Munteanu et al. 2010, 179-198; Munteanu, Perju 2010, 520-531; Munteanu 2012a; Munteanu 2013a, 311-329; Munteanu, Iarmulschi 2013a, 104-106; Munteanu 2013b; Munteanu, Iarmulschi 2013b; Munteanu, Tentiuc 2014a; Munteanu, Tentiuc 2014b, 145-165). Although they provide a range of important information for understanding the phenomena that took place in the second half of the first millennium BC, the predominant use of traditional methods leave considerable reserves in our knowledge. The situation becomes clearer, in particular when compared with the results brought by interdisciplinary studies. We would like to insist especially on issues of past communities relationships with the environment. Understanding the characteristics of the landscape in which an archaeological site is located, climatic conditions and soil characteristics of the area, vegetation and water resources that are specific to the region etc., can highlight the extent and nature

Fig. 1. Map of the Republic of Moldova indicating the Horodca village location.

Fig. 1. Harta Republicii Moldova cu amplasarea localității Horodca.

of discoveries, the functional organization of space arranged in the past or establish issues that caused the community to settle in that place or to leave, or many other realities that today remain outside observations (Ştefan, Ştefan, Cavruc 2012, 14). In these circumstances, we consider that it is necessary to focus our studies on the fortifications around the village Horodca towards multidisciplinary approaches, particularly towards the intercalation of archaeological with geographical studies. First, it is necessary to draw attention to the extremely low experience that we have in the area of spatial archeology, which surely will leave a visible trace on the generalized character of our study, but we hope this to mark a beginning developed into a continuity related to existing experiences in contemporary academia. Therefore, at this stage, we aim to provide an overview of the landscape in which these sites are situated, detach several aspects that may be accessible at the moment – topography, soils, vegetation and water. Accordingly, we will present the fortifications mentioned above in the context of geographical conditions, but we will also pursue their correlation with other known synchronous sites from adjacent spaces.

To this end, we will begin with providing a brief picture of geo-climatic conditions that characterize this micro-zone[1], by delimitation of geographical space peculiarities in which these sites are located and by specifying the exact location of the two mentioned fortifications and also other known Getic sites so as to delineate further potential connections.

[1] The presented geo-climateric conditions of the micro zone are based on the studies performed by Ion Danilescu, drawn in the PhD thesis *Studiu landşaftic al părţii centrale şi sud-estice din Republica Moldova*, deffended at the Iasi University, „A. I. Cuza" (1999), Faculty of Geology and Geography (manuscript). On this occasion we express our deep gratitude for having been given the opportunity to rely on and use his works.

The landscape: general characteristics

Speaking broadly from the territorial point of view, we will focus our attention on the central forested region Codri in Republic of Moldova, and if we narrow the optics then we will refer to the upper valley of Botna River on the micro-zone in which are located the fortifications Horodca Mare and Horodca Mică (fig. 2). The Codri Region is located in the central part of Moldova (fig. 3) and is the highest in the space between Prut and Dniester with the absolute height of 429.5 m recorded near Bălăneşti village. It is a rather hilly relief with a fragmentation depth ranging from 300 m to 100-150 m, in most landscapes being 200-350 m. The region is fragmented by valleys of rivers Cula, Ichel, Bâc, Botna and Cogâlnic, but also by other smaller ones that flow into the Prut River (fig. 4). River valleys are well delimited and deep. In general, the right side slopes are steep and affected by landslides, and the left side slopes are gentler and more developed, affected to a much lesser extent of erosion and landslides. The region covers an area of 6625.1 km^2 and is the exponent of the easternmost European Central Province. Evidence in this regard is the presence of beech trees (*Fagus sylvaticam* fig. 5A), which reaches its extreme eastern limit in the European space, and the presence of brown and brown podzolic soils.

Both evidences are explained by continental moderate temperate climate. It is to mention that this bio-pedologic-climatic complex is observed in the upper Codri forest area only and that it develops transitional characteristics to the Eastern European continental complex, supported by the evidence that at this altitude (over 350-400 m) the rainfall average rarely exceeds 500-550 mm and the temperature is maintained at 8-9^0 C. However, on peripheral slopes of this massif, in its middle and lower floors (between 350-200 m), the

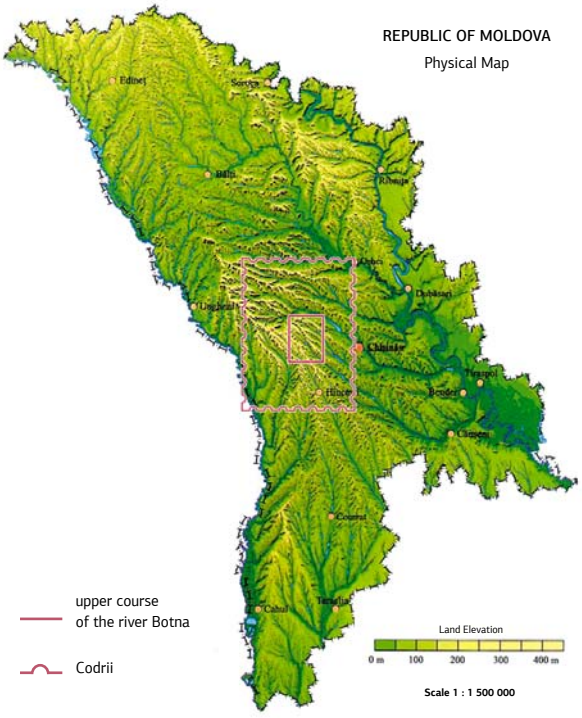

Fig. 2. Map indicating the location of the Moldavian Codri and the upper stream of the river Botna.

Fig. 2. Harta Republicii Moldova cu localizarea Codrilor şi cursului superior al râului Botna.

Fig. 3. The central part of the Republic of Moldova – Codrii. Orthophotomap (by http://geoportal.md/)

Fig. 3. Ortofotoplan cu partea Centrală a Republicii Moldova – Codrii (după http://geoportal.md/)

climate becomes more continental, forest and grass vegetation enriches increasingly with xerothermic elements (oak, fig. 5B), while zonal soils pass from brown-gray to typical gray, even chernozems at the foot of the forest area. The Cordi, which once earned its name due to the large and compact forest landscape, today preserves it's name only because of the remaining "hat" of the forest area. However the name survived so far, both in the popular and scientific language. Today, the landscape has changed, becoming more anthropic to the foot of the forest area. The cause lies in increasing desertification of the natural environment nowadays, which penetrates inside the Codri area which is especially done through enhancing anthropogenic deforestation and grubbing activities in favor of enlargement for agriculture which is practiced often irrationally and with serious consequences triggering erosion and landslide processes.

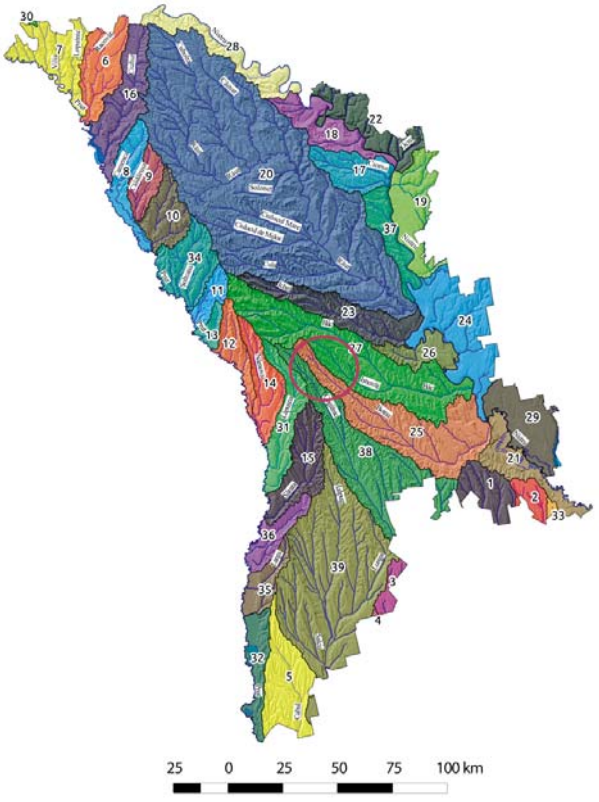

Fig. 4. Moldova: locating the upper river basins of Botna.

Fig. 4. Republica Moldova: bazinele râurilor cu localizarea cursului superior al Botnei.

A B

Fig. 5. Types of forests in the Codri: A - beech forests; B - oak forests.
Fig. 5. Tipuri de păduri din zona Codrii: A - păduri de fag; B - păduri de stejar.

Relief, vegetation, soils and waters in the central part of Codri

In the middle of the forest area we are interested directly in, the relief is oriented from northwest to southeast, where the altitude decreases from 350 to 250 m. The average altitude of watersheds is 300-150 m with a density of fragmentation of 3-4 km/km^2 in the northern part, 2-3 km/km^2 in the central part and 1-2 km/km^2 in the south-western extremity. The slopes structure is mainly made of deluvial deposits with landslides of old layers in the northern and central parts and deluvial deposits in the south. The sum of temperatures above 0^0 C is 3600, totaling 272 days per year, except Bălăneşti landscape which totalizes 3500^0 C or 270 days. The average temperature in July is +21^0 C and in January –3,5^0 C, with precipitations reaching 400 mm in the north and 350 mm in the south in the warm period, and about 100 mm in the cold period. Solar radiation is 86 kcal/cm^2 in the warm period and 28 kcal/cm^2 in the cold period. Evapotranspiration is 700 mm in the north and 750 mm in the south.

These conditions gave the space a rich forest vegetation represented by deciduous forests of central European type occupying an area of approximately 16% of the territory. Representative for the vegetation of Codri is the beech (*Fagus silvatica*), holm oak (*Quercus petraea*) and common oak (*Quercus robur*). The common oak is dominant towards the lower peripheries of Codri at the altitude of under 200-220 m. The holm oak, often in association with the hornbeam (*Carpinus betulus*), grows on the tops and slopes with medium or high altitudes of 200-300 m and at altitudes of 350-400 m on slopes with south-west orientation. The beech lives mostly on larger hypsometric levels of 280-400 m.

The companion trees are: the ash (*Fraxinus excelsior*), silver lime (*Tilia tomentosa*), sycamore maple (*Acer pseudoplatanus*), Norway maple (*Acer platanoides*), sweet cherry (*Prunus avium*), and field elm (*Ulmus carpinifolia).* In the lower floors of these forests develop: the wild service tree (*Sorbus torminalis*), field maple (*Acer campestre*), European wild pear (*Pirus piraster*), European crab apple (*Malus silvestris*). Floristic composition and structure of the undergrowth depend on the degree of canopy closure. Among the undergrowth species, a higher frequency present: European cornel (*Cornus mas*), common hazel (*Corylus avellana*), common hawthorn (*Crataegus curvisepala*, *C. monogyna*), common spindle (*Euonymus europaea*), euonymus verrucosa (*Euonymus verrucosa*), common dogwood (*Cornus sanguinea*), wayfarer (*Viburnum lantana*) etc.

This region is characterized by considerable areas of forest soils with mainly two types – brown and gray forest soils and chernozem podzolic and leachate soils. Brown and gray forest soils (more than 40% of the area) are under forests of beech, oak and hornbeam, ash and oak in the highest part of Codri at altitudes typically between 200 and 350 m. Most light gray soils correspond to lithological substrates with light texture and dark gray and gray soils – to those with loam clay and humus texture. The humus content is more frequently between 2.5-3% and respectively 3-4%, decreasing gradually to the foot of the forest area. In the arable soil horizon gray medium humus content varies from 1.9% to 3.6%. Humus reserves in 1 m profile are between 120 and 320 t/ha. Chernozem podzolic and leachate soils (30%) are located usually in forests of oak, hornbeam-oak and hornbeam-oak-ash in the lower parts of the forest below altitudes of 200-250 m. Podzolic chernozems (strong leachates) is a subtype of transition between gray forest soils and chernozems leachate, located approximately at 200-260 m of altitude. The profile and their properties do not differ much from those of the leachate soils, but the humus content is lower (about 3%), the reaction is more acidic (pH 6.0 to 6.4) and the degree of base saturation is lower (below 75%). Leachate chernozems (cambic and argillic soils) occupy interfluvial ridges and plateaus of the highest hill plains, their less inclined slopes and upper terrace bridges with an absolute altitude of 180-250 m. These are the most fertile soils, with a thickness exceeding a meter and a blackish color due to appreciable content of humus (4 to 5.5%). Their reaction is slightly acidic (pH 6.4 to 6.8) with and a high supply of basic elements and nutrients. Typical chernozems are generally extended on hilly and steppe plains, on gentle slopes of valleys and their middle terraces, generally at absolute altitudes of 150-200 m. The amount of humus is high (5-6%), the reaction is neutral (pH 6.8-7.1), the degree of base saturation is high (85-95%), they have a good supply of nutrients and an intense biological activity, properties which, along with predominantly loamy texture, ensures a high level of fertility potential. These soils are genetically related to the Central European climate and forest vegetation which was almost compact in the past.

The investigated micro-region is fragmented by Botna River, which flows from the southern slopes of the central part of Codri Plateau at 4 km southwest of Lozova village, near the village of Horodca Nouă, having a total length of 152 km. Downstream, up to Sălcuța

village, the river flows in the southeastern direction in a relatively symmetrical valley, but from Sălcuța it flows to the east-northeast. The catchment area is 1540 km^2. Floodplains is generally 0.5-1.0 km and only in the lower part it is 2.0-2.5 km, sloughing on some segments. On the upper course, Botna is much narrower, but forms a well defined valley with many streams flowing from the slopes into Botna. This particular area was chosen by a number of Getic communities, which they used and protected by the two fortifications around Horodca Nouă village. Therefore, in our focus falls the upper course of Botna River, from its springs up to Ruseştii Noi village.

