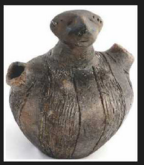
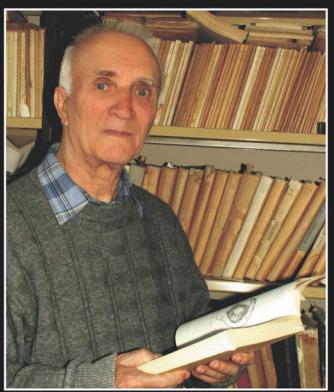
FACETS OF THE PAST

The Challenge of the Balkan Neo-Eneolithic

PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM
CELEBRATING THE 85TH BIRTH ANNIVERSARY OF EUGEN COMȘA
6–12 October, 2008, Bucharest, Romania





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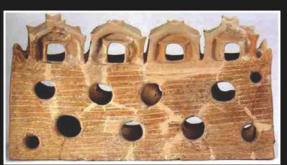

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FOREWORD

This volume encloses the results of the symposium dedicated to the 85th birth anniversary of my father, Dr. Eugen Comşa, one of the most prominent figures of the Romanian archaeology, who, unfortunately, was celebrated for the first time and last time in his scientific career, even if he had hardly worked, for about 60 years, at the National Museum of Antiquities, which later became the Institute of Archaeology. Despite his total dedication to his work and sacrifices he had made for undertaking hundreds of surveys, rescue and systematic excavations, he was never appreciated at his true value. Moreover, he was constrained to retire in a scientific position which he had occupied for about 30 years, which, according to the Romanian organizational chart, is called principal scientific researcher III, more appropriate for a young and a less experienced scientist. This is why, despite his huge experience and special archaeological senses, he could not even dream about being a Ph.D. coordinator, or about higher academic positions, because, legally, only those who are principal scientific researchers I could be qualified for such. He published about 400 articles and 11 volumes and he took excavations, both in Romania and, as a visiting archaeologist, in the neighboring countries (the Republic of Moldova, Bulgaria, Ukraine etc.). The concrete list with the outcome of his work was gathered in five volumes, each of more than 100 type-written pages.

The above-mentioned facts were the reasons that urged me to organize this symposium, to give him at least a glimpse of respect and consideration of some people around him, or far away from him. I had a nice surprise to see that, even if I got personal bank loans and had no financial support of any Romanian institution, people accepted to come, some of them on their own expenses, just for being together, in such festive moments.

I have the satisfaction that I did the things the way I considered appropriate for my father and the participants were pleased with the results. I am also glad that the contributions brought here were important or, at least, made with an open heart and people tried to do their best in emphasizing the significant contribution of my father to the Romanian archaeology. Unfortunately, he is highly appreciated abroad and less in his own country.

Moreover, there are people who not only disregard his work, but also pretend that they had discovered methods which were invented by my father, given that the copyright law provides just a slight protection for the scientific world in Romania. We could mention here the case of a young Romanian archaeologist, who, during his documentation for his doctorate thesis, might have came across the publications where Dr. Eugen Comşa had detailed his methods conceived after a long experience and fieldwork in many necropolises, like the one of Radovanu. In that site, archaeologist Dr. Eugen Comşa applied his own criteria of establishing the position of the Gumelnita necropolis, according with the one of the settlement. He used this method in other cemeteries from Romania and, as far as I know, in the Republic of Moldova, Southern Ukraine and in north-eastern Bulgaria, being

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always successful. The young fellow claimed that the mentioned method was designed by himself and started to ask for money in order to apply it. Yet, to his own dismay, he was unsuccessful in his enterprise and he could also not find any Cucuteni necropolis. He did not know a small thing: like any other inventor, my father did not publish all details of his methods as, for instance, he had used elements from the field that he did not specify in his texts.

Another aspect to be mentioned is the fact that, despite the invitation addressed to mass media, no newspaper, no radio and no television was available at that time, not even after the opening session. Yet, the representatives of the Embassy of France (Michel Farine – Attaché pour Cooperation Scientifique, Antoine Chouinard – Charge de Coopération Scientifique et Universitaire, Service de Cooperation et Action Culturelle) were interested in finding about the results of a Romanian archaeologist and they were present at our meeting and moreover provided us with financial help. Dr. Eugen Comşa was also honored by a Certificate for outstanding contribution to Balkan Prehistory by the International Institute of Anthropology, Salt Lake City[1], United States of America and by the Diploma of excellence awarded by the "Vasile Pârvan" Institute of Archaeology.

*

No matter how hard it was for me to bring everything to the end, I was rewarded by the smile on my father's face, anytime I told him about the proceedings of the symposium, as, at that time, he was ill at home. I am sure that, even now, after departing from me, he still watches over me, like my mother and my sister and, even if I am unable to see it, he will have a whimsical smile of delight when this book is coming out.

*

The present volume includes the contributions to the symposium, organized in chronological order, starting with the Early Neolithic cultures or prior to them and reaching up to the later ones. The papers belong to specialists in archaeology, architecture, archaeozoology, anthropology, geology, genetics, geography and other fields, each of them coming with their own perspective about the studied phenomena, or objects. This offers a more complete image about the way of life and spirituality of the mentioned communities. We hope that this would be a challenging volume, providing new interpretations and exchange of ideas that would finally result in new topics of study, or, at least, in approaching older by a new angle.

Alexandra Comşa

[1] http://www.iianthropology.org/comsasymposium2008poster.html

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CUVÂNT-ÎNAINTE

Acest volum înglobează rezultatele simpozionului dedicat celei de-a 85-a aniversări a tatălui meu, Dr. Eugen Comşa, una dintre cele mai proeminente figuri ale arheologiei româneşti care, din nefericire, a fost sărbătorit pentru prima şi ultima oară în cariera sa ştiinţifică, chiar dacă a muncit din greu, timp de mai bine de 60 de ani, la Muzeul Naţional de Antichităţi, care a devenit mai târziu Institutul de Arheologie. În ciuda devotamentului pentru munca sa şi a sacrificiilor pe care le-a făcut pentru sute de periegheze, săpături de salvare şi sistematice, el nu a fost niciodată apreciat la adevărata sa valoare. Mai mult decât atât, a fost constrâns să se retragă într-o poziţie ştiinţifică pe care a ocupat-o timp de aproape 30 de ani care, conform schemei româneşti de personal, este cea de cercetător ştiinţific principal III, mult mai potrivită pentru un cercetător tânăr şi neexperimentat. Acesta este motivul pentru care, în ciuda uriaşei sale experienţe şi a simţului arheologic special, nu a putut visa vreodată să fie coordonator de doctorate, sau să aibă vreo poziţie academică mai înaltă deoarece, legal, doar cei care sunt cercetători ştriinţifici principali I ar fi calificaţi pentru aşa ceva. El a publicat mai mult de 400 de articole şi 11 volume şi a efectuat săpături, atât în România cât şi, ca arheolog invitat, în ţările învecinate (Republica Moldova, Bulgaria, Ucraina etc.). Lista finală a rezultatelor muncii sale a fost adunată în cinci volume, fiecare a peste 100 de pagini.

Lucrurile menţionate mai sus au fost motivele care m-au impulsionat să organizez acest simpozion, pentru a-i oferi măcar o frântură de respect şi consideraţie din partea unor oameni din preajma lui sau de departe. Am avut o plăcută surpriză să constat că, deşi am luat credite personale de la bancă şi nu am avut sprijinul financiar al niciunei instituţii româneşti, oamenii au acceptat să vină, unii cheltuind banii lor proprii, numai pentru a fi împreună, în astfel de momente festive.

Am satisfacţia că am făcut lucrurile aşa cum am considerat mai potrivit pentru tatăl meu şi participanţii au fost mulţumiţi de rezultat. Sunt, de asemenea bucuroasă deoarece prezentările aduse aici au fost importante sau, cel puţin, făcute cu sufletul deschis, iar ei s-au străduit să evidenţieze contribuţia semnificativă a tatălui meu la arheologia românească. Din nefericire, el este foarte apreciat peste hotare şi mult mai puţin în propria ţară. Mai mult decât atât, există oameni care nu numai că îi desconsideră munca ci, de asemenea, pretind că ei au descoperit metode care au fost concepute de tatăl meu, dat fiind că legea dreptului de autor oferă doar o slabă protecţie pentru lumea ştiinţifică din România. Am putea menţiona aici cazul unui tânăr arheolog român care, în timpul documentării pentru teza de doctorat, probabil că a dat peste publicaţiile unde Dr. Eugen Comşa a menţionat metodele sale, concepute după o îndelungată experienţă şi muncă de teren în multe necropole, cum este cea de la Radovanu. În situl menţionat, arheologul Dr. Eugen Comşa şi-a aplicat propriile criterii de stabilire a poziţiei necropolei Gumelniţa, în funcţie de cea a aşezării. A folosit această metodă în alte cimitire din România şi, din câte ştiu eu, în Republica Moldova şi nord-estul Bulgariei, având întotdeauna succes.

Tânărul a pretins că el a conceput acea metodă şi a încercat să obţină bani pentru a o aplica. Dar, spre dezamăgirea lui, nu a avut succes în această acţiune şi nici în cazul necropolei Cucuteni. A uitat un lucru: ca mulţi alţi inventatori, tatăl meu nu a publicat toate detaliile metodelor lui, folosindu-se, de exemplu, de elemente din teren, pe care nu le preciza în lucrări.

Un alt aspect demn de menţionat este faptul că, în ciuda invitaţiei adresate întregii mass-media, niciun ziar, niciun post de radio şi nicio televiziune nu au fost disponibile la acea vreme, nici măcar după sesiunea de deschidere. Totuşi, reprezentanţii Ambasadei Franţei (Michel Farine – Attaché pour Cooperation Scientifique, Antoine Chouinard – Charge de Coopération Scientifique et Universitaire, Service de Cooperation et Action Culturelle) au fost dornici să afle despre rezultatele unui arheolog român, au fost prezenţi la întrunirea noastră şi, mai mult decât atât, ne-au oferit sprijin financiar. Dr. Comşa a fost de asemenea onorat printr-un Certificat pentru contribuţia de excepţie la preistoria balcanică, acordat de către Institutul Internaţional de Antropologie din Salt Lake City, Statele Unite ale Americii şi prin Diploma de excelenţă acordată de Institutul de Arheologie „Vasile Pârvan”.

*

Indiferent cât de greu mi-a fost să duc totul la bun sfârşit, am fost recompensată de zâmbetul de pe faţa tatălui meu, în fiecare zi când îi povesteam despre lucrările simpozionului, dat fiind că, la

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*

Acest volum include contribuțiile de la simpozion, organizate în ordine cronologică, începând cu cele referitoare la culturile Neoliticului timpuriu sau dinainte de acesta, şi ajungând până la cele târzii. Lucrările aparțin unor specialişti în arheologie, arhitectură, arheozoologie, antropologie, geologie, genetică, geografie şi alte domenii, fiecare dintre ei venind cu propria abordare privind fenomenele sau obiectele studiate. Acest fapt oferă o imagine mai cuprinzătoare despre modul de viață şi spiritualitatea comunităților menționate. Sperăm că va fi un volum stimulator, care va oferi noi interpretări şi schimburi de idei, ceea ce, în final, va avea drept rezultat noi tematici de studiu sau, cel puțin, abordarea unora mai vechi din unghiuri noi.

Alexandra Comşa

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Alexandra Comşa

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Alexandra Comşa

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Fig. 1 – Opening session-speech of Eugen Nicolae,
the Deputy Director of "Vasile Pârvan" Institute of Archaeology, Bucharest.

Fig. 2 – Eugen Comşa's *curriculum vitae* presentation.

Fig. 3 – Opening of the second exhibition by Irina-Ionelia Ionescu.

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Fig. 4 – Visiting the first two exhibitions.

Fig. 5 – Visiting the third exhibition – Eugen Comşa,
63 years in the field of archaeology.

Fig. 6 – Another aspect during the visit of the third exhibition.

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Fig. 7 – Aspects during the meeting
at the Museum of the Gumelnița Civilization, Oltenița.

Fig. 8 – C. Schuster's presentation
at the Museum of the Gumelnița Civilization Oltenița.

Fig. 9 – On the way to Radovanu.

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Fig. 10 – The path to the archaeological site of Radovanu – *Gorgana I and II*.

Fig. 11 – At the archaeological site from Radovanu – *Gorgana I and II*.

Fig. 12 – General view of the site.

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Fig. 13 – The mayor of the Radovanu village,
meeting the participants at the symposium.

Fig. 14 – Romanian hospitality includes tasting bread and salt.

Fig. 15 – The mayor of the Radovanu village, reading the festive speech
for Dr. Eugen Comşa, as *Citizen of Honor*.

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Fig. 16 – Alexandra Comşa and the diploma for *Citizen of Honor* awarded to Eugen Comşa by Vasilica Dobrescu, the mayor of Radovanu village.

Fig. 17 – The end of the festivity for awarding the title of *Citizen of Honor* of the Radovanu village.

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FEW WORDS ABOUT THE ACTIVITY OF EUGEN COMŞA

DR. EUGEN COMŞA AT 85 YEARS

Acad. Mircea PETRESCU-DÎMBOVIȚA
(Professor of Eugen Comşa)

The Romanian archaeologist of national and international reputation, born in Chişinău on October 20, 1923, reached the venerable age of 85 in 2008. In 1940, when Bessarabia was incorporated into the U.S.S.R., he took refuge in Bucharest with his family, where he graduated from high school and university, at the latter benefiting from instruction by professors such as Ion Nestor, C.C. Giurescu, and Gh. Ştefan. After graduation in 1949, he became university assistant to the Chair of Romanian History held by Gh. Ştefan, and then assistant to the Chair of Prehistory held by Prof. Ion Nestor, where he continued until 1952. Between 1946 and 1948 he was librarian at the Prehistory Seminary of the Faculty of Philosophy and Letters of the University of Bucharest and, from 1950, he was employed as assistant at the National Museum of Antiquities, which subsequently became the "Vasile Pârvan" Institute of Archaeology where, after the death of Ion Nestor, in 1974, he was appointed Head of the Prehistory Division, retiring in 1991. At the same Institute he also defended his doctoral thesis on the Boian Culture, under the supervision of Prof. Ion Nestor.

As a researcher, he was known for his very intense field activity. In this regard, I could mention that from the early years of his studies he took part in the excavations at the *tell* between the villages of Glina and Bălăceanca (Ilfov County), situated at the edge of the floodplain of the Dâmbovița river, directed by Ion Nestor in 1926 and 1927. It was in these excavations that the link between the Boian, Gumelnița and Glina cultures was proposed for the first time, and confirmed in subsequent excavations there, by myself and co-workers in 1943, 1945–1948 and 1970–1971, supported by funds from the Romanian Academy. Here, I should like to mention that I gained my first field experience on the excavation at Sărata Monteoru (Buzău County) also under the guidance of Ion Nestor, who at that time was a curator in the National Museum of Antiquities. Therefore, in this context, it was natural that the young archaeologist Eugen Comşa was sent to the site at Glina where he performed well. He proved himself eager to learn as much as possible about the excavation of that site, and this helped him in his work at the sites of Zimnicea, Glăvăneştii Vechi and Corlăteni directed by I. Nestor, as well as in the excavations at Verbicioara, Balta Verde and Gogoşu.

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Having distinguished himself, in 1950, Eugen Comşa began directing his own archaeological excavations, especially those relating to the Neolithic, including Luncavița and Techirghiol in Dobrogea, Drăgăneşti in Moldova, Feldioara in Transilvania, Ciumeşti and Oarța de Sus in north-west Romania, Băile Herculane, Liubcova and Şvinița in Banat, Silištea and Orlea in Oltenia, Giuleşti, Greaca, Dudeşti, Olteni, Bogata, Boian, Ipoteşti, Radovanu, Izvoare and Cuneşti in Muntenia.

To the above list can be added a large number of archaeological sites detected during his surface surveys along the Danube, Olt and Lower Prut rivers, but also in the area of the canal that links the Danube to the Black Sea. The results of these field investigations, especially those concerning the Neo-Eneolithic were published by Eugen Comşa in a series of synthetic volumes, namely *Istoria comunităților Boian* (The History of the Boian Communities) Bucureşti, 1974, and *Neoliticul pe teritoriul României* (The Neolithic of Romania) Bucureşti, 1987, but also in more than 400 articles on various aspects and problems of the Romanian Neo-Eneolithic period. Also, many of them are mentioned in volume I of *Istoria Românilor. Moştenirea timpurilor îndepărtate* (History of the Romanians: legacy of the distant past) coordinated by Academician Mircea Petrescu-Dîmbovița and Prof. dr. Alexandru Vulpe (Member of the Romanian Academy) and published by Editura Enciclopedică, Bucureşti, 2001.

Thus, as far as the Early Neolithic is concerned he made remarkable contributions to the Ciumeşti-Pişcolț group, named by the author after two villages in Satu Mare County belonging to the Linear Pottery Culture of the Upper Tisza basin, and having connections in SE Slovakia and NE Hungary. Also, he published interesting papers about the Criş and Linear Pottery Cultures in Romania.

Regarding the Middle Neolithic, we could mention here his studies of the Dudeşti Culture, named after a district in Bucharest, which overlaps with the Vinča culture in the region of Oltenia, resulting a mixed cultural phenomenon, but also the Linear Pottery Culture which extends east of the Carpathians as far as the Dniestr river, and which had contacts with the southern Bug Culture.

Eugen Comşa went on to study the evolution, periodization and relative chronology of the Eneolithic cultures, as well as the pottery kilns of the Cucuteni-Ariuşd Culture, the *en violon* figurines in the Gumelnița Culture area, the dwellings with beaten earth floors from the Gumelnița Culture levels at Radovanu, the periodization of the Cucuteni civilization, the relations between the Cucuteni and Ariuşd cultures, the Eneolithic complex from Radovanu, and other archaeological problems.

To all these, we could add his compilation of a complete bibliography of Romanian prehistory, covering the Palaeolithic, Mesolithic, Bronze and Iron Ages.

Besides the Neo-Eneolithic, which was his main concern, the excavations of Prof. D. Berciu at Balta Verde and Gogoşu sparked his interest in the pre-Roman metal ages, in the funerary practices of the 2^{nd}–1^{st} centuries A.D. in south-east Oltenia, and in the Getic-Dacian civilization of the second half of the 2^{nd} century

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B.C. up to the beginning of the 2nd century A.D., which led to the publication in 1981 in collaboration with V. Georgescu, of the article *Cetăţuia dacică de la Gura Vitioarei* (The Dacian Fortress of Gura Vitioarei).

For his rich and valuable scientific research activity, he was awarded the Medal of Scientific Merit in 1966, and in 1974 the Medal of the Centenary Anniversary of the Academy of Sciences in Kraków, as well as the *Vasile Pârvan* Prize of the Romanian Academy.

In recognition of the prestigious scientific activity of Dr. Eugen Comşa in the field of prehistoric archaeology, I venture to suggest to the management of the "Vasile Pârvan" Institute of Archaeology in Bucharest that they should investigate the possibility of awarding Eugen Comşa the Diploma of Excellence of the Institute to which he dedicated himself through his illustrious research career for more than half a century.

Iaşi, 15 August 2008

DR. EUGEN COMŞA LA 85 DE ANI

Academician Mircea PETRESCU-DÎMBOVIŢA
(profesor al lui Eugen Comşa)

Arheologul român de reputaţie naţională şi internaţională, născut la Chişinău, la 20 octombrie 1923 a ajuns în 2008 la venerabila vârstă de 85 de ani. În 1940, după anexarea Basarabiei de către U.R.S.S. s-a refugiat cu familia la Bucureşti, unde a efectuat studiile liceale şi universitare, la ultimele având profesori pe Ion Nestor, C.C. Giurescu, Gh. Ştefan şi alţii. După terminarea studiilor universitare, în 1949 a avut funcţia de asistent universitar la catedra de Istoria României, condusă de profesor Gh. Ştefan, apoi de Preistorie, sub direcţia prof. Ion Nestor, la care a activat până în 1952. În perioada 1946–1948 a fost bibliotecar la Seminarul de Preistorie al Facultăţii de Filozofie şi Litere a Universităţii din Bucureşti, iar în 1950 a fost angajat ca asistent la Muzeul Naţional de Antichităţi, corespunzător, în continuare, Institutului de Arheologie „Vasile Pârvan", unde, după încetarea din viaţă a lui Ion Nestor în 1974, a fost şef al secţiei de Preistorie, devenind pensionar în 1991. În cadrul acestui Institut şi-a trecut şi teza de doctorat referitoare la cultura Boian, sub îndrumarea profesorului Ion Nestor.

În calitatea de cercetător s-a remarcat prin o foarte bogată activitate pe teren. În această privinţă, menţionez că din primii ani de studii datează participarea sa la săpăturile subsemnatului din *tell*-ul dintre satele Glina şi Bălăceanca (judeţ Ilfov), pe marginea luncii râului Dâmboviţa, în care s-au efectuat săpături în 1926 şi 1927, de către Ion Nestor, precizându-se pentru prima dată raporturile dintre culturile Boian, Gumelniţa şi Glina şi apoi în 1943, 1945–1948 şi 1970–1971 de către subsemnatul şi colaboratorii, cu fonduri de la Academia Română, confirmându-se rezultatele săpăturilor mai vechi şi aducându-se multe date noi. În legătură cu aceste săpături, menţionez că subsemnatul şi-a făcut practica arheologică pe şantierul de la Sărata Monteoru (jud. Buzău) sub îndrumarea lui Ion Nestor, pe atunci conservator la Muzeul Naţional de Antichităţi. Deci, în acest context era justificată repartiţia tânărului arheolog Eugen Comşa la şantierul de la Glina, unde s-a comportat foarte bine, dorind să cunoască cât mai bine lucrările de pe acest şantier, ceea ce i-a fost de ajutor în activitatea de pe şantierele Zimnicea, Glăvăneştii Vechi şi Corlăteni de sub conducerea lui I. Nestor, precum şi la lucrările de pe şantierele Verbicioara, Balta Verde şi Gogoşu.

Fiind foarte bine apreciat, Eugen Comşa, cu începere din 1950 a condus şantiere arheologice, în special din neolitic, dintre care menţionăm Luncaviţa şi Techirghiol în Dobrogea, Drăgăneşti în Moldova, Feldioara în Transilvania, Ciumeşti şi Oarţa de Sus în nord-vestul României, Băile Herculane, Liubcova şi Şviniţa în Banat, Siliştea şi Orlea în Oltenia, Giulessţi, Greaca, Dudeşti, Olteni, Bogata, Boian, Ipoteşti, Radovanu, Izvoare şi Cuneşti în Muntenia.

La acestea se adaugă numeroase situri arheologice depistate prin perieghezele de-a lungul Dunării, Oltului şi Prutului Inferior, precum şi din zona canalului care leagă Dunărea cu Marea

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Neagră. Rezultatele acestor cercetări de teren, îndeosebi cu privire la neo-eneolitic au fost valorificate de autorul lor în volumele sale de sinteză, respectiv *Istoria comunităţilor Boian*, Bucureşti, 1974 şi *Neoliticul pe teritoriul României*, Bucureşti, 1987, precum şi în peste 400 de studii şi articole referitoare la diferite aspecte şi probleme din neo-eneoliticul României. De asemenea, multe dintre acestea sunt menţionate şi în volumul I din tratatul *Istoria Românilor. Moştenirea timpurilor îndepărtate*, volum coordonat de academician Mircea Petrescu-Dîmboviţa şi profesor dr. Alexandru Vulpe, membru corespondent al Academiei Române, Editura Enciclopedică, Bucureşti, 2001.

Astfel, în ceea ce priveşte neoliticul timpuriu se remarcă contribuţiile sale privind grupul Ciumeşti-Pişcolţ, denumit de autor după două localităţi din judeţul Satu Mare, aparţinând civilizaţiei liniare vechi din bazinul superior al Tisei cu legături în SE Slovaciei şi NE Ungariei. De asemenea, prezintă interes comunicările sale cu privire la culturile Criş în România şi a ceramicii liniare.

În legătură cu neoliticul dezvoltat menţionăm studierea culturii Dudeşti, denumită după un cartier din Bucureşti, cultură care interferează în Oltenia cu cultura Vinča, rezultând un aspect cultural mixt, precum şi cultura ceramicii liniare la est de Carpaţi până la Nistru, care a intrat în contact cu cultura Bugului sudic.

În fine, în eneolitic au fost analizate evoluţia, periodizarea şi cronologia relativă a culturilor eneolitice din România, precum şi caracteristicile cuptoarelor de ars ceramica ale culturii Cucuteni-Ariuşd, figurinele *en violon* din aria culturii Gumelniţa, locuinţele cu podea de pământ bătătorit din aria culturii Gumelniţa de la Radovanu, periodizarea civilizaţiei Cucuteni, relaţiile dintre culturile Cucuteni şi Ariuşd, complexul eneolitic de la Radovanu şi alte diferite probleme.

La aceastea se adaugă şi întocmirea unei bibliografii complete a preistoriei României, respectiv a paleoliticului, mezoliticului şi ale epocilor bronzului şi fierului.

În afară de neo-eneolitic, care l-a interesat în mod deosebit, l-a preocupat, pe baza săpăturilor profesorului D. Berciu de la Balta Verde şi Gogoşu, şi epoca metalelor, înainte de romani, respectiv unele practici funerare din secolele II-I î. Hr. din sud-estul Olteniei şi civilizaţia geto-dacică din a doua jumătate a secolului II î. Hr. până la începutul secolului II p. Hr., elaborând în 1981, în colaborare cu V. Georgescu, lucrarea *Cetăţuia dacică de la gura Vitioarei.*

Pentru bogata şi valoroasa sa activitate de cercetare ştiiţifică, a fost distins în 1966 cu medalia „Meritul ştiinţific", în 1974 cu medalia aniversării Centenarului Academiei de Ştiinţe din Cracovia şi în acelaşi an cu premiul *Vasile Pârvan* al Academiei Române.

Având în vedere prestigioasa activitate de cercetare ştiinţifică în domeniul arheologiei preistorice din România a dr. Eugen Comşa, îmi permit să propun conducerii Institutului de Arheologie „Vasile Pârvan" din Bucureşti a se analiza dacă este posibil să i se acorde diploma de excelenţă a acestui Institut, căruia i s-a dedicat, prin munca sa, competentă şi continuă, mai bine de jumătate de secol.

Iaşi, 15 august 2008

Fig. 1 – Eugen Comşa and M. Petrescu-Dâmboviţa during the 1958 visit at the Chişinău Museum of History / Eugen Comşa împreună cu M. Petrescu-Dîmboviţa în vizita din 1958 la Muzeul de Istorie din Chişnău.

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Fig. 2 – Tatiana S. Passek, the well-known researcher from Moscow, at Glina, together with Eugen Comşa, in 1960 / Cunoscuta cercetătoare de la Moscova Tatiana S. Passek la Glina, cu Eugen Comşa, în 1960.

Fig. 3 – The Presiding Committee of the International Symposium "The Cucuteni Culture in its European Context", Iaşi, 1984: Acad. P. Jitariu, Dr. Eugen Comşa, Prof. Maria Gimbutas (Los Angeles) and Prof. M. Petrescu-Dâmboviţa / Prezidiul simpozionului internaţional „Cultura Cucuteni în context european", Iaşi, 1984: Acad. P. Jitariu, Dr. Eugen Comşa, Prof. Maria Gimbutas (Los Angeles), Prof. M. Petrescu-Dîmboviţa.

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EUGEN COMŞA
(20 OCTOBER 1923 – 7 NOVEMBER 2008)

Dr. Eugenia ZAHARIA
(colleague in the Faculty of History
at the University of Bucharest
and in the Institute of Archaeology
"Vasile Pârvan" Bucharest)

Eugen Comşa was one of the most prominent researchers in the Romanian archaeology after the World War II. He was a member of the research team organized by Professor Ion Nestor, a team who introduced new working methods, not only technical, for a good and correct registration of the field situation, but also for a better understanding of the archaeological documents, as a source for a reconstruction of our ancient history.

*

He was born on October 20, 1923, at Chişinău, he attended the high school and Faculty of History at the University of Bucharest. In 1968 he obtained the doctor degree in historical sciences, also at the Faculty of History from Bucharest, in the first series, when the Ministry of Education created the possibility of getting this higher qualification in the country. After the University graduation, he was an appointed librarian (1946–1949) and afterwards an assistant at the Chair of Archaeology and Prehistory.

As a consequence of the restructures following after the World War II in the educational system, Eugen Comşa was appointed researcher at the Museum of National Antiquities, which depended at that time on "Nicolae Iorga" Institute of History. In the same institution that became the Institute of Archaeology in 1956, Eugen Comşa was a principal researcher (1968) and afterwards a chief of the Neolithic sector and subsequently a chief of the Prehistory Section (1974–1990). In all this time, he also had the position of the editorial board's secretary for the journal "Materiale şi Cercetări Arheologice" and "Studii şi Cercetări de Istorie Veche".

He began his research activity at Sărata Monteoru, Zimnicea, Glina, Corlăteni, Glăvăneştii Vechi etc., achieving a good experience in chronological achaeology, as it could easily be observed both from his field activity and from his numerous publications.

His field activity is extremely rich and important, bringing very necessary contributions that helped both the reconstruction of prehistoric cultural ranges and those of the first millennium. From this perspective, Eugen Comşa continued the activity of Vasile Pârvan's disciples (Professors Radu Vulpe, Gheorghe Ştefan, Vladimir Dumitrescu, Ion Nestor), having a significant contribution at organizing the archaeological research. Eugen Comşa remained till his death the most active and the most restless field investigator, since the time span after the World War II. We owe him many findings, which determined a long lasting research, with important results.

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Even if he worked in all time sequences, the Neolithic period was his main and permanent concern, bringing valuable contributions for the knowledge regarding the evolution of the south Carpathian Neolithic cultures from our country.

Another distinctive feature of Eugen Comşa was his participation to almost all archaeological manifestations, both general and regional ones. It was a custom that in autumn, after the end of the excavations, to organize a groupvisit to the investigation sites bearing a special interest. I remember that Eugen Comşa never missed such activity. He registered in his calendar all such manifestations. The publishing of that "diary" of all Romanian archaeology might be of general interest, both for the younger generations, but also for a history of the achaeological activity during the time of Eugen Comşa.

A last aspect concerning his rich activity that we consider worth being mentioned here is the bibliography he made for each research period, prehistoric, of the first millennium BC, of the period of the Romanian people formation, but also of the migration period. A research of all Romanian publications, in order to select and group on periods what had been published, all processed by hand, because at that time we had no computers, is a huge effort, but also a good instrument for work. I cannot say where this paper stopped but this is necessary to be continued.

He took part at a large number of international congresses, representing with competence the Romanian archaeology, whose prestige he fully enriched.

Being always concentrated upon his research, without long or contradictory comments, Eugen Comşa left us the memory of a good mate archaeologist.

18th December, 2008

EUGEN COMŞA
(20 OCTOMBRIE 1923 – 7 NOIEMBRIE 2008)

Dr. Eugenia ZAHARIA
(colegă la Facultatea de Istorie
a Universităţii din Bucureşti şi la Institutul de Arheologie
„Vasile Pârvan" Bucureşti)

Eugen Comşa a fost unul dintre cei mai proeminenţi cercetători ai arheologiei româneşti de după al Doilea Război Mondial. El a fost membru al echipei de cercetare organizate de către Prof. Ion Nestor, o echipă care a introdus metode noi de cercetare, nu numai tehnice, pentru o bună şi corectă înregistrare a situaţiei din teren, ci, de asemenea, pentru o mai bună înţelegere a documentelor arheologice, ca sursă a reconstituirii istoriei noastre vechi.

*

S-a născut pe 20 octombrie 1923, la Chişinău, a terminat liceul şi Facultatea de Istorie la Universitatea din Bucureşti. Tot la Facultatea de Istorie din Bucureşti, în 1968, a obţinut titlul de doctor în ştiinţe istorice, în prima serie, când Ministerul Educaţiei a creat posibilitatea de a obţine o calificare superioară în ţară. După absolvirea facultăţii, a fost numit bibliotecar (1946–1949) şi apoi asistent la Catedra de Arheologie şi Preistorie.

Ca o consecinţă a restructurărilor care au urmat după al Doilea Razboi Mondial în sistemul educaţional, Eugen Comşa a fost numit cercetător la Muzeul Naţional de Antichităţi, care depindea, în acea vreme, de Institutul de Istorie „Nicolae Iorga". În aceeaşi instituţie, care a devenit ulterior

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Institutul de Arheologie, în 1956, Eugen Comşa a fost numit cercetător principal (1968), apoi şef al sectorului Neolitic şi, ulterior, şef al secţiei Preistorie (1974–1990). În tot acest timp, a deţinut, de asemenea, poziţia de secretar al comitetului de redacţie al revistelor „Materiale şi Cercetări Arheologice" şi „Studii şi Cercetări de Istorie Veche".

Şi-a început activitatea de cercetare la Sărata Monteoru, Zimnicea, Glina, Corlăteni, Glăvăneştii Vechi etc., obţinând o bună experienţă în arheologia cronologică, aşa cum se poate observa, cu uşurinţă, din activitatea sa de teren şi din numeroasele sale publicaţii.

Activitatea sa de teren este extrem de bogată şi importantă, aducând contribuţii foarte necesare, care au ajutat atât la reconstituirea ariilor culturale din preistorie, cât şi din primul mileniu. Din această perspectivă, Eugen Comşa a continuat activitatea discipolilor lui Vasile Pârvan (Profesorii Radu Vulpe, Gheorghe Ştefan, Vladimir Dumitrescu, Ion Nestor), având o contribuţie semnificativă la organizarea activităţii arheologice. Eugen Comşa a rămas, până la moartea sa, cel mai activ şi cel mai ardent cercetător de teren, din perioada de după al Doilea Razboi Mondial. Lui îi datorăm multe descoperiri, care au dus la cercetări de durată, cu rezultate importante.

Chiar dacă a lucrat în toate secvenţele temporale, perioada neolitică a fost principala şi permanenta sa preocupare, aducând valoroase contribuţii la cunoaşterea referitoare la evoluţia culturilor neolitice de la sud de Carpaţi, din ţara noastră.

O altă trăsătură distinctivă a lui Eugen Comşa a fost participarea lui la aproape toate manifestările arheologice, atât generale, cât şi regionale. Exista un obicei ca toamna, după sfârşitul săpăturilor, să se facă o vizită în grup la siturile care prezentau un interes deosebit. Îmi aduc aminte că Eugen Comşa nu a ratat niciodată astfel de activităţi. Îşi înregistra în calendarul său toate aceste manifestări. Publicarea acestui „jurnal" al întregii arheologii româneşti ar fi de interes general, atât pentru generaţiile mai tinere, dar şi pentru o istorie a activităţii arheologice din timpul lui Eugen Comşa.

Un ultim aspect, referitor la bogata sa activitate, care considerăm că merită să fie amintit aici este bibliografia pe care a creat-o pentru fiecare perioadă de cercetare, preistorică, a mileniului I a.Chr., a perioadei de formare a poporului român, dar şi a perioadei migraţiilor. O cercetare a tuturor publicaţiilor româneşti, pentru a selecta şi grupa pe perioade ceea ce s-a publicat, totul făcut de mână, deoarece la acea vreme nu aveam computer, constituie un efort uriaş, dar şi un bun instrument de lucru. Nu ştiu unde s-a oprit această lucrare, dar este necesar să fie continuată.

A luat parte la un număr mare de congrese internaţionale, reprezentând cu competenţă arheologia românească, al cărei prestigiu el l-a ridicat cu prisosinţă.

Fiind întotdeauna concentrat pe cercetările sale, fără comentarii lungi sau contradictorii, Eugen Comşa ne-a lasat amintirea unui bun coleg arheolog.

18 decembrie 2008

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ARCHAEOLOGY AND THE GENERATION MEMORY

In memory of Eugen Comşa

Lolita NIKOLOVA
Director of the International Institute
of Anthroplogy Salt Lake City

Eugen Comşa has been a part of my social biography since I became a postgraduate student. I know him personally just from a short conversation during a conference at Băile Herculane in 1990s while his publications gradually built the image of a professional and a hard working person. His key position among the most prominent Romanian archaeologists in Balkan Prehistoric research makes me today, a few months after he departed from our life, think about what we, the archaeologists of the 21st century need to reproduce from the previous generations. Very helpful in this case is Eugen Comşa's daughter, Alexandra Comşa, whom I have accepted as one of the most brilliant colleagues that I have ever had and who has been contributing essentially to rebuild our profession as a garden of flowers for the humankind of the 21st century.

The generation scholarly memory is extremely important for the development of archaeology as a science, since it is one of the most dynamic disciplines, with fast developing technology of excavations and theory.

The works of Eugen Comşa are a classical example of a dedicated to archaeology scholar for whom the field is a laboratory for new scientific results and not for new finds only. Whether he was writing about the Boian culture or about the Gumelnița culture, the key problems of Balkan prehistory were always in the focus of the prominent researcher – chronology, evolution and cultural pattern. Comşa never was only descriptive. He always searched for the problem and tried to resolve it. I believe this comprehension of the social personality of Comşa complimented by excellent excavation and organization skills helps to look in past not with the cultural glasses of what was lost but what was achieved – at least in the case of Eugen Comşa.

Today, the mission and image of archaeology have been changing. We have been not only doing excavation and traditional interpretations. We have been studying, researching, producing and updating topics that have been opening our mind with opportunity to expand our knowledge and not to close it, not only to reproduce concepts and models, but to produce new knowledge at any level of our development – from the first year student to late elderly. Today we, the archaeologists, have been studying categories like value, sex, love, emotions, power, etc. It is almost a revolutionary turn and it depends on us to keep the direction and not to be blamed by the future generation, that we did it wrong.

The second turn is expanding the chronological frame of archaeology. Today, it includes widely the contemporary past, but tomorrow it may even have a topic of future past. This broadness of contemporary archaeology additionally opens the

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minds and makes the archaeologists some of the most advanced in knowledge anthropologists.

Both turns are extremely important since they help to develop archaeology as a highly intellectual discipline. And when there is such development, it is an invitation for more intellectuals to join the archaeology branch. In contrast to technical skills, the cognitive knowledge requires a specific matrix and a long-term process of specific enculturation. Then focusing on the anthropological subject of archaeology is extremely important for the whole development of this discipline. One more turn makes our decade almost revolutionary. The epoch of Internet gives everybody an opportunity to publish and to communicate quality knowledge.

However, there is still a lot to do to make archaeology safe and more attractive for the present and future generations. Although the Berlin Wall is past, there are still invisible walls in our social environment that people build mostly as a reproduction of old social habits. We still need to find the best way to communicate with humanity because our profession is about humanity. We still need to learn how to communicate our knowledge most effectively.

In all present and future directions the generation memory helps to keep the framework of archaeology within humanity and to maintain archaeology as a discipline about humanity.

ARHEOLOGIA ŞI MEMORIA GENERAŢIEI

In memoriam Eugen Comşa

Lolita NIKOLOVA
Director al Institutului Internațional
de Antropologie Salt Lake City

Eugen Comşa a fost parte din biografia mea socială de când am devenit studentă la cursuri post-universitare. L-am cunoscut personal doar dintr-o scurtă conversație, pe care am purtat-o în timpul unei conferințe de la Băile Herculane, în anii ’90, în timp ce publicațiile lui mi-au construit treptat imaginea unei persoane profesioniste şi foarte muncitoare. Poziția sa cheie printre arheologii proeminenți ai cercetării preistoriei balcanice mă face pe mine astăzi, la câteva luni după ce a plecat din viața noastră, să mă gândesc la ceea ce ar trebui să reproducem de la generațiile precedente noi, arheologii secolului XXI. Foarte utilă în acest caz este fiica lui Eugen Comşa, Alexandra Comşa, pe care am acceptat-o ca pe unul dintre colegii cei mai străluciți pe care i-am avut şi care a contribuit, în mod esențial, la reconstruirea profesiei noastre, sub forma unei grădini cu flori, pentru umanitatea secolului XXI.

Memoria generației de specialişti este extrem de importantă pentru dezvoltarea arheologiei ca ştiință, dat fiind că este una dintre cele mai dinamice discipline, cu tehnologie şi teorie de săpătură care se dezvoltă rapid.

Lucrările lui Eugen Comşa sunt un exemplu clasic al unui specialist dedicat arheologiei, pentru care munca de teren este un laborator pentru noi rezultate ştiințifice şi nu numai pentru câteva noi descoperiri. Indiferent dacă scria despre Cultura Boian sau despre Cultura Gumelnița, problemele cheie ale preistoriei Balcanilor au fost întotdeauna avute în vederea proeminentului cercetător – cronologie, evoluție şi model cultural. Eugen Comşa nu a fost numai descriptiv. El a căutat întotdeauna problema şi a încercat să o rezolve. Consider că această percepție a personalității sociale a lui Eugen Comşa, completată cu abilități excelente de săpător şi organizator, încă ne ajută să privim către trecut, nu cu ochelarii culturali a ceea ce a fost pierdut, ci a ceea ce a fost câştigat – cel puțin în cazul lui Eugen Comşa.

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Astăzi, misiunea şi imaginea arheologiei s-au schimbat. Noi am făcut nu numai săpături şi interpretări tradiționale. Am studiat, cercetând, producând şi actualizând tematici care ne-au deschis minții oportunitatea de a ne extinde cunoaşterea şi nu de a o limita, nu numai de a reproduce concepte şi modele, ci a produce cunoaştere nouă la orice nivel al dezvoltării noastre – de la primul an de studenție şi până la adânci bătrâneți. Astăzi, noi, arheologii, am studiat categorii ca valoare, sex, dragoste, emoții, putere etc. Este o turnură aproape revoluționară şi depinde de noi să păstrăm direcția şi să nu fim blamați de către generația viitoare, că am procedat greşit.

A doua schimbare este extinderea cadrului cronologic al arheologiei. Astăzi, el include, în sens larg şi trecutul contemporan, dar mâine poate avea chiar o temă de viitor trecut. Această lărgire a arheologiei contemporane deschide minții şi mai mult şi îi include pe arheologi printre antropologii cei mai avansați în cunoaştere.

Ambele schimbări sunt extrem de importante, dat fiind că ajută arheologia să se dezvolte ca o disciplină elevat intelectuală. Şi, atunci când există o astfel de dezvoltare, constituie o invitație pentru alți intelectuali, de a se alătura breslei arheologice. În contrast cu aptitudinile tehnice, cunoaşterea cognitivă necesită o matrice specifică şi un proces pe termen lung, de enculturație specifică. Epoca internetului creează pentru toți o oportunitate de a publica şi de a comunica cunoaşterea de calitate.

Oricum, sunt încă multe de făcut pentru a face arheologia sigură şi mai atractivă pentru generațiile prezente şi viitoare. Cu toate că Zidul Berlinului este de domeniul trecutului, există încă ziduri invizibile din mediul nostru social, pe care oamenii le ridică, mai ales ca o reproducere a unor obiceiuri sociale învechite. Avem nevoie să găsim cea mai bună cale pentru a comunica cu umanitatea, deoarece profesia noastră se referă la umanitate. Avem încă nevoie să învățăm cum să comunicăm cunoaşterea noastră în mod mai eficient.

În toate direcțiile prezente şi viitoare, memoria generațională ne ajută să păstrăm cadrul arheologiei în limitele umanității şi să menținem arheologia ca o disciplină despre umanitate.

18 decembrie 2008

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EUGEN COMŞA
Biography

Date of birth: October 20, 1923.

Place of birth: Chişinău, today the Capital of the Republic Moldova.

There, he attended the general school.

– 1937–1940 – He attended "Alexandru Donici" high school in Chişinău. At that time, the Republic of Moldova was part of Romania but, beginning with 1940, as his family took refuge in today Romania in 1940, after the former U.S.S.R. *ultimatum*, he graduated from the today "Cantemir Vodă" National College in Bucharest, in 1943.

– At the end of 1943, he was recruited and sent to the School of Infantry Reservation Officers in Ploieşti, subsequently moved to Slănic-Prahova. He was released at the end of 1944, as a reserve (sublieutenant) officer. After 1989, he became a war veteran.

– January 12, 1945 – He applied for the Faculty of History from the University of Bucharest, Professors: I. Nestor, C. Giurescu, C. Marinescu, Gh. Ştefan, Th. Sauciuc Săveanu and others.

– 1946 – Besides, the courses attended as a student, he was a librarian at the Prehistory Seminar of the Faculty of History from the University of Bucharest.

– 1948 – He graduated in 1948, being specialized in prehistory.

– 1949 – He was appointed assistant at the Chair of Prof. Gh. Ştefan, afterwards being transferred at the Chair of Prehistory of Prof. I. Nestor, where he worked until 1952. In parallel, since 1950, he also worked at the National Museum of Aniquities that subsequently became the today "Vasile Pârvan" Institute of Archaeology of the Romanian Academy.

– 1950–1956 – He worked as a researcher in the sector of prehistory of the National Museum of Antiquities, at the time when that institution depended upon the Institute of Historical Sciences "Nicolae Iorga".

– 1951 – He published his first paper, in "Studii şi Cercetări de Istorie Veche", the journal of the institution where he worked.

– 1956 – The Museum became the today Institute of Archaeology that subsequently took the name of "Vasile Pârvan".

– 1960 – He became a researcher in the mentioned institution.

– 1968 – He became principal researcher, at his retirement occupying the same position, namely that of principal researcher III.

– 1968 – He obtained his doctor degree in historical sciences, with the thesis entitled "Cultura Boian", coordinated by Prof. I. Nestor.

– 1969–1974 – He managed the Neolithic Sector of the Prehistory Section of the Institute of Archaeology;

– 1974 – He published his doctorate thesis, with the title "Istoria comunităților culturii Boian" (History of the Boian Culture Communities).

– 1974–1991 – After the death of Prof. Ion Nestor, he became the chief of the Prehistory Section, until he retired. During that time he organized 18 coloquia

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regarding different sequences of the prehistory, as well as 6 workshops, on more special aspects of the prehistory.

– He retired in 1991.

– He worked for 58 years in the Prehistory Section of the National Museum of Antiquities and subsequently of "Vasile Pârvan" Institute of Archaeology.

Some of his excavations

– He took part at his first excavations at Glina (coordinated by Prof. M. Petrescu-Dîmboviţa), Zimnicea, Glăvăneştii Vechi and Corlăteni (coordinated by Prof. Ion Nestor), at Verbicioara, Balta Verde and Gogoşu (coordinated by Prof. D. Berciu) and Garvăn (coordinated by Prof. Gh. Ştefan);

– He was part of complex research teams like the one that studied the region of the Iron Gates (Mehedinţi County), or Valea Jijiei (Iaşi County);

– Other important excavations he attended were those at: Băile Herculane, Liubcova, Svinița (in Banat), Drăgăneşti-Tecuci (in Moldova), Feldioara (in Transylvania), Ciumeşti, Oarţa de Sus (in Maramureş), Silişteni and Orlea (in Oltenia), Giuleşti, Greaca, Dudeşti, Aldeni, Bogata, Boian, Ipoteşti, Radovanu, Izvoarele, Cuneşti (in Muntenia), Luncavița, Techirghiol (in Dobrogea). Over this time, he also did surverys, discovering a large number of prehistorical settlements on the entire territory of Romania;

– 1960–1991 – He had an intense activity on the territory of the Călăraşi County, mostly in the region of the former lakes Greaca and Boian, but also in the proximity and within the Radovanu commune (Călăraşi County). During his research at Radovanu, he established a new method of field investigation, which enabled him to discover the necropolis, a fact of significance for the archaeological investigation, given that the data about the settlement and the necropolis, brought together, create a more clear image about the every day life and spirituality of the ancient communities. He successfully used that method for supporting other specialists from Romania, Bulgaria, Republic of Moldova and Southern Ukraine, who studied the Gumelniţa Culture. Also, he was the first Romanian archaeologst to use the arial photos and film for the study of some archaeological sites. In order to do that, he had used a crop duster;

– During his career, he tried to apply many other modern methods, in colaboration with specialists from other disciplines (dendrochronology, physical chemistry, anthropology, archaeozoology etc.);

– He studied in detail, but also discovered some Neolithic cultures, he published 11 volumes (one being in print and two others remaining in manuscripts after his death), but also over 400 specialized articles. He took part at more than 204 de national symposia, conferences or congresses, but also to 96 international ones, in Europe or Asia, he attended in person, or by sending his contributions. He also made 49 trips abroad, for documentation;

– He had an intense editorial activity, being editorial secretary for the journals of the institute, "Materiale şi cercetări de arheologie" and "Studii şi cercetări de istorie veche" subsequently transformed into "Studii şi cercetări de istorie veche şi arheologie";

– We should mention here the great effort he made for conceiving some bibliographies, structured upon the larger time sequences of the history and especially

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prehistory. Part of the bibliography has been published. All the tens of thousands of titles have been processed and ordered exclusively by hand, because at the time they were conceived there were no computers in the Romanian research institutions;

– After his retirement, he was awarded for several years the merit allowance of the Romanian Academy.

Some of the most important prizes and medals awarded to Eugen Comşa in Romania and abroad

– "Meritul ştiinţific" (Scientific merit) medal awarded by the Decree no. 739 of the State Council, in September 26, 1966;

– The medal of the Academy of Sciences from Krakow (Poland), awarded in 1974;

– "Vasile Pârvan" Prize of the Romanian Academy in 1974, awarded for the volume with the title "Istoria comunităţilor culturii Boian" (The History of the Boian Communities);

– The excellence title awarded by the International Institute of Anthropology in Salt Lake City, Utah, United States of America, for his entire activity in the field of archaeology;

– Diploma of excellence awarded by "Vasile Pârvan" Institute of Archaeology;

– Dr. Eugen Comşa was a citizen of honor of the villages Călugăreni (Giurgiu County) and Radovanu (Călăraşi County).

EUGEN COMŞA
Biografie

Data naşterii: 20 octombrie 1923.

Locul naşterii: Chişinău, actuala capitală a Republicii Moldova, la acea vreme fiind încă parte din România.

Acolo a urmat cursurile şcolii generale.

– 1937–1940 – A studiat trei ani la Liceul „Alexandru Donici" din Chişinău, dar, datorită refugierii familiei sale din anul 1940 în urma ultimatumului Uniunii Sovietice a absolvit Liceul „Cantemir Vodă" din Bucureşti, în 1943.

– La sfârşitul anului 1943 a fost înrolat şi trimis la Şcoala de Ofiţeri de Rezervă în Infanterie de la Ploieşti şi apoi de la Slănic-Prahova. A fost lăsat la vatră ca sublocotenent. După anul 1989 a devenit veteran de război.

– 1945 – 12 ianuarie – S-a înscris şi a fost admis ca student al Facultăţii de Istorie a Universităţii din Bucureşti. Profesori: I. Nestor, C. Giurescu, C. Marinescu, G. Ştefan, Th. Sauciuc Săveanu şi alţii.

– 1946 – În afara cursurilor urmate ca student, a devenit bibliotecar al Seminarului Preistorie de la Facultatea de Istorie a Universităţii Bucureşti.

– 1948 – A absolvit facultatea, cu specialitatea preistorie.

– 1949 – A fost numit asistent la Catedra Prof. Gh. Ştefan şi apoi la Catedra de Istorie, condusă de Prof. I. Nestor, unde a lucrat până în 1952. În paralel, din 1950, a lucrat şi la Muzeul Naţional de Antichităţi, care a devenit, ulterior, actualul Institut de Arheologie „Vasile Pârvan" al Academiei Române.

– 1950–1956 – A lucrat ca cercetător în preistorie la Muzeul Naţional de Antichităţi, la vremea când instituţia depindea de Institutul de Ştiinţe Istorice „Nicolae Iorga".

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– 1951 – A publicat prima sa lucrare în „Studii şi Cercetări de Istorie Veche”, revista institutului unde lucra.

– 1956 – Muzeul a devenit Institutul de Arheologie, care ulterior şi-a adăugat la titulatură şi numele lui „Vasile Pârvan”.

– 1960 – A devenit cercetător în instituţia menţionată.

– 1968 – A devenit cercetător principal, la pensionare ocupând aceeaşi poziţie, de cercetător principal III.

– 1968 – A obţinut titlul de doctor în ştiinţe istorice, cu teza intitulată „Cultura Boian”, sub îndrumarea Prof. I. Nestor.

– 1969–1974 – A condus sectorul Neolitic al Secţiei Preistorie din Institutul de Arheologie.

– 1974 – Şi-a publicat teza de doctorat, sub titlul „Istoria comunităţilor culturii Boian”.

– 1974–1991 – După moartea Prof. Ion Nestor, a condus Secţia Preistorie a Institutului până când s-a pensionat. În acea perioadă a organizat 18 colocvii privind diferite secvenţe şi aspecte ale preistoriei, ca şi 6 alte întruniri privind aspecte mai speciale ale preistoriei.

– S-a pensionat în 1991.

– A lucrat timp de 58 de ani în Secţia de Preistorie de la Muzeul Naţional de Antichităţi şi ulterior de la Institutul de Arheologie „Vasile Pârvan”.

Unele dintre săpăturile sale arheologice

– A luat parte la primele sale săpături la Glina (sub coordonarea Prof. Petrescu-Dîmboviţa), Zimnicea, Glăvăneştii Vechi şi Corlăteni (coordonate de Prof. I. Nestor), la Verbicioarea, Balta Verde şi Gogoşu (sub coordonarea Prof. D. Berciu) şi la Garvăn (coordonate de Prof. Gh. Ştefan);

– A făcut parte din echipele complexe de cercetare, cum a fost aceea care a studiat regiunea Porţilor de Fier (Jud. Mehedinţi) sau Valea Jijiei (jud. Iaşi);

– Alte săpături importante la care a participat sunt cele de la: Băile Herculane, Liubcova, Svinița (în Banat), Drăgăneşti-Tecuci (în Moldova), Feldioara (în Transilvania), Ciumeşti, Oarţa de Sus (în Maramureş), Silişteni şi Orlea (în Oltenia), Giuleşti, Greaca, Dudeşti, Aldeni, Bogata, Boian, Ipoteşti, Radovanu, Izvoarele, Cuneşti (în Muntenia), Luncaviţa, Techirghiol (în Dobrogea). În tot acest timp el a efectuat de asemenea periegheze, descoperind un număr mare de aşezări preistorice pe întreg teritoriul României;

– 1960–1991 – A desfăşurat o intensă activitate pe teritoriul judeţului Călăraşi, în special în regiunea fostelor lacuri Greaca şi Boian, dar şi în vecinătatea şi din comuna Radovanu (jud. Călăraşi). În timpul cercetărilor de la Radovanu el a stabilit o nouă metodă de cercetare, datele cumulate despre aşezare şi necropolă creând o imagine mai clară despre viaţa de zi cu zi şi spiritualitatea comunităţilor din vechime. El a folosit cu succes această metodă pentru a sprijini alţi specialişti din România, Bulgaria, Republica Moldova şi Ucraina de Sud, care se ocupau de studiul culturii Gumelniţa. De asemenea, a fost primul arheolog care a folosit fotografiile aeriene şi filmul pentru studiul unor situri arheologice. Pentru a realiza acest lucru s-a folosit de un avion pentru împrăştierea îngrăşămintelor pe culturile agricole;

– În timpul carierei sale a încercat să aplice cât mai multe metode moderne, în colaborare cu specialişti din alte discipline (dendrocronologie, chimie fizică, antropologie, arheozoologie etc.);

– A studiat în detaliu, dar a şi descoperit unele culturi neolitice, a publicat 11 volume (unul fiind în curs de publicare şi două rămânând în manuscris), dar şi peste 400 de articole de specialitate. A participat la peste 204 simpozioane, conferinţe şi congrese naţionale, dar şi la 96 internaţionale din Europa sau Asia, la care s-a dus personal sau a trimis lucrările. De asemenea, a efectuat 49 de călătorii de documentare peste hotare;

– A avut o activitate redacţională intensă, fiind secretarul de redacţie al revistelor institutului, „Materiale şi cercetări arheologice” şi „Studii şi cercetări de isorie veche”, transformată ulterior în „Studii şi cercetări de istorie veche şi arheologie”;

– Merită menţionat aici şi marele efort pe care l-a făcut pentru a concepe bibliografii, structurate pe perioade mai mari de timp, în special pe preistorie. O parte a bibliografiilor a fost publicată. Toate cele câteva zeci de mii de titluri au fost prelucrate şi ordonate esclusiv manual, deoarece în acea vreme nu existau computere în instituţiile de cercetare româneşti;

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– După pensionare, timp de câțiva ani, i-a fost acordată indemnizația de merit de către Academia Română.

Câteva dintre premiile şi medaliile cele mai importante acordate lui Eugen Comşa în România şi peste hotare

– Medalia „Meritul ştiinţific" acordată prin Decretul nr. 739 al Consiliului de Stat, pe 26 septembrie, 1966;

– Medalia Academiei de Ştiințe din Cracovia, Polonia, acordată în 1974;

– Premiul „Vasile Pârvan" al Academiei Române pe anul 1974, pentru volumul cu titlul „Istoria comunităților culturii Boian";

– Titlul de excelență acordat de Institutul Internațional de Antropologie din Salt Lake City, Utah, Statele Unite ale Americii, pentru întreaga sa activitate în domeniul arheologiei;

– Diploma de excelență acordată de Institutul de Arheologie „Vasile Pârvan";

– Dr. Eugen Comşa a fost cetățean de onoare al localităților Călugăreni (jud. Giurgiu) şi Radovanu (jud. Călăraşi).

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SELECTIVE LIST OF EUGEN COMŞA'S PUBLICATIONS

INDIVIDUAL BOOKS

- 1974 – *Istoria comunităţilor culturii Boian*, Editura Academiei, Bucureşti, 270 p.
- 1976 – *Bibliografia neoliticului de pe teritoriul României*, I, Muzeul de Istorie al R.S.R., Bucureşti, 171 p.
- 1977 – *Bibliografia neoliticului de pe teritoriul României*, II, Muzeul de Istorie al R.S.R., Bucureşti, 149 p.
- 1978 – *Bibliografia paleoliticului şi mezoliticului de pe teritoriul României*, Muzeul de Istorie al R.S.R, Bucureşti, 127 p.
- 1982 – *Neoliticul din România*, Editura ştiinţifică şi enciclopedică, Bucureşti, 111 p.
- 1987 – *Neoliticul pe teritoriul României. Consideraţii*, Editura Academiei Republicii Socialiste România, Bucureşti, 198 p.
- 1990 – *Complexul neolitic de la Radovanu* (= CCDJ, 8) Călăraşi, 126 p.
- 1993 – *Bibliografia referitoare la a doua epocă a fierului de pe teritoriul României*, Biblioteca Thracologica, III, Bucureşti, 280 p.
- 1995 – *Figurinele antropomorfe din epoca neolitică pe teritoriul României*, Editura Academiei Române, Bucureşti, 223 p.
- 1996 – *Viaţa oamenilor din spaţiul carpato-danubiano-pontic în mileniile 7–4 î.Hr*., Editura didactică şi pedagogică R.A., Bucureşti, 213 p.
- 1996 – *Bibliografia epocii bronzului pe teritoriul României*, Muzeul Naţional de Istorie a României, Bucureşti, 256 p.

BOOKS IN COLLABORATION

- 2001 – E. Comşa, Gh. Cantacuzino, *Necropola neolitică de la Cernica*, Editura Academiei Române, Bucureşti, 251 p.

INDIVIDUAL STUDIES, ARTICLES, REPORTS

- 1951 – *Cercetări şi observaţii în legătură cu valurile din Dobrogea*, SCIV, 2, 2, p. 233–238.
- 1951 – *Cercetări arheologice pe traseul Canalului Dunăre-Marea Neagră*, SCIV, 2, 1, p. 169.
- 1952 – *Raport preliminar asupra sondajului de lângă Luncaviţa, raionul Măcin*, SCIV, 3, p. 413–416.
- 1953 – *Contribuţie la harta arheologică a Dobrogei de nord-vest*, SCIV, 4, 3–4, p. 747–757.
- 1954 – *Săpăturile arheologice din sectorul Giuleşti*, in: Studii şi referate privind istoria României, 1, p. 303–309.
- 1954 – *Consideraţii cu privire la evoluţia culturii Boian*, SCIV, 5, 3–4, p. 361–392.
- 1954 – *Cercetări arheologice în preajma lacului Greaca*, SCIV, 5, 3–4, p. 585–593.
- 1955 – *Stadiul cercetărilor despre viaţa oamenilor din faza Bolintineanu a culturii Boian*, SCIV, 6, 1–2, p. 13–43.
- 1955 – *Săpături de salvare şi cercetări în regiunea Bucureşti*, SCIV, 6, 3–4, p. 411–441.
- 1955 – *Buletinul Institutului arheologic bulgar*, 18, 1952, Sofia, SCIV, 6, 3–4, p. 943–944.
- 1955 – *Stadiul cercetărilor despre viaţa oamenilor din faza Bolintineanu a culturii Boian*, SCIV, 6, 1955, 1–2, p. 13–43.
- 1956 – *Rezultatele sondajelor de la Dudeşti şi unele probleme ale neoliticului de la sud de Carpaţi*, SCIV, 7, 1–2, p. 41–52.
- 1956 – *Zagadnienie walów w Dobrudzy*, Postepy Arheologii, 5, p. 11–17.
- 1957 – *Stadiul cercetărilor cu privire la faza Giuleşti a culturii Boian*, SCIV, 8, p. 27–51.
- 1957 – *Quelques données relatives à la périodisation et à l'évolution de la civilisation de Boian*, Dacia, NS, 1, p. 61–71.
- 1957 – *Câteva descoperiri arheologice din raionul Medgidia (regiunea Constanţa)*, Materiale, 4, p. 325–334.

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- 1957 – Recenzie la: *S.N. Bibikov. Tripol'skoe poselenie v okrestnosteah Luki Vrubleţkoi*, KSIA, Kiev, 6, 1956. In: SCIV, 8, 1–4, p. 390–392.
- 1957 – *Stadiul cercetărilor cu privire la faza Giuleşti a culturii Boian*, SCIV, 8, 1–4, p. 27–57.
- 1958 – *Kul'tura bojanska*, Zotchlani Wieków, Vroclaw-Poznán, 24, 6, p. 418–421.
- 1958 – *Câteva date despre ritul funerar al culturii Boian*, SCIV, 9, 2, p. 401–406.
- 1958 – *Despre cercetările neolitice din Bulgaria*, SCIV, 9, 2, p. 274–277.
- 1959 – *Betrachtungen űber die Linearbandkeramik auf dem Gebiet der Rumänischen Volksrepublik und der angrenzenden Länder*, Dacia, NS, 3, p. 37–57.
- 1959 – *Un vas de piatră descoperit pe Grădiştea Ulmilor la Boian*, SCIV, 10, 1, p. 135–136.
- 1959 – *La civilisation Criş sur la territoire de la R.P. Roumaine*, AAC, Kraków, I, 2, p. 173–190 + 3 pl.
- 1959 – *Săpăturile de la Dudeşti*, Materiale, 5, p. 91–97.
- 1959 – *Săpăturile de salvare de la Bogata şi Boian*, Materiale, 5, p. 115–123.
- 1959 – *Limesul dobrogean, cercetări de suprafaţă de-a lungul Dunării, între Ostrov (reg. Galaţi) şi Hîrşova (reg. Constanţa)*, Materiale, 5, p. 761–767.
- 1959 – *Săpături arheologice la Boian* – Grădiştea Ulmilor, Materiale, 6, p. 127–135.
- 1959 – *Cu privire la activitatea arheologilor ucraineni*, SCIV, 10, 1, p. 160–163.
- 1960 – *Consideraţii cu privire la cultura cu ceramică liniară pe teritoriul R.P.R. şi din regiunile vecine*, SCIV, 11, 2, p. 217–242.
- 1959 – *Despre tipurile de locuinţe din cuprinsul aşezării din sec. IX–XII de la Garvăn*, SCIV, 10, 1, p. 117–134.
- 1960 – *Considérations sur le rite funéraire de la civilisation de Gumelniţa*, Dacia, NS, 4, p. 5–30.
- 1960 – *Contribuţie cu privire la riturile funerare din epoca neolitică de pe teritoriul ţării noastre*, in: Omagiu lui C. Daicoviciu, Bucureşti, p. 83–103.
- 1960 – *Nouvelles données relative à l'evolution des civilisations néolithiques sur le territoire de la Roumanie*, in: NÉH, II, p. 7–17.
- 1961 – *La civilisation néolithique Dudeşti*, in: Bericht űber den V. Internationalen Kongress für Vor- und Frühgeschichte, Hamburg – Berlin, p. 195–197.
- 1961 – *Kultura ceramiky wsehowej rytej na terenie Rumunskiej Republiki Liudowej*, SpurPAU, p. 1–3.
- 1961 – *Mormântul neolitic descoperit lângă satul Andolina*, SCIV, 12, 2, p. 359–362.
- 1961 – *K voprosu o perehodnoi faze ot kul'tury Boian k kul'ture Gumelniţa, predvaritel'nyi očerk*, Dacia, NS, 5, p. 39–68.
- 1961 – *Săpăturile arheologice de la Boian*, Materiale, 7, p. 63–69.
- 1962 – *Săpături arheologice la Boian-Vărăşti*, Materiale, 8, p. 205–210.
- 1962 – *Săpături arheologice la Ipoteşti*, Materiale, 8, p. 213–218.
- 1962 – *Săpături arheologice la Luncaviţa*, Materiale, 8, p. 221–224.
- 1962 – *K voprosu ob otnositelnoj hronologhii i o razvitii neoliticeskih kul'tur na jugo-vostoke RNR i na vostoke N.R. Bolgarija*, Dacia, NS, 6, p. 53–85.
- 1963 – *Le rite funéraire de la civilisation Gumelnitza*, in: Actes du VI[e] Congrès International des Sciences Anthropologiques et Etnologiques, Paris, II, Technologie, p. 379–382.
- 1963 – *Unele probleme ale aspectului cultural Aldeni II (pe baza săpăturilor de la Drăgăneşti – Tecuci*), SCIV, 14, 1, p. 7–26.
- 1963 – *K voprosu o periodizacii neoliticeskih kul'tur na severo-zapade RNR*, Dacia, NS, 7, p. 477–484.
- 1964 – *Mormânt din prima epocă a fierului găsit la Radovanu (r. Oltenita)*, SCIV, 15, 1, p. 127–130.
- 1964 – *Descoperirea de la Poarta Albă*, SCIV, 16 1, p. 149–158.
- 1965 – *Consideraţii cu privire la complexele neolitice din preajma Dunării, în sud-vestul României*, SCIV, 16, 3, p. 545–551.

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- 1965 – *Contribuţie la cunoaşterea culturii Dudeşti. Complexul de la Radovanu*, in: Omagiu lui P. Constantinescu-Iaşi, cu prilejul împlinirii a 70 de ani, Bucureşti, p. 39–41.
- 1965 – *Cultura Boian în Transilvania*, SCIV, 16, 4, p. 629–645.
- 1965 – *Quelques données sur les aiguilles de cuivre découvertes dans l'aire de la civilisation Gumelniţa*, Dacia, NS, 9, p. 361–371.
- 1965 – *Quelques données sur la chronologie relative et le développement des cultures néolithiques du sud-est de la R.P.R. et de l'est de la R. P. Bulgare*, in: Atti del VI Congresso Internazionale delle Scienze Preistoriche e Protostoriche, II, Roma, p. 242–245.
- 1965 – *Descoperirea de la Poarta Albă*, SCIV, 16, 1965, 1, p. 149–157.
- 1966 – *Die Boian Kultur in Transilvanien*, Acta Musei Nationalis Pragae, Historia, 20, 1–2, p. 49–53.
- 1966 – *Schimbul la comunităţile din epoca neolitică de pe teritoriul ţării noastre*, RM, 3, 5, p. 440–444.
- 1966 – *Le complexe archéologique de Feldioara (Transilvanie)*, AAC, 8, 1–2, p. 257–262.
- 1966 – *Le dépôt en bronze de Cioclovina (Carpates Méridionales)*, AAC, 8, 1–2, p. 169–174.
- 1966 – *Materiale de tip Starčevo descoperite la Liubcova (r. Moldova Nouă)*, SCIV, 17, 2, p. 355–361.
- 1966 – *Boian A*, in: MEPPE, 1, p. 137–138.
- 1966 – *Dudeşti*, in: MEPPE, 1, p. 310.
- 1966 – *Vărăşti-Boian*, in: Enciclopedia dell'arte antica classica e orientale, Roma, 7, p. 1090–1091.
- 1967 – *Unele date cu privire la sfârşitul perioadei de trecere de la epoca neolitică la epoca bronzului în sud-estul Olteniei* (*În lumina săpăturilor de la Siliştioara*), SCIV, 18, 2, p. 207–220.
- 1967 – *Date despre cultura Vinča în zona Porţilor de Fier*, in: Comunicări, 3, Craiova.
- 1967 – *Istoria comunităţilor culturii Boian* (autoreferat), Bucureşti.
- 1967 – *Toporul de bronz de la Silişteni*, SCIV, 18, 4, p. 671–676.
- 1968 – *Câteva descoperiri arheologice în sud-vestul raionului Slatina*, in: Comunicări, Craiova.
- 1968 – *Unele date despre descoperirile arheologice din Peştera Muierilor de lîngă Baia de Fier (epoca neolitică – epoca feudală)*, in: Comunicări, 8, Craiova.
- 1968 – *Der Bronzedolch aus Vărăşti*, in: Liber Iosepho Kosztrzewski octogenario a veneratoribus dicatus, Wroclaw – Warszawa – Kraków, p. 128–130.
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One volume writen by Eugen Comşa about the Neolithic on the Lower Danube will soon be published and another book is still in manuscript. Some of the bibliographies (updated Neolithic, Hallstatt, 3rd–13th centuries A.D.) he conceived as well as other manuscripts, remained unpublished.