The fortifications of the upper Botna River

The existence of fortifications in the upper Botna River course micro-zone was reported back in the initial phase of extensive surveys conducted on the territory of Moldova in the immediate post-war period (see localization in fig. 1, 6, 18). Short descriptions of these sites can be found in several publications, however no extensive investigation was conducted in the past (Смирнов 1949, 198-199; Пассек 1949, 59; Златковская, Полевой 1969, 50; Лапушнян, Никулицэ, Романовская 1974, 49, Hâncu 1993, 70). Since 2006 systematic research at this site was initiated and expanded the poor investigation of the micro-zone, also the space which generally stretches toward Prut and the relatively good preservation of the sites from Horodca Mică (promontory is called by Horodca villagers "La Hultan"). Later, the investigations were extended on the surrounding headland, known among local inhabitants as "La Cetate" and among researches as Horodca Mare (Munteanu 2009; Munteanu 2010; Munteanu 2011; Munteanu 2012b).

Horodca Mică fortification is located on the penultimate Botna River terrace (on the right bank of the river, altitude 269 m), in the close vicinity to its sources, on a promontory bordered by two ravines at about 700 m southwest of the last row of houses on the eastern alignment of Horodca Nouă village (Hînceşti District) (fig. 6, 7). Another landmark is the hamlet La Roman, against which the headland is situated on the north-east at a distance of 450 m. The sheepfold is the nearest construction to this promontory which is at a distance of 270 m in the northeastern direction. The headland is shaped like a triangle with cut off corners,

Fig. 6. Fortifications location Horodca Mare and Horodca Mică. Orthophotomap. View from the west (by Google Earth PRO).

Fig. 6. Ortofotoplan cu amplasarea fortificaţiilor Horodca Mare şi Horodca Mică. Vedere dinspre vest (după Google Earht PRO).

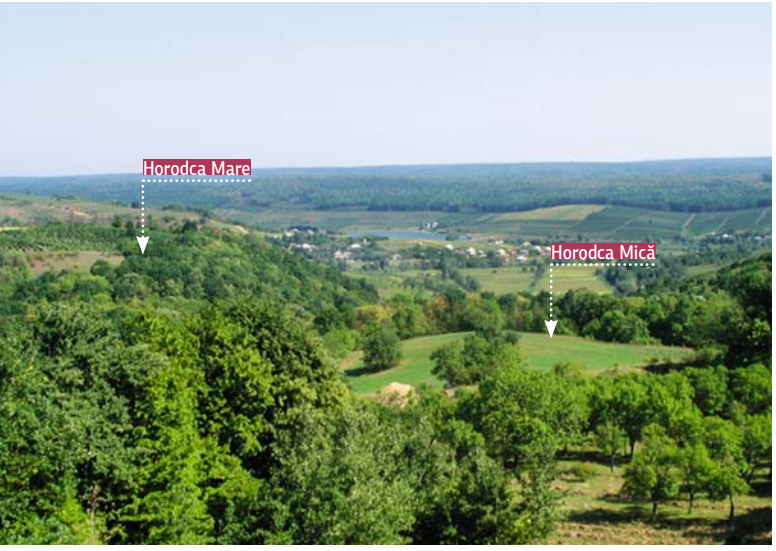

Fig. 7. View of the fortifications Horodca Mare and Horodca Mică. View from the South.

Fig. 7. Vedere asupra fortificațiilor Horodca Mare şi Horodca Mică. Vedere dinspre sud.

Fig. 8. The location fortification Horodca Mică. Orthophotomap (by http://geoportal.md/).

Fig. 8. Ortofotoplan cu amplasarea fortificației Horodca Mică (după http://geoportal.md/).

covering an area of about 1.6 ha (fig. 8). The ravine is very deep and steep on the west, while the slopes get more gentle in the north and northeast, however remaining hardly accessible. The access ways go though the south-west, south and southeast directions with reinforcements made by the inhabitants of the area.

The fortification consists of several defensive elements: wall with adjacent ditch, scarp and bastion. Given the specific topographical space, the southwestern limit of the headland has been chamfered on a length of about 50 m which, of course, facilitated the effort to strengthen the headland area. The remaining space occupied by the connecting area was fortified with wall and ditch (fig. 9 A, B). The wall was raised in the south and south-east of the headland and represents two broken segments, placed at an angle of about 160 degrees with the outside quite rounded and an overall semicircular character (fig. 10). The fortified segment length in the south is 65 m inside and 75 m outside. The difference is explained by the curvature of the defense system. The southeastern segment length is 45 m both outside and inside. The proportionality of lengths is due to the straight character of this fortified portion. The wave width is relatively homogeneous in the west and is 32-33 m long, widening slightly at the junction with the "bastion" up to 35 m (fig. 11, 12). The southeast segment is slightly narrower. Its width varies from 25 m (in the east) to 30 m. In this case, it is probable that the difference in length is due to the curvature of the defense segment. The height of the wall varies between 5 and 6.5 m (from the top of the wave to the footstep level of the precinct). The adjacent ditch width is mainly 12-13 m. In some areas it becomes wider while in others it shrinks. Thus, the ditch narrows

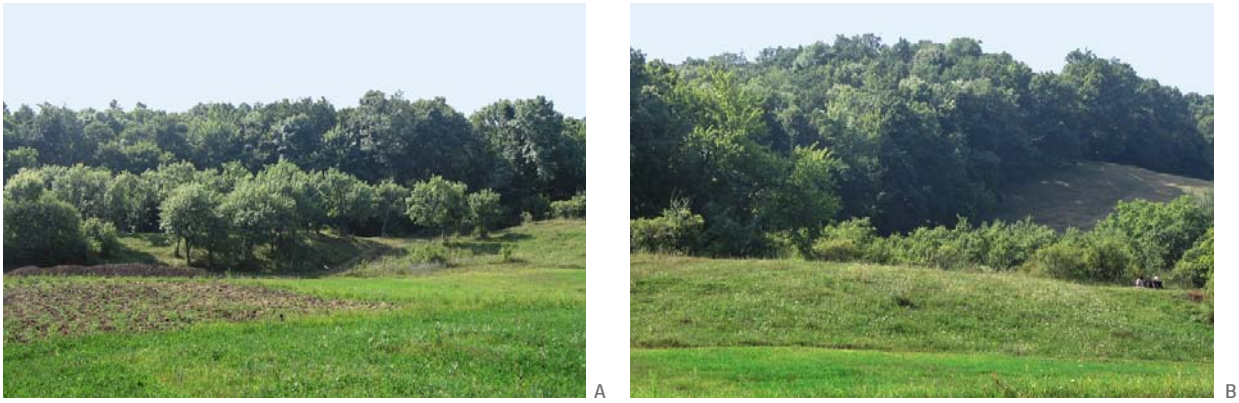

Fig. 9. Horodca Mică. View of the defensive system, from its inner area: A - South-East; B - the southern part.
Fig. 9. Horodca Mică. Vedere asupra sistemului defensiv dinspre incintă: A - partea sud-estică; B - partea sudică.

to 10 m in the western part near the bastion and, on contrary, widens to 15 m in the opposite side. At present, the difference in level between the top of the wall and the wedge of the ditch is 5.2 m.

The space between the two cut defensive segments has a width of between 10 and 13 m. It is likely that here was located the entry into the fortress, however additional information is required to confirm this assumption. In the south-east part of the gap (entry) raises a "bastion", which basically makes junction with the western portion of the wall. The certainty of this junction is easily compromised by a "gateway" site that can be appreciated visually as one made in the contemporary period using modern technique. However, this visual statement requires additional field specifications. The bastion currently represents a circular mound which has a height of over 9 m from the

Fig. 10. Horodca Mică. View of curvature of the outer defense system.
Fig. 10. Horodca Mică. Vedere asupra curburii sistemului defensiv din exterior.

Fig. 11. Horodca Mică.
View of the defensive system from the site.

Fig. 11. Horodca Mică.
Vedere asupra sistemului defensiv dinspre incintă.

Fig. 12. Horodca Mică.
View of the defensive system from the extra-muros.

Fig. 12. Horodca Mică.
Vedere asupra sistemului defensiv dinspre zona extra-muros.

present footstep level (fig. 13). The "bastion" diameter is about 16.5 m. There is a ditch on the outside of the bastion which makes a direct connection in the west with the adjacent ditch of the western segment of the fortification. The Ditch width is smaller than that of the wall and is 6 m in the west and 9 m in the east.

The fortification of Horodca Mare is situated at the distance of about 300 m northwest from Horodca Mică fortification (on the right bank of the river, altitude 260 m; fig. 6, 7). It is separated from the later by a deep ravine whose slopes form the promontories *La Hultan* (on which Horodca Mică fortress is located) and *La Cetate* were discovered remains of Horodca Mare fortification. The headland *La Cetate* is bordered by the already mentioned ravine and another one located slightly toward north-west. Both ravines are sufficiently deep with steep slopes, especially in the north and east (fig. 6, 7, 14). The promontory itself is quite large, occupying an area of about 32 ha with the site holding a surface of about 8 ha in its northeast part (fig. 15). The precise area of the site can hardly be defined at present because of destructions to the defensive system during the collectivization period, when intra-mural territories were part of farming land. In order to facilitate access to this land, the wall of the defense system was overturned into the ditch, so that today no trace of it can be seen with a naked eye. However, their existence was mentioned by our forefathers in the immediate post-war period (without pointing it's exact location) when these sites were mapped, also they are preserved in the memories of the elder villagers (discussion with an old man who mentioned relief forms at Horodca Mare fortification similar to those from the space of

Fig. 13. Horodca Mică. View of the bastion from the extra-muros.

Fig. 13. Horodca Mică. Vedere asupra bastionului dinspre zona extra-muros.

Fig. 14. Horodca Mică. View of the headland from the North-East.

Fig. 14. Horodca Mare. Vedere asupra promontoriului dinspre nord-est.

Fig. 15. Horodca Mare. View of the headland from the North-East, indicating the site's location. Orthophotomap (by Google Earht PRO).

Fig. 15. Horodca Mare. Vedere asupra promontoriului dinspre nord-est cu localizarea sitului (după Google Earht PRO).

Fig. 16. Horodca Mare. Location of the potential defensive systems. Orthophotomap (by Google Earht PRO).

Fig. 16. Horodca Mare. Ortofotoplan. Localizarea posibilelor sisteme defensive (după Google Earht PRO).

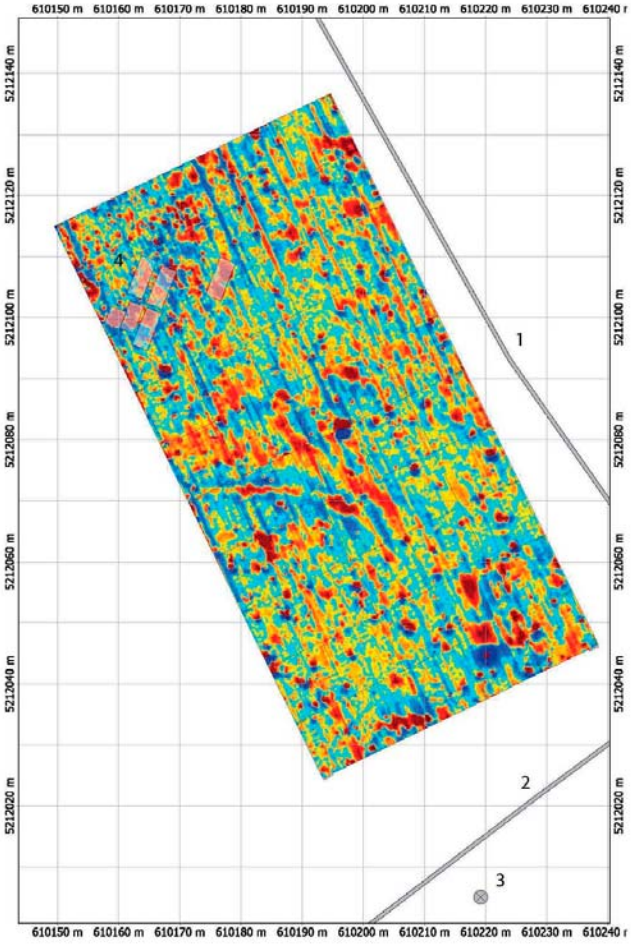

Fig. 17. Horodca Mare. Magnetometric plan of investigated surface.

Fig. 17. Horodca Mare. Planul magnetometric al suprafeței investigate.

Horodca Mică fortification which are better preserved). This information may be supplemented by data drawn from the analysis of satellite images (fig. 16) and geo-magnetic prospecting carried inside the fortification (fig. 17; Popa et al. 2010, 146, planşa 1). And if the defensive line that was meant to bar the access to intra-mural fortification did not preserve, luckily the defensive elements from the perimeter of steep banks of the fortification are still visible today. It is true that their current size is relatively small and does not allow a clear view, nevertheless traces can be observed from a closer examination of the territories in the north-eastern and northern edge of the promontory (fig. 18). Moreover, these spaces have been studied through field research and a fairly clear picture was obtained about the fortification structure. What deserves attention is that the rather steep slope has not been considered sufficient to provide defensive certainties only by a palisade, therefore it was resorted to digging a trench adjacent the palisades, which is located just up the hill. The Intramural area is mostly covered with vines, which does not allow field research and cannot offer a clear picture of the habitation degree. However, the harvested material from the surface together with field research in the few gaps of vines, allows us to advance the idea of including this territory into the hearth of the communities that built it (Munteanu 2009; Munteanu 2010; Munteanu 2011; Munteanu 2012b).

Thus, making a balance of mentioned above facts the following picture emerges. In the area immediately surrounding Botna River springs, the inhabitants from Iron Age II conducted actions that require serious physical, intellectual, and material effort in order to

fortify two spaces placed at relatively short distance from each other (fig. 6, 7, 19). Both sites offer perfect vision over the valley of Botna and open a wide corridor of movement in areas of hills covered with forests (fig. 20, 21). Moreover, there is a perfect view from each fortress over the other one providing opportunities for communication and coordination of actions of the defenders of these fortifications (fig. 22, 23). It is to mention that at the base of Horodca Mare fortification were discovered traces of a synchronous settlement occupying an estimated area of about 4 ha which cannot be studied at the moment because of the plantations of plum trees (a situation which generally compromises the conservation status of the site, fig. 19).

Fig. 19. Orthophotomap (by Google Earth PRO) indicating the location of the fortifications Horodca Mare, Horodca Mică and settlement Horodca. View from the north-east.

Fig. 19. Ortofotoplan cu amplasarea fortificațiilor Horodca Mare, Horodca Mică și a așezării deschise. Vedere dinspre nord-est. (după Google Earth PRO).

Getic settlements in the upper course of the Botna River

We would like to mention a number of archaeological monuments dated with La Tene period and located around the two mentioned sites (fig. 24). Only in the micro-zone of Horodca village other four Getic sites were identified. One was reported in the western entry to the village Horodca on the right side of a tributary of Botna (Horodca VI, fig. 24/4: Полевой 1969, 193; Лапушнян, Никулицэ, Романовская 1974, 58). A second can be assumed in the central part of the village where sporadic traces of Getic remains were reported, while at the eastern entrance into the village were identified Getic remains that allow assuming the presence of another point (the findings were noted by the author of this work during the last years campaigns – fig. 24/5, 6). Not far to the east, at a distance of about 900 m,

Fig. 18. Horodca Mare. View of the defensive system from the north-eastern part of the promontory.

Fig. 18. Horodca Mare. Vedere asupra sistemului defensiv de pe marginea nord-estică a promontoriului.

Fig. 20. View of the Botna river valley from the promontory *The Citadel* (Horodca Mare).

Fig. 20. Vedere asupra văii râului Botna de pe promontoriul *La Cetate* (Horodca Mare).

Fig. 21. View of the Botna river valley from the promontory *At Hultan* (Horodca Mică).

Fig. 21. Vedere asupra văii râului Botna de pe promontoriul *La Hultan* (Horodca Mică).

was located another Getic settlement (Ulmu III, fig. 24/7: Романовская 1969, 81-95; Romanovskaja 1987, 207-226). Moving eastward from the nest of Getic settlements around Horodca village we will reach other three settlements situated on the estate of Ulmu village. The nearest site from the last one of Horodca is at the distance of about 1 km right at the north-western limit of the village Ulmu (Ulmu IV, fig. 24/8: Полевой 1969, 195; Лапушнян, Никулицэ, Романовская 1974, 57). On the opposite side of the village (east side) were identified two other Getic settlements: one on the right bank of Botna and another on the left bank. The settlement on the right bank is closer to the settlement in the western part of the village and is located at a distance of about 2.5 km from it (Ulmu VII, fig. 24/9: Полевой 1969, 198; Лапушнян, Никулицэ, Романовская 1974, 57). The settlement on the left bank of Botna is situated at a distance of about 900 m southwest off the settlement on the right bank (Ulmu V, fig. 24/10: Полевой 1969, 195; Бырня 1974, 99). Around the village Vasieni were recorded other twosettlements: in the west, at a distance of 2.5 km from the south-eastern site of Ulmu, is located a settlement (Văsieni II, fig. 24/11: Полевой 1969, 198; Дергачев 1973, 94), and, on the opposite side of Vasieni village, at a distance of 4.5 km, there is another Getic site (Văsieni V, fig. 24/12: Полевой 1969, 199). The last in the array of sites from this area of Botna, is a site located at a distance of 1.8 km in the south-eastern direction and closer to the western edge of Ruseştii Noi village (Ruseştii Noi IV, fig. 24/12: Полевой 1969, 139-200; Лапушнян, Никулицэ, Романовская 1974, 60). Thus, along the upper Botna River, starting immediately with the fortification near Horodca Mare, other 11 open settlements were located.

Six of them are situated on the right bank of the river, and five on the left one.

We can notice that the distances between the settlements are not too big, in a way that walks from one to the other did not require much time, thus being assured an easy and continuous communication between the settlements. All the settlements are located nearby Răut River, practically in the River Valley, but in the same time their location surfaces rise slightly above the valley. The location altitude for the settlements from Ruseştii Noi and Văsieni (those situated in the dowside of the microzone) is lower than 115 m. The settlements near Ulmu village are situated at altitududes that are only few bellow 155 m, but those nearby Horodca village are located at higher levels – approximately 185-188 m. The only settelement situated at a high enough level is one settlement from the foot of the Horodca Mare fortification – approximately 220 m above sea level, thus being only 40 m lower than the *La Cetate* promontory and 40 m higher than the Botna River level at its nearest point.

Near these sites, wide areas of very high quality farming land have been attested, presenting a comfortable exposure and therefore perfect conditions for practicing agriculture. The necessary amount of water can be sufficiently provided by the main water artery of the microzone, as well as the by the multiple streams flowing into the Botna river, this being an additional favourable conditions for practicing land works. To these factors, the surrounding Codri area has to be added, which represents an enormous source of wooden raw material, used in a wide range of activities: from building the living spaces

Fig. 22. View of the promontory *At Hultan* (Horodca Mică) from the promontory The Citadel (Horodca Mare).

Fig. 22. Vedere asupra promontoriului *La Hultan* (Horodca Mică) de pe promontoriul La Cetate (Horodca Mare).

Fig. 23. View of the promontory *The Citadel* (Horodca Mare) from the promontory At Hultan (Horodca Mică).

Fig. 23. Vedere asupra promontoriului *La Cetate* (Horodca Mare) de pe promontoriul La Hultan (Horodca Mică).

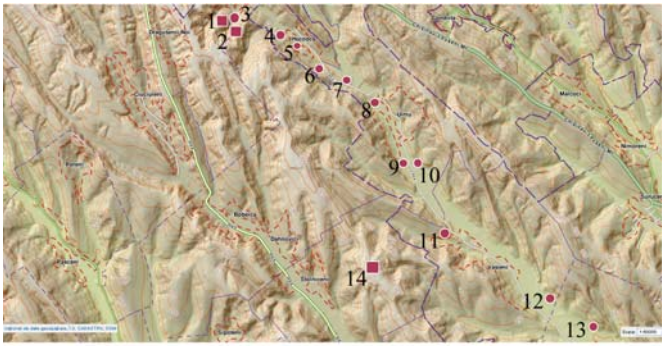

Fig. 24. The micro-zone of the Botna river upper course indicating the site's location (by http://geoportal.md/): 1 - Horodca Mare; 2 - Horodca Mică; 3 - aşezarea Horodca; 4 - Horodca VI; 5 - Horodca sat; 6 - Horodca sud; 7 - Ulmu III; 8 - Ulmu IV; 9 - Ulmu VII; 10 - Ulmu V; 11 - Văsieni II; 12 - Văsieni V; 13 - Ruseştii Noi IV; 14 - Stolniceni.

Fig. 24. Microzona cursului superior al râului Botna cu amplasarea siturilor getice (după http://geoportal.md/): 1 - Horodca Mare; 2 - Horodca Mică; 3 - Horodca-aşezare; 4 - Horodca VI; 5 - Horodca sat; 6 - Horodca sud; 7 - Ulmu III; 8 - Ulmu IV; 9 - Ulmu VII; 10 - Ulmu V; 11 - Văsieni II; 12 - Văsieni V; 13 - Ruseştii Noi IV; 14 - Stolniceni.

(with all its potential annexes) and the defensive systems to the confection of various daily use artefacts. These being given, the communities settled along upper Botna were provided with sufficient resources for organizing autonomously their daily life. In the same context, we should note that farther, on the other side of Ruseştii Noi, the Botna valley begins to slightly widen, therefore in the microregion formed by the villages from the lower course of the Botna River, the situations appears to be different, being determined by another kind of circumstances and natural conditions, which would be worthy being treated separately, considering that the big number of opened settlements are gravitating around other fortifications than those discussed above, such as those from Pojăreni, Hansca and Sociteni.

As a final thought, I would like to draw the attention to the Stolniceni site – its particularities classify it among those having a deep spiritual signification and, considering its location, it can be regarded as a sacred place, common for a number of more Getic groups from the upper Botna region Although this situation requires additional research and specifications, their framework rising beyond the purposes set for this work.

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Fortifications and open settlements of the 1st millennium BC in the micro-zone of Horodişte-Ţipova[1]

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În partea de sud a regiunii Nistrului Mijlociu, în preajma localităților Horodişte şi Țipova, raionul Rezina, se conturează un spațiu cu suprafața de cca 6 km^2, unde au fost evidențiate mai multe situri arheologice, atribuite epocii fierului.

Ca urmare a studierii ortofotoplanurilor, a cercetărilor perieghetice şi sondajelor arheologice în această microzonă a fost atestată o „aglomerație" de situri, compusă din şapte fortificații şi patru aşezări civile (fig. 2), atribuite două orizonturi culturale – hallstattian timpuriu şi traco-getic.

Orizontul hallstattian timpuriu, de tip Cozia-Saharna, este reprezentat de o fortificație (citadela de la Horodişte „La Şanț") şi două aşezări deschise (Horodişte „Groapa Turcului" şi Țipova II). Cel traco-getic este documentat prin şapte fortificații (Horodişte „La Cot", Horodişte „La Şanț", Buciuşca II, Țipova III etc.) şi două aşezări deschise (Buciuşca IV şi Buciuşca V).

Dintre fortificațiile traco-getice se evidențiază cea de la Horodişte „La Cot", care se deosebeşte de restul prin suprafața considerabilă (cca 28 ha), complexitatea sistemului defensiv, precum şi prin poziția strategică pe care o ocupă în microzona Horodişte-Țipova. Plecând de la aceste observații, la nivelul actual de cercetare, se poate presupune că cetatea Horodişte „La Cot" a îndeplinit funcțiile unui „centru" economic, administrativ etc. pentru comunitățile din regiune.

In the southern part of the Middle Dniester region, at a distance of about 5 km south of the Saharna micro-zone, near the villages of Horodişte and Țipova (Rezina District) there is an area of about 6 km^2, where several archaeological sites attributed to the Iron Age were found.[1]

The Horodişte-Țipova micro-zone is located on the right bank of the Dniester (fig. 1), which in this region is quite steep and rises by about 100-130 m from the riverbed. The territory is segmented by a deep gorge with steep slopes, which starts from the river and continue north-east for a distance of about 1.5 km. Near the village of Horodişte the gorge ramifies, forming a network of canyons which, in turn, outlines a series of cliffs. At the bottom of canyons the Valea Horodiştii and Blănărița

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Fig. 1. Location of the Horodişte-Ţipova micro-region.
Fig. 1. Localizarea microzonei Horodişte-Ţipova.

streams flow and fall into the Jidauca stream. This river, crossing the Ţipova gorge, flows into the Dniester.

As a result of the study of aerial photos, satellite images and field research[2] in this micro-zone an "agglomeration" of sites consisting of seven fortifications and four open settlements were certified (fig. 2).

Fortifications

Among mapped fortifications the one of Horodişte "La Cot" stands out due to its location, size and complexity of the defensive system.

The **Horodişte "La Cot"** site (site coordinates: 47°36′50″ North, 28°57′32″ East) (fig. 2; 3)[3], with an area of about 28 ha, is located on a promontory/plateau of nearly polygonal shape, located at the eastern edge of the village. The Promontory, with an altitude of 160 m above sea level and 65 m above the surrounding area, is bordered on three sides by gorges with relatively steep slopes. The fortress was fortified all around

[2] This region has attracted the attention of researchers since the second half of the 1940s, when the first field investigations were undertaken by G.D. Smirnov (1946) and T.S. Passek (1947). During this period there were identified two fortified sites attributed to the Scythians, which in spite of the different locations are known by the same name - Horodişte (Смирнов 1949, 196; Пассек 1949, 64). In the repertories of Getic fortresses compiled in the following years (Златковская, Полевой 1969, 47; Лапушнян, Никулицэ, Романовская 1974, 45; Hîncu 1993, 96-97; Zanoci 1998, 136; Haheu 2008, 72) the information with reference to the fortress discovered by G.D. Smirnov is given. According to "Repertoryy of archaeological monuments in Republic of Moldova: Rezina District" (Levițki 1993, 8), as well as the work by M. Kašuba, V. Haheu and O. Levițki (2000, 127), near the village of Horodişte there are two fortifications – Horodişte "La Şanţ" (identified by G.D. Smirnov) and Horodişte II (discovered by T.S. Passek). In the repertory compiled by T. Arnăut (2003, 225-226) there is only one fortification (Horodiştea), described with the use of data by G.D. Smirnov, as well as with the use of information received in course of field investigations conducted in 1995. In the last two decades in the Horodişte-Tipova micro-zone several surface investigations were carried out, but their results remain unpublished. In order to verify the information given in the directories and to identify new sites, in 2013 collaborators of the Scientific Laboratory "Thracology" (I. Niculiță, A. Zanoci, A. Nicic, S. Matveev, M. Băț and A. Corobcean) conducted field investigations in the Horodişte-Tipova micro-zone, followed by several surveys (Niculiță et al. 2013b, 26-27; Niculiță, Zanoci, Băț 2014)

[3] The location and dimensions of the site named Horodiştea are mentioned by T. Arnăut (2003, 225). But the description of its defensive system is taken from the work by G.D. Smirnov (Смирнов 1949, 196), which refers to another fortress – Horodişte "La Şanţ". The first localization of the fortification on a orthophotomap was made by A. Vartic (2007, 28, fig. 1). Orthophotomaps and the mention that near the village of Horodişte a Getic-Dacian fortress once existed are found in some blogs that promote the rocky landscape of the Horodişte-Tipova micro-zone (https://manastireatipova.wordpress.com/2009/07/22/defileuri-pitoresti-de-la-tipova-horodiste-o-noua-directie-de-cercetare/).