Moments of his activity were mentioned in some volumes of memories, or monographs:

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CONTRIBUTIONS

DEATH ON THE DANUBE: LATE MESOLITHIC BURIALS AT SCHELA CLADOVEI, ROMANIA*

MOARTE PE DUNĂRE: MORMINTE DIN MEZOLITICUL TÂRZIU LA SCHELA CLADOVEI, ROMÂNIA

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Cuvinte-cheie: Schela Cladovei, mezolitic, caracteristici fizice, sănătate, dietă, violență, datare radiocarbon.

Rezumat: Această lucrare descrie un grup de morminte mezolitice de la Schela Cladovei, descoperite în 1991–1992. Resturile osteologice cuprind şapte schelete în conexiune anatomică şi oase dezarticulate de la cel puțin 18 alți indivizi. Metoda caracteristică de depunere primară a fost înmormântarea în poziție întinsă pe spate, în morminte simple. Există, de asemenea, dovezi privind înmormântări parțiale, inclusiv depuneri separate de cranii, posibil în conexiune cu practica excarnării. Dinți de peşte şi/sau cochilii de moluşte au apărut lângă cinci schelete şi pot reprezenta obiectele depuse împreună cu mortul. Ocru roşu a fost răspândit în două morminte. Majoritatea înmormântărilor au aparținut unor adulți care erau înalți, robuşti şi cu puține semne de boală. Mulți indivizi aveau frecvente leziuni, adesea ca rezultat al violenței. În câteva cazuri, rănile s-au dovedit fatale. Analiza colagenului din oase cu izotopi stabili sugerează o dietă dependentă masiv de peştele din Dunăre. Analiza AMS ^{14}C efectuată pe oasele de la opt indivizi indică faptul că ei au fost înmormântați la circa 6900 cal. a.Chr.

Key words: Schela Cladovei, Mesolithic, physical characteristics, health, diet, violence, radiocarbon dating.

Abstract: This paper describes a group of Late Mesolithic burials from Schela Cladovei, excavated in 1991–1992. The remains comprise seven articulated skeletons

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and disarticulated bones from at least another 18 individuals. The characteristic method of primary disposal was extended supine inhumation in simple graves. There is also some evidence for partial burial, including separate disposal of crania, possibly linked to the practice of excarnation. Fish teeth and/or mollusc shells occurred near to five skeletons and may represent items buried with the dead. Red ochre was sprinkled on two graves. The majority of the burials were of adults who were tall, physically robust and showed few signs of disease. Many individuals had sustained injuries, often as a result of violence. In several cases, the injuries proved fatal. Bone collagen stable isotope analyses suggest a diet heavily dependent on Danube fish. Direct AMS ^{14}C dates on bones from eight individuals indicate that they were buried *c*. 6900 cal BC.

Introduction

Schela Cladovei is one of a number of well-preserved Stone Age sites in the Iron Gates section of the Danube Valley, which were discovered and investigated prior to the impounding of the river by the Iron Gates I and II dams. Situated on the left bank of the Danube, some 7 km below the river's exit from the Iron Gates Gorge, the site lies in a more open section of the Danube Valley, where the river is flanked by a broad alluvial plain, consisting of a series of river terraces (Fig. 1).

Excavations at Schela Cladovei began in 1965 and have continued at intervals ever since. Thirteen field campaigns were completed between 1965 and 1991 led by Vasile Boroneanţ. Between 1992 and 1996 the excavations became a joint Romanian–British research project, co-directed by V. Boroneanţ and C. Bonsall. Further work was undertaken in 1997 (by V. Boroneanţ), 2001–2002 (by A. Boroneanţ), and 2007 onwards (by A. Boroneanţ and C. Bonsall).

The Schela Cladovei site was occupied at various periods during the Holocene. The earliest settlement evidence relates to the Late Mesolithic and Early Neolithic (Starčevo-Criş culture), *c*. 7100–5600 cal BC. Among the finds dating to the Late Mesolithic are estimated 100+ burials. Some of these have been discussed in previous publications[1]. This paper describes one particular group of burials excavated in 1991–1992, and is a revised version of a paper that was presented at the Fifth International Mesolithic Symposium held in Grenoble in 1995[2].

Schela Cladovei: stratigraphic context and physical setting

The excavation at Schela Cladovei is located on an alluvial flat bordering the Danube. Previously, we interpreted this as a Holocene terrace at 6–8 m above the original river level[3]. After studying aerial photographs taken before the river was dammed, we now think this 'flat' may correspond to the modern floodplain (the Danube has overtopped this surface within living memory). Since the building of the Iron Gates II dam, there has been accelerated erosion of the riverbank at Schela Cladovei. At the time of the 1992–96 excavations, the eroding bank of the Danube

[1] Nicolăescu-Plopşor 1987; Boroneanţ 1990; Boroneanţ & Nicolăescu-Plopşor, 1990.
[2] Boroneanţ *et alii*, 1999.
[3] Boroneanţ *et alii*, 1999, 386.

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provided a section through the site, in which archaeological remains could be traced over a distance of *c.* 1.5 km. In 2000 a concrete revetment was built along this part of the riverbank in an effort to protect the archaeological site from further erosion by the river (Fig. 2). To the north east, the alluvial flat/floodplain abuts on a higher terrace composed largely of Pleistocene sands and gravels. Numerous freshwater springs occur at the base of the Pleistocene deposits and, traditionally, have been important sources of drinking water. They feed small streams that are incised into the alluvial flat/floodplain and flow into the Danube. One such stream cuts across the archaeological site from NE–SW (Fig. 3). Although Neolithic remains occur over most of the site area, traces of Mesolithic occupation have been found mainly in the area to the east of the stream, where, prior to erosion, they could be traced for *c.* 200 m along, and up to 70 m back, from the riverbank.

The alluvial flat on which the archaeological site lies is underlain by 1.5–2.0 m of silty Holocene river alluvium resting upon older, very poorly sorted fluvial gravels that show evidence of having been deposited in a periglacial environment. Soil-forming processes have affected the alluvial sediments for the greater part of the Holocene resulting in the development of a calcareous brown earth. The soil profile extends throughout the full depth of the silty alluvial material and all signs of sedimentary stratification have been eliminated. The soil has been decalcified through leaching to a variable depth of 34–55 centimetres. In standard soil horizon notation, a non-calcareous, dark-coloured Ap horizon, affected by modern ploughing, overlies an anthropically overdeepened, but equally dark-coloured, Ah2 horizon that shows abundant signs of Neolithic activity and extends to about 55–65 cm depth. These overdeepened organomineral A-horizons overlie a prismatic structured B-horizon, strongly affected by illuviation of calcium carbonate (designated a calcic horizon or Bk horizon) in the form of irregular tubular nodules infilling root channels and earthworm burrows. It is this pale brown Bk horizon in which the Mesolithic burials were located.

The Area III 'cemetery'

In the course of the joint Romanian–British excavations in the 1990s, two small areas along the riverbank were investigated (Fig. 3: Areas III–IV and VI). The excavation of Area III–IV (11 m × 2–5 m) was undertaken mainly by a Romanian team in 1990–91. Mesolithic remains were encountered within the pale brown Bk horizon, between 1.00 m and 1.65 m below the present land surface. The following account is based largely on site notes and sketch plans made by Vasile Boroneanț, who directed the 1990–91 excavations.

Architectural remains

In the north-east part of the trench (Area III) at a depth of *c*. 1.00 m, there was a dense concentration of stones *c*. 2.5 m across. Within it was a sub-rectangular setting of large tabular stones that likely originally formed the lining of

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a shallow pit. It is probable that these features are the remains of some form of structure. Oval to rectangular stone-bordered pits are common on Mesolithic sites in the Iron Gates, sometimes occurring within larger, usually trapezoidal, pit features (*e.g.* at Vlasac in Serbia) that are generally interpreted as semi-subterranean dwellings ('pit houses'). The small stone-bordered pits are usually explained as domestic 'hearths', although it has been argued that they could have been storage facilities[4]. Interestingly, magnetic susceptibility readings on soil samples from the stone-bordered pit in Area III at Schela Cladovei failed to identify it as a hearth; moreover, the soil contained large numbers of small fish bones, none of which were obviously fire-damaged[5]. No postholes were identified in proximity to the stone-bordered pit/stone concentration, nor could it be determined whether these features lay within a larger 'house' pit though evidence from elsewhere on the site suggests this is likely.

About two metres to the south west of the stone-bordered pit, at approximately the same level, there was a large irregularly shaped stone, with a shallow rounded depression in its upper surface. This has parallels in the so-called stone 'altars' found at some other Iron Gates sites.

Burials

Immediately to the south west of the structure, between the 'hearth' and the 'altar', there were abundant human skeletal remains, that evidently represent formal burials (Fig. 4). They comprised a number of articulated skeletons (M42, M43, M46, M47, M48, M49, M50). Among the skeletons were numerous disarticulated bones, belonging to other individuals. This group of burials was excavated and recorded in 1991 by the Romanian team. In 1992 a small extension to Area III was dug (Fig. 3: Area IIIa) in order to investigate the area to the north east of the structure where more burials were suspected; members of the British team undertook this work. The human remains uncovered in this area consisted principally of an articulated adult skeleton, apparently complete apart from the skull (M52), a pair of articulated lower legs and feet (M55), and a pair of articulated lower legs without feet (M56). Their spatial arrangement suggests that they were placed in a single grave.

The burials in Area III/IIIa are all simple inhumation burials. In the case of the articulated skeletons the bodies were laid out in an extended position, on their backs, with long axes oriented approximately NW–SE. In three instances (M47, M50, M52) the skull was missing. Area III produced no clear evidence of other forms of burial; there were no skeletons in flexed or sitting positions, and no evidence of cremation was discovered. One skeleton (M49) lay within an elongated shallow depression excavated into the Pleistocene gravel at the base of the Holocene alluvium. This depression is presumed to be the base of a grave pit. It is

[4] Voytek & Tringham, 1989.
[5] Bonsall *et alii*, 1992; Bonsall, 2008.

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likely that the other burials were also interred in grave pits dug into the alluvium. However, the outlines of the graves could not be discerned and probably had been erased by soil forming processes since the Mesolithic. Similarly, the level from which the grave pits were dug could not be determined, although the results of subsequent excavations at Schela Cladovei coupled with pedological investigations suggest that the Late Mesolithic land surface was probably not much lower than the present land surface.

'Grave goods'

In a number of instances artifacts occurred in close proximity to human skeletal remains, and it is possible that some of these represent items buried with the dead. In two cases (M42, M49) traces of red ochre were detected around the body; in the case of M42, ochre was found around the skull and in the pelvic area; in the case of M49 it occurred on and around the skull. Bead-shaped crowns of pharyngeal teeth from large carp and/or shells of marine and freshwater molluscs (some with artificial perforation) occurred near to some skeletons (M43, M47, M48, M50, M52), and may represent remains of personal ornaments.

Late Mesolithic population: physical characteristics, health and diet

The human remains in Area III were exceptionally well preserved. They comprise bones from at least 25 individuals, of which eight are represented by articulated skeletons. Most individuals were adults, who had died in their 30s or 40s. Apart from a few isolated bones of children under the age of seven, the youngest individual present was a female aged about 17, represented by her lower limbs only (M55). The absence of bones of individuals in the 7–16-year age range suggests that either (1) mortality among juveniles was low, or (2) their bodies were disposed of elsewhere or by a different method of burial.

Osteological analyses suggest that the Mesolithic population was well nourished and generally in good health. Adults were tall and robust with strong bones and musculature; the average height of males was 1.82 m, and of females 1.65 metres. Females were so robust that many of their bone dimensions are well within the range for modern males. There were no carious lesions on teeth, and no obvious signs of malnutrition. However, the population was not entirely free from disease. Arthritis was common – in many cases severe and widespread throughout the body. Periodontal disease was also common but, with one exception (M46), was not associated with dental abscesses or tooth loss. Periodontal infection was usually associated with heavy calculus and probably related to poor dental hygiene.

The Schela population displays some interesting osteomorphological adaptations. Most individuals show extreme attrition of the anterior teeth, especially the upper. This could be related to diet. Another, more likely explanation is that individuals commonly used their teeth as a 'tool', *e.g.* for softening leather.

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If so, as anterior attrition is common to both males and females, the occupation would have been one undertaken by both sexes. The clavicles of both males and females were extremely robust, with the left clavicle noticeably more so than the right. Similar evidence has been recorded at Vlasac where it was suggested to be an occupationally related condition associated with heavier use of the left arm[6].

Among the individuals represented in the Area III burials there are frequent signs of trauma. In many cases this is of a violent origin. Healed fractures of the skull, vertebrae, limbs, and hand and foot bones are common. In particular, blows to the skull (M42, M48) and 'parry' fractures of the lower arm (M46, M49) are likely to be the result of violence as the arms are often held up to fend off blows directed at the head. In addition, at least two, and probably three, individuals had met a violent death. Bone points found embedded in vertebrae of M48 and M50 and a flint 'point' in a vertebra from M47 are likely to have caused fatal injuries as no healing could be observed at the point of their penetration into the bone. Bone arrowheads also occurred as individual finds near to skeletons. A complete example was found adjacent to M47, while fragments of single arrowheads occurred with M42 and M50. While these could be considered 'grave goods', it is more likely that they were originally embedded in the soft tissue surrounding the skeletons and resulted from acts of violence that perhaps caused or contributed to the deaths of the individuals.

The burials from Area III at Schela Cladovei were among the first in the Iron Gates to be examined isotopically to provide information on the Mesolithic diet. Bonsall *et alii*[7] analyzed the C and N isotopic compositions of collagen in single bones from 7 individuals (Table 1). The resulting $\delta^{13}C$ values of –19.1 to –18.2 ‰ and $\delta^{15}N$ of +14.9 to +15.8 ‰ are significantly heavier than would be expected from a diet based on terrestrial animal and plant food sources, and strongly suggest a dietary regimen in which much of the protein was derived from fish and shellfish[8]. This interpretation is supported by the faunal remains from Mesolithic contexts at Schela Cladovei, excavated between 1992 and 1996, among which fish bones far outnumbered those of terrestrial mammals[9], and by the prevalence of heavy calculus on the teeth of Mesolithic humans (see above) which implies a high protein diet (fish and shellfish meat is a rich source of protein, but has a negligible carbohydrate content). Theoretically, consumption of the flesh of animals that regularly ate fish and shellfish, such as waterfowl, otters, and even domestic dogs, could have contributed to the heavy $\delta^{15}N$ and $\delta^{13}C$ values in human bone collagen. However, in the 1992–96 excavations at Schela Cladovei, bones of otter and dogs were not recovered from Mesolithic contexts, and bird bones were found in only relatively small numbers[10].

[6] Prinz 1987, 83.
[7] Bonsall *et alii*, 1997.
[8] Bonsall *et alii*, 1997, 2000.
[9] Bartosiewicz *et alii*, 2001.
[10] Gál & Kessler, 2000.

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Dating

There are three aspects to a consideration of the chronology of funerary activity in Area III: (1) the relative ages of the burials; (2) their absolute dating; and (3) the chronological relationship between the burials and the structure.

Relative dating of the burials is problematical. The fact that the human remains occurred at various levels within the Bk horizon may be simply a function of the depths to which individual graves were dug. However, there are other aspects of the horizontal and vertical arrangement of the burials that may, or may not, reflect differences in date:

(1) The many disarticulated bones could be from graves disturbed by later burials represented by the articulated skeletons, although in some instances (*e.g.* Fig. 4: M44, M45, M55, M56) they would appear to represent deliberate acts of disposal of bones or body parts, possibly linked to the practice of excarnation – a practice also recognized in the Mesolithic, at Lepenski Vir[11]. Precisely, how excarnation was achieved at Schela Cladovei is uncertain, but no cut marks suggestive of active dismemberment soon after death were found on any of the bones, and there is no evidence of the bones having been gnawed by mammalian or avian scavengers which would seem to rule out direct exposure of the corpses. Even if the individuals represented by the disarticulated bones had died before those found as articulated skeletons, the dates of final burial may have been roughly the same.

(2) There is some evidence of superpositioning of skeletons – for example, M43 overlay M46, although it is not inconceivable that the bodies were deposited together in the same grave;

(3) The majority of the articulated skeletons were oriented with heads to the south- east, but two (M46, M52) lay with the heads to the north-west – however, if M43 and M46 *were* deposited in the same grave, then the 'end-to-end' placement of the burials may simply reflect – to use a modern concept – a more efficient use of (grave) space, and would have no chronological significance.

If there were distinct 'phases' of burial activity in Area III, they are not evident in the absolute dates. AMS ^{14}C determinations were obtained on single bones from eight burials (Table 1). The ^{14}C ages range from 8316 ± 61 BP to 8570 ± 105 BP. However, it has been shown that these dates are 'too old' by about 450 years because of the existence of a large reservoir effect in the River Danube and the heavy consumption of fish by the Mesolithic population[12]. Cook *et alii*[13] devised a method of 'correcting' the human bone ^{14}C ages using the $\delta^{15}N$ value of

[11] Cf. Srejović 1972.
[12] Cook *et alii*, 2001; see also Bonsall *et alii*, 1997.
[13] Cook *et alii*, 2001, 2002.

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the bone collagen. The reservoir-corrected ^{14}C ages of the burials from Area III range from 7878 ± 90 to 8090 ± 118 BP, and the calibrated age ranges are indistinguishable at the 1σ level of confidence. These results suggest the burials were emplaced sometime between *c*. 6775 and 7055 cal BC, although they could represent a very brief episode of Late Mesolithic funerary activity within that time-range.

Table 1

AMS radiocarbon dates and stable isotope values for Late Mesolithic burials from Area III–IV at Schela Cladovei

Sample	Description	Lab. Reference	^{14}C Age BP	Reservoir-corrected age BP	Cal BC age range (2σ)	Median probability	$\delta^{13}C$ (‰)	$\delta^{15}N$ (‰)
M52	Adult, left humerus	OxA-4384	8570±105					
M43	Adult male, right femur	OxA-4379	8550±105	8070±122	7442–6649	7015	–18.7	15.0
M55	Adult, right tibia	OxA-4385	8510±105	8090±118	7448–6681	7056	–18.7	15.0
M49	Adult female, right femur	OxA-4382	8490±110	8046±124	7345–6642	6969	–18.8	15.4
M46	Adult male, right femur	OxA-4380	8460±110	8046±122	7338–6644	6969	–18.5	14.9
M42	Adult female, right femur	OxA-4378	8415±100	7971±115	7282–6536	6879	–19.1	15.4
M48	Adult male, left radius	OxA-4381	8400±115	7932±130	7173–6499	6841	–18.2	15.8
M50	Adult male, right femur	OxA-4383/8581	8316±61[1]	7878±90	7048–6531	6773	–19.1[2]	15.3[2]

[1] Weighted mean of OxA-4383 and OxA-8581
[2] Average of 2 analyses

The ^{14}C ages of human bones have been corrected for the Danube freshwater reservoir effect using Method 1 of Cook *et al*. (2002). Calibration was performed with CALIB 5.0.2 (Stuiver & Reimer 1993; Stuiver *et al*. 2005) using the IntCal04 curve (Reimer *et al*. 2004). The reservoir age corrections were applied prior to calibration using the terrestrial calibration curve.

The majority of the articulated skeletons in Area III occurred close to, but outside, the visible limits of the structure. Co-occurrence of burials and structures

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has been reported from a number of open-air Mesolithic sites in the Iron Gates region, and is usually taken to imply that burials were contemporaneous with the use of an adjacent structure. However, not all the human remains in Area III occurred outside the structure. Two skulls (M44, M45) lay within the stone concentration, at or slightly below the level of the stones forming the 'hearth'. The skulls were found in an upright position, facing one another. The top (calvarium) of a third skull was found a few centimetres to the east. It is possible that all three skulls were deposited on or under the floor of the structure. It is interesting that the number of skulls found within the structure is the same as the number of articulated skeletons without skulls found outside the structure. Disarticulated bones of another individual (M50) lay at approximately the same level as the skulls, just to the south-west of the 'hearth'. These also may have been buried beneath the floor of the structure. The position of articulated burial M47 is equivocal; the skeleton lay close to the south-west edge of the structure, below the level of the stone concentration. From Fig. 4 it appears that the structure actually overlaps the burial and is stratigraphically younger; however, it needs to be emphasized that the plan is based on photographs and field sketches, and is probably not entirely accurate. If the stratigraphic relationship between the structure and burial M47 implied by Fig. 4 is correct, then the structure could be a later feature unrelated to M47 and the other articulated burials.

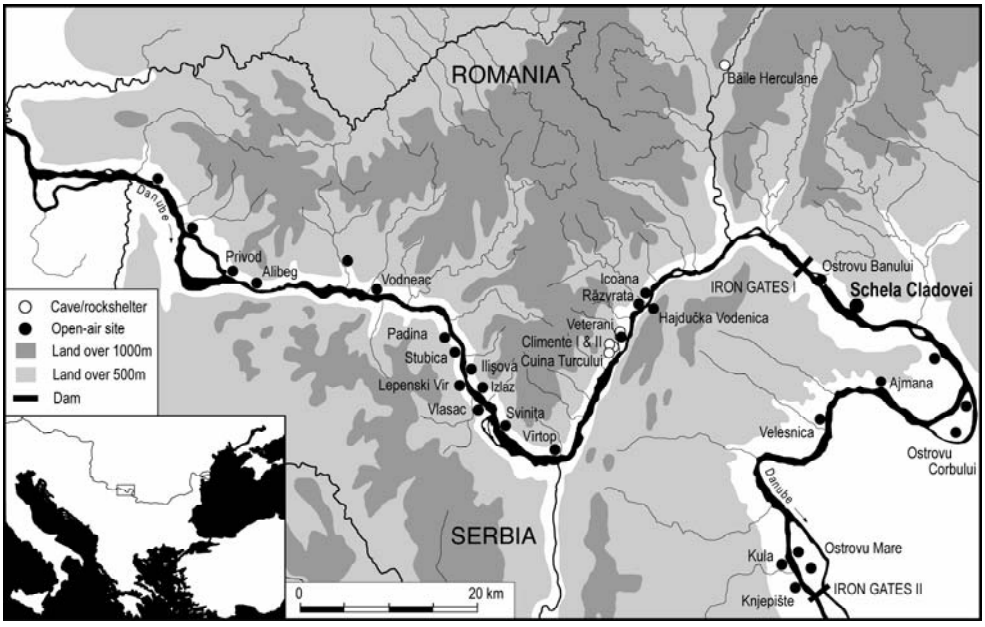

Fig. 1 – Schela Cladovei and other important Stone Age sites in the Iron Gates region.

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2 A

2 B

Fig. 2 – Two photographs of the Danube riverbank at Schela Cladovei taken at approximately the same location in 1994 and 2001, respectively: A) photograph taken in 1994 during the joint Romanian–British excavations, showing the effect of undercutting by the Danube; B) photograph of the concrete revetment built in 2000 to protect the site.

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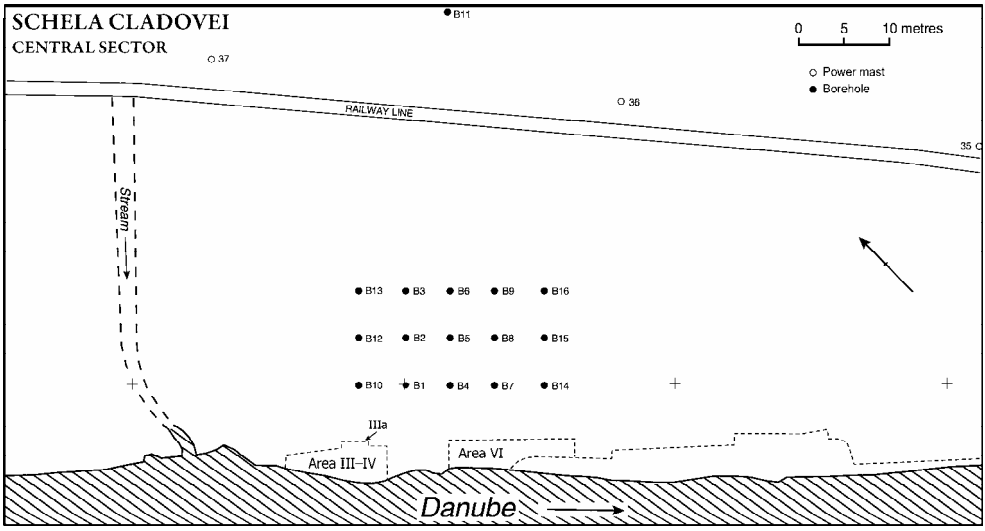

Fig. 3 – Plan of part of the Schela Cladovei archaeological site showing the areas investigated in 1991–1992.

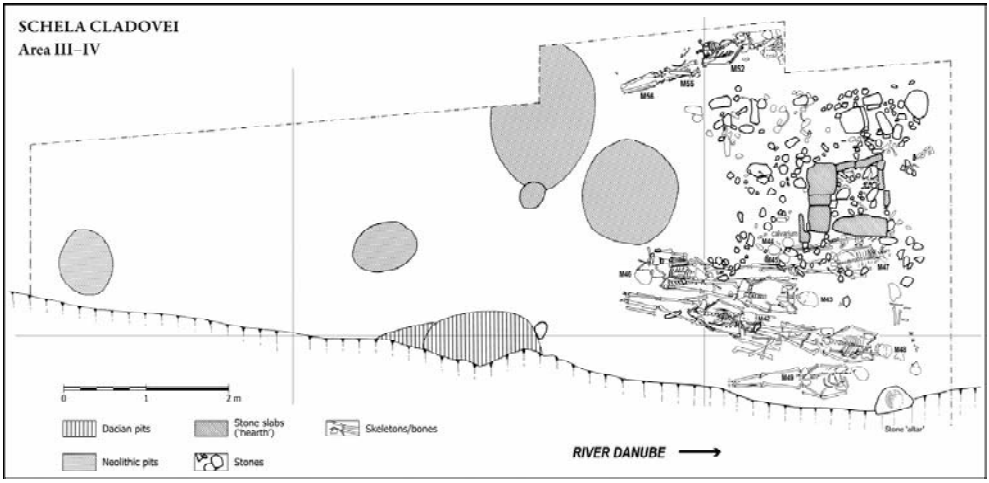

Fig. 4 – Sketch plan of Mesolithic burials and architectural features in Area III–IV at Schela Cladovei.

Conclusions

The burials uncovered in Area III at Schela Cladovei are a significant addition to the human skeletal material previously excavated from the site, and give an important insight into the nature of burial activity during the Late Mesolithic occupation. Mortuary practices resemble those at other Iron Gates later Mesolithic sites. The dead were deposited in simple grave pits in an extended,

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supine position, and provided with few grave goods. There is also evidence of the practice of excarnation and partial (re-) burial. The majority of burials are of adults, who were tall, physically robust and showed few signs of disease. Many individuals, however, had sustained injuries, often as a result of violence. In several cases, the injuries proved fatal. Paired AMS ^{14}C and stable isotope measurements indicate that the burials belong to a relatively short phase within the Late Mesolithic, and reflect a population that was heavily reliant on the fish, molluscs, and other resources of the Danube for its subsistence.

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POTS AND POTTERS IN THE MESOLITHIC-NEOLITHIC TRANSITION IN EUROPE

VASE ŞI MEŞTERI OLARI ÎN TRANZIŢIA DE LA MEZOLITIC LA NEOLITIC DIN EUROPA

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Cuvinte-cheie: Eurasia, tehnologie ceramică, neolitizare, paleo-ADN, toleranță la lactoză.

Rezumat: În această lucrare vom discuta despre inventarea tehnologiei ceramice şi dispersia produselor de olărie în contextele „vânătorilor-culegătorilor" şi fermierilor din Eurasia. Ne-am focalizat pe aspectele ce operează în paradigmele interpretative, care sugerează mişcări unidirecționale şi difuziunea „demică" dar şi corelațiile dintre ceramică şi haplogrupurile ADN legate de cromozomul Y şi distribuția lor în Europa din „Neoliticul inițial". Prezentăm rezultatele analizelor de ADN-mitrocondrial din mezolitic si neolitic, care sugerează variații în traiectoriile populaționale din Europa preistorică. În plus, facem comentarii privind ipoteza recent avansată, referitoare la corelația existentă între distribuția genei lactozei (LCT)-13910*T în cadrul populațiilor moderne din Europa, despre care s-a arătat că se asociază cu persistența lactozei, a regimului alimentar bogat în lactate şi tranziția către ferme în Europa Centrală.

Key words: Eurasia, ceramic technology, neolithisation, ancient DNA, lactose tolerance.

Abstract: In this paper we discuss the invention(s) of ceramic technology and the pottery dispersals in the hunter-gathers' and farmers' contexts in Eurasia. We focused on the narratives that operate within the interpretative paradigms suggesting unidirectional colonisation movements and 'demic' diffusion, and the correlation between the pottery and Y-chromosome DNA haplogrups distributions in Europe in the initial Neolithic. We present the results of ancient, Mesolithic and Neolithic mitochondrial DNA analyses, which suggest variations in population trajectories in prehistoric Europe. In addition, we comment the recently presented hypothesis of the correlation between the lactase (LCT) gene-13.910*T distribution within modern population in Europe, which has been shown to associate with lactase persistence and dairying, and the Neolithic transition to farming in Central Europe.

Introduction

Pottery was once archaeologically conceptualized by an interpretative triad suggesting that in the context of human social evolution, 'lower barbarism' (Neolithic) can be distinguished from 'upper savagery' (Mesolithic) by the

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presence of vessels that territorial distributions of pottery types reflect 'sharply defined archaeological cultural provinces'[1], and that the invention of ceramic technology and pottery making was '*the earliest conscious utilization by man of a chemical change...in the quality of the material…the conversion of mud or dust into stone*' in the Neolithic[2].

The decades later pottery assemblages contextualized within the initial European Neolithic settlement contexts were related to genetically identified haplogroups within the modern European populations and believed to mark the population movements across the Europe. This narrative operates within the two interpretative paradigms suggesting linear and unidirectional colonisation movements or the leap-frog colonization, and the 'demic' diffusion, both associated with the spread of agriculture frontier from central Anatolia via Balkans and central Europe towards the Atlantic and Baltic coasts. The parallel hunter-gatherers' pottery distribution in western Siberia, Russian Plain and northern Europe remains ignored. The appearance of ceramic technology and production of fired-clay vessels has an extended history in Eurasia that has not necessarily been related to the dynamics of the transition to farming. It is increasingly clear that diverse forms of ceramic technology had been used by hunter-gatherers long before the emergence of sedentary social structures appeared. The invention of ceramic technology in Europe was associated with female and animal figurine making in Gravettian and Epigravettian complexes in central and southern Europe. The introduction of fired-clay vessels, on the other hand occurred first in hunter-gatherer contexts in south-eastern (China), and eastern (Japanese archipelago and Russian Far East) Eurasia at c. 16,500 calBC.

Initial pottery distribution in south-eastern and north-eastern Europe in seventh millennium BC shows the wide-spread and contemporary appearance of pottery making techniques. The various methods of pottery technology and principles of vessel shaping and ornamenting reflect cultural complexity and local knowledge and not the hypothesized axial transfer of people and technology from the Near East.

Pots and Population: tracing the origins of southeast European Neolithic pottery

The appearance of pottery has long been studied in conjunction with the appearance of new populations. While the Neolithic pottery was hypothesised as a universal indicator of both, 'cultural identities' and 'distributions of ethnic groups', the morphological characteristics of Neolithic skeletal remains were believed to mark the Neolithic population trajectories. Thus Childe[3] related it to *'farmers'* who entered into the territories of '*herdsmen, hoe-cultivators and troglodytes*'

[1] Kossinna 1911.
[2] V. Cilde 1951, 90.
[3] Childe 1939, 10–26.

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southern and central Europe. Coon[4] associated it with the interactions between the local hunter-gatherers (the Alpines) and migrating newcomers (the Mediterraneans), that was believed to be determined by a 'dinaricization' process in which the "*Mediterranean type seems to be a brachycephalized by some non-Mediterranean agency*". The process was completed by the end of the Neolithic and in most of Europe, including southeast Europe, only 'Dinaric' populations remained. Coon's biologically determinate migration model was never recognized in archaeology, although the migration of 'Mediterraneans', the concept of blending populations, the cultural and population frontiers, and the regional and cultural traditions in pottery productions have remained focal points in interpreting the European Neolithic.

Parallel to Coon's (see also Pinhasi, von Cramon-Taubadel[5]) racial taxonomy and human phenotype dispersals, the distribution of pottery types and ornaments has been discussed in archaeology in the context of the colonization of southeastern Europe in the Early Neolithic. The pottery was recognized as 'the most obvious diagnostic element' for tracing 'waves of migrations' from Asia Minor[6]. In the most influential interpretation in the sixties, southeastern Europe was recognized as a 'western province of the Near Eastern peasant cultures', created by the processes of colonisation and acculturation'[7]. This assertion was grounded on the identification of 'common traditions in pottery styles' between the regions and in the distribution of 'oriental stamp-seals' and female figurines, and 'sometimes of animals, which may relate to religious cults'. Nandris[8] suggested that this dispersal marks early Neolithic 'cultural unity', which was 'greater than was ever subsequently achieved in this area of south-east Europe, down to the present day'. In this context, Greece was suggested as being the location of the 'foundation' and 'construction of the main features of Neolithic culture' in Europe[9]. The reconstruction of colonizing and acculturating logic was reduced to identifying the geographical distribution of 'monochrome' and painted pottery. Both achieved paradigmatic status as cultural and ethnic markers of the Neolithic diaspora, in which farming 'oriental' communities dispersed across the Peloponnese and Thessaly on the southern tip of the Balkan Peninsula. By the end of the Aegean early Neolithic, the diaspora was hypothesised as having spread to northern regions, and farming communities were established in the Balkans and Carpathian basin. A wave of migrations along the Vardar and Morava rivers, marked by the spread of white and red painted pottery, was hypothesised.

Cultural and ethnic distinctions were based on styles of pottery, and thus changes in cultural or ethnic groups were based on 'typological comparability and comparative stratigraphy'[10]. While red and white painted pottery was believed to indicate an Anatolian population and culture, coarse pottery was perceived as

[4] Coon 1939, 173
[5] Pinhasi & von Cramon-Taubadel 2009, e6747.
[6] Schachermeyer, 1976.
[7] Piggott 1965, 49–50; see also Roden 1965.
[8] Nandris 1970, 193, 202.
[9] D. Theocharis 1973, 58.
[10] Milojčić 1949; H. Parzinger 1993.