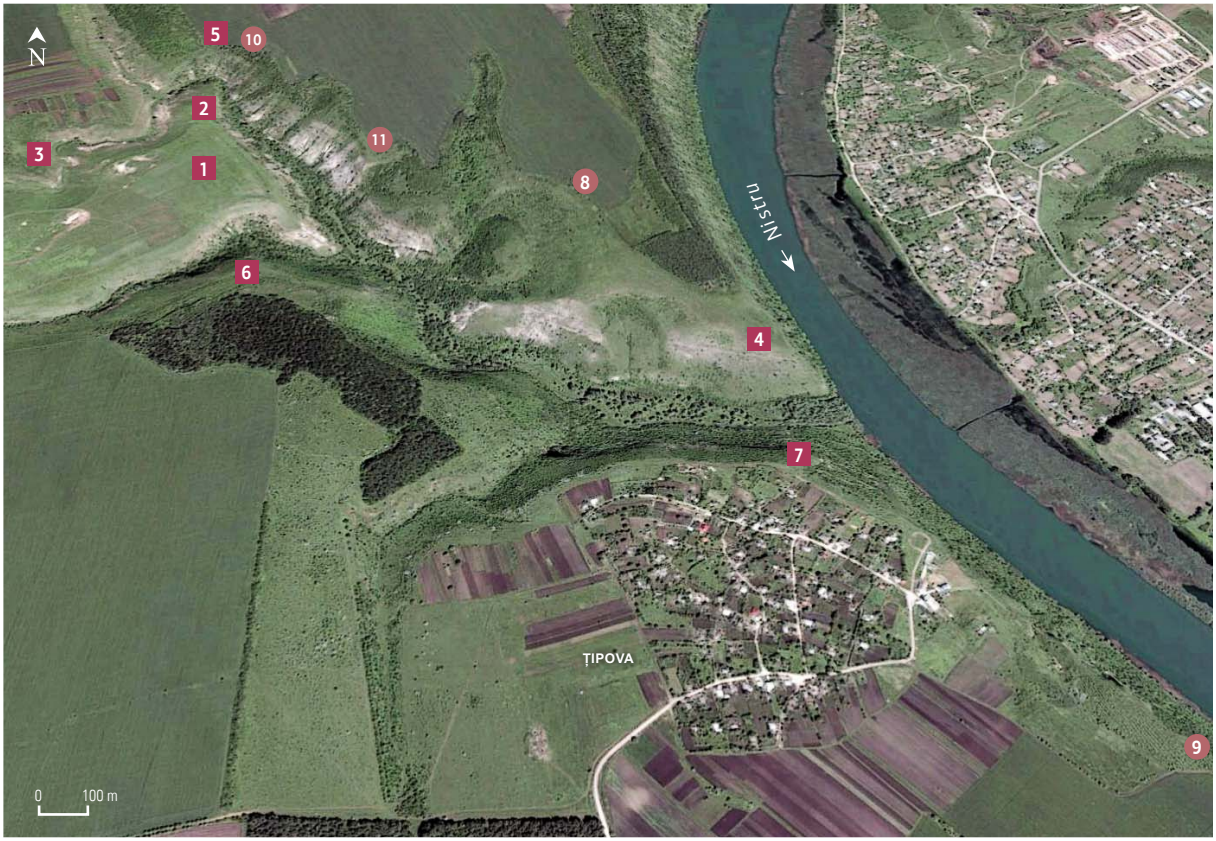


Fig. 2. Orthophotomap of the Horodişte-Ţipova micro-region (fortifications: 1 - Horodişte "La Cot"; 2 - Horodişte "La Şanţ", 3 - Horodişte II; 4 - Buciuşca II; 5 - Buciuşca III; 6 - Ţipova III; 7 - Ţipova IV; open settlements: 8 - Horodişte "Groapa Turcului"; 9 - Ţipova II; 10 - Buciuşca IV; 11 - Buciuşca V) (by Google Earth Pro).

Fig. 2. Ortofotoplanul microzonei Horodişte-Ţipova (aşezări fortificate: 1 - Horodişte „La Cot"; 2 - Horodişte „La Şanţ", 3 - Horodişte II; 4 - Buciuşca II; 5 - Buciuşca III; 6 - Ţipova III; 7 - Ţipova IV; aşezări civile: 8 - Horodişte "Groapa Turcului"; 9 - Ţipova II; 10 - Buciuşca IV; 11 - Buciuşca V) (după Google Earth Pro).

with a “rampart” with a total length of about 2.5 km, doubled on the west side with a ditch. On the east and south sides the defensive line is wavy, forming a kind of “bastions”. On the eastern edge of the plateau about 21 “bastions” could be traced and on the southern edge they are watched clearly at the eastern end, where their number goes up to 12. As a rule, they have arched shape in plan, with an opening of about 10-12 m. The Remains of the bastions now are presented as a wall of about 3 m width at the base and about 0.4 m height (fig. 4; 5). The same “bastions” were found on the eastern side of the Thraco-Getic fortress of Saharna Mare (Niculiță et al. 2013, 223-224, fig. 13-14), as well as in the sites of Saharna “La Șanț” I, Saharna “La Vile”, etc. (Niculiță et al. 2014, 27-29).

On the northern side, where the slope of the promontory is smoother, there was found a wall of 108 m length, about 4 m width at base and a height of 0.3-0.5 m. On the northwest slope, which is also gentler, another wall was identified, with a length of 80 m, a width of 4 m and height of 0.3-04 m (fig. 4).

Fig. 3. The promontory near the Horodişte village. View from the north.
Fig. 3. Promontoriul din preama satului Horodişte Vedere dinspre nord.

Fig. 4. Horodişte "La Cot". Orthophotomap tracing anomalies of the defensive line on the northern, eastern and southern sides (by http://geoportal.md/).

Fig. 4. Horodişte „La Cot". Ortofotoplan cu fixarea anomaliilor liniei defensive de pe laturile de nord, est și sud (după http://geoportal.md/).

Fig. 5. Horodişte "La Cot". Remains of the defensive system on the east side at present.

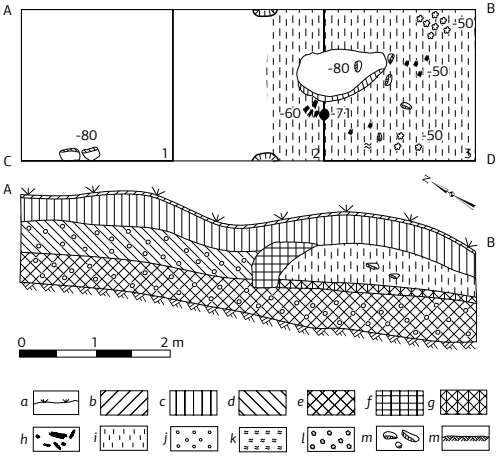
Fig. 5. Horodişte „La Cot". Vestigiile actuale ale sistemului defensiv de pe latura de est.

On the northwestern side, at the bottom of the ravine currently there is a spring whose waters flow into nearby stream (Valea Horodiştii). From this stream goes downhill a wall of a length of 275 m, width at base of about 4 m and height of 0.3 to 04 m, which rises up near the wall of the fortress inner area, forming together a gateway of about 6 m width. Presumably, this defensive construction was intended to protect the access to the water source (fig. 4).

In order to clarify the technique and the period of construction of the "bastions" at the eastern end of the defensive line, on the southern side an archaeological excavation 6x2 m was carried out (fig. 4; 6).

Remnants of the defensive construction were found at a depth of 0.5 m from the current ground surface and represent debris composed of clayey soil mixed with ash, fragments of charred wood and pieces of burnt clay. It had a concave shape and attested in an area that was the width of 2.7 m and a maximum thickness of 0.55 m. In the debris there were found a single large stone (1.2×0.6×0.3 m) and several small pieces of limestone (0.15×0.10×0.05 m). Also among the ruins, at a depth of about 0.7 m a beam charred *in situ* was found. It was in an upright position, having a length of 0.3 m and a diameter of 0.15 m. Many pieces of carbonized wood were discovered near it (fig. 6/3).

At the north end of the debris, in the east and west profiles (fig. 6/1, 2) there were found traces of two postholes with a diameter of 0.4 m, 0.1 m deep, filled with baked soil mixed with burnt pigments of charred wood. Among the ruins, fragments of Thraco-Getic



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Legend: *a.* modern ground surface; *b.* chernozem mixed with vegetation; *c.* chernozem; *d.* gray soil; *e.* brown soil; *f.* burnt soil; *g.* soil burnt to red; *h.* fragments of burnt wood; *i.* loamy soil mixed with ash and fragments of burnt wood; *j.* gravel; *k.* ash; *l.* fragments of burnt clay; *m.* stones; *n.* sterile layer.

Fig. 6. Horodişte "La Cot". Section no. 1. Ruins of a defensive structure on the south side: 1 - plan and profile of the section; 2 - vertical stratigraphic profile of the debris of the wall; 3 - fragments of charred wood.

Fig. 6. Horodişte „La Cot". Secţiunea nr. 1. Ruinele construcţiei defensive de pe latura de sud: 1 - planul şi profilul secţiunii; 2 - profilul stratigrafic vertical al dărâmăturii zidului; 3 - fragmente de lemn carbonizat.

pottery and animal bones were discovered. Under the debris, throughout its width there is a soil layer with thickness of about 0.1 m, burnt to red (fig. ??) (Niculiţă, Zanoci, Băţ 2014, 235-236, fig. 3).

Based on archaeological situation attested in the southern part of the excavation, it can be assumed that the investigated debris represents ruins of a defensive line. This was probably built of two rows of posts. The first was documented through pits shown in profile, the second – through the charred beam *in situ*. If one takes into consideration the distance between rows of about 0.6 m, to which about 0.2-0.3 m thick beams is added,

then it is clear that the defensive construction had a total width of about 1.0-1.2 m. The space between the rows of beams was filled with earth and stones, well compacted. It is possible that the construction outside was coated with clay, as suggested by clay fragments discovered in the debris. As a result of a violent destruction, the defensive construction collapsed on the south side (toward the edge of the promontory), what caused burning the soil to red (ancient ground surface), on which it has fallen.

The "walls" similar by the technique of construction and by size were used in the Thraco-Getic fortifications of Saharna Mare (Niculiță et al. 2013a, 223-237, fig. 9-14, 18, 21), Butuceni (Niculiță, Teodor, Zanoci 2002, 31, 32, fig. 14, 19-22, foto 3), Măşcăuți "Dealul cel Mare" (Zanoci 2004, 46, fig. 4-8), etc.

Based on the method of building of the defensive system and the characteristics of fragments of pottery discovered in the filling, the fortification of Horodişte "La Cot" can be also attributed to the Thraco-Getic communities.

Along with fortress of "La Cot", the access through gorges in the vicinity of villages Horodişte and Țipova was controlled by five fortifications located nearby, on the northern, southern and eastern sides of the canyons.

The fortress of **Horodişte "La Şanț"** (site coordinates: 47°37′07″ North, 28°57′37″ East) (fig. 2; 7)[4] is located at the northeastern extremity of the Horodişte "La Cot" fortification, at a distance of about 850 m east of the village Horodişte, Rezina District[5]. The fortress, with an area of 0.6 ha, is located on a promontory of a nearly polygonal shape formed by the junction of two gorges. As a result of studying orthophotoplans and field research three defensive lines were attested on the promontory area (fig. 2; 7).

The first was built in the place, where the "La Şanț" promontory is connected with the plateau fortification "La Cot". Its remains, actually a wall, can be traced over a length of 48 m. At present it has a width of about 14 m at the base and a height of about 2 m. In front of the wall there was dug a ditch with an opening of about 6 m and a depth of approximately 1.2 m (fig. 7; 8/1).

The second line of defense was attested on the western, northern and eastern sides. It was located on the edge of the promontory and represented a small wall of about 3 m width and a height of about 0.3 m (fig. 7/2).

Thus, by means of these arrangements the promontory was fortified on all sides: the available (southern) side was fortified with a "wall" and ditch, and the sides protected of natural geographic factors and a defensive

[4] The site was discovered in 1946 by G.D. Smirnov, who made a general description of the defensive system and noted that on the territory of the inner space of the fortress fragments of hand modeled pottery ("Scythian") and of Greek amphorae were collected (Смирнов 1949, 196).

[5] Here and below, the distances between the settlements are given in a straight line (after www.geoportal.md), disregarding the actual driveways.

1

construction of smaller proportions, probably a wooden "wall" filled with earth and gravel[6].

The third defensive line was found in the center of the site, placed perpendicular to the promontory at a distance of 52 m north of the first one. It is represented by a small wall with a length of 60 m, which rises to about 0.3 m above the modern ground surface and has a width of about 3.2 m at the base (fig. 7/2; 8/2).

In order to investigate the structure of this defensive line and the content of the cultural layer around it, there was made an excavation having the dimensions of 10×2 m (fig. 9/1).

2

Fig. 7. Horodişte "La Şanţ". 1 - View of the headland from the southwest; 2 - orthophotomap of the site (by http://geoportal.md/).

Fig. 7. Horodişte "La Şanţ". 1 - Vedere a promontoriului dinspre sud-vest; 2 - ortofotoplanul sitului (după http://geoportal.md/).

[6] Similar "walls" were found on the edges of the promontories of Horodişte "La Cot", Saharna Mare (Niculiţă et al. 2013a, 223-237, fig. 9-14, 18, 21), etc.

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Fig. 8. Horodişte "La Şanţ": 1 - view of the defensive line no. 1 from the south; 2 - view of the defensive line no. 3 from the south.

Fig. 8. Horodişte „La Şanţ": 1 - vedere dinspre sud a liniei defensive nr. 1; 2 - vedere dinspre sud a liniei defensive nr. 3.

As a result of archaeological investigations remains of the defensive construction were certified at a depth of about 0.4 m from the modern ground surface, representing a concave lens of 2.4 m width at the base, with the maximum thickness of 0.35 m (fig. 9). It was composed of gray soil mixed with ash, burnt clay fragments and stones with the dimensions between 0.4×0.3×0.15 m and 0.2×0.1×0.05 m. Probably, a part of debris of the defensive line is also an accumulation of stones (with dimensions between 0.25×0.20×0.10 m and 0.85×0.40×0.20 m) found in the southern part of the excavation.

In the debris of the defensive construction a bronze awl (fig. 10/1) and 11 fragments of pottery of the Cozia-Saharna type (fig. 10/7) were found (Niculiță, Zanoci, Băț 2014, 242-243, fig. 8), which have many analogies in the settlements of Saharna Mare/"Dealul Mănăstirii" (Niculiță, Zanoci, Arnăut 2008, fig. 59/13; 67/1-13), Alcedar III (Кашуба 2000, рис. XIII/4) or Saharna "Ţiglău" (Niculiță, Nicic 2008, fig. 3/11).

The Cultural layer around the defensive construction reaches a thickness of about 0.4-0.5 m and contains materials typical for both, early Hallstatt culture of Cozia-Saharna and Thraco-Getic culture.

Early Hallstatt materials are represented by fragments of bowls, pots and cups (fig. 10/7-11; Niculiță, Zanoci, Băț 2014, 243, fig. 9), frequently found in the settlements of Cozia-Saharna culture in the Middle Dniester region (Niculiță, Nicic 2012, fig. 9/3, 10/5; Niculiță et al. 2012, fig. 37; 41/4).

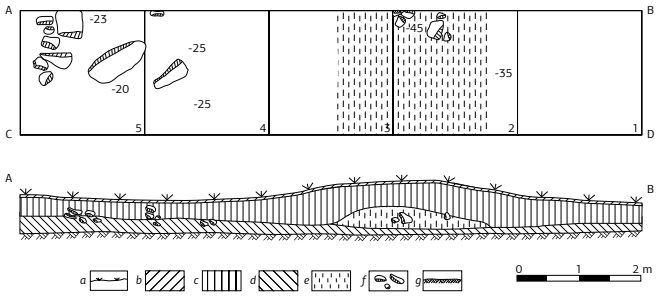
From the layer of Thraco-Getic habitat come: a belt set composed of an iron buckle (fig. 10/2) and a plaque (fig. 10/3), a grindstone (fig. 10/4), two spindle-whorls (fig. 10/5, 6), and a rich and varied assortment of pottery modeled by hand (Niculiță, Zanoci, Băț 2014, 245, fig. 10-12). The pottery discovered in the site of Horodişte „La Şanț" is similar to that found at the Thraco-Getic monuments of Butuceni (Niculiță, Teodor, Zanoci 2002, fig. 94/1), Saharna Mare (Niculiță, Zanoci, Arnăut 2008, fig. 127/8), etc.

Thus, as a result of surface researches and archaeological surveys conducted in Horodişte "La Şanț" one can assume, with a certain degree of probability, that during the early Hallstatt period in the north of the promontory there was a "citadel" of polygonal shape with dimensions of 60×57 m (S = 0.34 ha), fortified on all the sides with an artificial defensive system.

In the next phase (the Thraco-Getic habitat layer) the settlement occupies the entire surface of the promontory (0.6 ha), being fortified on the southern side by a "wall" with adjacent ditch, and on the remaining sides – by a wooden "wall" filled with earth, rubble and gravel.

The **Horodişte II** fortification (site coordinates: 47°36′58″ North, 28°57′18″ East) (fig. 2; 11)[7] is located at a distance of 300 m east of the outskirts of the Horodişte village, opposite (west) the "La Cot" fortress.

[7] The site was discovered in 1947 by T.S. Passek (Пассек 1949, 64), who indicated in this place an open settlement, attributed to the Cucuteni-Tripolye culture, and a Getic ("Scythian") fortification.



1

Legend: *a.* modern ground surface; *b.* chernozem mixed with vegetation; *c.* chernozem; *d.* gray soil; *e.* loamy soil mixed with ash and fragments of burnt wood; *f.* stones; *g.* sterile layer.

2

Fig. 9. Horodişte "La Şanț". Defensive line no. 3. Section no. 1/2013: 1 - plan and profile of the section; 2 - vertical profile of the defensive structure.

Fig. 9. Horodişte „La Şanț". Linia defensivă nr. 3. Secțiunea nr. 1/2013: 1 - planul și profilul secțiunii; 2 - profilul vertical al construcției defensive.

Fig. 10. Horodişte „La Şanţ". Finds from the debris of the "wall" (1, 7) and from the cultural layer (2-6, 8-11).
Fig. 10. Horodişte „La Şanţ". Descoperiri din dărâmătura „zidului" (1, 7) şi din stratul cultural (2-6, 8-11).

It is located on a promontory with an altitude of 155 m above sea level, of a triangular shape, formed by a deep canyon, at the bottom of which a stream flows. Both on the orthophotoplan and directly at the site a "wall" was detected, which currently has a width of about 3 m at the base and a height of about 0.3 m. The "wall" with a length of about 280 m surrounds the site, giving the inner space a trapezoidal shape with an area of about 0.5 ha.

The **Buciuşca Fortress II**[8] (site coordinates: 47°36′42″ North, 28°58′49″ East) (fig. 2; 12) is located on the right bank of the Dniester, at a distance of about 2.2 km south of the village of Buciuşca and about 0 57 km north of the village of Ţipova. The site is located on a ledge of the hill with an altitude of about 150 m above sea level (120 m from the Dniester), bounded on the east by the river bed and on the south by a deep gorge. The inner area of the fortress, with an area of about 0.9 ha, has a triangular shape and was reinforced all around with a defensive line. Following the study of orthophotoplans and the field investigations, remains of the defensive construction could be watched on a total length of about 380 m. They represent a "wall" of about 3 m width at the base and of a height of 0, 2-0.3 m.

1

2

Fig. 11. Horodişte II: 1 - orthophotomap (by http://geoportal.md/), 2 - view of the headland from the east.

Fig. 11. Horodişte II: 1 - ortofotoplan (după http://geoportal.md/); 2 - vedere a promontoriului dinspre est.

[8] Although the site is located closer to the village of Ţipova, Rezina District, it was given the name of Buciuşca II because it is located, in terms of cadastral division, on the land of this village. The name "Buciuşca" without number was given to a fortification located north of the village. For details see: Niculiţă, Zanoci, Băţ 2012, 17-19.

1

2

Fig. 12. Buciușca II: 1 - orthophotomap (by http://geoportal.md/), 2 - view of the headland from the west.

Fig. 12. Buciușca II: 1 - ortofotoplan (după http://geoportal.md/); 2 - vedere a promontoriului dinspre vest.

The fortification of **Buciușca III** (site coordinates: 47°37′16″ North, 28°57′32″ East) (fig. 2; 13) is located about 2.2 km southwest of the village of Buciușca and about 0.8 km northeast of Horodiște, opposite (northwest) the site of Horodiște "La Șanț". The fortress is situated on a promontory with absolute altitude of about 145 m, formed by the confluence of two canyons. According to geospatial data and field research it was established that the site was surrounded all around by a defensive line, which now represents a "wall", barely visible on the modern ground surface. Total length of the "wall" is about 250 m, its width at the base is about 3-4 m, and the height is between 0.2 and 0.4 m. On the northern side the "wall" is arched (curved) to the outside. The inner space enclosed by the defensive line is estimated at 0.5 ha.

The site of **Țipova III** (site coordinates: 47°36′40″ North, 28°57′50″ East) (fig. 2; 14) is located at a distance of about 0.85 km northwest of the village of Țipova, opposite (southeast) the fortress of Horodiște "La Cot". The fortress is situated on a ledge of the hill, of about 155 meters altitude above sea level, formed by a gorge. The inner area of about 6 ha has a semi-oval shape. Both on the orthophotoplan and on the modern ground surface a small "wall" could be traced, that surrounds the site all around. The "wall", with a length of about 1.15 km, has a width of about 3 m at the base and a height of 0.3-0.4 m, sometimes amounting to 0.8 m.

The fortress of **Țipova IV** (site coordinates: 47°36′17″ North, 28°59′04″ East) (fig. 2; 15) is on the eastern end of the Țipova village, on a relative altitude of about 125 m and steep bank of the Dniester. Currently the site area

1 2

Fig. 13. Buciuşca III: 1 - orthophotomap (by http://geoportal.md/), 2 - ruins of the defensive system.
Fig. 13. Buciuşca III: 1 - ortofotoplan (după http://geoportal.md/); 2 - ruinele sistemului defensiv.

Fig. 14. Ţipova III. View of the headland from the northeast.
Fig. 14. Ţipova III. Vedere a promontoriului dinspre nord-est.

1

2

Fig. 15. Țipova IV: 1 - View of the headland from the northeast, 2 - ruins of the defensive system (by http://www.prospect.md/).

Fig. 15. Țipova IV: 1 - Vedere a promontoriului dinspre nord-est; 2 - ruinele sistemului defensiv (după http://www.prospect.md/).

is affected by local farms. Remains of the defensive system are represented by a wall of about 4 m width at the base and a height of about 0,5-0,7 m, which can be seen only from the southeast and northwest sides.

Open settlements

The site of **Horodişte "Groapa Turcului"** (site coordinates: 47°37′58″ North, 28°58′24″ East) (fig. 2)[9] is located about 1.7 km east of the Horodişte village and about 1.9 km southwest of the Buciuşca village, on the northern side of the gorge. From the settlement surface fragments of pottery characteristic for the Cozia-Saharna culture are known (Кашуба 2000, 367, рис. XLVI/15, 16).

The **Țipova II** settlement (site coordinates: 47°35′59″ North, 28°59′26″ East) (fig. 2)[10] is located about 550 m southeast of the Țipova village, on a high and steep bank of the Dniester. The northern part of the site is wooded, the rest is agricultural land. As a result of field research there were collected fragments of pottery characteristic for the Cozia-Saharna culture.

The **Buciuşca IV** settlement (site coordinates: 47°37′18″ North, 28°57′38″ East) (fig. 2) is located north-east of the Buciuşca III fortress, in its immediate vicinity, on the northern side of the gorge. Currently the

[9] Currently the settlement is situated on the land of the village of Buciuşca. It was identified in 1967 by V. Verina. The localization and a brief description of the site was made by V. Lapuşnean, I. Niculiță and M. Romanovskaya (Лапушнян, Никулицэ, Романовская 1974, 18)

[10] It was discovered by V. Bobrakov. In 1992 it was investigated by O. Leviţki (1993, 10), whom we thank for permission to publish the information about this site.

settlement is affected by agricultural works. As a result of research on the surface fragments of Thraco-Getic pottery were collected.

The **Buciuşca V** settlement (site coordinates: 47°37′04″ North, 28°58′04″ East) (fig. 2) is located about 0.8 km southeast of the previous one, on the northern side of the Ţipova gorge. From the site surface, which is currently affected by agricultural works, fragments of Thraco-Getic pottery were found.

Conclusions

Considering the older publications, archival materials and results of field investigations and archaeological surveys, at present we can see the existence of two cultural horizons – Early Hallstatt and Thraco-Getic – in the Horodişte-Ţipova micro-zone in the 1st millennium BC.

The Early Hallstatt horizon is represented by a fortification (the citadel from Horodişte "La Şanţ") and two open settlements (Horodişte "Groapa Turcului" and Ţipova II). According to materials collected from these sites, the early habitation layer in the Horodişte-Ţipova micro-zone can be attributed to the communities of the Cozia-Saharna culture dated from the end of the 11th c. - the beginning of the 8th c. BC (Кашуба 2011, 54).

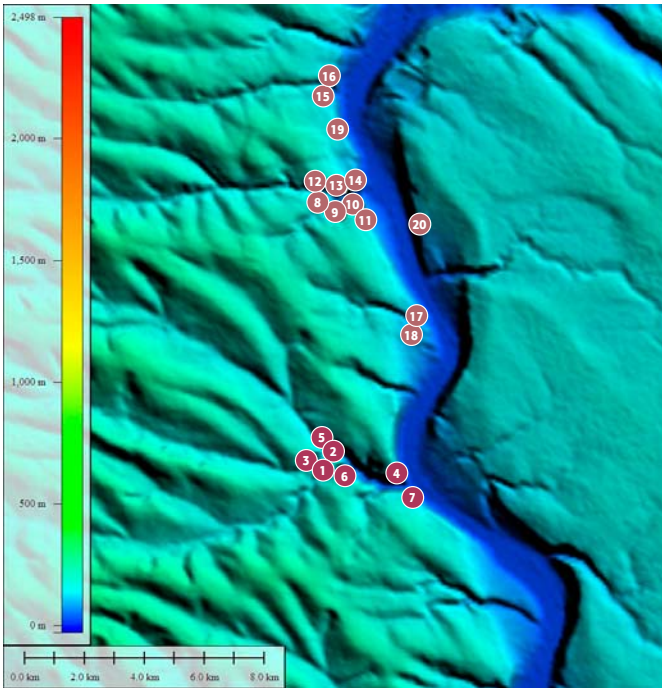
To the Thraco-Getic horizon currently seven fortifications and two open settlements (Buciuşca IV and Buciuşca V) can be attributed.

Among the fortresses there is one of Horodişte "La Cot", which differs from the others by a large area (about 28 ha), the complexity of its defensive system and its strategic position in the Horodişte-Ţipova micro-zone. The fortress is located at a distance of about 1,8 km from the right bank of the Dniester, an access to it is possible only through the Ţipova gorge, which is controlled at the entrance by the fortified sites of Buciuşca II and Ţipova IV. Also, the site of Horodişte "La Cot" is protected from the north and northwest by the fortifications of Buciuşca III, Horodişte "La Şanţ" and Horodişte II, and from the south – by Ţipova III.

The visibility analysis (after Global Mapper) established that from the Horodişte "La Cot" the possibilities to supervise the left bank and the valley of the Dniester, both upstream and downstream, are low (fig. 16/2). Instead, it had direct eye contact with all the fortifications located in the Horodişte-Ţipova micro-zone. The same analysis showed that the mission to control territories in the east and the basin of the Dniester River belonged in the main to the sites located on the high bank of the river – Buciuşca II and Ţipova IV[11] (fig. 16/3). Also through these fortifications it was possible to establish visual contact with the sites of Buciuşca, Saharna "Hulboaca" and Ofatinţi from the so-called Saharna micro-zone[12] (fig. 16/4).

[11] From these fortifications one could oversee east of the Dniester area to a distance of 8 km, down the river – up to 5 km and upstream – up to 7 km.

[12] About the location of fortifications from the Saharna micro-zone see the study by I. Niculiţă, A. Zanoci, and M. Băţ from this collection of papers (p. 21-46).