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something so local to the Balkans that "*we do not believe that this primitive pottery was introduced from Asia Minor*"[11]. Pottery assemblages with 'impresso' decoration made with the fingernail and shell impressions, or by pinching clay between finger and thumb, and 'barbotine' pottery with the application of a slip in the form of thick patches or trails that comprise the most popular types of pottery in the Balkans were explained simply as showing 'a clear 'regression in pottery production'[12]. In Thessaly, this pottery was linked to an interruption in the 'painted ware tradition'[13]. Milojčić, von Zumbusch and Milojčić[14] have suggested the interruption was associated with 'barbarian local production' brought into the region by a migrating population from the 'north', and marked by 'burnt layers' and settlement destruction in northern Thessaly at the end of the Early Neolithic. Meanwhile, it was hypothesised that white painted pottery marked 'a breakthrough' by Anatolian 'ethnic components' and Early Neolithic culture from Thessaly to the Northern Balkans and the Carpathian Basin[15]. Differences in decorative motifs and ornamental composition constituted clusters of cultures in the region: 'Anzabegovo-Vršnik' in southern Balkans, 'Starčevo', 'Körös', 'Criş' in its central and northern areas, and 'Kremikovci', and 'Karanovo' in its eastern parts. A parallel trajectory towards the Adriatic, and central and western Mediterranean was recognized in distributions of 'Impresso (Cardium)' pottery and associated cultures[16].

A similar migratory event was hypothesised in a 'leapfrog' or 'salutatory' demographic model that suggests migrations from one suitable environment to another. Van Andel and Runnels[17] hypothesised that Anatolian farmers had moved towards the Danube and Carpathian basin after reaching demographic saturation in Thessaly, which they had settled first. The Larissa plain in Thessaly was believed to be the only region in the southern Balkans that provided a reasonably assured and large enough harvest for the significant population growth that led to the next migratory move north. It was calculated that farmers needed 1,500 years to reach saturation point and to migrate to the northern Balkans.

The rate of spreading was first calculated from the small series of ^{14}C dates available at the time. Clark[18] allocated dates to three temporal zones running from Near East to Atlantic Europe and embedded in time span from 5200 BC to 2800 BC. He suggested that decreasing values of these dates be arranged in a southeast-northwest gradient, and that the sequential settlement distribution reflects 'the gradual spread of the Neolithic way of life' and associated materiality from the Near East over Europe. Much bigger series of standard ^{14}C dates was later

[11] Theocharis 1967, 173; cf. Thissen 2000, 163.
[12] Milojčić 1960, 32.
[13] Nandris 1970, 200.
[14] Milojčić – von Zumbusch & Milojčić 1971, 34, 151.
[15] Garašanin 1979; Pavlu 1989; M. Garašanin & Radovanović 2001, 121–122.
[16] Schubert 1999; Gheorgiu 2009.
[17] Van Andel & Runnels 1995.
[18] Clark 1965a; Clark 1965b.

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associated with early Neolithic cultures within the same decreasing gradient and similar temporal zones embedded in seventh millennium in southeastern and six millennium calBC in western Europe[19].

The interpretative paradigm constructed around the dichotomy 'civilized/barbarian' continued to be highly significant in the context of academic controversy over the Neolithisation process in south-eastern Europe, and thus pottery – and by proxy the manufacturers of that pottery – was interpreted in that light. It was embedded in both interpretative models – the 'Balkan-Anatolian cultural complex' and the 'frontier model' – determining differences between European and Oriental materiality and potential, and postulating a frontier between indigenous Mesolithic societies and the incoming farmers from surrounding areas. Both models maintain a perception of an allochthonous Anatolian population in association with a well-developed farming economy and pottery technology, and an autochthonous Balkan population able to produce only simple and coarse pottery that selectively adopts crop production and animal husbandry[20].

The distributions of material items, such as female figurines, sometimes exaggerated in form, stamp seals, anthropomorphic, zoomorphic and polypod vessels, which do indeed connect southeast Europe and west Anatolia, continue to support the perception of migrating farmers and the gradual distribution of the 'Near Eastern Neolithic package'[21]. It was suggested at this point that pottery style analysis indicates two culturally and population distinct trajectories for the spread of Neolithic culture in Europe: a Danubian/Balkan Route and a Mediterranean Route[22].

It is worth remembering that the beginning of the Neolithic in south-eastern Europe was marked neither by stamp seals nor ceramic female figurines. No single stamp has been found in the earliest Neolithic settlement contexts and none of the clay figurines can be securely dated to it[23]. When figurines appeared in the Balkans, they remained highly schematised, sometimes to the extent that their identification as anthropomorphic is debatable[24].

In general terms, the early Neolithic pottery assemblages on the Peloponnese and the most southern tip of the Balkan Peninsula consist of monochrome pottery, and 'a very limited use of painting'. The earliest pottery in Thessaly is chronologically contextualized within a range of c. 6500–6200 calBC (at 68.2%

[19] Breunig 1987; Biagi *et alii*, 2005.

[20] Benac *et alii*, 1979; Todorova 1998; Garašanin & Radovanović 2001; Perić 2002; Tringham 2000; Zvelebil & Lillie 2000; Lichardus-Itten & Lichardus 2003; Borić & Miracle 2004; Sanev 2004; Boroneanț & Dinu 2006.

[21] Lichter 2005; Özdoğan 2008.

[22] Ammerman & Biagi 2003; Bar-Yosef 2004; Lichter, 2007; Spataro & Biagi 2007; Bocquet-Appel & Bar-Yosef 2008; Rowley-Conwy 2011.

[23] Reingruber 2011.

[24] Vajsov 1998; Perlès 2001; for a general overview, see Hansen 2007.

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probability), with a high peak at about 6400, and one slightly less high at c. 6200 calBC[25]. Unpainted vessels were clearly the first to appear in the rest of the Balkans. The earliest settlement contexts with monochrome pottery at Poljanica, Lepenski Vir, Padina, Grivac and Poljna in the northern Balkans are ranging from c. 6440-6028) calBC (at 68.2% probability) [26] (Fig. 1).

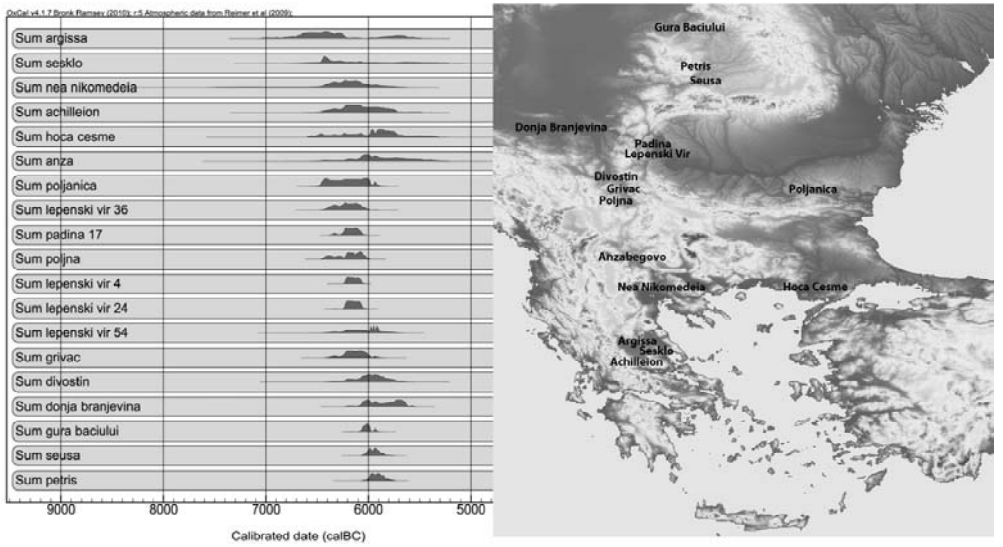

Fig. 1 – Site distribution and Sum probability plot of initial Neolithic pottery distribution based on available 14C data from Argissa, Sesklo, Nea Nikomedeia, Achilleion, Anzabegovov (Anza) and Hoca Cesme[27]; Poljanica[28]; Lepenski Vir, Padina,Poljna, Divostin, Donja Branjevina, Magareći Mlin and Pitvaros[29]; Grivac[30]; Gura Baciului, Seusa and Petris[31].

Since coloured ornaments were attached to pots in the northern Balkans and Carpathians at approximately 6000 calBC, a dichotomy of colour and motif perception in the European early Neolithic becomes evident. Red and brown geometric and floral motifs were limited to the Peloponnese and the southern Balkans; white painted dots and spiral motifs were distributed across the northern and eastern Balkans and southern Carpathians. None of them appeared in the early Neolithic on the eastern Adriatic[32].

[25] Perlès 2001; Thissen 2005 and 2009; Reingruber & Thissen 2009.
[26] Budja 2009 with references.
[27] Reingruber & Thissen 2005.
[28] Weninger *et alii*, 2006. Tab. 11.
[29] Borić & Dimitrijević 2009.Tab. 1;Tissen 2009.Tab. 4; Whittle *et alii*, 2002. 115, Fig. 9.
[30] Bogdanović 2004. 497.
[31] Biagi *et alii*, 2005. 46–47; Luca & Siciu, 2008.44;. Luca *et alii*, 2008. 328, Fig. 19.
[32] Schubert 1999 and 2005; Müller 1994.

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We cannot ignore, however, different regional patterns in the use of cereals within these areas. Cyprus is believed to relate culturally to the Levant, but their archaeobotanical assemblages have much less in common. The differences between the varieties of Neolithic wheat compositions recovered on mainland Greece and those on Crete are well known. The Karanovo, Starčevo and Körös cultures in the Balkans and the southern Carpathian Basin are recognized as forming a homogenous Neolithic cultural complex, but the composition of the plant suites found in the Balkan regions could hardly be more different[33].

The Early Neolithic painted pottery and ceramic female figurine distributions in Europe were suggested to be recognized as 'the best genetic predictor' of Neolithic Levantine farmers' haplogroups and of the (re)population dynamics in Europe. King and Underhil[34] hypothesised that Y-chromosome J haplogroup is 'the *best genetic predictor of the appearance of Neolithic painted pottery and figurines at various European sites'*. The suggestion was contextualised within the modern genetic studies of Eurasian population dynamics in prehistory. The geneticists Cavalli-Sforza[35] shifted the focus from phenotype to genotype, from skeletal morphological characteristic to classic genetic markers. They linked the first principal component of 38 gene frequencies of 'classic', non-DNA marker dispersal in modern European populations with the 'wave of advance' and the invasion of Levantine Early Neolithic farmers into Europe. They hypothesised that the transition to farming in Europe correlates with a massive movement of population from the Near East, without substantial contact with local Mesolithic populations. The elimination of the European autochthonous hunter-gatherer population was assumed. The scenario of the 'first demic event' that was hypothesised to significantly reshape European population structure and to generate a genetic continuity between the Neolithic population and modern populations in Europe were broadly accepted[36]. Since the revolution in the study of the human genome[37] the debate has shifted from the classic markers of certain genes to the loci in humans – the mitochondrial DNA present in both sexes, but inherited only in the maternal line; and the Y-chromosome present only in males and inherited exclusively through males[38]. Because they are nonrecombinant and highly polymorphic, they are seen as ideal for reconstructing human evolution, population history, and ancestral migration patterns. Thus different human nuclear DNA polymorphic markers (polymorphisms) of modern populations have been

[33] Perlès 2001, 62; Colledge *et alii*, 2004; Kreuz *et alii*, 2005; Coward *et alii*, 2008.
[34] R. King & Underhil 2002, 714.
[35] Cavalli-Sforza *et alii*, 1994.
[36] Budja 2009 and 2010.
[37] Renfrew 2000; Renfrew *et alii*, 2000.
[38] Jobling *et alii*, 2004.

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used to study genomic diversity and to define maternal and paternal lineage clusters, haplogroups, and to trace their (pre)historic genealogical trees and chronological and spatial trajectories. Particular attention has been drawn in recent years to the power of Y-chromosome biallelic markers as it allows the construction of intact haplotypes and thus male-mediated migration can be readily recognised[39]. It was hypothesised, however, that the southeast-northwest cline of frequencies for selected Y-chromosome markers and related haplogroups was associated with Levantine male contribution to the European Neolithic, and that they geographically overlap with the distribution of Early Neolithic settlements and the dispersal of artefact assemblages in Europe[40]. The Neolithic painted pottery and ceramic female figurine distributions in Europe was suggested to be recognized as the 'genetic predictor' of Neolithic Levantine farmers' population and of the (re)population dynamics in Europe (see above) (Fig. 2).

However, the invention of ceramic and the introduction of ceramic female statuettes and animal figurines was certainly not within the cultural domain of earlier Levantine hunter-gatherer societies, nor did they only appear on the 'eve of the appearance of an agricultural economy', as Cauvin[41] suggested. He even postulated an inter-linked economic and religious transformation, which explains why hunter-gatherers in villages outside the Levant did not develop subsistence production for themselves: their failure to 'humanise' their art and adopt new deities would have prevented them from making the transition to a new type of economy. Accordingly, Europe could not have become Neolithic until the 'wave of advance' and ceramic female figurines had reached the Balkans.

Knowledge of ceramic technology had been an element of Eurasian hunter-gatherer cultures for many millennia before the appearance of food-producing agricultural societies. We must also note two other facts: first, that the making of ceramic figurines predates the making of pottery, and second, that pottery was not necessarily associated with the emergence of farming, as in East Asia ceramic vessels had been made before early agriculture appeared.

The tradition of making ceramic figurines can be traced back to the central European Pavlovian cultural context, and then across the Russian Plain into southern Siberia, and ultimately back to the Levant and North Africa. It is now clear that the clay-figurine-tradition was deeply embedded in pre-existing Eurasian hunter-gatherer social and symbolic contexts. In central Europe, an assemblage of 16,000 ceramic objects – more than 850 figural ceramics – have been found Gravettian and Pavlovian hunter-gatherer camps at Dolní Věstonice, Předmostí, Pavlov I and Krems-Wachtberg[42]. At Dolní Věstonice, there was an oven-like

[39] For a review of the literature see Goldstein & Chikhi 2002; Richards 2003; O'Rourke 2003.
[40] Semino *et alii*, 2000; Rosser *et alii*, 2000.
[41] Cauvin 2000, 25.
[42] Verpoorte 2001, 95-100, Tab. 5.1; Farbstein, 2011.

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hearth in the centre of a hut-like structure in which 'two thousand pieces of ceramics, among which about 175 with traces of modelling' were dispersed. In addition, other ceramic finds had been deposited near a single male burial, around a triple burial, and in the vicinity of a large hearth. The available statistics indicate that almost all the figurines and statuettes were deliberately fragmented, although many of the pellets and balls which comprise a large quantity of the ceramic inventory were found intact[43]. The ceramics are embedded within time spans that range at 68.2% probability from 30,488 – 28,490 calBC at Dolní Věstonice and 30,080 - 29089 calBC at Krems-Wachtberg to 29,430 – 28,868 calBC at Předmostí and 29,372 – 27,664 calBC at Pavlov I calBP[44]. Recently 36 ceramic artefacts (fragments of a horse or deer figurines) from the cave site of Vela Spila on the Korèula Island offer the first evidence of ceramic figurative art in the Epigravettian in the Adriatic. The ceramic assemblage is dated within the period 19,102 – 16,012 calBC at 68.2% probability[45]. We thus may postulate that the ceramic female figurines are thus much 'predictors', to paraphrase King and Underhill, of Palaeolithic Gravettian and Epigravettian hunter-gatherers' haplogroups than of Neolithic farmers in Europe. We may assume as well the ceramic technology have been reinvented more than once in pre Neolithic Eurasian contexts (Fig. 1).

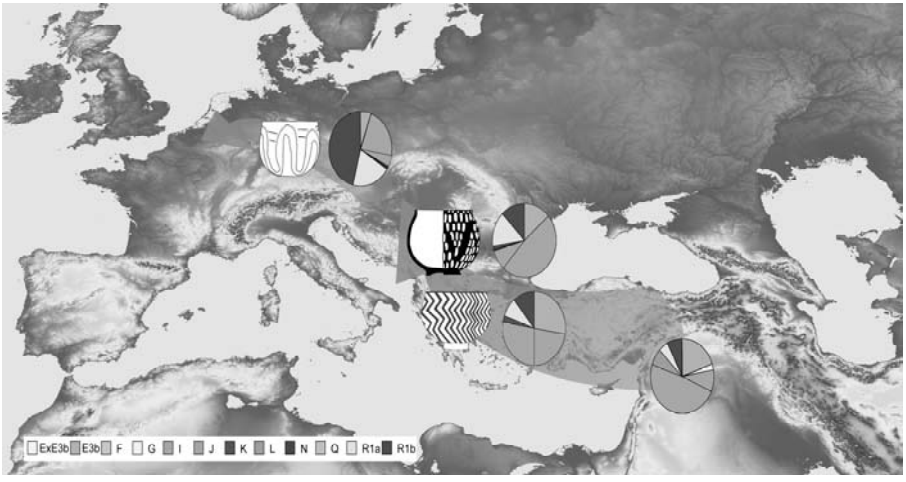

Fig. 2 – The southeast-northwest cline of frequencies for Y-chromosome haplogroups J and E within modern European populations were hypothesised to be associated with Levantine male contribution to the European Neolithic. It was suggested they geographically overlap with the distribution of Early Neolithic painted pottery, ceramic female figurines and settlements distributions in south-eastern Europe. The haplogroups distributions is based on McDonald's World HaplogroupsMaps[46].

[43] Soffer *et alii,* 2000; Verpoorte 2001, 56, 128.
[44] Verpoorte 2001, 40, 59, 90; Einwögerer and Simon 2008, 39.
[45] Farbstein 2012.
[46] McDonald 2005.

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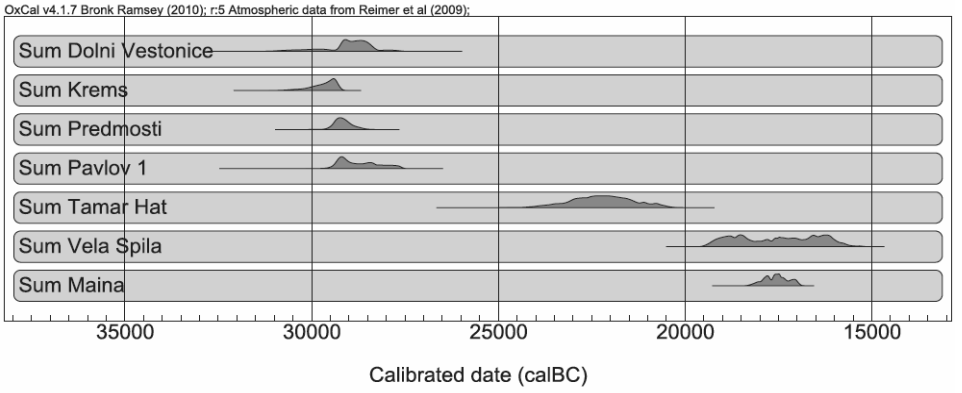

Fig. 3 – The ^{14}C distribution of ceramic figurines in pre-Neolithic contexts in Eurasia. The sequence is based on ^{14}C data sets from Dolní Věstonice, Pavlov I, Předmostí and Krems-Wachtberg in central Europe[47], from Vela Spila on the Korèula Island in Adriatic[48], from Tamar Hat in northern Africa and Maina in Siberia[49].

The introduction of fired-clay vessels, on the other hand occurred first in hunter-gatherer contexts in Eastern Eurasia, where it was associated with small-scale sedentary or semi-sedentary communities, millennia before the advent of agriculture[50]. The earliest dates for pottery come from southern China (Yuchanyan Cave) at around 16,500 to 15,500 calBC[51]. On the Japanese archipelago the incipient pottery assemblages are dated to 14,020–13,120 calBC[52], and in the Russian Far East around 15,990–7710 calBC (Gromatukha)[53].

However, the postulate that the geographically overlapping distribution of Early Neolithic artefacts and allele frequency clines reflects an individual and time limited demic diffusion of farmers that resulted in the colonization of Europe and the replacement of populations has recently lost its interpretative or any other power. Geneticists suggest that the modern peopling of Europe was a complex process, and that the view of the spread of the Neolithic in Europe as a result of a single demic event is too simplistic. The paternal heritage of modern population of Southeast Europe reveals that the region was both an important source and recipient of continuous gene flow. Recent studies of the Y-chromosomal paternal haplogroups E (M78), J1 (M267) and J2 (M172) strongly suggest continuous Mesolithic, Neolithic and post-Neolithic gene

[47] Verpoorte 2001, 40, 59, 90; Einwögerer and Simon 2008, 39.
[48] Farbstein 2012, 4–5.
[49] Farbstein 2011, 11.
[50] Jordan & Zvelebil 2009.
[51] Boaretto *et alii*, 2009; Lu, 2010.
[52] Taniguchi 2009, 38.
[53] Keally *et alii*, 2003; Kuzmin 2006.

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flows within Southeast Europe, and between Europe and the Near East in both directions. In addition, the low frequency and variance associated with I (M423) and E (V13) in Anatolia and the Middle East support the European Mesolithic origin of these two clades. The Neolithic and post Neolithic component in the gene pool is most clearly marked by the presence of the J (M241) lineage and its expansion signals associated with Balkan micro-satellite variation. Its frequency in Southeast European populations ranges from 2% to 20%. The remaining genetic variations are associated with pre-Neolithic hunter-gatherer haplogroups E, I, and R[54].

For some decades it was assumed that the geographical structuring of genetic diversity within Europe was exclusively the result of the 'first demic event' and the gene flow at the beginning of the transition to farming. Recent phylogenetic analyses of ancient – Mesolithic and Neolithic – maternally and paternally inherited mitochondrial (mt) and Y-chromosomal DNA (aDNA) show, however, that genetic structure of the European population and the transition to farming cannot be marginalized to gradual axial expansion of Levantine Neolithic farmers into Europe and to associated population replacements.

In recent years a number of studies have examined mitochondrial and Y-chromosomal DNA of the Mesolithic hunter-gatherers' and Neolithic farmers' human skeletons from Europe[55]. Advances in aDNA methods and next-generation sequencing have allowed new approaches, which can directly assess the genetic structure of past European populations. Mitochondrial aDNA analyses thus suggest variations in population trajectories in Europe. In central Europe Neolithic farmers differed in various genetic markers from both Mesolithic hunter-gatherers and from modern European populations[56]. The characteristic mtDNA type N1a with a frequency distribution of 25% among Neolithic LBK farmers in Central Europe shows in contrast low frequency of 0.2% in modern mtDNA samples in the same area[57]. The N1a type was not observed in hunter-gatherer samples from western and northern Europe. A rather different picture emerges from the Iberian Peninsula, as the Neolithic mtDNA haplotypes still prevails amongst modern populations[58]. Interestingly, there is no evidence of the mt aDNA haplogroup N1a neither in Spain nor in

[54] King *et alii*, 2008; Battaglia *et alii*, 2009.

[55] Pinhasi *et alii*, 2012.

[56] Haak *et alii*, 2005; Bramanti *et alii*, 2009; Haak *et alii*, 2010; Burger &Thomas, 2011; Guba *et alii*, 2011; see also Banffy *et alii*, 2012.

[57] Haak *et alii*, 2005.

[58] Sampietro *et alii*, 2007.

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France[59], which was highly present in Central Europe in the Neolithic. The mitochondrial aDNA sequences from contemporary hunter-gatherer and farmer populations in Scandinavia and Baltic differs significantly. These populations are unlikely to be the main ancestors of either modern Scandinavians or Saami but indicate greater similarity between hunter-gatherers and modern eastern Baltic populations[60]. It was suggested as well that Scandinavian Neolithic hunter-gatherers shared most alleles with modern Finnish and northern Europeans, and the lowest allele sharing was with populations from southeastern Europe. In contrast, the Neolithic farmer shared the greatest fraction of alleles with modern southeastern European populations but was differentiated from Levantine populations and showed a pattern of decreasing genetic similarity to 'populations from the northwest and northeast extremes of Europe'[61]. All these cases indicate that the process was far more complex and variable than was first thought. We still do not know what happened to the Mesolithic hunter-gatherer and Neolithic populations in South-East Europe, as no studies have been carried out in the region.

The dairying and the lactose tolerance are thought to have evolved in a relatively short period of time within a milk economy and brought into the Europe by migrating farmers in the Early Neolithic. The residue analysis of Neolithic ceramics shows that along with raw milk fats, dairy fat residues could come from fermented milk products such as yoghurt and cheese and that their detection indicates not only dairying, but also milk processing. The milk processing thus provided advantages in means of storing and transporting dairy products and making them available in times of low milk production[62]. The raw milk fats and the dairy fat residues (*i.e.*, lipids) preserved in ceramic vessel show that the beginning of exploitation of milk have occurred in the period between 7000–6000 calBC in Central Anatolia at earliest. In the Carpathian Basin it was embedded between 6000–5500, and in the southern Balkans between 5700–4200 calBC[63]. In northern Adriatic it was dated at ca. 5400 calBC[64].

The ability to digest lactose was associated with the emergence of farming and particularly the consumption of unfermented milk. The T allele of C/T polymorphism located 13,910 bp upstream of the lactase (LCT) gene – 13.910*T has been shown to associate strongly with lactase persistence[65]. A

[59] Lacan *et alii*, 2011.
[60] Linderholm 2011.
[61] Skoglund *et alii*, 2012.
[62] Craig *et alii*, 2005; Evershed *et alii*, 2008; Regert 2011.
[63] Evershed *et alii*, 2008.
[64] Šoberl *et alii*, 2008; D. Mlekuž *et al*., 2008.
[65] N.S. Enattah *et alii,* 2002; Beja-Pereira *et alii*, 2006; Tishkoff *et alii*, 2007.

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simulation model of the Neolithic origin and evolution of lactase persistence and dairying which was based on modern population in Europe has inferred that natural selection started to act on an initially small number of lactase persistent dairyers in a region between Central Europe and the northern Balkans[66]. However, palaeogenetic analysis of Neolithic skeletons in the Central Europe in the Mediterranean and in the Baltic revealed an absence of the allele in all cases suggesting that lactase persistence frequency in Early Neolithic Europeans may have been zero[67].

We already mentioned that early pottery actually occurred first in hunter-gatherer contexts in Eastern Eurasia where it was associated with small-scale sedentary or semi-sedentary communities. In recognising that the production of fired-clay vessels has an extended history, we must acknowledge that the emergence of pottery technology in Europe has not necessarily been related to the transition to farming in Levant. The deeply established assumption about the exclusive southeast-northwest gradient of overlapping pottery, early agricultural and population dispersals into the Europe is now approaching fundamental revision. The parallel pottery distribution in Northern and Eastern Europe in hunter-gatherer contexts shows the widespread and almost contemporary appearance of different pottery making techniques[68]. The earliest hunter-gatherers' sites are located along the rivers Ob and Tobol in western Siberia and eastern Urals. The vessels forms are simple with the rounded or pointed bases. They are ornamented by stab-and-drag and incision techniques. The simple decoration consists of horizontal stripes, consisting of alternating straight, wavy and slanting lines (Zakh 2006; Chairkina, Kosinskaia 2009, 212–214). The 14C dates of Yurtobor's and Sosnovy Ostrov's pottery assemblages vary within a rather wide range 8306–6432 calBC (at 68.2% probability) time span[69].

Further to the west in the Middle Volga River, the oldest pottery was contextualized in Elshanka (Yelshanian) culture. It was found on the small seasonal sites, scattered in a vast forest-steppe area. Small vessels with conic and flat bases were made from salty clay tempered with organic mater, fish scales and crumbled animal bones. They are decorated with imprints of pits, notches, incised lines and lines forming rows, triangles, rhombi and zigzags. The earliest 14C dates at Chekalino and Lebyazhinka range between 8295 and 7328 calBC at 68,2% probability. They are based on fresh water mollusc shells but as the reservoir age value is not known for the East European Plain these

[66] Itan *et alii*, 2009 and 2010; Leonardi *et alii*, 2012.

[67] Burger *et alii*, 2007; Burger & Thomas 2011; Lacan *et alii*, 2011; Linderholm 2011; Nagy *et alii*, 2011.

[68] Piezonka 2008; Dolukhanov *et alii*, 2005; Dolukhanov *et alii*, 2009.

[69] Zakh 2006, 77.

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results should be considered to be too old[70]. The dates on pottery carbon at Ivanovskaya range between 7070–6265 calBC at 68,2% probability[71]. In northern part of East European Plain, on the Upper Volga and Oka Rivers the earliest pottery sites are embedded in the time span 6218–5811 calBC (at 68,2% probability)[72]. Further to north in Karelia in European Russia the early pottery was contextualized in hunter-gatherer sites on the southern shores of Lake Onega. The earliest context (Tudozero V) is dated to c. 6209–6049 calBC and the later (Sperrings) to c. 5512–4947 calBC (at 68,2% probability). The point-based vessels were decorated with fish vertebra impressions and later replaced with comb and punctated lines[73]. On southern Baltic the early pottery dispersals are embedded in time span of c. 5462–5303 in eastern (Narva), c. 5611–5471 in central (Neman), and c. 5466–5316 calBC (at 68,2% probability) on western (Ertebølle) coast[74]. The vessel shapes, the coiling technique and sparse decoration are similar in all cultural contexts (Figs. 4 and 5).

Fig. 4 – Initial pottery distributions in southeastern and northeastern Europe in seventh and sixth millennium calBC shows the wide-spread and contemporary appearance of pottery making techniques. The various methods of pottery technology and principles of vessel shaping and ornamenting reflect cultural complexity and local knowledge. The Y-chromosome haplogroups distributions is based on McDonald's World HaplogroupsMaps[75].

[70] See Viskalin 2006.

[71] Dolukhanov *et alii*, 2005, Tab. 8; Vybornov 2008, 128–129, Tab. 1 and 2008a, 18–19; Zaitseva *et alii,* 2009, 799–800, Tab. 1.

[72] Tsetlin 2008, 234, Tab. 66; Zaretskaya & Kostyliova 2008, Tab 1.

[73] German 2009.

[74] Hallgren 2009.

[75] McDonald 2005.

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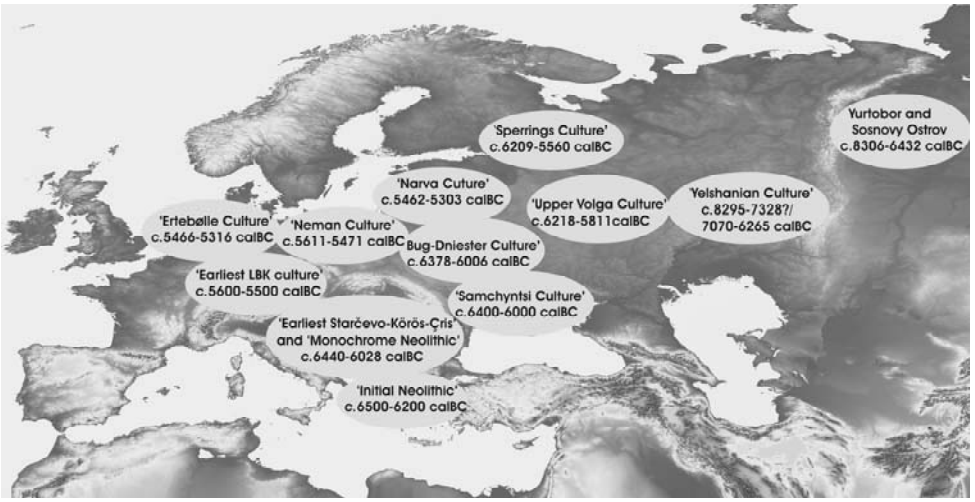

Fig. 5 – Initial, radiocarbon dated pottery distributions in hunter-gatherer groups in northeastern Europe, and in farming groups in southeastern, central and western Europe. For cultural contexts and 14C dates see text with references.

Concluding remarks

Initial pottery distribution in Europe shows two almost contemporary but geographically distinctive trajectories. The northern is embedded in the hunter-gatherer contexts. The southern is suggested to be associated with the transition to farming in the region. The pottery assemblages in both contexts differ in vessel shapes, production techniques and decorations. While the vessels with conic bases have not been modelled in southeastern Europe, the coloured ornaments have never been attached to the vessels in northeastern and northwestern Europe. Unpainted vessels were clearly the first to appear in Europe in seventh millennium calBC. Since coloured ornaments were attached to the pots in southeastern Europe dichotomy of colour and motif perception in the European Early Neolithic becomes evident. Red and brown geometric and floral motifs were limited to the Peloponnese and the southern Balkans; white painted dots and spiral motifs were distributed across the northern and eastern Balkans and southern Carpathians[76].

A critical reflection on the demic diffusion model and hypothesised population replacement during the initial European Neolithic in archaeology and population genetics shows that the hypothesis of gradual pottery distribution and the suggested time span vector believed to mark migration and acculturation – the absorption of hunter-gather groups by farmers are unrealistic. Geneticists suggest that the peopling of Europe is a complex process and that the view of the spread of

[76] H. Schubert 1999.

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the Neolithic in Europe being the result of a unique and homogeneous process is too simplistic. Y-chromosomal paternal lineages in modern populations reveal the signatures of several demographic population expansions within Europe, and between Europe and western Asia in both directions. This continuous gene flow and demographic expansion have been calculated for the Mesolithic, Neolithic and Chalcolithic periods, and seem to be more visible in the frequency of Y-chromosome markers in modern populations in the Balkans and Mediterranean than in other regions. Recent phylogenetic analyses of ancient – Mesolithic and Neolithic – mitochondrial (mt) and Y-chromosomal DNA (aDNA) show even more complex picture. They suggest variations in population trajectories in Europe. In central Europe Neolithic farmers differed in various genetic markers from both Mesolithic hunter-gatherers and from modern European populations. A rather different picture emerges from the Iberian Peninsula, as the Neolithic mtDNA haplotypes still prevails amongst modern populations. Interestingly, there is no evidence of the haplogroup N1a, with a frequency distribution of 25% among Neolithic LBK farmers in central Europe, neither in Spain nor in France. The mt-aDNA sequences from contemporary hunter-gatherer and farmer populations in Scandinavia and Baltic differs significantly. These populations are unlikely to be the main ancestors of either modern Scandinavians or Saami but indicate greater similarity between hunter-gatherers and modern eastern Baltic populations.

All these data indicate that the processes of the Mesolithic-Neolithic transformation were far more complex and variable than was first thought. We may suggest that the initial pottery distributions Europe shows the wide-spread and contemporary appearance of different pottery making techniques and ornamental principles within different populations, and cannot be explained as an axial transfer of people and technology, either embedded in 'first demic event' or in leap-frog colonization, from the Near East to southeastern Europe.

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PROBLÈMES CONCERNANT LE DÉBUT DU NÉOLITHIQUE DE L'ESPACE CARPATIQUE DANS LES TRAVAUX DE EUGEN COMŞA

PROBLEME PRIVIND ÎNCEPUTUL NEOLITICULUI ÎN SPAŢIUL CARPATIC ÎN LUCRĂRILE LUI EUGEN COMŞA

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Cuvinte-cheie: România, Europa Centrală şi de Sud-Est, neolitic timpuriu, E. Comşa.
Rezumat: Comunicarea analizează importantul rol ocupat de E. Comşa în studierea începuturilor neoliticului pe teritoriul României, în contextul mai larg, al Europei de Sud-Est şi Centrale. Implicarea lui E. Comşa în problemele neoliticului carpato-dunărean s-a produs chiar de la începutul marilor săpături din anii '50 ai secolului trecut, care au schimbat fundamental viziunea asupra acestei perioade. Implicarea constă atât în participarea directă la descoperirea unor culturi din neoliticul timpuriu (Starčevo-Criş, cultura ceramicii liniare, Dudeşti, Ciumeşti), ca şi în realizarea primelor sinteze despre aceste culturi în istoriografia din România. Prin contribuţiile sale, a reuşit să plaseze respectivele culturi în tabloul de ansamblu al neoliticului din România.
De asemenea, savantul bucureştean şi-a adus o însemnată contribuţie la cunoaşterea legăturilor acestor culturi cu cele din ţările vecine, integrându-le astfel în neoliticul european.
E. Comşa a avut o importantă contribuţie şi în prezentarea descoperirilor din neoliticul României dincolo de hotare, prin participarea sa la numeroase manifestări arheologice internaţionale, ca şi prin publicarea unor cărţi de mare valoare şi a câtorva sute de articole în diverse reviste din întreaga lume.

Mots-clés: Roumanie, Europe Centrale et Europe du Sud-Est, Néolithique, E. Comşa.
Résumé: Cet article analyse le rôle important occupé par E. Comşa dans l'étude des commencements du Néolithique sur le territoire de la Roumanie, dans le contexte plus large de l'Europe de Sud-Est et Centrale. L'implication de E. Comşa aux problèmes du Néolithique carpato-danubien s'est produit même du premier moment de grandes fouilles des années '50 du siècle passé, qui ont changé fondamentalement la vision sur cette période. Son implication s'est passée tant par la participation directe à la découverte de quelques cultures du Néolithique ancien (Starčevo-Criş, la céramique linéaire, Dudeşti, Ciumeşti) aussi bien que par la réalisation de premières synthèses concernant ces cultures dans l'historiographie de Roumanie. Par ses contributions, il a réussi à fixer leur place dans le tableau d'ensemble du Néolithique de Roumanie.
En même temps, le savant bucarestois a eu un grand apport à la connaissance des relations entre ces cultures et les civilisations des pays voisins, en les intégrant dans le Néolithique européen.
On remarque aussi l'importante contribution de E. Comşa à la présentation des découvertes du Néolithique de la Roumanie au-delà de frontières, par sa participation à de nombreuses manifestations archéologiques internationales, ainsi que par la publication de livres de grande valeur et de quelques centaines d'articles en diverses revues internationales.

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On dédie notre étude à la personnalité scientifique de Eugen Comşa (1923–2008), à sa contribution à la connaissance de la période néolithique sur l'ensemble du territoire de la Roumanie ainsi que pour différents aspects régionaux ou thématiques[1].

Le nom de E. Comşa se confond avec une page importante de l'histoire de la recherche du Néolithique de l'espace carpatique, qui couvre plus d'une moitié de siècle, après 1950 jusqu'à nos jours. Même si une approche générale de l'œuvre scientifique de l'archéologue E. Comşa peut paraître prématurée, nous avons considéré pourtant, qu'un bilan provisoire s'impose afin de regarder, avec le détachement du temps écoulé, les contributions réelles qu'il a apportées à la connaissance d'une période, durant plus de quatre millénaires. Nous ne nous arrêterons pas à de détails, qui peuvent être quelquefois discutables et disputés, même au-delà de leurs dimensions normales.

La présence scientifique de E. Comşa est ressentie en quelque aspect du Néolithique et de l'Enéolithique du territoire de la Roumanie. Nous croyons ne pas commettre une erreur quand nous affirmons qu'il est le seul chercheur du Néolithique roumain qui a des contributions ponctuelles pour toutes les provinces de la Roumanie. Même si ses zones préférentielles d'étude ont été celles de Valachie et de Dobroudja, son œuvre comprend à la fois, de nombreux articles et des références, dans les travaux de synthèses aux territoires de Transylvanie[2], Moldavie[3], Olténie[4] et du Banat[5], pas seulement sur la foi des informations bibliographiques, mais aussi sur la base des résultats de ses investigations. De plus, ces aspects ont été intégrés dans l'espace plus large de l'Europe Sud-Orientale et Centrale, avec des références à des découvertes de dernière heure de Bulgarie[6], l'ancienne Union Soviétique[7], l'ancienne Yougoslavie[8] et d'autres, qu'il les a connu directement, par suite de sa participation intense à de nombreuses manifestations scientifiques internationales. Eugen Comşa n'a pas retenu ces nouvelles pour lui-même, mais les a aussi communiquées, dans un bref délai, aux collègues, qui n'ont pas eu la chance de faire de tels voyages de documentation. Même si quelques-uns des aspects qu'il communiquait ont parfois provoqué des disputes contradictoires, les informations fournies ont eu le mérite de souligner des problèmes récents, au niveau des connaissances européennes, dans une période où les contacts externes des chercheurs de Roumanie étaient un rêve de plus en plus difficile à réaliser.

[1] Notre communication a été préparée pour la session scientifique dédiée à l'anniversaire de 85 ans de vie du savant (Bucarest, 6–12 octobre 2008). Malheureusement, entre temps, est intervenu sa disparition, mais nous avons considéré que le fond de notre hommage reste valable.

[2] Par exemple: Comşa 1963a; 1965b; 1966a; 1970a; 1973a; 1973b; 1975a; Comşa & Nánási, 1971; 1972; Comşa, Kacsó 1973.

[3] Par exemple: Comşa 1963b; 1978a; 1983a; 1991; 1994a; 1995b; 1997b; 1998b.

[4] Par exemple: Comşa 1968a; 1968b; 1973d.

[5] Par exemple: Comşa 1965a; 1966b; 1969a; 1969b; 1993c.

[6] Comşa 1958; 1962; 1973c; 1974; 1994b.

[7] *Idem* 1959c; 1971b; 1982a.

[8] *Idem* 1973c; 1974b; 1990.

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De même, afin de suppléer à cette lacune d'information, ressentie dans l'archéologie roumaine, E. Comşa a systématisé les titres de spécialités roumains, aussi bien que ceux étrangers avec une liaison à la préhistoire de la Roumanie, dans une série de volumes bibliographiques, dédiés surtout au Néolithique[9], mais aussi au Paléolithique[10], à l'Âge du Bronze[11] et au deuxième Âge du Fer[12]. La voie ouverte par E. Comşa attend des continuateurs, afin que ces excellents instruments de travail connaissent une édition revue, par les moyens modernes d'information (la première édition des volumes étant déjà une rareté), aussi bien qu'une suite avec les parutions plus nouvelles[13].

De la multitude d'aspects concernant l'étude du Néolithique et de l'Enéolitique, qui résulte de l'œuvre de Eugen Comşa, notre attention a été particulièrement retenue par les aspects concernant les commencements du Néolithique, parce qu'ici, à notre avis, plus que sur un autre sujet, il a lié son nom à la découverte et à l'encadrement culturel et chronologique de quelques nouveaux horizons d'habitat, qui ont placé les premières manifestations de la vie néolithique dans l'espace carpatique, avec quelques millénaires en arrière.

Tandis qu'à la fin de la deuxième guerre mondiale, le Néolithique de Roumanie commençait avec des cultures, comme Boïan, Précucuteni, Turdaş, Vădastra[14], qui sont, à présent, considérées comme appartenant chronologiquement au début de la période énéolithique, les intenses recherches entreprises dans la sixième décennie du siècle passé, au sein desquelles E. Comşa a été l'un de plus actifs participants, ont mis au jour les vestiges de quelques nouvelles civilisations, appartenant au Néolithique proprement dit.

Dans les fouilles effectuées au cadre de grands chantiers des bassins des rivières Jijia-Prut[15], E. Comşa a été membre du collectif coordonné par le Prof. Ion Nestor, en devenant ainsi l'un des découvreurs des plus anciennes cultures néolithiques de Roumanie, Starčevo-Criş[16] et la culture de la céramique rubanée[17]. De plus, il a contribué à l'approfondissement des connaissances concernant les deux cultures. Dans quelques études de synthèses dédiées à celles-ci autour des années 1960, E. Comşa a mis en évidence leur origine, les voies de diffusion, les caractéristiques de l'évolution sur le territoire de la Roumanie, ainsi que le rôle joué dans la naissance des civilisations ultérieures. Il a également dressé les premiers répertoires des découvertes du type Criş et de la céramique rubanée de

[9] *Idem* 1976a; 1977a.
[10] *Idem* 1978c.
[11] *Idem* 1996a.
[12] *Idem* 1993a.
[13] L'existence de la *Bibliographie historique de la Roumanie* (avec des parutions à chaque cinq ans) ne peut pas suppléer les volumes thématiques pour chaque époque, qui sont beaucoup plus approfondis.
[14] Petrescu-Dîmboviţa 1945; Nestor 1932; 1950; Marin 1952.
[15] Nestor *et alii,* 1950; Nestor *et alii*, 1951.
[16] Nestor 1950; Petrescu-Dîmboviţa 1958.
[17] Nestor 1951.

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Roumanie[18]. Eugen Comşa a adapté les périodisations élaborées par les chercheurs tchécoslovaques pour la culture de la céramique rubanée, aux données concrètes de Roumanie, en offrant le premier schéma de l'évolution de cette culture sur le territoire roumain. Ultérieurement, il est revenu sur ce sujet à l'occasion d'un symposium international, dédié à la céramique rubanée de toute l'Europe[19]. Dans une ample étude, il a publié aussi le mobilier de la céramique rubanée des fouilles de Glăvăneşti (dép. de Iaşi), en apportant de nouvelles précisions sur l'évolution de cette culture dans l'Est de la Roumanie[20].

En ce qui concerne la première culture néolithique de Roumanie, Starčevo-Criş, Eugen Comşa est revenu plusieurs fois sur la synthèse publiée en 1959, présentant amplement les vestiges matériels ressortis des sites importants de Glăvăneşti[21] et de Valea Lupului[22] (dép. de Iaşi), ce qui lui a permis de mettre en évidence une évolution locale, de ce vaste complexe culturel, en Moldavie, établissant l'existence de deux phases, dénommées selon les deux habitats[23]. Ce système de périodisation a ainsi permis de préciser quelques aspects locaux de la culture Starčevo-Criş sur le territoire de la Moldavie, ainsi que les étapes d'évolution, dans le cadre de ces aspects[24]. Il a publié aussi des matériaux inédits des stations Starčevo-Criş, qui n'ont pas été mis en valeur par leurs découvreurs, comme ceux de Dulceanca[25]. E. Comşa a également traité, dans plusieurs études, du problème de la culture Starčevo-Criş dans le cadre plus large de la néolithisation du territoire nord-danubien, apportant d'importantes précisions concernant les débuts du Néolitique en Roumanie[26].

C'est qu'à partir de l'existence de deux grandes aires dans le cercle culturel *Bandkeramik* – c'est-à-dire celle du bassin de Tisza et celle éparpillée de l'Europe Centrale tant vers l'Ouest que vers l'Est du continent –, Eugen Comşa a recherché aussi une série d'habitats du Nord-Ouest de la Roumanie[27], d'après lesquels il a définit une nouvelle culture (Ciumeşti)[28]. Cette culture se trouve en liaison avec les découvertes de céramique rubanée du bassin de Tisza[29], représentant un autre aspect des débuts de la période néolithique sur le territoire de la Roumanie[30]. On a souligné les fortes persistances de l'ancien fond culturel tardenoisien au cadre de cette culture néolithique[31], ce qui a posé le problème de la participation de

[18] Comşa 1959a; 1959b; 1960a.
[19] *Idem* 1972.
[20] *Idem* 1994a.
[21] *Idem* 1978a.
[22] *Idem* 1991.
[23] *Idem* 1970a.
[24] Ursulescu 1984.
[25] Comşa 1994c; 1995c.
[26] *Idem* 1977c; 1978b; 1978d.
[27] *Idem* 1963a; Comşa et Nánási, 1971; 1972.
[28] Comşa 1973a.
[29] Kalicz et Makkay, 1977; Comşa 1987a, 31–32.
[30] Comşa 1987a, 32.
[31] Păunescu 1963.

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l'ancienne population épipaléolithique à la synthèse culturelle qui a conduit à la formation de la première culture néolithique dans le Nord-Ouest de la Roumanie. Les recherches ultérieures ont prouvé l'existence, dans cette zone, d'une longue évolution locale, dénommée Pişcolţ[32] (ou Ciumeşti-Pişcolţ)[33], avec d'importantes liaisons vers les phénomènes du Néolithique ancien et récent du bassin moyen de la Tisza.

A l'occasion de l'étude sur l'origine et l'évolution de la culture Boïan[34], par les fouilles effectuées surtout autour du Bucarest, E. Comşa, a mis au jour les vestiges d'une civilisation plus ancienne, Dudeşti, dont les communautés ont occupé, à leur tour, le court habitat Starčevo-Criş de Valachie. Après une série de communications préliminaires[35], la nouvelle culture a été amplement présentée dans une étude de synthèse[36], dans laquelle tous les aspects importants qui concernent son apparition et son évolution en Valachie ont été précisés. Des recherches ultérieures, entreprises en Olténie, ont élargi l'aire de diffusion ainsi que la période d'existence de cette culture[37] et ont mis en évidence les importantes relations avec la culture Vinča[38]. De même, la trouvaille de vestiges semblables avec ceux du type Dudeşti sur les territoires de Bulgarie (Usoe I)[39], et de Turquie (Demircihüyük – chalcolithique moyen)[40] a démontré le tracé méridional des communautés qui ont formé cette culture au Nord du Danube[41]. C'est qu'à partir d'une série d'importations de céramique rubanée, trouvées dans des sites Dudeşti de Valachie[42], Eugen Comşa a mis aussi en exergue la dimension des contacts entre les communautés des deux cultures et a souligné leur rôle dans la formation de la culture Boïan[43].

Nous ne pouvons pas négliger les contributions de Eugen Comşa à la connaissance des débuts de la vie néolithique sur le territoire de la Dobroudja, autant par ses recherches personnelles[44] que par des études interprétatives. A la différence d'autres chercheurs[45], il considère qu'initialement quelques communautés néolithiques anciennes du type Starčevo-Criş se sont aussi

[32] Lazarovici et Németi, 1983; Maxim 1999, 75–80.
[33] Ursulescu 2002, 73.
[34] Comşa 1957; 1974a.
[35] *Idem* 1956; 1959d; 1961.
[36] *Idem* 1971c.
[37] Nica 1976.
[38] *Idem* 1991; Comşa 1987c.
[39] Todorova & Vajsov, 1993, 145, fig. 125–126 (Usoe I).
[40] Korfmann 1978, 91; Seeher 1987, 57 et surtout fig. 21 (la catégorie céramique E).
[41] Comşa 1987a, 37 mentionne qu'il a fait la détermination culturelle des fragments céramiques du type Dudeşti, provenant de Demircihüyük, à l'occasion des symposiums de Varna (1976) et Xanthi (1981).
[42] *Idem* 1969c; 1974c.
[43] *Idem* 1972; 1985a.
[44] *Idem* 1953, 750: les microlithes de Garvăn (dép. de Tulcea) représenterait la preuve qu'à la base de l'apparition du Néolithique en Dobroudja on trouve un fond tardenoisien (*idem* 1971d; 1987a, 30). Voir aussi Comşa 1977b.
[45] Bolomey 1978.

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probablement établies en Dobroudja et puis que les communautés de la culture Hamangia se sont éparpillées entre le Danube et la mer Noire[46].

Les préoccupations concernant les débuts du Néolithique, sur le territoire de la Roumanie, n'apparaissent pas seulement dans des études consacrées spécialement à ce problème, mais aussi dans différents travaux thématiques, dédiés à un aspect particulier de la vie à cette période. Il s'agit soit des occupations et coutumes traditionnelles de la population néolithique (l'agriculture[47], l'élevage[48], la chasse[49], la poterie[50], la construction des maisons[51], l'habit[52], etc.[53]), soit de sa vie spirituelle[54], soit des rites et des rituels funéraires[55], soit de l'utilisation de différentes matières premières[56], ou des changements intercommunautaires[57].

De même, le problème des commencements du Néolithique sur le territoire de la Roumanie se retrouve bien réfléchi dans différents travaux de synthèses sur cette époque dans l'espace carpato-danubien[58], où E. Comşa accorde une attention toute particulière justement au phénomène de la néolithisation de différentes zones, les choses étant aussi regardées à la lumière des contacts avec les communautés des territoires avoisinants à l'espace roumain.

Les nombreuses invitations reçues de participer à de prestigieuses manifestations scientifiques représentent justement un témoignage sans conteste du prestige dont s'est joui Eugen Comşa dans le monde archéologique international.

L'effort permanent, fait par E. Comşa, de présenter les découvertes néolithiques de notre pays dans des langues de large circulation internationale, apportant ainsi une contribution majeure à la connaissance des vestiges de l'époque néolithique de Roumanie dans les plus larges cercles de spécialité, mérite d'être souligné. Les nombreuses invitations qu'il avait reçu à participer à de prestigieuses manifestations scientifiques représentent justement un témoignage sans conteste du prestige dont jouïssait Eugen Comşa, dans le monde archéologique international.

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[49] *Idem* 1981c; 1983c; 1983e.
[50] *Idem* 1981b.
[51] *Idem* 1985c; 1986b; 1986c; 1998c; 2000.
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THE OSSEOUS ARTEFACTS OF THE STARČEVO-CRIŞ CULTURE IN ROMANIA. AN OVERVIEW

INDUSTRIA MATERIILOR DURE ANIMALE ÎN CADRUL CULTURII STARČEVO-CRIŞ DIN ROMÂNIA. PRIVIRE GENERALĂ

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Cuvinte-cheie: cultura Starčevo-Criş, industria materiilor dure animale, tehnologie, preistorie, România.

Rezumat: Lucrarea prezintă rezultatele analizei unei colecţii compuse din 653 artefacte din materii dure animale, descoperite într-un număr de 45 aşezări aparţinând culturii Starčevo-Criş. Piesele sunt confecţionate din materiale diverse (os, corn de cerb şi căprior, dinţi, cochilii de scoici şi melci) şi aparţin unor categorii tipologice, grupe şi tipuri variate (unelte, arme, piese de port şi de podoabă, elemente receptoare, piese tehnice etc.). Prilejul de faţă este utilizat pentru studiul opţiunilor tehnologice în domeniu şi pentru definirea unor activităţi economice specifice ilustrate de acest gen particular de industrie preistorică, creată de primele comunităţi sedentare cunoscute în regiunile de la nordul Dunării de Jos.

Key words: Starčevo-Criş culture, artefacts from skeletal materials, technology, Prehistory, Romania.

Abstract: The paper presents the results of analysis of an assemblage of 653 artefacts discovered in 45 sites of the Starčevo-Criş culture from Romania. The pieces are manufactured on diverse animal skeletal materials and belong to various types. This is an opportunity to analyse better the technological choices and to define some specific economic activities illustrated by the artefacts worked from skeletal materials related to the first settled communities in the Northern Lower Danube regions.

Introduction

The systematic research of the Early Neolithic sites from Romania (Starčevo-Criş culture) started in the first decade after World War II. There is a large bibliography from which we cite only some titles[1].

[1] Andreescu & Mirea 2008; Biagi, Shennan, Spataro 2005; Ciută 2005; Ciută 2009; Diaconescu, Luca, El Susi, Dumitrescu-Chioar 2009; Lazarovici 1984; Lazarovici 1996; Lazarovici 2005;

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Despite the large amount of bone and antler artefacts discovered since then, these were only recently studied entirely and in a unitary manner[2].

On this occasion we can remark and appreciate the various contributions of Eugen Comşa to the knowledge of the Neolithic artefacts from skeletal materials discovered in Romania, including those belonging to the Starčevo-Criş culture[3].

Recent discoveries from some important sites have a significant importance. Such examples are: Cerişor – "Cauce Cave", Hunedoara County; Măgura, Teleorman County; Miercurea Sibiului – "Petriş", Sibiu County; Şeuşa – "La Cărarea Morii", village Ciugud, town Alba Iulia, Alba County[4].

The detailed study of these artefacts (the typology, the technological analysis – the "manufacturing chain", the wear traces, the hypothesis regarding functionality) go a long way towards the technological research regarding the Starčevo-Criş communities[5].

The synthetic approach of the study takes into consideration different aspects: the repertoire, the typology, the dimensions, the technical study (the phases of the "manufacturing chain" and the phases of use: débitage, the manufacture/*façonnage* phase, the perforation, the hafting, the way/ways of use, the abandonment conditions).

The artefacts dated from the earlier phases of the Starčevo-Criş culture (IB – IIA) present a special interest because they are the first tools belonging to the oldest communities of farmers which spread in the Northern part of the Lower

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Lazarovici & Maxim, 1995; Luca 1999; Luca 2006a; Luca 2006b; Luca, Diaconescu, Georgescu, Suciu 2007; Luca, Diaconescu, Georgescu, Suciu 2009; Luca, Diaconescu, Suciu 2006; Luca, Diaconescu, Suciu 2008a; Luca, Diaconescu, Suciu 2008b; Luca, Roman, Diaconescu, Orlandea, Suciu, Beldiman 2004; Luca, Roman, Diaconescu, Ciugudean, El Susi, Beldiman 2005; Luca & Suciu 2008a; Luca & Suciu 2008b; Mantu 2008; Maxim 1999; Nica 1977; Nica 1995; Paul 1989; Paul 1995; Vlassa 1966; Vlassa 1976; Vlassa 1978.

[2] Allain, Averbouh, Barge-Mahieu, Beldiman *et al.* 1993; Beldiman 2000a; Beldiman 2000b; Beldiman 2001; Beldiman 2002; Beldiman 2003; Beldiman 2004a; Beldiman 2004b; Beldiman 2007; Beldiman Camps-Fabrer, Nandris 1993; Beldiman & Sztancs 2004; Beldiman & Sztancs 2005a; Beldiman & Sztancs 2005b; Beldiman & Sztancs 2007; Beldiman & Sztancs 2008; Beldiman & Sztancs 2009a; Beldiman & Sztancs 2009b; Nica & Beldiman 1997; Nica & Beldiman 1998; Popuşoi 1982; Popuşoi & Beldiman 1999; Popuşoi & Beldiman 2002; Sztancs 2010; Sztancs & Beldiman 2004.

[3] Comşa 1959; Comşa 1966; Comşa 1969; Comşa 1973; Comşa 1974; Comşa 1976a; Comşa 1976b; Comşa 1978; Comşa 1979; Comşa 1983; Comşa 1985; Comşa 1986; Comşa 1990; Comşa 1991a; Comşa 1991b; Comşa 1995a; Comşa 1995b; Comşa 1996; Comşa 1998a; Comşa 1998b.

[4] Andreescu & Mirea 2008; Beldiman & Sztancs 2004; Beldiman & Sztancs 2005a; Beldiman & Sztancs 2005b; Beldiman & Sztancs 2007; Beldiman & Sztancs 2008; Beldiman & Sztancs 2009a; Beldiman & Sztancs 2009b; Biagi, Shennan, Spataro 2005; Ciută 2005; Ciută 2009; Diaconescu, Luca, El Susi, Dumitrescu-Chioar 2009; Luca, Diaconescu, Georgescu, Suciu 2007; Luca, Diaconescu, Georgescu, Suciu 2009; Luca, Diaconescu, Suciu 2006; Luca, Diaconescu, Suciu 2008a; Luca, Diaconescu, Suciu 2008b; Luca, Roman, Diaconescu, Orlandea, Suciu, Beldiman 2004; Luca, Roman, Diaconescu, Ciugudean, El Susi, Beldiman 2005; Luca & Suciu 2008a; Luca & Suciu 2008b; Sztancs, 2010; Sztancs & Beldiman 2004.

[5] Beldiman 2007.

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Danube. Our approach compares the two chronological-cultural phases of the Starčevo-Criş culture (the sub phases I B – II A, the phases II – IV) because it allows us to eventually establish the traditions and the elements of progress (the inventions, the innovations and the foreign influences).

A part of the materials was discovered in complexes such as subterranean dwellings (pit houses), houses, and pits. Another part was discovered outside complexes in the cultural level. At Miercurea Sibiului – "Petriş", a large part of the artefacts belonging to the bone and antler industry was discovered in archaeological complexes such as a pit house (B 6) and a pit (G 26). The typological associations in the complexes illustrate the specific context of manufacturing, the usage, the storage and the abandonment: types present in the inventory of the pit house (B 1): I A9 + I C4; types present in the inventory of the pit house (B 4): I F10 + I B1; types present in the inventory of the pit house (B 10): I A15 + I B1) etc.; types present in the inventory of the pit house (B 19): I A7 + I A9[6].

Objectives. Methodology

In the wider context of the systematic approach of prehistoric discoveries of the bone and antler industry from Romania, our aim is to offer a synthesis of recent data regarding the artefacts made of skeletal materials (bone, teeth, antler, shell, snails), belonging to the Starčevo-Criş culture discovered in Romania. On the one hand, for the first category of artefacts the available data is retrieved only in publications (about 25 %). On the other hand, a large number of artefacts were directly studied by us due to the collections of some institutions – museums and archaeology institutes (about 75%). The second category of artefacts was studied taking into consideration a unitary methodology, including the microscopic analysis.

The study takes into consideration the well established criteria of typological classification and the schema of analysis recently proposed in the prehistoric research from Romania. These were the bases for the PhD thesis of the main

[6] Beldiman & Sztancs 2004; Beldiman & Sztancs 2005a; Beldiman & Sztancs 2005b; Beldiman & Sztancs 2007; Beldiman & Sztancs 2008; Beldiman & Sztancs 2009a; Beldiman & Sztancs 2009b; Biagi, Shennan, Spataro 2005; Diaconescu, Luca, El Susi, Dumitrescu-Chioar 2009; Luca, Diaconescu, Georgescu, Suciu 2007; Luca, Diaconescu, Georgescu, Suciu 2009; Luca, Diaconescu, Suciu 2006; Luca, Diaconescu, Suciu 2008a; Luca, Diaconescu, Suciu 2008b; Luca, Roman, Diaconescu, Orlandea, Suciu, Beldiman 2004; Luca, Roman, Diaconescu, Ciugudean, El Susi, Beldiman 2005; Luca & Suciu, 2008a; Luca & Suciu 2008b; Sztancs, 2010; Sztancs & Beldiman 2004.

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author[7] and were taken into consideration when more recent publications regarding this subject were accomplished[8].

The general methodological aspects of our approach are inspired by the *Cahiers de Fiches typologiques de l'industrie osseuse préhistorique*, edited by Henriette Camps-Fabrer during 1988[9]. These aspects refer to: the criteria and the structure of the typology (categories, groups, types, sub-types); the structure of the discoveries' repertoire, of the datasheet, of the vocabulary that is used; the data related to the "manufacturing chain" (the *débitage* and the manufacturing /*façonnage*); the specific morphologic and technical details (perforations, for example); the recordings and the conclusions regarding the macro- and microscopic traces of manufacture operations and wear traces. Every technical characteristic is designated by an abbreviation used in our database[10].

The statistical processing of the information from the Access database is used to conclude the specificity of the bone and antler industry that is studied. The data of analysis regarding the skeletal technology intends to define the common elements and the situations which are less frequent in the Starčevo-Criş culture. The contributions of the traditional cultural background, of the innovations and of the specific technological aspects are also revealing using the databases[11].

Every object from the repertoire was given an identification code comprising the abbreviation of the name of the site, the number of the level (the archaeological context of its provenance) and the identification number in the general list of osseous artefacts from the site (for example: CRC/I 3; MSP/I 13). The 653 datasheets were inserted in the artefacts repertoire. This represents a synthetic view of all the observations and of all the quantifiable parameters that were taken into consideration from a typological, morphological and technological point of view. Starting from these data we can formulate the conclusions of the study[12].

Among the advantages offered by the study of the recently discovered bone and antler industry (the sites: Cerişor – "Cauce Cave", Hunedoara County; Măgura – "Buduiasca" – "Boldul lui Moş Ivănuş", Teleorman County; Miercurea Sibiului – "Petriş", Sibiu County; Şeuşa – "La Cărarea Morii", village Ciugud, town Alba Iulia, Alba County) we may mention: the possibility of defining some new types of prehistoric bone and antler industry; the increase/development of the lots that are studied applying the recent criteria and the conclusions drawn on the artefacts' typology and on the specific technology of the Early Neolithic in the Northern

[7] Beldiman 2007.

[8] Beldiman & Sztancs 2004; Beldiman & Sztancs 2005a; Beldiman & Sztancs 2005b; Beldiman & Sztancs 2007; Beldiman & Sztancs 2008; Beldiman & Sztancs 2009a; Beldiman & Sztancs 2009b; Luca, Roman, Diaconescu, Orlandea, Suciu, Beldiman 2004; Luca, Roman, Diaconescu, Ciugudean, El Susi, Beldiman 2005; Sztancs 2010; Sztancs & Beldiman 2004.

[9] Allain, Averbouh, Barge-Mahieu, Beldiman *et al.* 1993; Beldiman, Camps-Fabrer, Nandris 1993.

[10] Beldiman 2007; Sztancs 2010.

[11] Sztancs 2010.

[12] Beldiman 2007.

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Lower Danube area; the cultural assignment and the absolute dating of the phases which are present in the site; the possibility of defining some specific markers – from more perspectives: methodological, typological, technological, economical, cultural, chronological – to which the same data from others sites pertains as well; the possibility of increasing the lot through the progression of the archaeological excavations during the next years and the exploration of some new complexes; the chance of an enlarged, exhaustive and multidisciplinary research of the site and the correlation of the conclusions regarding the bone and antler industry with other kinds of data[13] (Tables 1–2).

Table 1

The Starčevo-Criş culture sites in Romania: discoveries of artefacts from skeletal materials

1 Dudeştii Vechi, Timiş County	19a Cerişor, com. Ielese, Hunedoara County
2 Foeni, Timiş County	20 Dumbrava, com. Ciugud, Alba Iulia town, Alba County
3 Arad, Arad County	20a Şeuşa, com. Ciugud, Alba Iulia town, Alba County
4 Pojejena – "Nucet", Caraş-Severin County	21 Ocna Sibiului – "Triguri", Sibiu County
5 Moldova Veche, Moldova Nouă town, Caraş-Severin County	21a Miercurea Sibiului, Sibiu County
6 Liubcova, com. Berzasca, Caraş-Severin County	22 Zăuan, com. Ip, Sălaj County
7 Gornea, com. Sichevița, Caraş-Severin County	23 Cluj-Napoca/Gura Baciului, Cluj County
8 Dubova – "Cuina Turcului", com. Plavişevița, Mehedinți County	24 Lunca, com. Vânători-Neamț, Neamț County
9 Dubova – "Peştera lui Climente", com. Plavişevița, Mehedinți County	25 Grumăzeşti, Neamț County
10 Drobeta – Tr. Severin/Schela Cladovei, Mehedinți County	26 Suceava, Suceava County
11 Basarabi, Dolj County	27 Ipoteşti, Botoşani County
12 Verbicioara, com. Verbița, Dolj County	28 Glăvăneşti, com. Andrieşeni, Iaşi County
13 Sălcuța, Dolj County	29 Balş, com. Cucuteni, Iaşi County
14 Cârcea – "Hanuri", com. Coşoveni, Dolj County	30 Valea Lupului, com. Rediu, Iaşi town, Iaşi County
15 Cârcea – "Viaduct", com. Coşoveni, Dolj County	31 Vutcani, Vaslui County
15a Râmnicu-Vâlcea-Râureni, Vâlcea County	32 Trestiana, com. Grivița, Vaslui County
16 Locusteni, com. Daneți, Dolj County	33 Munteni, Galați County
17 Grădinile – "Islaz", com. Studina, Olt County	34 Voetin, com. Sihlea, Vrancea County
18 Grădinile – "Fântâna lui Duțu", com. Studina, Olt County	35 Leț, com. Boroşneu Mare, Covasna County
18a Măgura, Teleorman County	36 Sf. Gheorghe – "Bédeháza", Covasna County
19 Ohaba Ponor, com. Pui, Hunedoara County	

[13] Beldiman & Sztancs 2004; Beldiman & Sztancs 2005a; Beldiman & Sztancs 2005b; Beldiman & Sztancs 2007; Beldiman & Sztancs 2008; Beldiman & Sztancs 2009a; Beldiman & Sztancs 2009b; Biagi, Shennan, Spataro 2005; Diaconescu, Luca, El Susi, Dumitrescu-Chioar 2009; Luca, Diaconescu, Georgescu, Suciu 2007; Luca, Diaconescu, Georgescu, Suciu 2009; Luca, Diaconescu, Suciu 2006; Luca, Diaconescu, Suciu 2008a; Luca, Diaconescu, Suciu 2008b; Luca, Roman, Diaconescu, Orlandea, Suciu, Beldiman 2004; Luca, Roman, Diaconescu, Ciugudean, El Susi, Beldiman 2005; Luca & Suciu 2008a; Luca & Suciu 2008b; Sztancs 2010; Sztancs & Beldiman 2004.

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Table 2

The Starčevo-Criş culture sites in Romania: discoveries of artefacts from skeletal materials. Radiometric data

Site/Level	Phase	Lab	B.P.	Bibliography
Cârcea – "Viaduct"	III/IV	Bln-1982	6430 ±60	Mantu, 1998, p. 13.
Cârcea – "Viaduct"	III/IV	Bln-1983	6395 ±60	Mantu, 1998, p. 13.
Cârcea – "Viaduct"	III/IV	Bln-2354	5860 ±60	Mantu, 1998, p. 13.
Cluj-Napoca – Gura Baciului	IB-IC	GrA-24137	7140 ±45	Biagi, Shennan, Spataro, 2005, p. 49; Luca & Suciu 2008.
Cluj-Napoca – Gura Baciului (M 6)	IIIB	Lv-2157	6400 ±90	Mantu, 1998, p. 13.
Miercurea Sibiului – "Petriş". Level I (B10)	IB-IC	GrN-28520	7050 ±70	Biagi, Shennan, Spataro, 2005, p. 49; Luca & Suciu 2008.
Miercurea Sibiului – "Petriş". Level I (G 26)	IB-IC	GrN-29954	7010 ±40	Biagi, Shennan, Spataro, 2005, p. 49; Luca & Suciu 2008.
Miercurea Sibiului – "Petriş". Level I (B 17)	IC-IIA	Poz-24697	7030 ±50	Biagi, Shennan, Spataro, 2005, p. 49; Luca & Suciu 2008.
Miercurea Sibiului – "Petriş". Level I (B 1)	IC-IIA	GrN–8521	6920 ±70	Biagi, Shennan, Spataro, 2005, p. 49; Luca & Suciu 2008.
Ocna Sibiului – "Triguri". Level VIII	IB-IC	GrN-28110	7120 ±60	Biagi, Shennan, Spataro, 2005, p. 49; Luca & Suciu 2008.
Râmnicu-Vâlcea – Valea Răii	III/IV	KN-I 102	6480 ±75	Mantu, 1998, p. 13.
Şeuşa – "La cărarea morii". Level I	IB-IC	GrN-28114	7070 ±60	Biagi, Shennan, Spataro, 2005, p. 49; Luca & Suciu 2008.
Trestiana. Level I	IIIB	GrN-17003	6665 ±45	Mantu, 1998, p. 13.
Trestiana. Level I	IIIB	Lv-2155	6390 ±100	Mantu, 1998, p. 13.