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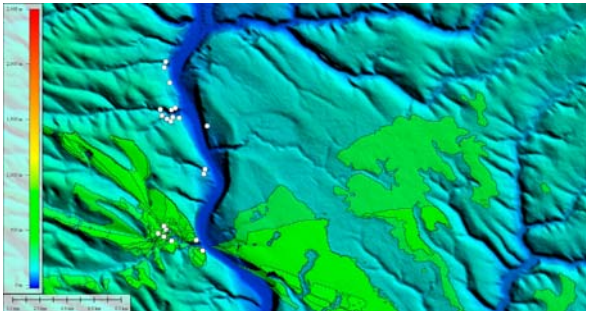

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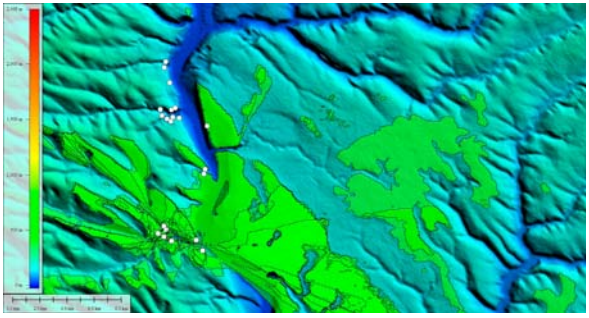

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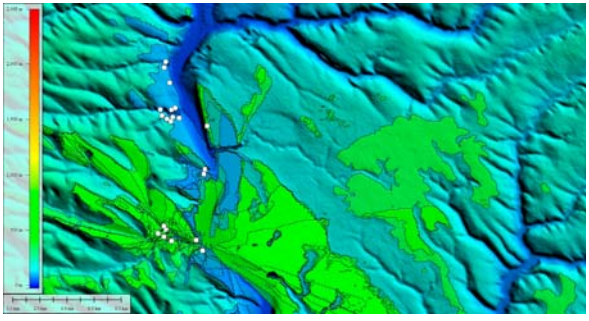

4

Horodişte-Ţipova micro-region:

1 - Horodişte „La Cot";
2 - Horodişte „La Şanţ";
3 - Horodişte II;
4 - Buciuşca II;
5 - Buciuşca III;
6 - Ţipova III;
7 - Ţipova IV

Saharna micro-region:

8 - Saharna Mare;
9 - Saharna "La Şanţ";
10 - Saharna "La Şanţ" I;
11 - Saharna "La Şanţ" II;
12 - Saharna Mică;
13 - Saharna; "Dealul Grimidon";
14 - Saharna "La Vile";
15 - Stohnaia III;
16 - Stohnaia IV;
17 - Saharna "Hulboaca";
18 - Buciuşca;
19 - Saharna "La Revichin";
20 - Ofatinţi

Fig. 16. 1 - Map of fortifications of the Horodişte-Ţipova and Saharna micro-regions; 2 - 25 km visibility range for sites no. 1-3, 5, 6; 3 - 25 km visibility range for sites no. 1-7; 4 - 25 km visibility range for sites no. 1-7, 17, 18, 20.

Fig. 16. 1 - Harta fortificaţiilor din microzonele Horodişte-Ţipova şi Saharna; 2 - raza de vizibilitate de 25 km pentru siturile 1-3, 5, 6; 3 - raza de vizibilitate de 25 km pentru siturile 1-7; 4 - raza de vizibilitate de 25 km pentru siturile 1-7, 17, 18, 20.

Thus, taking into consideration the compact arrangement of the fortifications and open settlements in the Horodişte-Ţipova micro-zone, it can be presumed the existence in this area there of an community, where the fortress of Horodişte "La Cot" served as the administrative "center". The time of its functioning still remains uncertain. However, if one takes into consideration that most fortified sites and open settlements in the Middle Dniester region (Niculiţă, Zanoci, Băţ 2013, 296-297) functioned the Thraco-Getic period, it can be assumed that the community of Horodişte-Ţipova lived here around the same time. But it reaches its peak of development in the 4th-3rd centuries BC, as well as the neighboring communities in the area the existing village of Saharna (Niculiţă, Zanoci, Băţ 2013, 297-299).

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Quelques observations sur des centres fortifies geto-daces dans la Valachie central-nordique[1]

Valeriu Sîrbu
Sebastian Matei

Am ales, pentru a ilustra cât mai complet această tematică, patru situri geto-dacice aflate în zone diferite, care au structuri de apărare diferite şi care, dincolo de trăsăturile culturii materiale destul de unitare, au avut o evoluții particulare.

Ele se află în zone diferite de relief: *Piscul Crăsanilor*, pe un bot de terasă din centrul Câmpiei Române, Pietroasa Mică-*Gruiu Dării*, pe un platou calcaros de la Curbura Carpaților, Cârlomăneşti-*Cetățuie*, pe un martor de eroziune din valea Buzăului, iar Târcov-*Piatra cu lilieci* – pe o culme muntoasă.

Structurile lor de apărare sunt diverse, în funcție de materialele din zonă şi de scopul construirii lor. Astfel, la *Piscul Crăsanilor* şi la Cârlomăneşti s-au săpat şanțuri şi s-au ridicat valuri cu palisade din lemn, la Târcov erau ziduri din piatră informă ori sumar fasonată, iar la *Gruiu Dării* sunt ziduri de inspirație elenistică, cu două paramente de calcar şi emplecton.

În timp ce la *Piscul Crăsanilor* şi la Cârlomăneşti au fost centre rezidențiale, cu importante valențe economice, politice şi religioase, la Târcov a existat o cetate cu rol strict militar, iar la *Gruiu Dării* este documentată o unică succesiune de tipuri de situri: aşezare nefortificată, cetate, loc de cult.

Pour illustrer au plus complètement cette thématique, nous avons choisi quatre sites géto-daces situés dans des zones variées, avec des structures défensives différentes et dont le rôle, outre les traits assez unitaires de la culture matérielle, ont connu une évolution toute particulière[2]. Après une brève présentation des sites, nous allons discuter, plus en détail, les traits communs et particuliers de chacun.

Pietroasa Mică-*Gruiu Dării* – établissement, cité, lieu de culte (dép. de Buzău)

Le site de *Gruiu Dării* se trouve sur un plateau dominant (côte 534 m) situé à la courbure des Carpates, dans le Massif d'Istrița, offrant une excellente visibilité aux alentours, sur les collines et la plaine. Il est entouré

[1] Le texte et l'illustration pour Pietroasa Mică-*Gruiu Dării* et Crăsanii de Jos-*Piscul Crăsani* ont été rédigés par V. Sîrbu, tandis que ceux pour Târcov-*Piatra cu lilieci* et Cârlomăneşti-*Cetățuie*, par Seb. Matei. Les considérations finales appartiennent aussi à V. Sîrbu.

[2] Dans le choix de ces sites on a tenu compte aussi du fait que les auteurs font partie des collectifs de recherche, donc ils connaissent bien les réalités du terrain et ont pu utiliser les données des fouilles archéologiques.

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Fig. 1. Pietroasa Mică-*Gruiu Dării*: 1 - vue aérienne; 2 - vue du sud-est; 3 - vue du nord-ouest.

Fig. 1. Pietroasa Mică-*Gruiu Dării*: 1 - vedere aeriană; 2 - vedere dinspre sud-est; 3 - vedere dinspre nord-vest.

sur trois côtés de pentes, les unes abruptes, n'étant accessible que de l'ouest, où le plateau continue (fig. 1); au nord et à l'est du plateau, coule le ruisseau de Dara.

Les fouilles archéologiques attestent le fait que les vestiges de *Gruiu Dării* présentent une série de caractéristiques insolites par rapport aux autres sites connus dans l'aire des Géto-Daces, autant par la succession des types de sites, que par certains types de complexes identifiés (Dupoï, Sîrbu 2001, 13-20, fig. 1-4, 20-32; Sîrbu, Matei, Dupoï 2005; Sîrbu 2008, 177-193; Sîrbu, Matei 2012-2013, 109-134; Sîrbu, Matei 2013, 347-373).

Les 27 campagnes de fouilles archéologiques nous ont fourni une documentation riche qui nous permet de faire des analyses et des appréciations plus détaillées, autant sur l'ensemble du site, que sur ses phases d'évolution. Nous allons concentrer maintenant notre attention seulement sur le premier siècle av. J.-C., lorsqu'il y a eu une forteresse. Certes, nous allons faire de brèves références, à quelques aspects essentiels de la période antérieure et celle postérieure dans l'évolution du site dans le but de pouvoir en comprendre correctement la situation.

Les IV^{e}-III^{e} siècles av. J.-C. On a mis au jour 19 complexes datant des IV^{e}-III^{e} siècles av. J.-C., répandus dans toutes les zones fouillées: deux demeures, 12 fosses, deux foyers, deux fours et une agglomération de matériel archéologique, ce qui témoigne de l'existence d'un établissement géto-dace sur le plateau. On n'y a pas identifié d'élément de fortification (Sîrbu, Matei 2012-2013, 110-117, fig. 2-4).

Les II^{e}-I^{er} siècles av. J.-C. Pour cette époque, on y a identifié 70 complexes de types variés, caractéristiques aux établissements et forteresses géto-daces: 7 demeures, 12 foyers extérieurs, 41 fosses et 10 complexes qui n'ont pas pu être défini avec certitude soit à cause de l'état de conservation ou la fouille partielle, soit à cause de leur forme ou structure (Sîrbu, Matei 2012-2013, 117-120, fig. 5-6).

I^{er} siècle après J.-C. – lieu sacré. Lors des fouilles faites après 2001, on n'a trouvé que deux types de complexes datant du I^{er} siècle après J.-C.: a) dépôts du type petite butte – 72 de ex., et b) foyers isolés – 6 ex. Sur les 72 dépôts du type petite butte, 55 avaient des rings de pierre, à l'intérieur desquels se trouvaient neuf foyers *in situ*, dans d'autres huit cas, les foyers déposés étaient en fragments, et 17 autres dépôts n'avaient pas de rings de pierre (Sîrbu et al. 2014). Les fouilles faites dans la période 1973-1989 ont révélé des dizaines de dépôts votifs du même type, mais l'on ne saurait préciser leur nombre exact (Dupoï, Sîrbu 2001, 18-20, fig. 20-32).

Ce qui est essentiel c'est que l'on n'a pas identifié, pour le premier siècle de l'ère chrétienne, de complexes d'habitation ou annexes ménagères (fosses, ateliers, abris saisonniers etc.), sur le Plateau et sur la *Terrasse I* non plus. La seconde phase de la muraille correspond chronologiquement à l'utilisation de l'enceinte seulement pour des dépôts votifs. L'analyse des pièces à datation restreinte, en particulier les fibules et les monnaies, témoigne du fait que le site avait été mis en ruine/ abandonné vers la fin du I^{er} siècle, éventuellement le commencement du II^{e} siècle après J.-C., donc peu avant ou même pendant les guerres daco-romaines.

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Fig. 2. Pietroasa Mică-*Gruiu Dării*: 1-3 - le mur sur le côté ouest-nord-ouest.

Fig. 2. Pietroasa Mică-*Gruiu Dării*: 1-3 - zidul de pe latura de vest-nord-vest.

La forteresse (Ier siècle av. J.-C.). Mur d'enceinte. Le mur d'enceinte est encore préservé, en divers stades, seulement sur les côtés nord et ouest, donc environ la moitié du mur initial, puisque sur les deux autres côtés, il a été complètement détruit, autant à cause de l'exploitation du calcaire que des écroulements ultérieurs à son abandon/démantèlement.

Deux observations sûres s'imposent: a) c'est un mur à deux parements en blocs de calcaire sommairement taillés et *emplecton*; b) il a connu deux phases principales de construction, une au Ier siècle av. J.-C., lorsqu'il y avait une forteresse, et l'autre, au Ier siècle après J.-C., lorsqu'il y avait une enceinte sacrée. Les fouilles archéologiques ont mis en évidence le fait que les deux phases de la fortification avaient, outre les éléments communs, une série de caractéristiques spécifiques, selon la période et la situation concrète de chaque zone.

Le côté occidental de la forteresse. Pour la *Ière phase* le terrain a été nettoyé jusqu'au rocher natif, celui-ci étant taillé dans certaines zones dans le but d'obtenir une surface au plus plate; on a mis ensuite une couche de terre gris-jaunâtre, 20-30 cm d'épaisseur, relativement propre et dure, afin d'obtenir l'horizontalité du terrain et assurer l'adhérence de la fondation du mur sur le rocher (fg. 2/3). Vu que l'on n'a pas identifié de fossé de fondation creusé dans le rocher, la base du mur a été enfouie sur une certaine hauteur. Les débris de charbon indiquent l'existence d'une structure de bois, en guise de surélévation ou plancher enduit dans la partie haute afin d'empêcher l'eau de s'infiltrer dans le mur.

Pour édifier le mur de la *II^e phase* on a nivelé les restes de la première phase de la fortification où il y avait autant de grosses pierres que des dalles de calcaire, ensuite on a déposé une couche de terre, 15-20 cm d'épaisseur, dans laquelle on a trouvé de rares fragments de vases daces, ensuite deux rangées de pierres massives de calcaire en vue d'assurer une base solide pour la nouvelle fondation. Seulement une partie de la fondation du mur de la première phase est préservée *in situ.* La fondation de la nouvelle muraille ne respecte plus exactement le trajet de la première muraille, le parement extérieur étant retiré vers l'intérieur, mais s'appuyant, partiellement sur celle-ci.

Il s'agit d'un mur à deux parements en blocs de calcaire sommairement taillés à l'extérieur, 2,00-2,20 m de large, dans une zone où il est le mieux conservé, notamment huit assises sur environ 1,20 m de haut (fg. 2/2-3). Le liant utilisé est un sédiment blanc, probablement poudre de calcaire issue lors de la taille des parements. L'*emplecton* consiste en des cailloux petits et moyens de calcaire, plus rarement des grès rougeâtres, et le lœss en guise de liant. Dans les fouilles faites jusqu'à présent on n'a pas identifié les vestiges de quelque structure en bois de la seconde phase.

Le côté septentrional de la forteresse. Vu que le terrain y était différent, il a fallu trouver d'autres solutions pour assurer la stabilité des murs. Auparavant, dans les époques énéolithique et du Bronze, il y existait une pente douce, aussi a-t-on identifié, dans la zone restée intacte, autant de couche archéologique, que de nombreux complexes d'habitation datant de ces deux périodes (Sîrbu et al. 2011).

Les Géto-Daces y ont entrepris de vastes travaux d'aménagement, d'une part pour accentuer la pente, de l'autre, pour la consolider et empêcher les glissements et assurer de la sorte la stabilité du mur (fig. 3/1-2). Vu que dans cette zone, la base du mur ne s'appuyait aucune part sur le rocher, ils ont dû creuser un fossé de fondation.

Dans les zones fouillées, on n'a trouvé, de la *première phase* du mur, qu'une partie de la fondation en pierre non-taillée, consistant en de pierres grandes et moyennes en calcaire, forme irrégulière; le bord vertical témoigne du fait que l'on y avait creusé un fossé (fig. 3/3).

Dans toutes les sections fouillées dans l'enceinte, il y avait, auprès du mur, à 3,00-3,50 m de distance, de grandes fosses avec des pierres sur les bords, qui témoignent de l'existence des poteaux massifs, tandis que les traces de poutres /planches épaisses carbonisées suggéreraient des «ceintures» horizontales, donc une structure solide de consolidation vers l'intérieur.