The artefacts made of skeletal materials from the Early Neolithic (Starčevo-Criş culture, phases I–IV) studied in this paper were discovered in 45 sites from almost all of Romania's territory. Three of them have levels which are dated in both early and later phases of the Starčevo-Criş culture (Cârcea – "Hanuri", Cluj-Napoca – Gura Baciului, Ocna Sibiului – "Triguri"). The sites are placed in four historical regions: Transylvania – 13 sites (5 sites with Early Neolithic phases); Banat – 9 sites; Oltenia – 11 sites (3 sites with Early Neolithic phases); Moldavia – 11 sites; until now we only know one Early Neolithic site from Muntenia containing such artefacts (Măgura – "Buduiasca" – "Boldul lui Moş Ivănuş", Teleorman County).

From a geographical point of view we observed that the absolute majority of these sites are placed in plain or hilly areas, around or on the shore of some rivers; four sites were discovered in the karst area form Transylvania (Ohaba-Ponor Cave, OPN/II; Cerişor – "Cauce Cave", both in Hunedoara County) and Banat – the Iron

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Gates of the Danube (Dubova – "Cuina Turcului", DCT/III-V and Dubova – "Climente Cave", DPC/II).

The sites are either multi-stratified (we have more Starčevo-Criş levels at Cluj-Napoca – Gura Baciului, Grădinile – "Islaz", Cârcea – "Hanuri", Miercurea Sibiului – "Petriş", Ocna Sibiului – "Triguri") or have only one level belonging to the Starčevo-Criş culture (most of them). Regarding the Starčevo-Criş phases there are 9 sites with IB – IIA sub-phases (and in four of them there are later levels as well) and there are 33 sites with II – IV phases[14] (Tables 1–2).

The quantitative and typological structure

The lot contains 653 pieces, from which 254 are dated from the Early Starčevo-Criş phases (IB – IIA) and 399 from the Later Starčevo-Criş phases (II – IV). The site from Măgura is the largest (166 pieces studied on this occasion), followed by the site from Dubova – "Cuina Turcului", DCT/III–V (87) and the site from Trestiana (83). The other sites have between 1 and 28 pieces.

The artefacts are grouped in five typological categories (I Tools; II Weapons; III Adornments; IV Hafts; V Debited pieces/*Ébauches*, Raw materials, Waste), 23 typological groups (most of them being tools and adornments) and 75 types, from which three are double. This last fact illustrates the special situation of the remanufacturing of different types of artefacts on deteriorated ones; for example, a point made of a fragment of bone chisel; a point made of a fragment of a bone spoon; a pendant made of a proximal fragment (handle) of a bone spoon (Table 3 and Figs. 1–9).

Table 3

Typology of Starčevo-Criş artefacts from skeletal materials from Romania

Types	Denomination	Phases of Starčevo-Criş culture		Total
		I B – II A	II – IV	
I A1	Point made of fragment of long bone worked at distal part	17	33	50
I A1/D1	Point made of fragment of long bone worked at distal part/chisel (double type, reused fragment)		1	1
I A2	Point made of proximal fragment of long bone worked at distal part		1	1
I A3	Point made of fragment of long bone worked entirely		8	8
I A3/I F3	Point made of fragment of long bone worked entirely/spoon with ellipsoidal distal part (double type, reused fragment)		1	1
I A4	Point made of fragment of long bone worked entirely with tiny proximal part	2	8	10

[14] Beldiman 2007; Beldiman & Sztancs 2004; Sztancs 2010; Sztancs & Beldiman 2004.

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Types	Denomination	Phases of Starčevo-Criş culture		Total
		I B – II A	II – IV	
I A6	Point made of metapodial segment	1	2	3
I A7	Point made of sheep/goat half metapodial	7	31	38
I A7 a	Point made of sheep/goat distal half metapodial	26	22	48
I A7 b	Point made of sheep/goat proximal half metapodial	5	7	12
I A8	Point made of sheep/goat half perforated metapodial	1		1
I A9	Point made of big herbivores half metapodial (Bos, Cervus)	6	13	19
I A10	Point made of ulna	1		1
I A11	Big perforated point (for weaving/knitting)	1	3	4
I A12	Needle	3	18	21
I A14	Curved hook for fishing		10	10
I A15	Point made of fragment of rib	4	11	15
I A16	Point made of red deer or roe deer antler (digging stick)	2	7	9
I A17	Point made of red deer or roe deer antler (chasse-lame)	2	3	5
I A21	Point made of fragment of red deer or roe deer antler	2		2
I A22	Point red deer or roe deer tine (perforator or dagger)	1		1
17		81	179	260
I B1	Polishing tool (*lissoir*) made of long bone fragment	23	17	40
I B2	Polishing tool (*lissoir*) made of proximal tibia		1	1
I B3	Polishing tool (*lissoir*) made of rib segment	11	5	16
I B4	Polishing tool (*lissoir*) made of fragment of rib	12	8	20
I B7	Polishing tool (*lissoir*) made of fragment of tooth (canine)		2	2
I B10	Polishing tool (*lissoir*) with axial active part made of fragment of rib		1	1
I B11	Polishing tool (*lissoir*) made of long bone fragment with slot	1		1
7		47	34	81
I C4	Hammer made of distal humerus	1		1
1		1	0	1
I D1	Chisel made of long bone fragment	1	5	6
I D2	Chisel made of fragment of rib	1		1
2		2	5	7
I E3	*Retouchoir* made of long bone fragment		2	2
1		0	2	2
I F	Spoon (fragment of undefined type)	8	9	17

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Types	Denomination	Phases of Starčevo-Criş culture		Total
		I B – II A	II – IV	
I F/III B1	Spoon (fragment of undefined type)/bone pendant (double type, reused fragment)		1	1
I F1	Spoon with oval distal part and middle part profiled	1	1	2
I F2	Spoon with oval distal part and middle part flat		1	1
I F3	Spoon with oval distal part, middle part profiled and axial rib on superior face	1	36	37
I F5	Spoon with ellipsoidal distal part and middle part flat		2	2
I F6	Spoon with ellipsoidal distal part, middle part flat and narrow proximal part	2	3	5
I F7	Spoon with trapezoidal distal part and middle part profiled		4	4
I F8	Spoon with trapezoidal distal part and middle part flat	3	5	8
I F9	Spoon with trapezoidal shape and thick section of proximal part	1	10	11
I F10	Spoon with trapezoidal shape and thin section of proximal part	31	16	47
I F11	Spoon with rectangular shape and convex extremities	1		1
11		48	88	136
I G4	Oblique unilateral point made of red deer perforated axe	2	4	6
1		2	4	6
I H1	Scraper made of fragment of wild boar's tusk	1		1
1		1	0	1
II D	Hammer-axe made of red deer antler	1		1
1		1	0	1
II E	Bone harpoon	1	2	3
1		1	2	3
III A1	Perforated tooth – incisive	1		1
III A2	Perforated tooth – incisive		1	1
2		1	1	2
III B1	Pendant made of fragment of bone (undecorated)		5	5
III B3	Pendant made of fragment of wild boar tusk		7	7
III B4	Pendant made of fragment of bone with central perforation		2	2
III B5	Pendant made of fragment of shell		1	1
III B6	Pendant made of fragment of tine (undecorated)		1	1
III B7	Pendant made of fragment of bone (hook-shaped)		1	1
III B11	Pendant made of fragment of red deer	1		1

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Types	Denomination	Phases of Starčevo-Criş culture		Total
		I B – II A	II – IV	
	antler (hook-shaped)			
7		1	17	18
III C1	Perforated snail	1	5	6
III C2	Perforated shell	2	14	16
2		3	19	22
III D1	Bead made of long bone segment		1	1
III D2	Bead made of fish vertebra		2	2
III D3	Bead made of long bone fragment		1	1
III D4	Bead made of shell fragment		2	2
4		0	6	6
III E1	Disk made of bone fragment	6		6
III E2	Disk made of wild boar's tusk fragment	1	8	9
2		7	8	15
III F1	Bone ring	6	3	9
1		6	3	9
III G1	Bone bracelet		4	4
III G2	Red deer bracelet	3	1	4
III G3	Shell bracelet (*Spondylus* sp., *Pectunculus* sp. etc.)	2	1	3
3		5	6	11
III H	Bone pin (undefined type)	1		1
III H1	Bone pin with discoid head	1	2	3
2		2	2	4
III I1	Discoid bone button	1	3	4
1		1	3	4
IV A1	Red deer antler sickle	1	5	6
IV A2	Red deer/roe deer antler handle	1	1	2
IV A3	Bone handle	4	1	5
3		6	7	13
IV C	Bone sleeve (*douille*)		1	1
1		0	1	1
IV D	Bone tubular sheath (for needle)		1	1
1		0	1	1
V A1	Debited piece (*ebauche*)	8	3	11
V A2	Raw material	7	1	8
V A3	Waste	23	7	30
3		38	11	49
75		254	399	653

The tools' category has 8 groups (I A–I B–I C–I D–I E–I F–I G–I H) and 41 types. It is immediately followed by the adornments' category with 7 groups (III A–III B–III C–III E–III G–III H–III I) and 25 types. Afterwards, there is a Vth category which is represented in our lot by a group and 3 types: debited pieces/*ébauches*, raw materials and waste (V A). The hafts are next in the hierarchy with 3 groups (IV A–IV C–IV D) with 3 types. The weapons are the last with 3 groups.

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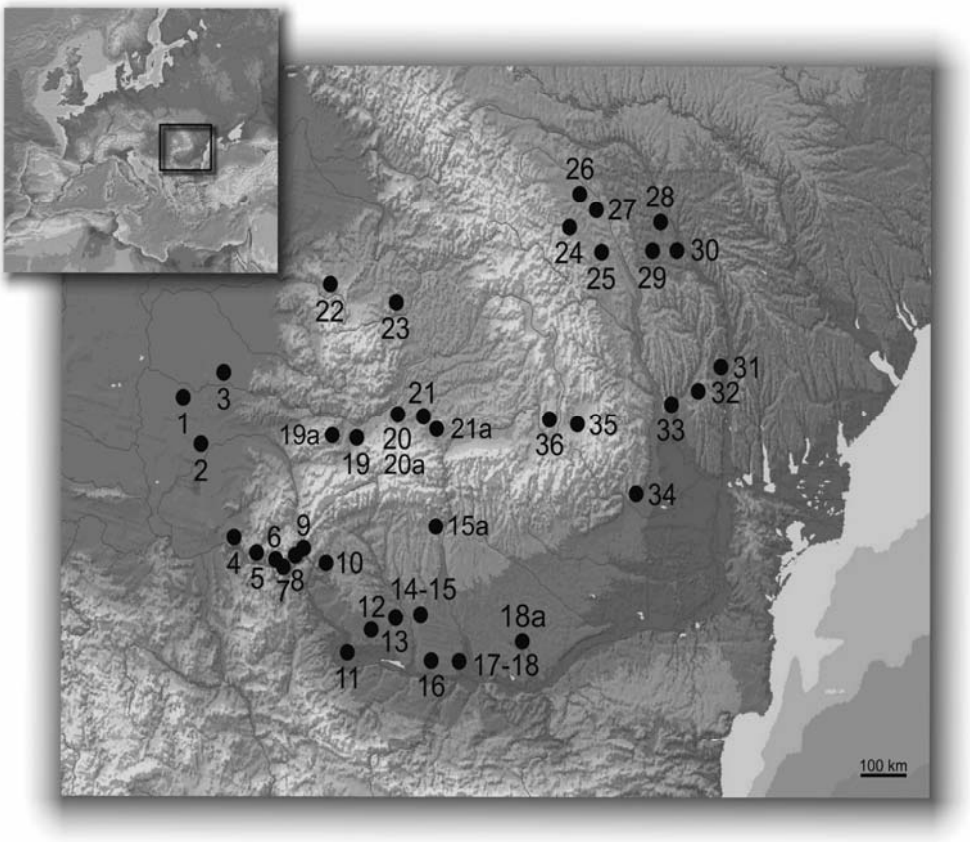

Fig. 1 – The Starčevo-Criş culture sites in Romania:
discoveries of artefacts from skeletal materials
(list of sites in Table 1).

Most of the pieces are usually types from/pertaining to all the phases, but we have some situations in which some types are present only in the early phases and some of them only in the later phases. For the early phases (IB–IIA) we have documented: I A8, I A10; I B11; I C4; I F11; I H1; II D; III A1; III B11; III E1; III G2 and for the later phases: (II–IV): I A2, I A3, I A14; I B2, I B7, I B10; I E3; I F2, I F5, I F7; III A2; III B1, 3–7; III D1–4; III G1; IV C; IV D.

When we deal with objects attested only in isolated cases, we concluded that the situation might reflect the stage of documentation. When we deal with a three or more pieces of a certain type (for example: III E1 for early phases and I A3, I A14, I F7, III B1, III B3, III I1, III G1 for later phases) we can say that these may illustrate a specific characteristic for those phases (Table 3).

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We have also identified some rare pieces all made of red-deer antler: sickles, bracelets, a zoomorphic representation, a pendant belonging to the *Gürtelhaken* type from the MSP/I site (Fig. 2).

Fig. 2 – The Starčevo-Criş culture artefacts from skeletal materials discovered in Romania: 1–7 bone points; 8–9 bone lissoirs; 10–11 bone spoons; 12 metapodal debited by splinter and groove technique; 13–15, 18 bone raw materials; 16 hammer made of bovid humerus; 17 hook-type/Gürtelhacken pendant made of red deer antler (Miercurea Sibiului – "Petriş").

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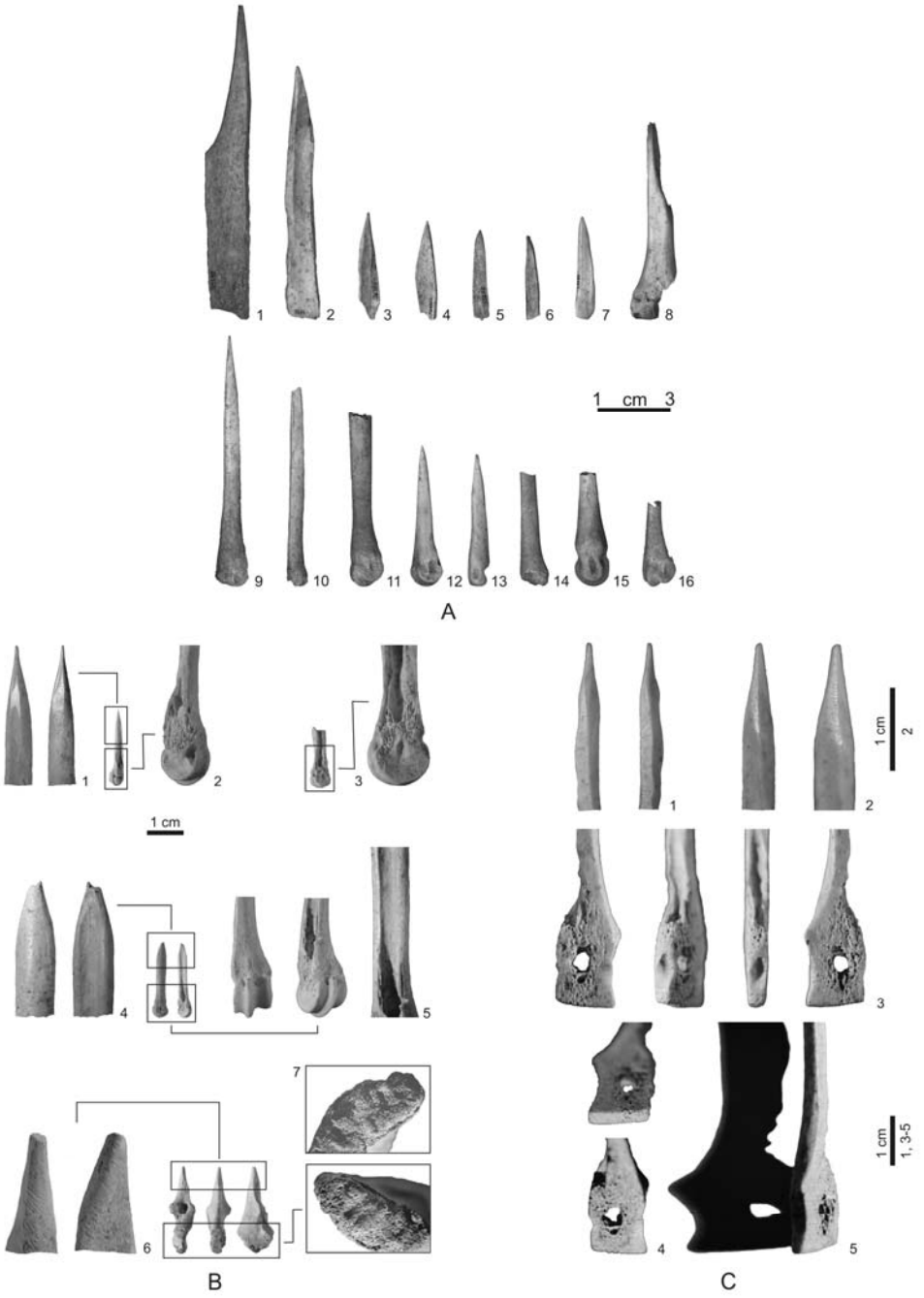

Fig. 3 – The Starčevo-Criş culture artefacts from skeletal materials discovered in Romania:
A 1–16 bone points (Măgura – "Buduiasca");
B 1–6 bone points; C 1–5 bone points
(Şeuşa – "La cărarea morii").

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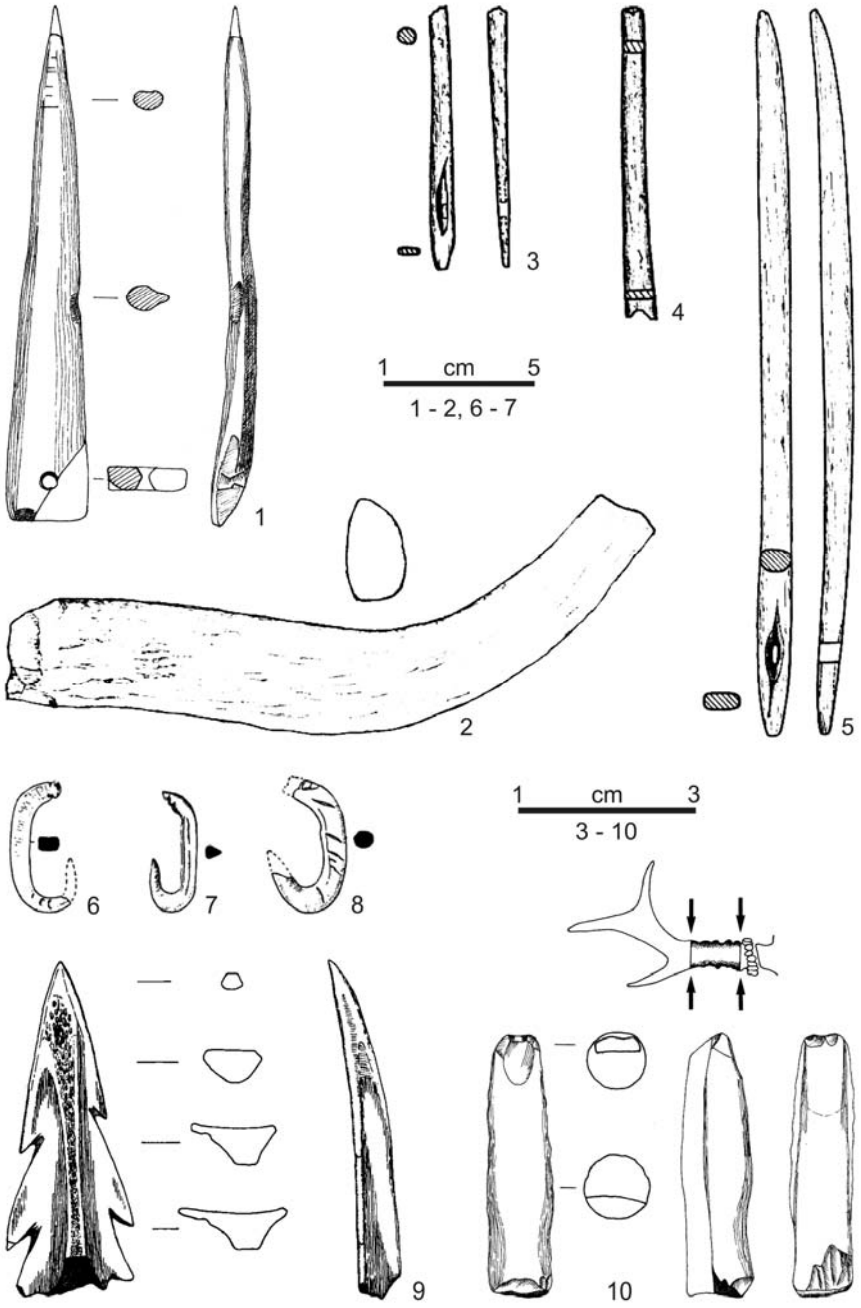

Fig. 4 – The Starčevo-Criş culture artefacts from skeletal materials discovered in Romania: 1 long bone perforated point (Cârcea – "Haltă"); 2 digging stick made of red deer antler; 3–5 bone needles (Trestiana); 6–8 bone fishing hooks (Dubova – "Cuina Turcului"/III-V); 9 bone harpoon (Drobeta-Tr. Severin – Schela Cladovei); 10 *chasse-lame* made of roe deer antler (Ocna Sibiului – "Triguri").

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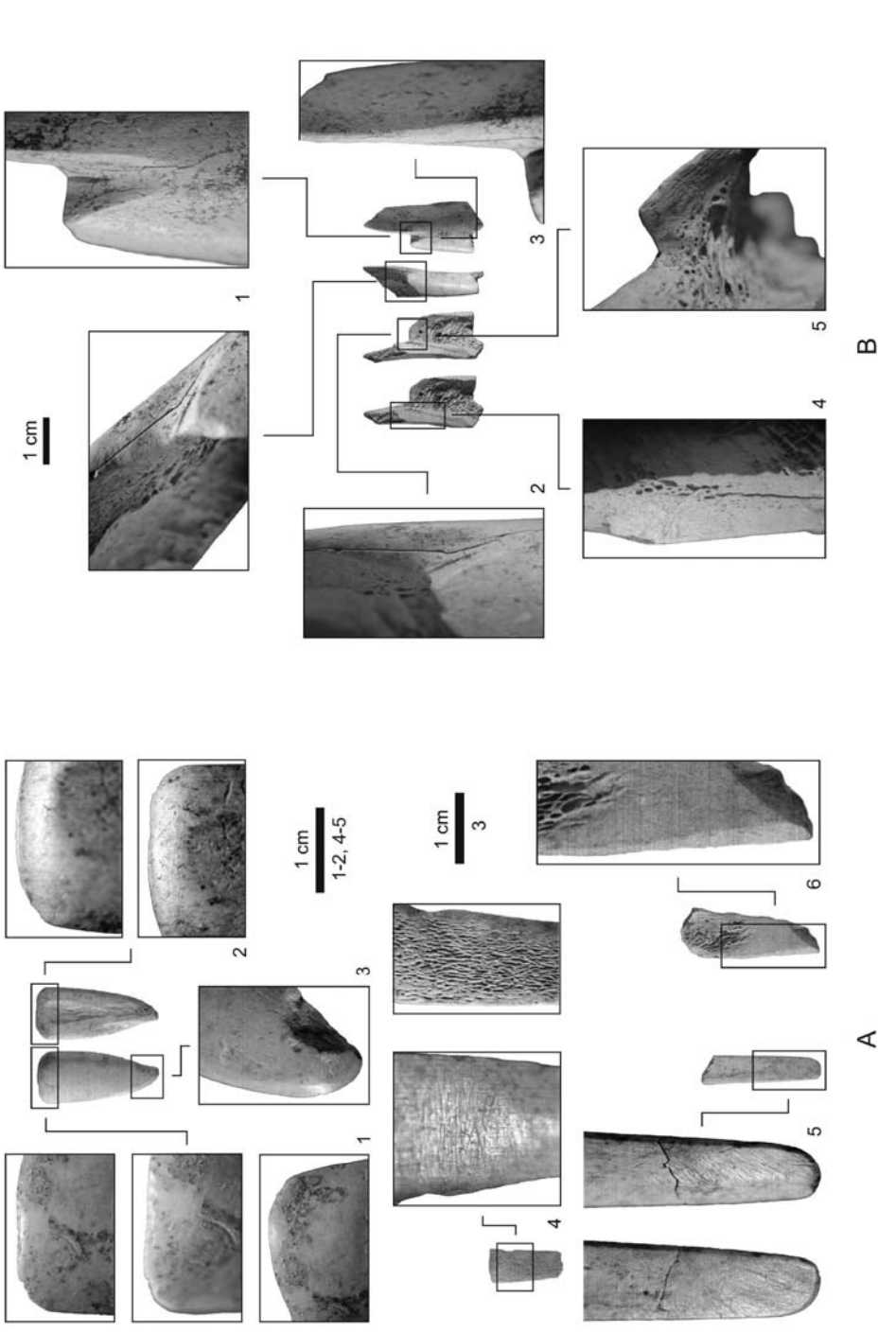

Fig. 5 – The Starčevo-Criş culture artefacts from skeletal materials discovered in Romania: A 1–6 bone *lissoirs*; B 1–5 bone *lissoir* made of long bone fragment with slot (Şeuşa – "La cărarea morii").

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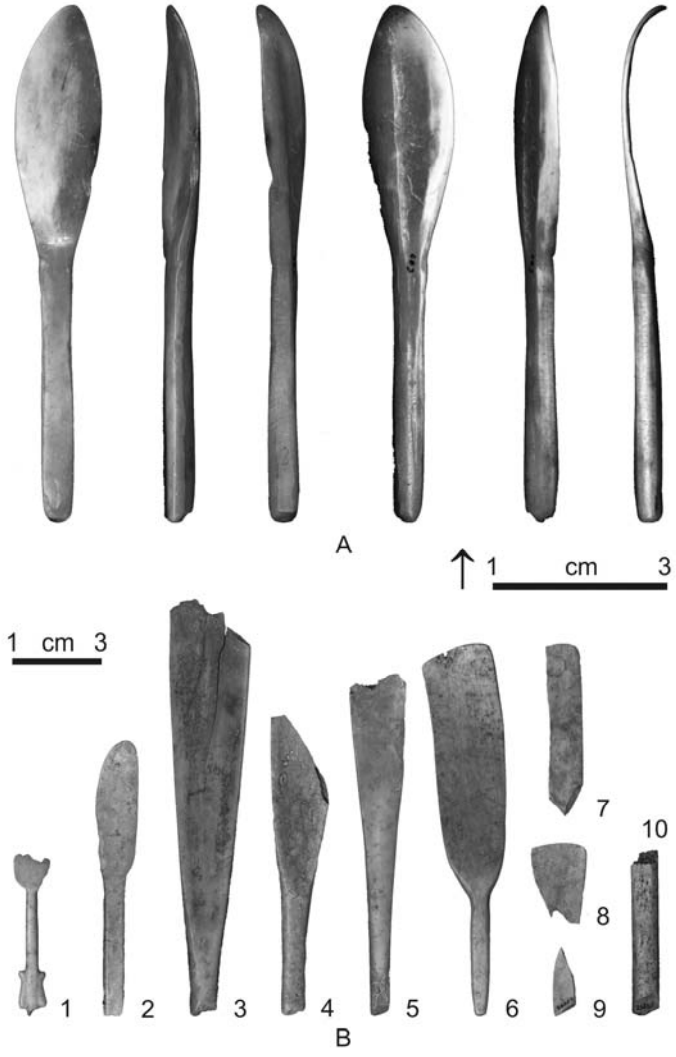

Fig. 6 – The Starčevo-Criş culture artefacts from skeletal materials discovered in Romania: A bone spoon (Cerişor – "Cauce Cave"); B 1–10 bone spoons (Măgura – "Buduiasca").

The typological bone and antler industry belonging to the Starčevo-Criş culture discovered in Romania as well as in other areas of this culture have new specific elements: different types of points made of bones coming from domestic species (cattle, sheep/goat) used for perforation and knitting/weaving; needles; axes made of red-deer antler; hafts and bone spoons. The adornments are also diversified and include some new typological groups and types[15].

[15] Beldiman 2007; Beldiman & Sztancs 2004; Beldiman & Sztancs 2005a; Beldiman & Sztancs 2005b; Beldiman & Sztancs 2007; Beldiman & Sztancs 2008; Beldiman & Sztancs 2009a; Beldiman

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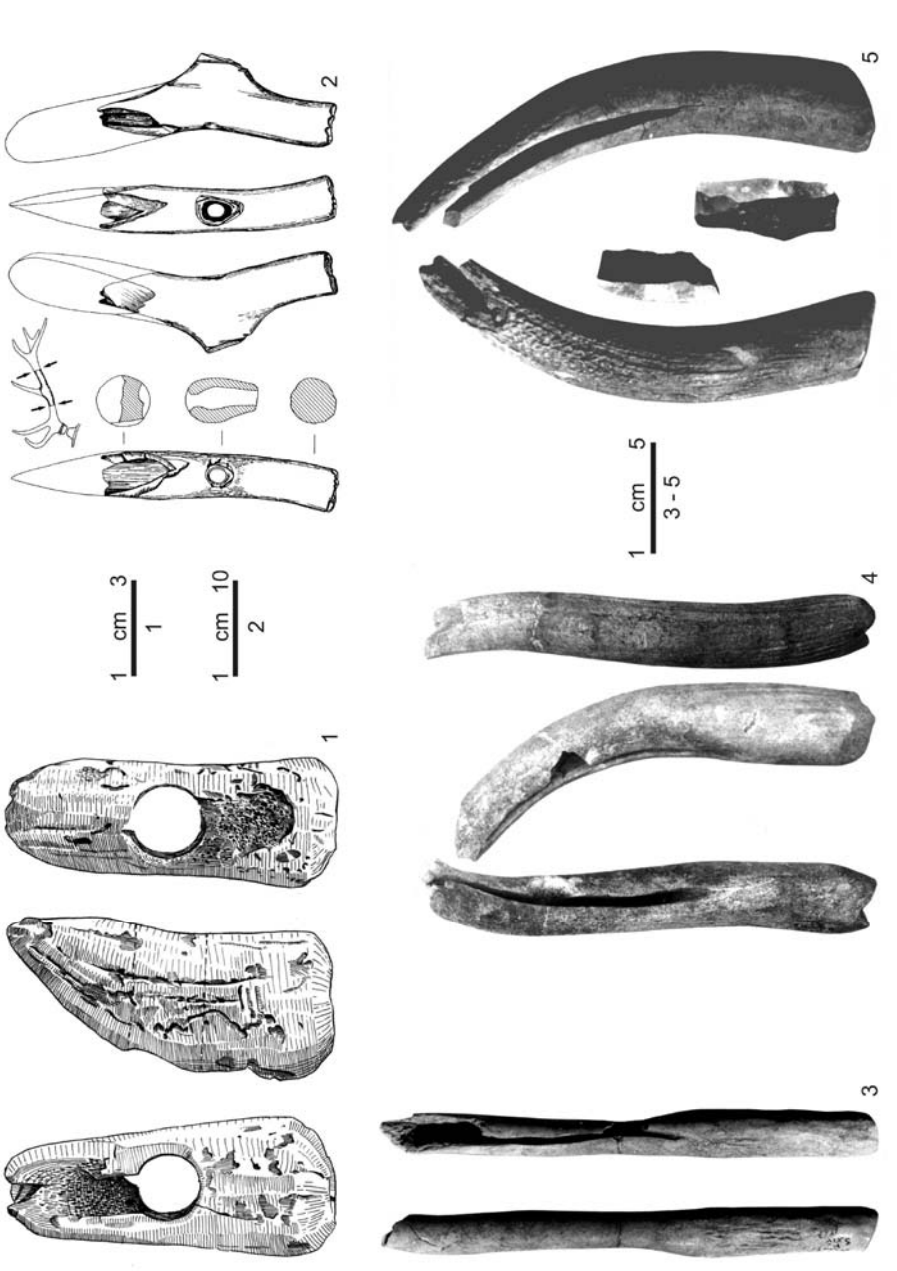

Fig. 7 – The Starčevo-Criş culture artefacts from skeletal materials discovered in Romania: 1 hoe/mattock made of red deer antler (Trestiana – after Popuşoi, 1979); 2 long axe made of red deer antler (Ocna Sibiului – "Triguri"); 3–5 sickles made of red deer antler (Cârcea – "Viaduct").

& Sztancs 2009b; Luca, Roman, Diaconescu, Orlandea, Suciu, Beldiman 2004; Luca, Roman, Diaconescu, Ciugudean, El Susi, Beldiman 2005; Luca & Suciu 2008a; Luca & Suciu 2008b; Sztancs 2010; Sztancs & Beldiman 2004.