Le mur de la *II^e phase* avait la même structure et les mêmes dimensions que celui du côté ouest-nord-ouest, à la seule différence que le liant utilisé aux parements y était le lœss, et dans l'emplecton on avait mis autant du lœss local, de couleur brique-rougeâtre, que des débris incendiés des demeures énéolithiques et de l'âge du Bronze, bouleversés lors de l'aménagement de la pente. On n'y a pas identifié de structure en bois, mais la situation pourrait s'expliquer aussi par l'absence totale des parties du haut de la muraille ou encore par sa

destruction totale à cause du feu. Le mur de la IIe phase superposait, en des pourcentages différents, le mur de la première phase comme il suit: ainsi, tandis que dans sa partie occidentale, il existait un décalage plus grand entre leurs marges, dans la partie orientale, ils partageaient presque le même périmètre (fig. 3/1-2).

Outre les deux phases générales de construction, on a pu observer, sur certaines surfaces recherchées, des destructions locales du mur et sa reconstruction, mais pas aussi soigneusement.

Pièces d'armement. Nous mentionnons, parmi les armes découvertes, quelques pointes de lance ou javelots en fer, deux poignards du type *sica* et quelques autres grands couteaux de combat en fer, de nombreuses pointes de flèche en fer et bronze. Les éperons entrent dans la catégorie de l'équipement militaire, tandis que le grand nombre de mors, branches de mors et maillons font partie des pièces d'harnachement. On pourrait y ajouter quelques billes massives de pierre.

Il est important de dire que les nombreuses armes ou pièces d'équipement militaire (éperons) ou d'harnachement (mors, branches de mors en forme de barre ou circulaires, maillons) se trouvaient dans les dépôts votifs du Ier siècle après J.-C.., ce qui suggérerait une connexion de ces dépôts avec des rituels guerriers.

Chronologie. On a constaté dans quelques situations, sur le côté nord, des fragments céramiques daces typiques pour la fin du IIe - commencement du Ier s. av. J.-C. dans le nivellement du terrain pour la fondation du mur de la première phase, ce qui témoigne de l'existence d'un établissement non-fortifié avant la construction de celui-ci. Il se peut que le mur de la première phase ait été élevé dans les premières décennies du Ier s. av. J.-C.

Les traces de feu observées sur le côté nord, autant dans la muraille que sur la pente, attestent le fait que le mur avait été mis en ruine à la suite d'un grand feu, peut-être vers la fin du Ier s. av. J.-C.

Pour la IIe phase de reconstruction, la situation est plus claire: au-dessus du mur écroulé, et le nivellement des débris du mur de la première phase, on avait nivelé avec du lœss ou une couche de calcaire, en dessus de tout cela se trouvant seulement des dépôts rituels du type petite butte et des foyers avec du mobilier qui ne se datent qu'au Ier s. après J.-C. Par conséquent, le mur de la seconde phase avait été élevé, le plus probablement, au commencement du premier siècle de l'âge chrétien.

Observations générales. Dans quel but a-t-on élevé la cité de *Gruiu Dării*? A première vue, on peut dire que le plateau ne se trouvait pas sur une artère importante de communication qui traverse les Carpates et pas même à l'entrée dans une vallée qui entre profondément dans les montagnes. En revanche, le plateau s'avérait être un bon lieu d'où on pouvait observer/surveiller de vastes zones aux alentours, autant vers les collines méridionales et la plaine basse, que les sommets environnants. Malheureusement, on n'a pas fouillé en profondeur une zone plus grande de l'aire de visibilité du plateau, afin de mettre en évidence le grand nombre de sites des IIe-Ier siècles av. J.-C., bien que l'on connaisse des découvertes datant de cette période. Elever une telle cité pourrait

exprimer plutôt la volonté d'un chef local géto-dace qui y avait la résidence, en compétition peut-être avec ses voisins. Les recherches futures pourraient peut-être donner une réponse claire à la question: y a-t-il existé, au premier siècle av. J.-C., une *dava* ou seulement une cité à fonction militaire?

La cité de *Gruiu Dării* fait partie d'une série de centres fortifiés du Ier siècle av. J.-C. élevées autant dans les zones sous-carpatiques, telles celles de Cârlomăneşti (Babeş 1975, 125-139; Babeş 1977, 319-352; Babeş 2010, 123-146) ou Cetățeni (Vulpe 1966, 38-42; Chițescu 1976, 155-170; Chițescu 1981, 1-74; Măndescu 2003, 129-137), que dans la Plaine Roumaine, comme à Barboşi (Sanie 1983, 141-151; Sîrbu, Croitoru 2014), Crăsanii de Jos-*Piscul Crăsani* (Vulpe 1966, 42-46; Conovici 1985, 76-77) ou Popeşti (Vulpe 1966, 27-38).

Le mur de la cité de *Gruiu Dării* sera mis en ruine vers la fin du Ier s. av. J.-C. ou le commencement du premier siècle de l'âge chrétien. Il est possible que la ruine de la cité se soit produite lors de l'expédition d'Aelius Catus au nord du Danube (les années 6-9 après J.-C.) (Pippidi 1967, 287-328), mais nous n'avons pas de preuve à cet égard, sinon la relative contemporanéité entre la ruine de la citadelle et cette incursion romaine.

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Fig. 3. Pietroasa Mică-*Gruiu Dării*: 1-2 - le mur et les aménagements sur la pente septentrionale; 3 - le mur sur le côté nord, vue de l'enceinte.

Fig. 3. Pietroasa Mică-*Gruiu Dării*: 1-2 - zidul şi amenajările de pe panta de nord; 3 - zidul de pe latura de nord, văzut dinspre incintă.

La cité de Târcov-*Piatra cu Lilieci*, dép. de Buzău

La cité de Târcov se trouve à quelque 7 km nord de la commune de Pârscov, dans le voisinage du village de Târcov. Elle est située sur une cime presque inaccessible, avec trois pentes abruptes et une hauteur maximale de 735 m, que les gens de l'endroit appellent *Piatra cu Lilieci* (fig. 4/1). La cité se trouve dans une position dominante par rapport à la vallée de Buzău, ce qui lui a conféré, à coup sûr, non seulement un rôle militaire de choix, mais aussi celui de surveiller la circulation et le commerce sur cette importante artère de communication.

Les données fournies par les découvertes archéologiques, en particulier les fibules, nous ont indiqué que cette cité avait été fonctionnelle dans la seconde moitié du Ier s. après J.-C., très probablement jusqu'au règne du roi Décébale (87-107 après J.-C.). Peut-être que cette fortification a-t-elle eu un rôle dans le système défensif que Décébale avait mis au point, celui de contrôler l'accès vers la Transylvanie sur le cours haut de la rivière de Buzău.

Cette hauteur avait été habitée dès l'âge du Bronze – la culture Monteoru, dans la période comprise entre 2500 et 2200 av. J.-C.; l'on y constate, pour les IVe-IIIe s. av. J.-C. une présence sporadique des Gètes, sans laisser de traces stratigraphiques visibles dans le terrain. Au Ier s. après J.-C., lors de l'installation des Daces, le sommet a subi des aménagements et nivellements faits dans le but de créer un espace propice à l'habitation et la fortification (Trohani et al. 2008, 308-309; Trohani et al. 2009, 216-217; Trohani et al. 2010, 187-189; Sîrbu et al. 2011b, 136-138; 2012, 144-145; Matei et al. 2013, 129-130).

Du point de vue morphologique, le site se divise en deux unités distinctes: un plateau-acropole, 160 m de long, et une succession de trois terrasses, dont au moins deux sont fortifiées avec des murailles de pierre et de bois. L'accès du plateau-acropole jusqu'aux trois terrasses se faisait par une selle, deux-trois mètres de large et une centaine de mètres de long.

On a dépisté jusqu'à présent des structures de fortification entre les Terrasses 1 et 2 (fig. 4/2), ainsi que entre les Terrasses 2 et 3. Il s'agit de fondation en pierre semi-taillée, avec, par endroits, deux-trois rangées d'assises conservées. La largeur des murs de fondation varie entre 1,60 m et 2,50 m. On n'a pas trouvé, au cours des fouilles, d'éléments qui prouvent l'existence d'un mur de pierre en élévation, aussi considérons-nous que la structure visible de la fortification consistait en poutres massives de bois, mises sur une fondation de pierre.

La structure de fortification la plus complexe a été recherchée entre les Terrasses 2 et 3 (fig. 5). Celle-ci s'étendait sur environ 16 mètres de long, étant divisée en quelques segments distincts.

Le premier segment consistait en une agglomération compacte de pierres grandes et moyennes, située au bord de la terrasse ayant, probablement, le rôle de rendre horizontale et de soutenir la Terrasse 2 dans ce segment.

Le second segment se trouve dans la zone où la pente commence à devenir plus abrupte, et où l'on a identifié deux parements formés de dalles massives de pierre, situées à 2,5 m l'une de l'autre. Deux rangées d'assises

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sont conservées du parement extérieur. D'habitude, les pierres du parement ont deux-trois facettes plus plates, bénéficiant d'une taille minimale. Depuis le parement extérieur, commence une agglomération compacte de pierres, sur 2,6 mètres de long, agglomération qui se termine brusquement et en ligne, dans une zone de pente. Cette structure représente probablement un remblai.

Le troisième segment se trouve en pente, étant formé d'une base large de 1,6 m, composée de grosses pierres. Il s'ensuit une agglomération massive de pierres mises d'une façon compacte sur 7 m de long. Cette structure aussi se termine brusquement et en ligne, ce qui nous fait la considérer toujours comme un remblai, au-delà duquel apparaissent des matériels archéologiques et des complexes qui font partie de la Terrasse 3 (fig. 5).

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Fig. 4. Târcov-*Piatra cu Lilieci*: 1 - vue générale de l'est; 2 - vestiges des fortifications entre la Terrasse 1 et la Terrasse 2.

Fig. 4. Târcov-*Piatra cu Lilieci*: 1 - vedere generală dinspre est; 2 - vestigii ale fortificațiilor dintre Terasa 1 şi Terasa 2.

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Fig. 5. Târcov-*Piatra cu Lilieci*. Vestiges des fortifications entre la Terrasse 2 et la Terrasse 3.

Fig. 5. Târcov-*Piatra cu Lilieci*. Vestigii ale fortificațiilor dintre Terasa 2 şi Terasa 3.

Entre les deux derniers segments se trouve une zone dépourvue de pierres, sur 1,60 m de distance. Bien que les données fournies par les fouilles archéologiques soient préliminaire, nous pourrions émettre l'hypothèse des deux phases de fortification, se trouvant en une certaine connexion. Les futures recherches, faites aussi avec l'aide de la magnétométrie, pourront éclaircir cet aspect.

En ce qui concerne la fortification du plateau-acropole, on n'aurait pu la faire que sur le côté ouest, assez abrupt, mais accessible sur certaines portions, mais le degré d'érosion de ce côté n'a pas laissé de traces visibles dans le terrain. Les fosses de poteaux, au diamètre de 0,25 m, identifiées à environ 1,00 m vers la pente, pourraient nous offrir des indices sur la fortification de ce côté avec une palissade.

Les dimensions relativement petites du plateau et des terrasses nous montrent que cet espace n'était pas favorable à l'habitation, il servait tout simplement aux militaires qui défendaient la cité.

On a mis au jour, pendant les fouilles archéologiques, des débris de constructions, dont les unes incendiées. Au milieu de la Terrasse 2 a été identifiée une structure rectangulaire massive, aux dimensions de 3,30×2,90 m, qui représentait, probablement, la fondation d'appui pour une tour en bois, ayant le rôle de surveillance.

Les fouilles archéologiques ont mis au jour un grand nombre d'artefacts, dont les plus nombreux sont les fragments de vases céramiques daces provenant

de bocaux, cruches, coupes sur pied, tasses-lampes, kantharoi, bols, écuelles et vases de provisions.

A part les vases céramiques, on a également trouvé des outils et ustensiles en fer (couteaux, clous, crampons), armes (pointes de lance et de flèche), parures et accessoires vestimentaires en bronze et perles de verres, ainsi que des moulins de pierre.

La cité a probablement cessé d'être habitée lors des guerres avec les Romains des années 101-102 et 105-106 après J.-C.

La dava de Cârlomăneşti-*Cetăţuie* (dép. de Buzău)

Le site archéologique de Cîrlomăneşti-*Cetăţuie* se trouve dans la zone des Carpates de courbure, à quelque 13 km nord-ouest de la ville de Buzău. L'établissement est situé sur une butte-témoin de forme ovale irrégulière, avec tous les côtés abrupts, sur la rive droite de la rivière de Buzău (fig. 6/1).

S'étendant sur une superficie de 7500 m^2, le site a été intensément habité, avec de brèves interruptions, tout le long de l'âge du Bronze, après quoi il est abandonné pour longtemps et l'habitation est reprise à l'époque géto-dace, respectivement vers la fin du II^e s. av. J.-C. L'établissement de Cârlomăneşti va connaître, entre la fin du II^e s. av. J.-C. - milieu du I^{er} s. av. J.-C. un développement important, devenant une véritable *dava* – centre politique, économique et religieux pour les communautés géto-daces de la vallée du Buzău (Babeş 1975, 125-139; Babeş 1977, 319-352; Babeş 2010, 123-146).

Les fouilles archéologiques ont dévoilé, dans l'établissement situé sur la colline Ce*tăţuia,* plusieurs édifices de grandes dimensions, à l'intérieur desquels il y avait des foyers décorés, des débris d'autres bâtiments, plus petits, documentés par des fosses de poteaux, planchers, foyers, débris de parois enduits de glaise (Babeş 1977, 330-343; Gugiu 2004, 249-257), ainsi que quelques centaines de fosses qui ont fourni une quantité substantielle de matériels archéologiques.

Dans la *dava* de Cârlomăneşti les plus importantes découvertes sont représentées par les statuettes zoomorphes et anthropomorphes uniques dans l'espace de la culture géto-dace (Babeş 1977, 319-352), par le trésor formé de 124 monnaies daces d'argent et, surtout, l'attestation épigraphique d'un roi – *basileus*, présent sur un fragment de vase de provisions (Babeş 2010, 134-135, pl. 8).