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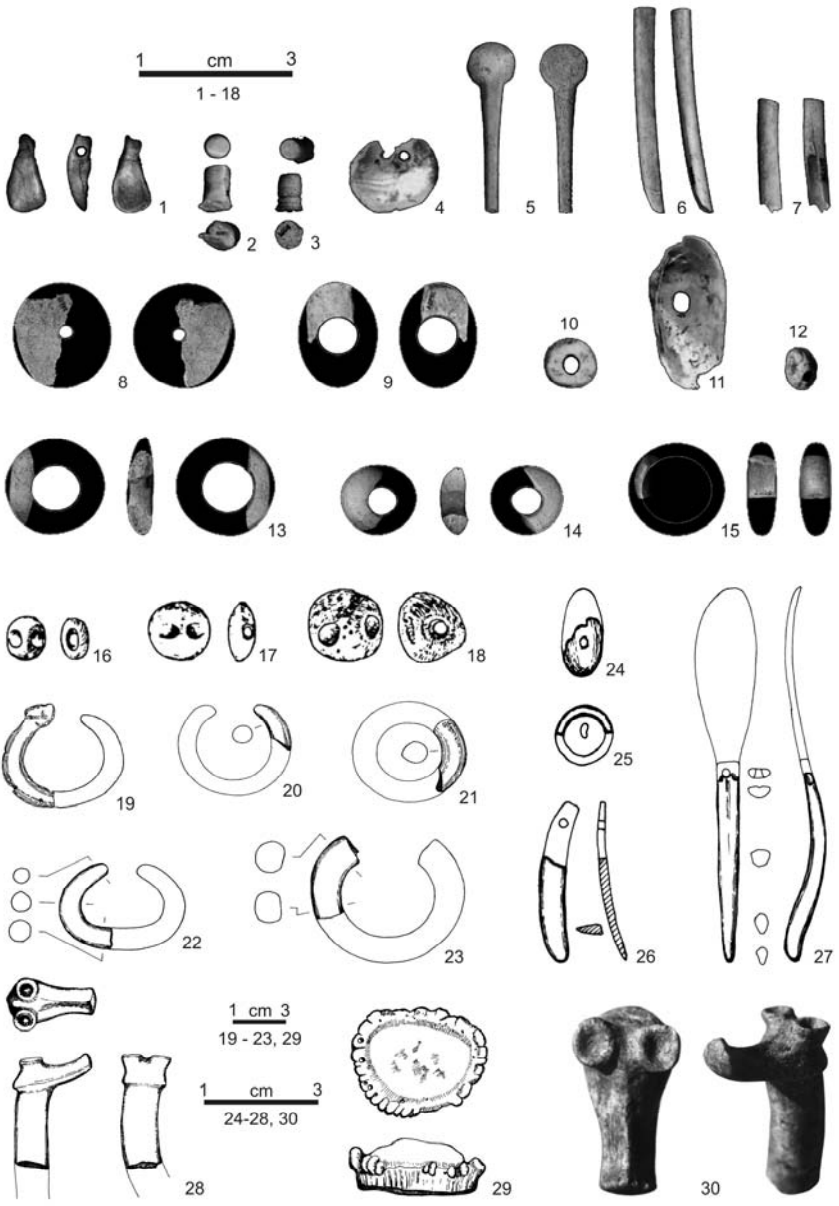

Fig. 8 – The Starčevo-Criș culture artefacts from skeletal materials discovered in Romania: 1 perforated bovid incisor (Măgura – "Buduiasca"); 2–3 bone waste from perforated disks; 4, 10 shell disks; 5 bone pin; 6–7 bone tubes; 8–9 bone disks; 11 perforated shell; 12 perforated snail; 13–15 bone rings (Măgura – "Buduiasca"); 16–18 bone buttons (Dubova – "Cuina Turcului"/III); 19 bracelet made of red deer antler (Grădinile – "Islaz"); 20–21 bracelets made of red deer antler (Trestiana); 22–23 bracelets made of red deer antler (Drobeta-Tr. Severin – Schela Cladovei); 24 perforated shell (Pojejena – "Nucet"); 25 bone ring (Arad); 26 pendant made of wild boar's tusk fragment (Glăvăneştii Vechi); 27 pendant made of proximal part of a bone spoon (Dudeştii Vechi – "Movilă"); 28, 30 animal head (bracelet end) made of red deer antler (Cârcea – "Hanuri"); 29 debited piece/*ébauche* for bracelet made of red deer antler (Grădinile – "Islaz").

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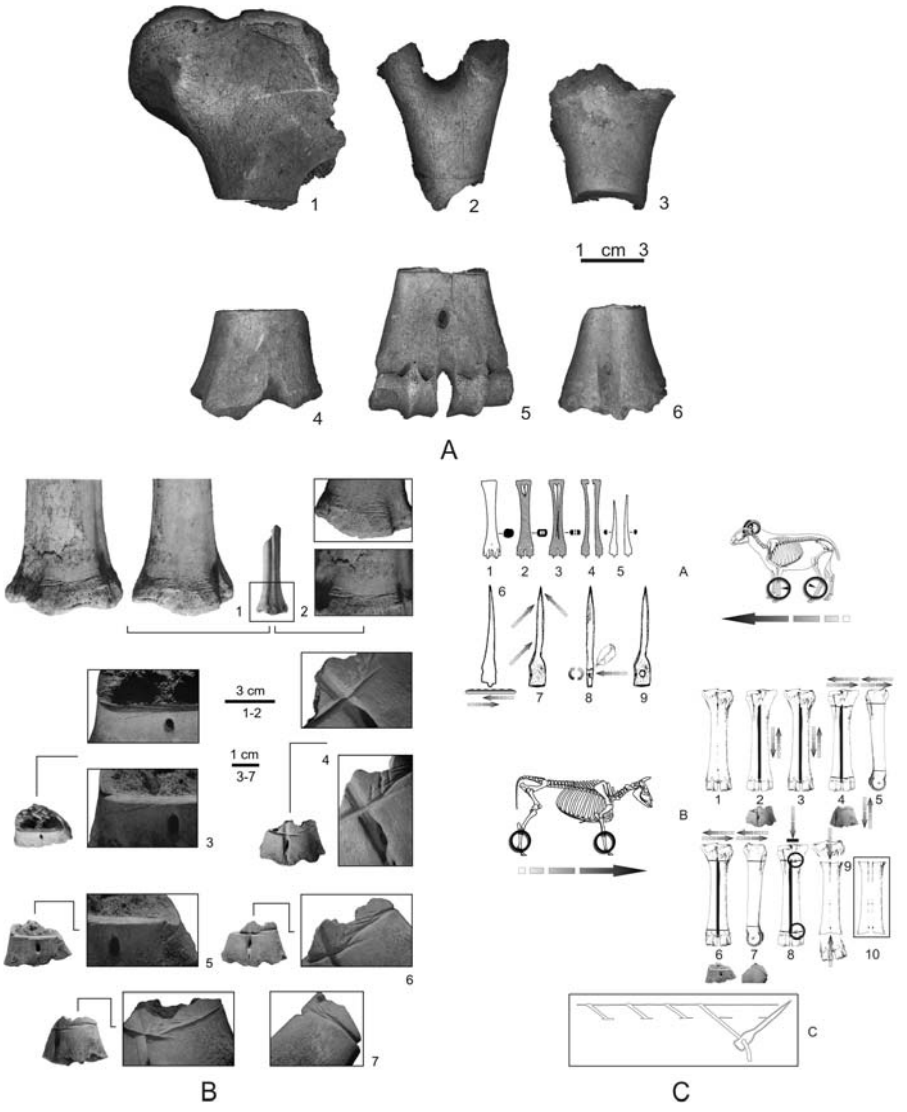

Fig. 9 – The Starčevo-Criş culture artefacts from skeletal materials discovered in Romania: A 1–6 Long bones waste (Măgura – "Buduiasca"); B 1–2 Long bone raw material; 3–7 Bovid metapodal waste; C-$_A$ 1–9 Manufacture of a bone point of I A8 type; C-$_B$ 1–10 Débitage of bovid metapodal by groove & splinter technique and transverse sawing; C-$_C$ Hypothetic use of the bone point of I A8 type (Şeuşa – "La cărarea morii").

Raw materials. Species

The Early Neolithic artefacts made of skeletal materials belonging to the Starčevo-Criş culture are made of numerous types of raw materials coming from

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domestic and hunted species. Besides domestic species (cattle, sheep/goats, unidentified herbivore), we distinguish wild species (red-deer, roe-deer, wild boar and fox), shells and snails also being represented. Sometimes bird and fish bones appear.

There are four groups of raw materials. Firstly, there are the metapodials of herbivores coming from cattle, sheep/goats, unidentified herbivores and red-deer. Along with the long bones pertaining to unidentified herbivores, cattle, and sheep/goats, they form the lot of the first group. Secondly, we have ribs from cattle, unidentified herbivores and sheep/goats; red-deer antler and roe deer antler; shells; wild boars' tusks and canines of fox. Thirdly, we distinguish: shells, sheep/goats tibia, cattle and birds and cattle humerus. The final group which has few objects is composed of cattle mandibles, fish vertebra, cattle radius and phalanx of sheep/goats.

We may see the absolute predominance of the domestic species (especially the cattle). Next there are the unidentified herbivores and sheep/goats. The wild species like red-deer, shells and wild boar, roe-deer, birds and fish are represented by few artefacts[16].

Manufacture

Débitage. The longitudinal and transversal débitage represents the prevailing technique procedure regarding the Early Neolithic artefacts made of bone and antler which were chronologically dated from the early Starčevo-Criş culture. These techniques are illustrated by the following combined technical procedures: splitting; abrasion + splitting; splitting + transverse retouching.

Transversal débitage appears as the second most used technique procedure in the researched areas. It implies: chopping, direct percussion, flexion fracture, transversal abrasion; transversal cutting appears in some cases and it was used individually or associated with the direct percussion, with groove and splinter techniques and the direct percussion or with the direct percussion/cleavage and fracture. The groove and splinter technique was documented only in one case where it is associated with direct percussion. Linear abrasion is also attested in only one case[17].

Façonnage. First of all, we have to emphasize that in the case of some artefacts from the analysed sites façonnage traces have not been observed. This situation is due either to the absence of this phase from the "manufacturing chain" or to the absence of those traces from the preserved parts of the artefacts studied.

The artefacts belonging to the Early Starčevo-Criş culture reveal several technique procedures which are typical for the façonnage phase.

[16] Beldiman 2007; Beldiman & Sztancs 2004; Luca, Roman, Diaconescu, Orlandea, Suciu, Beldiman 2004; Luca, Roman, Diaconescu, Ciugudean, El Susi, Beldiman 2005; Luca & Suciu 2008a; Luca & Suciu 2008b; Sztancs 2010; Sztancs & Beldiman 2004.

[17] Beldiman 2007; Beldiman & Sztancs 2004; Sztancs 2010.

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In most of the cases, the procedures are combined on the same piece; this fact illustrates the complexity of the "manufacturing chain". Is is a proof of the new technique acquisitions produced in the Early Neolithic, of the complexity of the artefacts' performance, the scopes for which they were made and used.

These technique procedures used in the façonnage phase are: multidirectional abrasion; chopping, finishing using the abrasion, finishing of perforations, percussion, two-sided perforation applied transversally, one-sided perforation transversally applied, axial scraping, retouching, groove and splinter technique, transversal cutting.

The analyzed cases of the technique procedures present the abrasion as the main technique applied on the artefacts. Then, we have the finishing using abrasion.

The middle group is represented by the following procedures: chopping and hollowing; transversal two-sided perforation, groove and splinter technique, axial scrapping and transversal cutting.

The following procedures are placed on the last place of the technique procedures of finishing: the direct/indirect percussion, the one-side perforation, the inverse retouch.

As we already mentioned, in most/in the majority of cases, the façonnage techniques were applied in combination with two and/or five components.

As a single procedure, the multi-directed abrasion (axial, oblique and transversal) dominates the technique scheme. The associations with others procedures (chopping, finishing using the abrasion, two-sided perforation, pressure, groove and splinter technique) appear only in some cases. This fact forbids us to conclude that there may be some constant procedures applied according to some precise manufacturing schemas.

Data syntheses allow us to conclude that the constant application of some façonnage schemas is entailed by the type of artefact that was obtained.

The association between chopping and abrasion is the most frequent one. Then, there is the chopping with abrasion, transversal two-sided perforation. On the last place, there is the association between the chopping and the transversal two-sided perforation.

According to the associated procedures mentioned before, chopping as a unique façonnage procedure is irrelevant. The other combinations are very rare and are not statistically important (they just document some combined procedures)[18].

Hafting

Most of the pieces have preserved no indices regarding hafting, even though the fact that we may presume that composite artefacts were largely used in that

[18] Beldiman 2007; Sztancs & Beldiman 2004.

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period. Is it probable that the *lissoirs* (I B1) and the points of type I A1 were inserted in a wooden haft using an axial/direct/positive insertion.

The fastening of the transversal hafting type (the perforated artefacts) appears in the case of the II D type axe when a wooden handle is used. The adornments of the types III C and III E might have been hanged or tided on vegetal or animal fibre.

Hafts also illustrated new situations as being the first cultural manifestations that appeared in Romania in the Early Neolithic. We include in this category the sickles made of red-deer antler (IV A1) and the handles obtained from the same raw material (type IV A2) which were probably used for the axial hafting of a chipped stone piece (like a blade, a point etc.)[19].

Wear traces

Wear traces were often observed on artefacts. There are several types of wear traces and in most cases they are combined on the same piece.

Statistically, the bluntness and polishing of the active edge are on the first place; the flexion breakages, axial striations and fractures are on the second place. Then we distinguished a group of pieces with the following wear traces: breakages produces by frontal impacts, traces of subsidence of *compacta's* fibres at the pieces' edges, and impact chippings which appeared after the frontal impact with a hard surface. The most numerous wear traces are preserved on points, *lissoirs* and bone spoons. Bluntness and polishing are representative for the points and bone spoons. The second ones present some pressure breakage traces and traces resulted after the contact with a hard surface (clay or wood vessels?).

Specific associations of different wear trace categories on the same piece, analysed within the typological groups, respectively within the types, revealed several important situations from a functional point of view. We observe that bluntness and polishing (individually or in association with others wear traces, like: abrasion, fractures, striations) appear on most of the pieces which belong to the typological groups I A–I B–I F. These are followed by the breakages presented in the typological groups I A–I F–I G–III B–III H. The bluntness associated with breakages and striations are on the third place and appear on the pieces belonging to the typological groups I A–I B –I F. The impact chippings associated with fractures were observed on the artefacts belonging to the typological groups I A–I D–I G. The last place belongs to the impact wear traces, presented on the pieces belonging to the typological group I E[20].

Functional aspects. Economic activities

The skeletal artefacts belonging to the Early Starčevo-Criş allowed us to emphasize some clues regarding the functionality and the economic activities

[19] Beldiman 2007; Beldiman & Sztancs 2004; Sztancs 2010; Sztancs & Beldiman 2004.
[20] Beldiman 2007; Sztancs 2010; Sztancs & Beldiman 2004.

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which took place in the sites. In this way, the economic coordinates and the new activities reveal the aspects of a sedentary way of life.

The tools category is represented by the points' typological group; most of them are multi-functional artefacts used for leather perforation, weaving and probably for knitting vegetal or animal fibre. Needles are present in a significant number. *Lissoirs* were used to process leather, wood and polish the clay recipients. Chisels probably were used in/for woodcraft. *Retouchoirs* and *chasse-lames* were used to process (chopping) lithic materials. The bone spoon typological group is a special one. Probably the bone spoons were used to eat the pasty feeds (boiled cereals). Fishing is illustrated by the harpoons' typological group. Oblique points (I G4) had a double functionality (tools and weapons), respectively as axes (II D).

Hafts represent an important typological category which is illustrated by the bodies of antler sickles (for harvesting cereals). The handles made of the same raw material were used to insert lithic pieces like points or blades.

Adornments are represented by a relatively large number of pieces. Perforated shells, perforated teeth, long bones pendants, beads, rings and bracelets, bone pins and bone buttons are the components of this category. Some typological groups (bone rings and bracelets made by shells, bone and antler) appear in Romania for the first time in this cultural horizon.

Art objects made of skeletal materials are very rare. The animal head which represents an herbivore made of red deer antler was discovered in the Cârcea – "Hanuri" site and is probably the zoomorphic extremity of a bracelet.

Debited pieces, *ébauches* and waste prove the fact that skeletal materials were processed in the sites' area in limited series and probably by non-specialized people[21].

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FURTHER THOUGHTS ON STARČEVO-CRIŞ FIGURINES FROM ROMANIA[1] – TYPOLOGY AND SIGNIFICANCE

ALTE GÂNDURI DESPRE FIGURINELE STARČEVO-CRIŞ DIN ROMÂNIA – TIPOLOGIE ŞI SEMNIFICAŢIE

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Cuvinte-cheie: Starčevo-Criş, tipologie, diversitate, influenţe sudice şi vestice, contribuţie locală.

Rezumat: Considerăm că studiul statuetelor antropomorfe Criş reprezintă unul dintre cele mai interesante subiecte, în special ca parte a prezentei tendinţe antropologice şi etno-arheologice. Ca rezultat al studiului nostru, am împărţit întregul material în şase tipuri: tipul I, caracterizat prin steatopigie; tipul II, aşa-numitul gât-coloană; tipul III cu forma generală cilindrică; tipul IV cu analogii apropiate cu statuetele cu „gura de peşte" de la Lepenski Vir; tipul V cu o formă paralelipipedică şi tipul VI, care are analogii în statuetele clasice Vinča. În Ungaria găsim analogii pentru tipurile I, II şi V; pe teritoriul fostei Yugoslavia avem analogii pentru tipurile I, II, III şi VI, iar Grecia a oferit analogii pentru tipurile I şi II. Unul dintre aceste tipuri are şi variante. Numărul mare de tipuri şi variante sugerează lipsa unei unităţi tipologice şi stilistice, atât ca rezultat al influenţelor dinspre sud şi vest dar şi ale contribuţiei locale.Am dori să prezentăm şi unele concluzii privind analogiile, distribuţia în teren, cronologia, influenţele şi, nu în ultimul rând, despre semnificaţia aspectului anatomic şi semnificaţia statuetelor. Aceste statuete constituie o formă timpurie a divinităţii neolitice Magna Mater, zeiţă a fecundităţii şi fertilităţii, a vieţii şi a morţii. Existenţa acestor statuete este o manifestare târzie, în faza a treia a culturii Criş şi a durat până la sfârşitul culturii, cu remarcabile influenţe vinčiene.

Key words: Starčevo-Criş, typology, diversity, southern and western influences, local background.

Abstract: The author considers the study of Criş anthropomorphic figurines to be one of the most interesting topics, especially as part of the present anthropological and ethno-archeological trend. As a consequence of my study, I have subdivided the figurines into six types: type I, characterized by steatopygy; type II, the so-called column-necked; type III has a generally cylindrical form; type IV has very close analogies to the "fish-mouthed" statuettes at Lepenski Vir; type V has a parallelipipedic form; and type VI has parallels in classic Vinča culture statuettes. In Hungary analogies are found for types I, II and V; in the territory of the former Yougoslavia there are analogies for types I, II, III and VI, and Greece provides analogies for types I and II.

[1] The present material was written in 1983. At that moment we tried to present in our paper all the statuettes with known provenience. We modified the text only in restraint limits, without attempting an up-to-date with new statuettes or theories. All the intervention on the text was in the direction of our new perspective, due to the experience we stored up in the past time.

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Each of these types has variants.The very large number of types and variants suggests a lack of typological and stylistic unity, resulting from both external influences from the south and west and local contributions. I also offer some conclusions about analogies, field distribution, chronology, influences, and last but not least, about the significance of the anatomic characteristics and the significance of the statuettes. These statuettes are an early form of the Neolithic deity of the *Magna Mater* type, goddess of fecundity and fertility, of life and death. The existence of this statuary is a late manifestation, in the 3rd phase of the Criş Culture, and lasted until the end of that culture, with obvious Vinča influences.

The Starčevo-Criş culture is a key-moment in the evolution of the south-eastern European Neolithic. At present, we have enough information to tentatively approach an exclusive analysis in the plastic field. The amount of material we have – not very large, but of extreme variety – permits us to present a typology and, from this, to try to partially reconstruct the way of thinking of the Criş culture creators.

A. Typology

Type I has three variants: **variant IA** is represented by the examples of Zăuan, Perieni, Beşenova, Homorodu de Sus, Suplacu de Barcău and Ostrovu Golu (Plate I/1–27[2] and a piece from Gornea[3]. All these examples are characterized by emphasized steatopygy and the presence of some details such as: breasts on no. 1 and 27; the genitalia as a prominence or as an incised triangle (nos. 26 and 27 – of which only the right half exists); no. 25 has the genitalia marked with a triangle with a double line on the left. The neck and arms – in those cases where the torso was preserved – are not depicted. Also, the head is not separate from the neck (no. 1). The eyes are two oblique incisions and the nose is placed in the extension of the arch of the eyebrows. The nostrils are marked by two small cavities. In three cases, the knees are emphasized by knobs and are slightly flexed (nos. 5, 8, 12). In some cases, the legs are separated by a vertical incision (no. 1). On pieces nos. 1–4, the foot is very realistically rendered, with toes, and in the last two cases the ankle is also marked. In case of the statuettes that end in a widened base, it is thought that

[2] I had the opportunity to study and draw the original materials from Zăuan and Beşenova, for which I am grateful to I. Uzum, the former manager of the Reşiţa Museum, who permitted access to the statuettes. Studying the originals was of utmost importance, because the quality of the published illustrations was at least questionable through no fault of the authors. The statuettes from Suplacu de Barcău are from D. Ignat, cf. Lazarovici, 1980, 20, footnotes 67 and 69; Perieni, from Dumitrescu, 1974, Fig. 181/l (nos. Pl. I/2) and Petrescu- Dîmboviţa, 1957, Fig. 8/2 (nos. Pl. I/14); Ostrovu Golu: the statuettes nos. 12, 13/ Pl. I were offered to me by Petre Roman to whom I am deeply grateful; nos 6, 25, 26, 29 are from Roman & Boroneanţ, 1974, Pl. III/8, 5, 6, 3; no. 27 was published by. Dumitrescu, *op. cit.* Fig. 181/4. The pieces from Homorodu de Sus are from Bader, 1968, Figs. 1, 2; those from Poiana în *Pisc* were published by Paul, 1961, Figs. 2–4. Two statuettes form Turdaş, nos Pl. I/23, 28, came from Roska, 1941, Pl. CXXXVIII/15 and CXXXIX/1, and other two, (nos. Pl. I/19 and 24), from Kutzián, 1944, Pl. LII/8, 6.

[3] Lazarovici, 1979, Pl. X/24, connected also with type III. In the same book, the author published three more pieces from Deva, Cenad and Ostrovu Golu.

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this base as a simplified representation of the foot, because the widening does not function as a base.

Variants IB and **IA** have steatopygy in common, but the appearance of pieces 28 and 29 (Pl. I) is very different from the others: in the middle of the face is a round protuberance – probably the nose – and on the right and left, are two horizontal incisions that represent the eyes. This way of treatment is very reminiscent of Vinča statuettes. In the case of no. 28 the face is octagonal, so the similarity with Vinča pieces is even more evident (see and Pl. I/30). The neck, arms, hips, and waist are not represented. If we observe these statuettes strictly from the front, they have a generally rectangular form. All the items we put into this category are technically and aesthetically inferior to those of type IA.

Variant IC so far includes only piece no. 30 (Pl. I). We assign this item to a different variant because of the buttocks, this time of normal dimensions. In fact, the whole piece has very harmonious proportions: the face is almost pentagonal, with no other details. We find this form of the face also on no. 28 (Pl. I), an item catalogued as type IB. The legs are separated by a deep incision, so that they completely apart in the lower level.

Probably in the same variant[4] can be placed the pieces from Gornea and the lower part of a piece discovered by E. Popuşoi la Trestiana, as can two fragmentary objects (only the buttocks) from Homorodu de Sus.

Type II is represented by the column-shaped-neck statuettes. All the pieces we have until now are fragmentary: heads and necks, and in two cases, torsos split under the breasts. In this category are the statuettes from Homorodu de Sus, Leţ, Perieni, Tinca-Râpa, Suplacu de Barcău[5] (Pl. IIIA/nos. 1–4)[6].

The distinctive element of this type is the neck: it is unnaturally long, clearly out of proportion with the rest of the body. It has a face in the form of an isosceles triangle with rounded corners in the forehead area. The arms (see examples nos. 4 and 5/ Pl. IIIA) are in the form of buds, or conical protuberances. The eyes are horizontal incisions and the nose is a ridge (nos. 2 and 3/ Pl. IIIA). On no. 5 the mouth is an incision. The fragment from Leţ has a row of impressions around the top of the head, and at the centre of the head is an incision which separates the front, the face and the chin into two halves. Pieces 1, 4 and 5 have the breasts as round knobs, placed in the right anatomical position and harmoniously proportioned with the other elements, the neck being an exception. Examples 2 and 4 – and probably no. 1 – show obvious Vinča influences.

For the moment, in the same type, we put some statuettes from Homorodu de Sus[7] that lack buttocks and have bud-arms and breasts as round buttons. In all these cases there are no heads or bases.

[4] There is some uncertainty because the statuettes are very fragmented.

[5] Tinca Râpa and Suplacu de Barcău were not published until 1983.

[6] Dumitrescu, *op. cit*., Fig. 181/1–3, for Homorodu de Sus, Leţ, Perieni.

[7] Bader, *op. cit*., Pls. 2/5, 7, 8.

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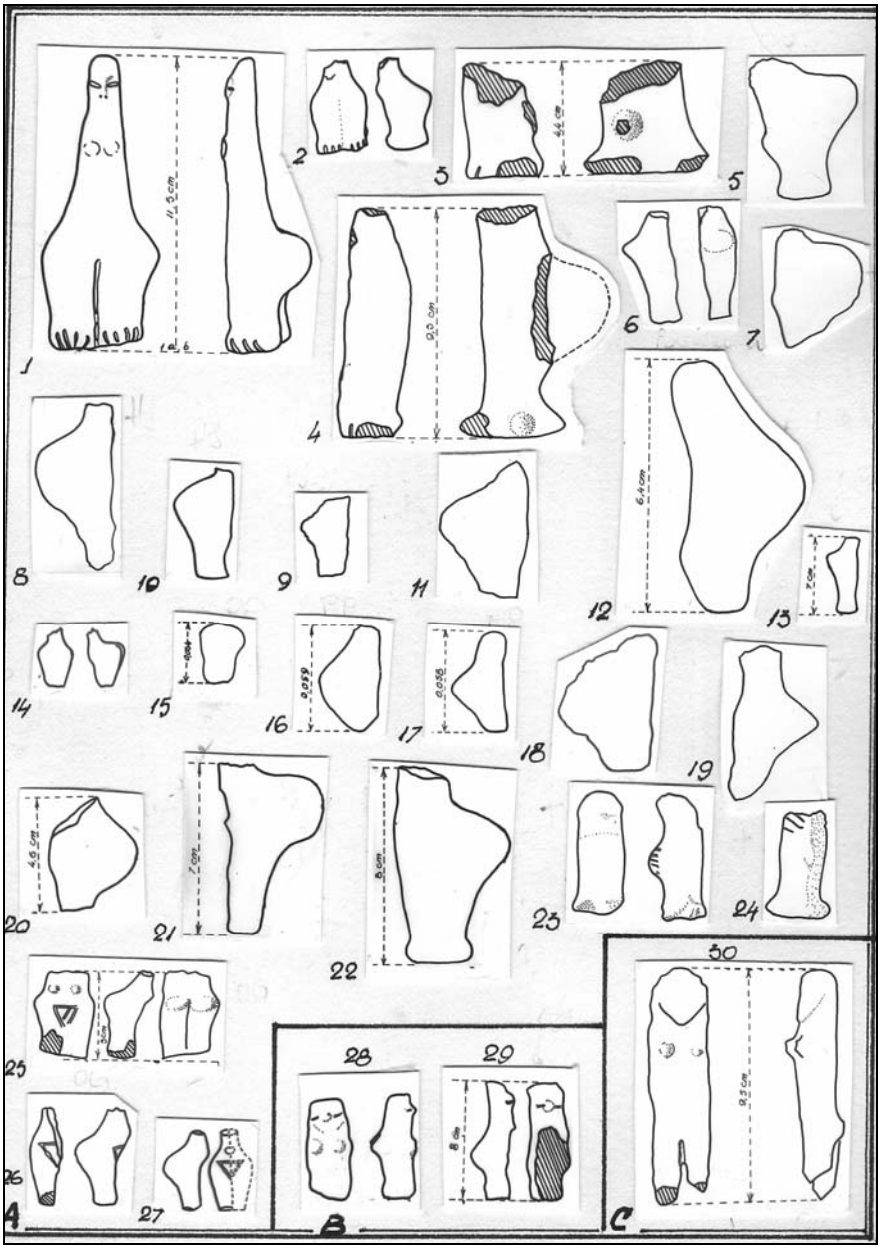

Plate I – type I: Zăuan: 1 (see also Gh. Lazarovici, AMN, XVII, 1980, p. 22, Fig. 4/2), 20, 21, 22; Perieni: 2 (cf. V. Dumitrescu, *Arta preistorică în România*, 1974, Fig. 181/6), 14 (M. Petrescu-Dâmbovița, *Studii şi cercetări arheologice*, 3, 1957, Fig. 8/2); Beşenova: 3, 6; Homorodu de Sus: 5, 7, 8, 9, 10, 11 (cf. T. Bader, *ActaMN,* 5, 1968, Figs. 1, 2); Ostrovu Golu: 6 (P. Roman, V. Boroneanț, *Drobeta,* 1, 1974, Pl. 3/8), 12, 13 (given by P. Roman), 25, 29 (P. Roman, V. Boroneanț, *Drobeta*, 1, 1974, Pl. III/ 5, 6, 3); Poiana în Pisc:15-17 (cf. I. Paul, *Materiale,* 7, 1961, Fig. 2–4); Turdaş: 19, 23, 24, 28 (nos. 23, 28 cf. Roska Márton, *Die Sammlung Zsofia von Torma*, Cluj, 1941, pl. CXXXVIII/15 and CXXXIX/1 and nos 19, 24 cf. I Kutzian); Suplacu de Barcău:30 (also Gh. Lazarovici, op. cit., Fig. 4/9, pag. 22).

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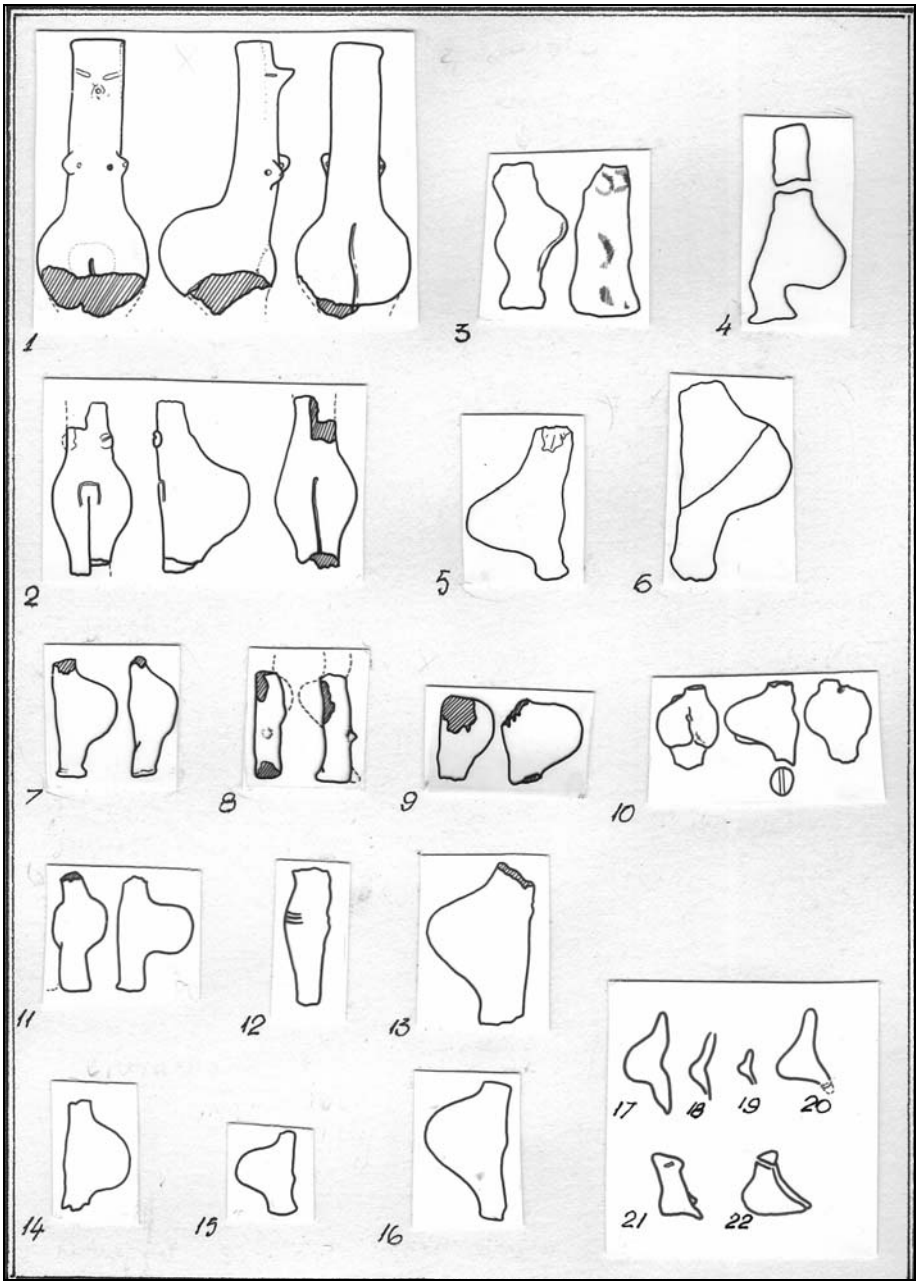

Plate II – analogies for type I: Hungary 1 (N. Kalicz, P. Raczky, *MittArchInst*, 10/11, 1980/1981, Pl. IX/1–2), 2, 8, 9; Szajol-Felsöföld; Kunszentmárton-Nagyerpart : 3 (Ida Kutzian, *AKK*, *XVIII*/12a–b); Vinča: 4 (I. Kutzian, AKK, Pl. LXII/1a-b),12; Kopancs-Zsoldos tanya: 5 (Ida Kutzian, *op. cit*., LXIII/5) ; Monstorszeg-Opoljenik: 6, 16 (Ida Kutzian, *op. cit.*, Pl. XIII/5); Tiszaföldvar-Újtmetö: 7; Kengyel-Csonka Tanya: 10; Szolnok Feketeváros: 11; Tiszaug-Topart: 13 and Kotacpart-Vata Tanya: 14 (I. Kutzian, *AKK*, Pl. CLIII/2 şi VIII/1); Hódmezövásárhely-Hámszáritóhalom:15; Monostorszeg – Opoljenik: 16 (I. Kutzian, *op. cit*., XIII/8); Grecia: 20, 21, Sesklo; Magoula Karamourlar: 22.