De l'ouest, l'accès vers le plateau se faisait à travers une terrasse aménagée (Terrasse 1) afin d'être propice à l'habitation. De forme triangulaire, la pointe orientée vers ouest-nord-ouest, celle-ci avait une superficie d'environ 1000 m^2. La différence de niveau par rapport au plateau est de -13,5 m. La partie occidentale de la terrasse a été fortifiée par un fossé qui avait en haut une ouverture de 9,5 m et 2,20 m de profondeur, qui traversait la Terrasse 1, sur la direction NE-SW, barrant de la sorte la seule voie d'accès sur le plateau haut (fig. 6/2-5).

Les fouilles archéologiques faites dans la période 2007-2009 à l'ouest du plateau vers la Terrasse 1, indiquent une possible fortification des bords du plateau avec un

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Fig. 6. Cârlomăneşti-*Cetăţuie*: 1 - vue de l'ouest; 2, 3 - fossé, fondation, palissade; 4, 5 - le fossé à l'entrée sur la Terrasse 1.

Fig. 6. Cârlomăneşti-*Cetăţuie*: 1- vedere dinspre vest, 2, 3 - şanţ, fundaţie, palisadă; 4, 5 - şanţul de la intrarea pe Terasa 1.

système complexe de palissades et plates-formes. Bien que les recherches se soient faites sur une superficie restreinte, on a pu identifier des alignements de fosses de poteaux, 0,50 m de diamètre, les unes enduites d'argile verte foulée. Le long de ces fosses, sur 7,70 m de long, représentant la limite des fouilles archéologiques, on a découvert deux fossés parallèles ayant le profil en forme de la lettre «W». En haut, leur largeur combinée ne dépasse pas 1,00 m, et leur profondeur mesure entre 0,30-0,50 m. Il se peut que ce fossé double ait représenté la fondation d'une palissade en bois. Toute cette structure de fortification a été découverte à 6 m du bord actuel du plateau, vers la pente, ce qui a rendu possible de construire des plates-formes entre le bord du plateau et la palissade. Cette interprétation est soutenue par une série de rangées de fosses, à l'est du fossé en «W», vers le plateau (Babeş et al. 2007, 117-121, pl. 24/5-60; Babeş et al. 2008, 94-97). Certes, les futures recherches faites dans la zone périphérique du plateau dans l'établissement de Cârlomăneşti fourniront des éléments supplémentaires à cet égard.

Il est bon de préciser que l'on a identifié, autour de *Cetățuia,* d'autres établissements daces contemporains, ce qui peut signifier que celui-ci n'était que «l'épicentre» des agglomérations d'habitation contemporaines.

La dava de Crăsanii de Jos-*Piscul Crăsani* (dép. d'Ialomiţa)

Piscul Crăsani est l'un des plus anciens sites archéologiques fouillés et publiés, cette année même nous fêtons le 90e anniversaire de la parution de la première «monographie» du site (Andrieşescu 1924; Pârvan 1926, 175-220). Bien qu'il y ait eu de nombreuses autres campagnes de recherches archéologiques, coordonnées, dans la plupart des années, par notre feu collègue Niculae Conovici, elles n'ont pas été publiées, sauf les brefs rapports archéologiques (Conovici 1979, 143-145; Conovici 1997, 70-73; Conovici, Neagu 1981, 193-200), seulement une série d'articles importants portant sur certaines catégories spéciales de pièces, comme les vases de culte, les bols à décor en relief, les figurines, les monnaies (Conovici 1974, 295-301; Conovici 1978, 165-183; Conovici 1980, 139-143; Conovici 1981, 571-579; Conovici 1994, 61-83; Sîrbu 2009a, 37-69; 2009b, 19-31; Sîrbu, Nicolăescu 2012, 77-112)[3].

Nous ne disposons pas d'informations suffisantes concernant le système de fortification non plus, pour

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Fig. 7. Crăsanii de Jos-*Piscul Crăsani*. Vues aériennes du site (images C. Bem).

Fig. 7. Crăsanii de Jos-*Piscul Crăsani*. Vederi aeriene ale sitului (imagini C. Bem).

[3] Le nouveau collectif de recherche, qui a repris les fouilles dans le site en 2011 (V. Sîrbu, M. Neagu, Fl. Vlad, I. Cernău, M. Cernea, D. Ştefan, M.-M. Ştefan), se propose de publier le premier volume en 2015/2016, la documentation essentielle provenant des fouilles coordonnées par N. Conovici, qui sera, sans doute, le premier auteur de la monographie.

plusieurs raisons: la forte érosion du site, le manque des matériaux pérennes (ex., la pierre) ou bien la quantité réduite de bois utilisé pour l'élévation du *vallum*, la publication incomplète des résultats des fouilles archéologiques.

Les fouilles faites sous la direction de N. Conovici mènent à la conclusion de l'existence de deux *valla* et deux fossés, construits successivement, qui séparent le pic/sommet de terrasse du plateau (Conovici 1985, 76; Conovici 1997, 70-73).

La première ligne de défense («A») consistait en un fossé aux parois abruptes, presque verticales, et le fond plat, à 4,00-5,00 m de profondeur, selon les bords, le fond mesurant environ 8,50 m de large et l'ouverture d'environ 9,50 m (Conovici 1997, 72). Reposant sur la stratigraphie des débris écroulés dans le fossé, on a émis l'hypothèse que le *vallum*, situé vers le nord, construit en lœss extrait du fossé, plus des pierres de rivière, aurait eu une palissade en bois, enduite peut-être, de glaise. Après des écroulements et des reconstructions répétés, il aurait été abandonné, et on aurait élevé des demeures sur le *vallum* et dans le fossé, on aurait creusé des fosses pour en extraire le lœss et pour y jeter les ordures ménagères.

La seconde ligne de défense («B») a été faite à une quinzaine de mètres de la première, vers le sud, étant formée toujours d'un *vallum* et un fossé, presque 7,00 m de profond, et environ 8,00 m de large, à la base (Conovici 1997, 72).

Ainsi, «l'acropole» jouissait d'une défense solide vers le sud, consistant en deux structures défensives puissantes, vallum+fossé, sur une quarantaine de mètres de «profondeur»/largeur; on accédait, très probablement, dans l'enceinte de la nécropole, sur un pont en bois, dont les vestiges ne sauraient plus être trouvées, puisque la zone est fortement érodée et il y existe un ravin très profond.

La troisième ligne de défense («C»). Les fouilles des années 2011-2013 ont révélé le fait que la soi-disant fortification de néolithique avait été élevée par les Géto-Daces, toujours pendant le second âge du Fer (Sîrbu et al. 2014b).

Vu que le nouveau collectif de recherche (Sîrbu et al. 2014) a fouillé cette nouvelle ligne de défense, située à quelque 40 m vers le sud, sur le Plateau, nous sommes à même de vous en offrir plus d'informations.

Les observations stratigraphiques faites dans les quatre sections de la fortification, aux bords et dans la zone centrale de son trajet, ont mené à des résultats concluants concernant ses caractéristiques essentielles, les différences consistant surtout dans les détails, selon la zone (Sîrbu et al. 2014).

Stratigraphiquement, le fossé avait été creusé depuis la base de la couche archéologique d'époque géto-dace, dans le lœss naturel, ou depuis un certain niveau de la couche gétique et, ensuite, dans le lœss.

Forme et dimensions du fossé. Le fond était plat, et les parois verticales ou légèrement évasées. Le fossé

avait à la base entre 3,00-4,00 m de large, et en haut, l'ouverture mesurait 3,60-4,50 m. Au bord méridional, extérieur, la profondeur variait entre 0,60-1,40 m, tandis qu'au bord septentrional, vers le *vallum*, entre 1,00-1,80 m (fig. 8-9).

Le *vallum*/parapet en lœss, issu du piochage a été déposé sur le bord septentrional, vers «l'Acropole», étant conservé encore sur 0,20/0,60 m de haut et une largeur maximale de 3,00 m (le mieux dans S II) (fig. 8). On n'a saisi de vestiges de quelque structure en bois (fosses de poteaux, traces de brûlure, cendre etc.) ni dans la partie conservée *in situ*, ni dans le remplissage du fossé.

Remplissage du fossé. Depuis la base jusqu'à l'ouverture, la plupart du remplissage du fossé était relativement unitaire du point de vue des sédiments/couches, autant une conséquence des remplissages anthropiques que des écoulements du *vallum*.

Dans toutes les quatre situations, après le premier remplissage anthropique suivait une lentille de microcouches de couleur jaunâtre, suite à l'écoulement naturel du parapet en lœss sur le côté nord. Il faut rappeler le fait que, sous cette lentille, qui formait une sorte de «couvercle» et «scellait» le remplissage du fossé (fig. 8; 9/1, 4), le mobilier était presqu'en totalité, d'époque géto-dace.

Mentionnons, parmi les types de vases découverts dans le remplissage du fossé, des fragments de bocaux, tasses-lampes ou coupes sur pied géto-daces ou encore des amphores du type Cos/Pseudo-Cos.

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Fig. 8. Crăsanii de Jos-*Piscul Crăsani*. Le fossé et le *vallum*, de S2, profil occidental.

Fig. 8. Crăsanii de Jos-*Piscul Crăsani*. Şanţul şi valul, din S2, profilul de vest.

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Fig. 9. Crăsanii de Jos-*Piscul Crăsani*. Le fossé et le *vallum*, dans S4: 1 - profil occidental, 2-4 - profil oriental.

Fig. 9. Crăsanii de Jos-*Piscul Crăsani*. Şanţul şi valul, în S4: 1 - profilul de vest, 2-4 - profilul de est.

Dans aucun des sectionnements de la fortification on n'a observé de réaménagement certain (certes, il se peut que le fossé ait été nettoyé, mais sur le même trajet).

La fortification de forme semi-circulaire délimitait le «Plateau», de l'est à l'ouest, depuis une pente abrupte à une autre sur la haute terrasse de la rivière d'Ialomița. Vu la forme, la profondeur du fossé et le manque des autres structures (palissades) sur le parapet de lœss, il se peut que sa fonction eût été, en premier lieu, de délimiter, à un moment donné, l'habitation ou ses divers secteurs, assurer une certaine protection pour les hommes et les bêtes et évacuer l'eau d'un plateau à altitudes variées.

Les observations stratigraphiques et le mobilier découvert dans le remplissage du fossé, en particulier celui en dessous les écoulements de lœss du *vallum*, indiquent le fait que la fortification avait été faite à un certain moment de l'habitation géto-dace, au cours du II^e^ siècle av. J.-C. L'absence des dépôts sur le fond ainsi que des érosions des bords nous fait croire que, peu après avoir été creusé, le fossé a été rempli jusqu'à une certaine hauteur, et les écoulements naturels du «vallum», suite aux précipitations, ont continué à niveler le terrain. En fin de compte, le fossé a été couvert de nouveau, dans le but, peut-être, de rendre la circulation plus facile.

Les fouilles archéologiques ont mis en évidence le fait que l'habitation géto-dace des II^e^-I^er^ s. av. J.-C. s'étend autant au nord qu'au sud de la fortification «B».

Les observations stratigraphiques et l'inventaire découvert dans les fossés indiquent l'élévation successive et l'utilisation de ces lignes de défense depuis la seconde moitié du II^e^ jusqu'à la seconde moitié du I^er^ s. av. J.-C. Malheureusement, les destructions subies par les deux premières lignes de défense nous empêchent de faire des observations stratigraphiques détaillées sur leurs connexions.

Nous y rappelons entre autres, la découverte, sur le Mamelon Oriental, d'une zone sacrée avec autel décoré au milieu (*eschara*), entouré, de tous les côtés, d'édifices imposants (Conovici 1997, 70-72).

Dans le voisinage, vers le sud, il existe une nécropole tumulaire, dont on a fouillé une seule tombe, et sur la terrasse droite d'Ialomița on a identifié d'autres établissements daces contemporains.

Les types variés de complexes et le mobilier abondant trouvé dans le site, en particulier sur l'acropole, témoignent de l'existence, depuis le milieu du II^e^ jusqu'aux dernières décennies du I^er^ s. av. J.-C., sur *Piscul Crăsanilor,* du plus important centre économique, politique et religieux dace au centre de la Plaine Roumaine, un véritable centre résidentiel (*dava*).

Conclusions

Tout comme nous l'avons affirmé dès le début, ces sites sont représentatifs pour la civilisation des Géto-Daces, pour plusieurs raisons.

Ils se trouvent dans des zones à relief différent: *Piscul Crăsanilor*, sur un bout de terrasse au centre de la Plaine Roumaine (fig. 7), Pietroasa Mică-*Gruiu Dării*, sur un plateau en calcaire de la Courbure des Carpates (fig. 1), Cârlomăneşti-*Cetăţuie,* sur un témoin d'érosion dans la vallée de Buzău (fig. 6/1), et Târcov-*Piatra cu lilieci,* sur un sommet de montagne (fig. 4/1).

Leurs structures défensives varient en fonction des matériaux de la zone et le but de leur construction. Ainsi, à *Piscul Crăsanilor* et Cârlomăneşti on a creusé des fossés et élevé des *valla* avec des palissades en bois, à Târcov il y avait des murs de pierre irrégulière ou sommairement taillée, et à *Gruiu Dării*, des murs d'inspiration hellénistique, avec deux parements de calcaire et emplecton.

Tandis qu'à *Piscul Crăsanilor* et Cârlomăneşti c'étaient des centres résidentiels, avec une place de choix dans l'économie, la politique et la religion, à Târcov il a existé une citadelle à rôle strictement militaire, et à *Gruiu Dării* est documentée une succession unique de types de sites: établissement non-fortifié, citadelle, lieu de culte.

Bien que dans tous on ait trouvé des vestiges datant dès les IVe-IIIe s. av. J.-C., ils deviennent des centres importants à partir du milieu du IIe s. av. J.-C. (*Piscul Crăsanilor*, *Gruiu Dării* et Cârlomăneşti) ou le milieu du Ier s. après J.-C. (Târcov). Certains de ces sites cessent d'exister vers la seconde moitié du Ier s. av. J.-C. (*Piscul Crăsanilor* et Cârlomăneşti), et les autres (*Gruiu Dării* et Târcov), à la fin du Ier s. après J.-C. ou le commencement du IIe s. après J.-C., lors des guerres daco-romaines.

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