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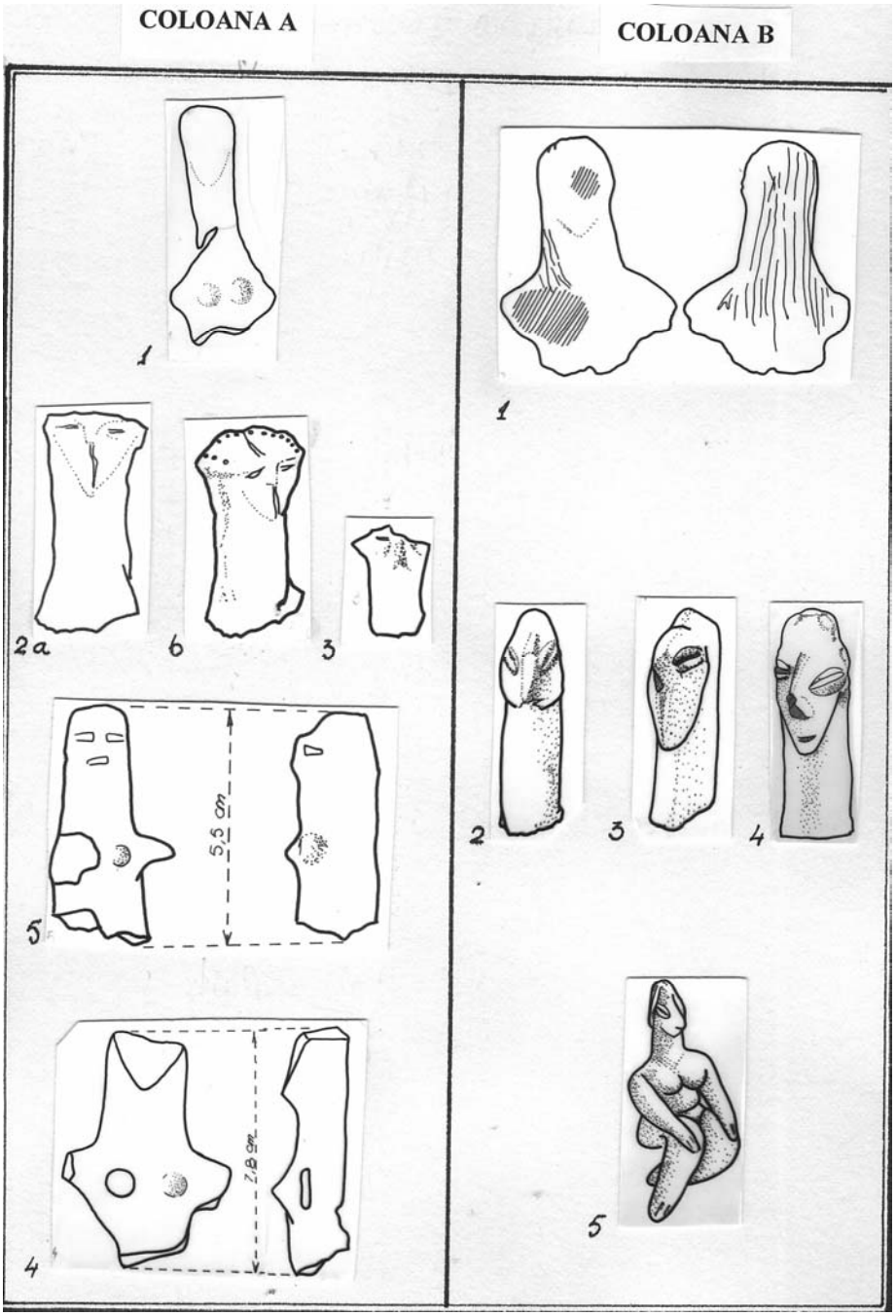

Plate III – type II: column A: variant A: Homorodu de Sus:1, Leț: 2a, b; Perieni: 3 (cf. V. Dumitrescu, *op. cit*., Fig. 181/1–3); Tinca Rîpa: 4 (cf. Gh. Lazarovici, *AMN XVII*, Fig. 4/8); Suplacu de Barcău: 5; column B, analogies for type II: Hungary: 1 a–b, Kotacpart-Vata tanya (Ida. Kutzian, *op. cit*., Pl. XLIV/8a–b); Grecia: 2, Sesklo; Magoula Karamourlar: 3; Pyrassos: 4, 5 Pharsala (unknown site) (*Neolithic Greece*, Figs. 222, 221, 40, 38).

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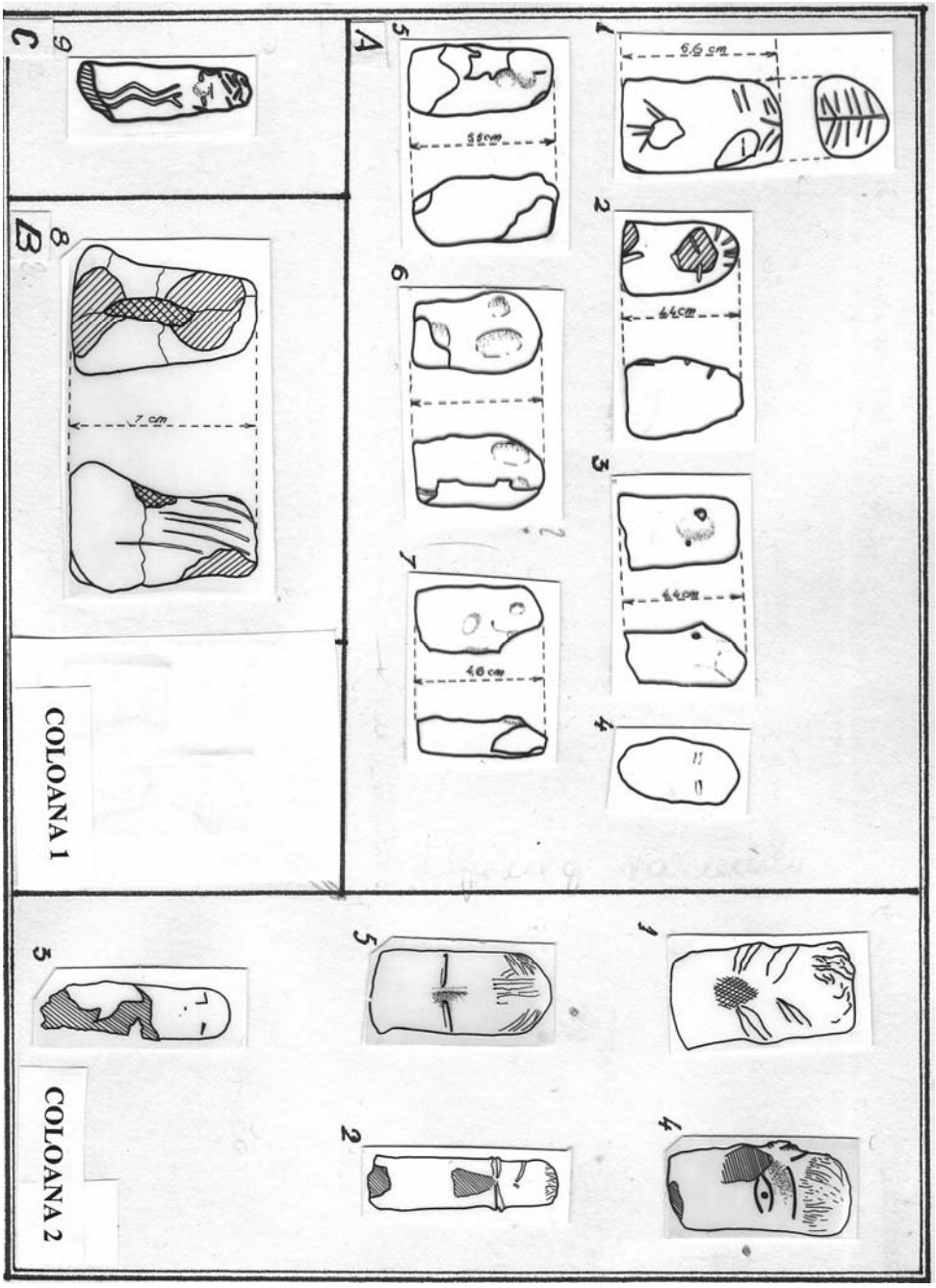

Plate IV – type III colum 1: variant A: 1, 2, 6 Beşenova (nos 6 cf. M. Roska, *op. cit*., Pl. CXXXVII/7); Zăuan: 3; Turdaş: 4; Cîrcea: 5 (cf. M. Roska, *op. cit*., Pl. CXXXVII/5); Gura Baciului: 7; variant B: 8, Beşenova; variant C:9, Trestiana; column 2: analogies for type III: former Iugoslavia: Starčevo: 1 (Srejović, *IPEK*, 21, 1964–1965, Pl. 17/4); Beletinci: 2 (Srejović, *op. cit.*, 21, 1964–1965, Pl. 17/1–2); Vinča: 3 (Srejović, *op. cit*., 21, 1964–1965, Pl. 18/1); Gladinca: 4; Grivca: 5.

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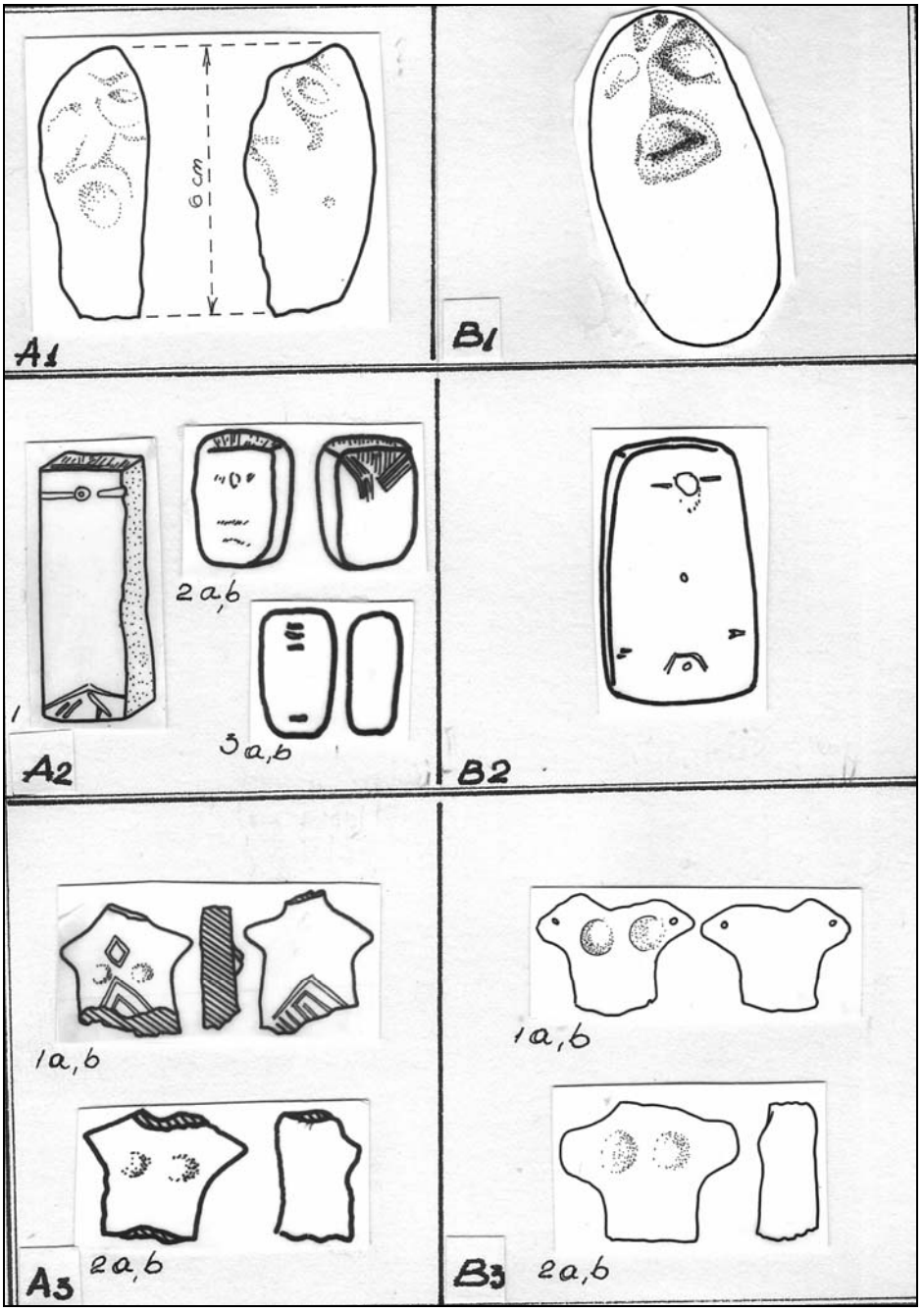

Plate V A1 – type IV: Cîrcea; A2 – type V: Zăuan: 1 (Gh. Lazarovici, *ActaMN*, XVII. Fig. 4/3); Beşenova: 2 a–b (Gh. Lazarovici, *Neoliticul Banatului*, 1979, Pl. X/7); Cîrcea-Hamuri: 3 a–b (Gh. Lazarovici, *ActaMN*, XVII. Fig. 4/5); A3 – type VI Ostrovu Golu: 1, 2 (cf. Roman şi Boroneanţ, *op. cit.,* Pl. IV/4, 7). Column B: analogies for type IV: B1, Lepenschi Vir (D. Srejović, *Lepenski Vir*, 1969, Fig. 57); type V: B2, Méhtelek (Gh. Lazarovici, *AMN*, XVII, Fig. 4/4, pag. 22); type VI: B3/1, 2, Vinča.

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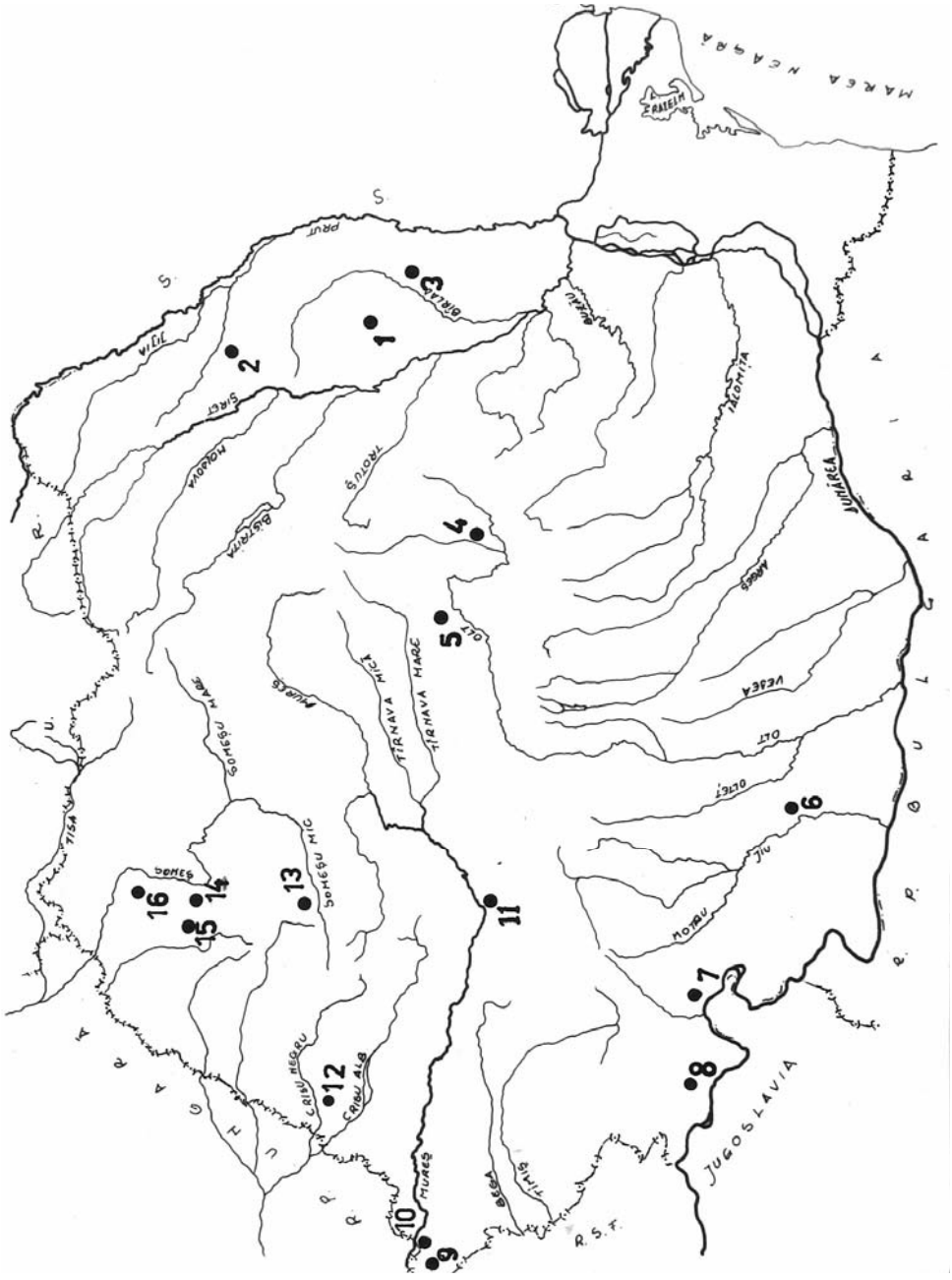

Plate VI – The distribution of the sites on the Roumanian territory where antropomorphic statuettes of Criş Culture were discovered: 1. Perieni, dist. Vaslui; 2. Blaş, dist. Iaşi; 3. Trestiana, dist. Vaslui; 4. Leţ, Dist. Covasna; 5. Poaiana în Pisc, dist. Sibiu; 6. Craiova, dist. Dolj; 7. Ostrovu Golu (Ostrovu Banului), dist. Mehedinţi; 8. Cornea, dist. Caraş-Severin; 9. Dudeşti Vechi (fost Beşenova Veche), dist. Timiş; 10. Cenad, dist. Timiş; 11. Turdaş, dist. Hunedoara; 12. Tinca Rîpa, dist. Bihor; 13. Gura Baciului, mun. Cluj-Napoca, dist. Cluj; 14. Zăuan, dist. Sălaj; 15. Suplacu de Barcău, dist. Bihor; 16. Homorodu de Sus, dist. Satu Mare.

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In spite of some similar elements, the pieces we assign to type II have no stylistic unity. From this point of view, only examples 1 and 4 have more elements in common.

Type III has three variants. It is characterized by pieces with a primitive aspect, of general cylindrical shape or with a slightly flattened base. Incision and pinching were used for marking certain elements and there is not even a small preoccupation with proportions. The pieces that have been included in this type are small, varying from 4 to 7 cm in height.

Variant IIIA. I have included in this category items from Beşenova, Zăuan, Cârcea and Gura Baciului[8] illustrated in Pl. IVA/1–7. The Balş item, is identified in the text with "B"[9].

B, 1, 3, 4, 5, and 6 have a regular cylindrical form; no. 7 is oblate dorsal-ventral, characteristic of type V (A1/Pl. V); 2, 4 and 6 have a slightly rounded top of the head. The eyes are marked with horizontal incisions (B, 1, 2 and 4) or sockets (nos. 6, 7). In the case of no. 6 the teeth ridges are unequal, an element consistent with our statement that there is no concern with the aesthetics of the objects. Objects 3 and 5 have a protuberance in the middle of the face, which could represent the nose. No. 3 has two faint pricks representing the eyes. The mouth is represented in items B (alveolated shape), 2 (crooked incision), 6 and 7 (round sockets). No. 5 merits special mention because, as shown in the photograph, in the middle of the face there is a round knob and below it a round hole with the same dimension; the two elements can be interpreted as nose and mouth. Statuettes 1 and 2 have incisions at the top, representing the hair. Item B has a vertical incision in the centre of the forehead; by turning the piece, we can see a second character, and maybe even a third one[10]. The first character has eyes and nose, the other eyes and mouth. Two knobs, or protuberances, can be interpreted as breasts or cheeks[11], but we prefer the first explanation. Statuette no. 1 has slight incisions on the lower part, which define a triangular area that could indicate the genitalia just as in the case of no. 2. In this category we include the items found at Beşenova[12].

Variant IIIB contains statuettes with a general cylindrical aspect and a large base. The object from Beşenova (Pl. IV/8) has only the hair indicated, with

[8] Our drawings. nos 5 and 6 cf. Roska, *op. cit*., Pl. CXXXVII/7 and 5.

[9] Popuşoi, 1980, 15, Fig. 12. This piece has features that, in our opinion, put it in a unique position: the author thinks that the face is on the lower part, while the breasts are on the vertical of the cylinder. We consider that the piece is more complex: on the upper area, a face is represented, in a primitive form. The eyes of this face are indicated by two horizontal incisions and a mouth. The breasts and hair are also marked by vertical incisions. On the base of the piece there is the face noted by the author. If we turn the statuette with its upper part downwards, the two horizontal incisions become the eyes of a third face and the vertical line can be a nose. If we accept this point of view, we have a piece with a double if not a triple representation of the human face. However, whatever hypothesis is accepted, the piece must take the benefit of a proper illustration.

[10] See footnote 10, above.

[11] The position is ambiguous.

[12] Lazarovici, *op. cit*., Pl. X/4, 6.

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incisions, as in variant IVA. We cannot discuss the features of the face, because the upper part of the single item included in this collection is destroyed.

Variant IIIC. For the moment, we have included here only one item coming from Trestiana (Pl. IVC/9)[13]. This has a tubular appearance, slightly enlarged toward the base. The inferior part is missing. The hair is marked by incisions inclined to the right and left similar to no. 1/Pl. IVA). A round knob, placed in the centre of the face, represents the nose, and the eyes are two horizontal incisions that continue a virtual diameter of the nose, elements that remind us of Vinča representations. Interesting on this piece compared to the others included in the IA variant, is the ventral ornament: two parallel incisions in a zigzag, the one on the right having a branch at its upper part. This incomplete object is similar to no. 1/Pl. IA but, unlike the latter, it has the hair rendered in a similar manner to the ones from type III; the nose is a knob, like type III and not an edge, like the first type, and it does not have the breasts marked. The break could have been below the breasts, but this seems unlikely to us, because of their very high position compared with the items we put into type I. For this reason, we prefer to think of this item as a variant of the cylindrical form, although stylistically it has nothing in common with the aforementioned objects.

Type IV is represented by an item discovered at Cârcea (Pl. IVA1)[14]. It is very similar with the ones with "fish mouth" from Lepenski Vir, but also with those from Beşenova and Gura Baciului (nos. 6, 7/Pl. IVA). They might be a foreign reflex of less elaborate South-Danubian type, which could be included in the same category on the base of some more subsequent pieces of information.

Type V is represented by parallelepipedic shapes, perfectly illustrated by the piece from Zăuan (1/Pl. VA2)[15]. We also include in this type the objects from Beşenova[16] and Cârcea-*Hanuri* (nos. 2, 3/Pl. VA2)[17]. On the upper part, a series of incisions represent the hair (nos. 1, 2 a–b/Pl. V/A2). In the case of nos. 2 a–b these incisions continue on the back, vertically placed in the central zone and oblique in the lateral one, as if the hair would have been gathered into a tail; in the centre of what would seem to be the face, the nose is marked in different ways: on item no. 1 with an orifice which pierces the piece, on piece no. 2 with alveolated holes[18]. At the sides of the nose, "moustaches" are marked. On the lower part, the genitalia are rendered by incisions: the most complex is the one on piece no. 1 with six irregular incisions which approximately delimitate an isosceles triangle, having the edge to the top, on pieces 2 and 3/1–2 with horizontal lines.

[13] Drawn by us, from the original.
[14] Drawn by us, from the original.
[15] Lazarovici, 1980, 20 and Lakó, 1978, Pl. VII/3.
[16] Lazarovici, *op. cit*., Pl. X/7.
[17] *Idem*, 1980, Figs. 4, 5.
[18] The quality of the illustration does not allow us to establish if it is an alveolate hole or a little knob.

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It should not be ruled out that this type evolved into type VI, which is more natural, characterized as well by dorsal-ventral flattening.

Type VI contains two items from Ostrovu Golu[19], both fragmented (only the torsos were preserved) and dorsal-ventrally flattened. The arms are in the shape of a bud. Breasts in the shape of round knobs indicate the genitalia. One of the statuettes (1/Pl. VA3) has an incised ornament on the ventral and also on the dorsal part: on the face, above and between the breasts, a rhombus; on the womb and on the back an angular ornament, circumscribed rhombuses or spirals[20].

B. Findings

In most of the cases, items of Starčevo-Criş anthropomorphic plastic art were fragmentarily preserved. The breakage occurred in the area of the waist, above or below the knees, or in the area of the neck. There are heads and necks without a body, torsos, fragments from the waist down, without bases in most of the cases, the legs or just the foot of the leg. Under these circumstances, reconstruction of the original features is difficult.

For the first type the task is made easier by the statuettes discovered in Hungary. Starting with the preserved examples, discovered in Romania and Hungary and from the stylistic harmony that these show, we propose the following classification:

Type I possibly has the head similar to the one from Zăuan (Pl. I/1). We believe that some items can be completed with a head of type IB, so that the statuette looks like the one from Ostrovul Banului[21], or like the one from Turdaş[22].

Type II might have the appearance of an item from the IA category from Zăuan and the aspect of an oblong cylinder, the head of which was not preserved.

Type III is considered to look like the item from Beşenova, but this does not help in reconstructing the upper part. On the other hand, it could have common elements with type IB in respect of the face, but the oblong cylinders are more likely linked on stylistic criteria to the heads of type II.

Types IV and **V** do not represent a concern in this respect, because the appearance and structuring of the elements facilitated their preservation.

Type VI presents some problems of reconstruction. The heads of type II that indicate the association with narrow shoulders cannot have a connection with this type. It cannot be excluded that the head was similar to those of the dorsal–

[19] Roman & Boroneanţ, *op. cit*., Pl. IV/4, 7.

[20] See also the fragmentary items from Homorodu de Sus, cf. T. Bader, *op.cit.*, Pls. 2/5, 7, 8. Similarly the statuettes from Ostrovu Golu, these have breasts as knobs and bud-arms. We are sorry that the frontal foto does not permit us to observe if the piece has also a dorsal-ventral flattening.

[21] See Pl. III/3.

[22] Roska, *op. cit.*, Pl. CXXXIX/1.

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ventrally flattened items from Tinca-Râpa (Pl. III/4). As mentioned above, we group them in this type only because of the length of the neck. We take this option because similar objects from south of the Danube with a clear Vinča affiliation have a normal neck, and in Hungary it seems that there are no other items with a long neck, with the exception of a few examples of Zăuan–Méhtelek type. So this would be a characteristic of the pieces from Romania.

Regarding these items, it needs to be emphasized that we are cautious regarding their cultural assignment, asking ourselves if, despite the original assignment, they are not closer to the Vinča culture. It is true that the contact between the two cultures makes difficult the separation of the elements, in some circumstances.

C. Style

The tendency of simplification dominates, the creators, apparently, being preoccupied by the general aspect of the body (which oscillates between steatopygia and oblong cylinder. Next are the face and the neck, the last being astonishingly presented in the case of the column-type. The elements of the face, when made, are minimal: eyes – horizontal incisions or asymmetric alveoli; nose – knob or edge; mouth – when it exists – an incision or an alveolus. In many cases, the face and the neck are not separate. It seems that the legs and arms were of least interest: in the case of the cylinders there is not even an indication of the separation of the legs. In most cases the legs are separated by an incision; the knees are marked, even the ankles, and on some pieces, the toes of the feet are marked too. The arms as well as the mouth appear to have been of little or no interest: in most cases they are missing, with the exception of those pieces with bud-arms**.**

D. Territorial distribution[23]

Type I is almost generally present, the only exception being Oltenia, with the site of Cârcea. It is not to be excluded that this absence is fortuitous.

Type II is widespread in Transylvania, the only site outside the Carpathian arch in which such an item was discovered being Perieni, in Moldova.

Type III is also generally present. This type can be connected to the parallelepipeds that appear on three items from Transilvania, Banat and Oltenia.

Types V, III and VI may be connected from an evolutionary point of view, even in the order they are mentioned. For type V a more precise dating is needed to confirm this. Apparently types V and IV represent the oldest forms.

Types IV and VI comprise unique items. It is not impossible that the pieces found along the Danube are imported – of which the ones from Ostrovu Golu belong to the Vinča culture.

[23] This aspect is subject to debate on present information.

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E. The chronology of Starčevo–Criş plastic art

The archeological context demonstrates that plastic art is a late phenomenon in this culture. It seems that the only exception is the object from Cârcea, whose connections with Lepenski Vir we have already mentioned, and that could be earlier. The rest of the items are from the end of phase III, and continue throughout phase IV. In Romania southern and western influences, combined with the specific local features, resulted in the catalyzing of the phenomenon's evolution.

F. Analogies

Type I. There are analogies in Hungary[24] and south of the Danube. Pieces from Kotacpart-Vata tanya and Tiszaug-Topart (13, 14/Pl. II)[25] are broken at the waist line and have unmarked knees. Pieces from Monostorszeg-Opoljenik, Kunszentmárton-Nagyerpart, Vinča (16, 3, 4/Pl. II)[26] have slightly flexed knees. The foot marked by a flattening is found on the items from Monostorszeg-Opoljenik, Vinča, Kopancs-Zsoldos tanya[27], Tiszaföldvár-Üjtenetö, Szajol-Felsöföld (nos. 6, 4, 5, 7, 8/Pl. II)[28].

We belive that a statuette from Kunszentmárton-Nagyerpart (3/Pl. II) with a more realistic appearance)[29] deserves special attention: it has breasts, well-marked steatopygy and flexed knees. It should be mentioned that, although the buttocks are very prominent, they are balanced by the flexed knees, so that the effect is not ungraceful. So far, it seems that this is the only piece with a functional base.

There are interesting analogies among the items published by Pál Raczky between 1976 and 1980[30]. Some came from Szajol-Felsöföld (1, 2, 8, 9/Pl. II) and others from Kengyel-Csonka-tanya (10/Pl. II)[31]. The statuette from Szajol-Felsöföld (1/Pl. II[32]) is similar in appearance to the piece named "Venus from Zăuan" (1/Pl. I), but the piece from Zăuan has a rounded top of the head, similar to the one from Nagykörű[33]. The rest of the materials from Hungary have angular tops. Two other similar heads were discovered at Szajol-Felsöföld[34]. The statuettes from Hungary do not have arms, and an item from Méhtelek has bud-arms[35]. The

[24] The statuettes from Hungary, especially those published by P. Raczky, nos. Pl. II/1–2 are very carefully made, with clear lines, more harmonious and more aesthetic.

[25] Kutzian, *op. cit*., Pl. XLIII/2; VIII/1.

[26] *Ibidem*, Pl. XIII/8; XVIII/12a, b; LXII/1a, b.

[27] *Ibidem*, 5/Pl. XIII; 1ª–b / Pl. LXII; 5/ Pl. LXIII/5.

[28] Raczky, 1979–1980, 5–33. N; see also Kalicz & Raczky, 1980/1981, 13–24, p. 237, Pl. IX/1–2. Raczky, 1978, 7–17.

[29] Kutzian, *op. cit*., 12a, b/ Pl. XVIII.

[30] Raczky, see *supra*. We are deeply obliged for the information he gave us.

[31] *Ibidem*, Fig. 1/1, 2; 4/3; 7/1.

[32] Kalicz & Raczky, 1980–1981, 13–24, Pl. IX/1–2, 237.

[33] Lazarovici, *op. cit.*, Fig. 4/1.

[34] Raczky, *op. cit*., 4/ 1, 2.

[35] Lazarovici, *op. cit.*, Fig. 4/7.

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way the breasts are treated (with visible perforations – Pl. II/ nos. 1 and possibly 2) should be noted, compared to Pl. I/ nos. 1 A, B, C.

A piece from Vinča[36] has horizontal incisions on the hip, similar to a piece from Turdaş (24/Pl. I). These incisions could be folds of fat, but the dimensions of the pieces do not support this.

Greece, also offers a series of analogies, some of them surprising: Palaeolithic[37] representations, a statuette dated to the pre-ceramic Neolithic and a Neolithic item, two coming from Sesklo and a last one from Magoula Karamourlar (17–22/Pl. II)[38]. The statuettes and the Palaeolithic drawings are identical from the breasts downwards with the steatopygic items of type IA. The only difference is that in these objects no attention was given to anatomical details of the upper part. In the case of the items from the pre-ceramic Neolithic the legs are bent forward, with exaggerated buttocks and short horizontal feet, so that they could easily sit down. It is interesting that between the Palaeolithic and Greek pre-ceramic Neolithic this type appears without any notable stylistic differences in the drawn as well as in the plastic art. Comparison between the Upper Palaeolithic and Neolithic must be considered more an objective finding than genetic reality. Once more it is notable that in the countries of the former Yugoslavia, as in Romania and Hungary, millennia later the Starčevo-Criş complex illustrates this type, but paying more attention to elements that differentiate the sex.

Type II has analogies at Kotacpart-Vata-tanya and Kopancs-Zsoldos-tanya[39]. In the first case the neck is long, the head unmarked, the face badly preserved, but probably lacking clear features from the outset; the hair is long, let loose at the back, marked by slightly wavy incisions, and the figure has bud-arms**.** The second item poorly preserved and with an unclear graphic presentation, could be of the same type (1a–b/ Pl. IIIB). Worthy of note here is the column-shaped neck of some of the items published by P. Raczky and grouped in the IA type because of the steatopygy .

A set of column shaped neck statuettes was also found in Greece: the items from Sesklo, Magoula Karamourlar, Pyrassos and from the area of Pharsala[40]. All these statuettes (Pl. IIIB/2–5) have column shaped neck, rounded top, coffee-bean eyes; the last two have hair. By the way the eyes are rendered and the strict separation between the face and neck as well as the the form of the legs and arms, they differ from the objects on the Romanian territory. The item from Pyrassos has the arms resting on the knees. The general aspect, except the face, is very reminiscent of the statuettes belonging to the Hamangia culture.

[36] Vasič, 1936, Pl. XXI / Fig. 52a–c, by us Pl. II/12.
[37] Which could rise problems regarding the origins or about the assimilation of old local elements.
[38] * * *, 1973, 301, Pl. XXII/4a–f, by us Pl. 2/17–22.
[39] Kutzian, *op. cit.*, Pl. XLIV/8a–b, 9.
[40] * * *, 1973, Figs. 222, 221, 40, 38.

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At Soufli Magoula were discovered statuettes with long necks and bud-shaped arms dated by the author[41] to the Early Neolithic. The author assigns them to communities that practised cremation.

This type seems to be characteristic of the second phase of the Starčevo-Criş culture and also to the third phase[42].

Type III comprises cylindrical forms, such as the items from Starčevo[43], Beletinci[44] and Vinča[45]. The first two items, of cylindrical form and with an unmarked base, have the eyes rendered in a manner that combines incision with excision (similar in some respects to the coffee-bean pieces from Greece). The hair is marked by irregular incisions which, on the back of the second example take the form of zig-zags that extend to the base of the statuette (Pl. IV, col. 2/1, 2). The piece from Vinča (Pl. IV, col. 2/3) although of cylindrical form, represents an analogy with type III, but because of the face (central knob, "moustaches") is more like type IB.

Type IV. A piece from Lepenski Vir has analogies with items of this type (Pl. VB1)[46]. What differentiates the only piece found so far at Cârcea from the Lepenski one is the way it was made. The head from Cârcea has alveolar holes for the eyes and mouth, while completely opposite, the creator of the Lepenski Vir piece achieves the same result[47] by means of a contour-relief band. The mentioned item from Cârcea has only the head, while the majority of the items from Lepenski Vir have round or ovoid bodies**.** It cannot be ruled out that these pieces are masks, but if at Lepenski Vir the stylization suggests this, the pieces from Romania provide no confirmation of it. But it should be emphasized that the more primitive style, the less careful working of the clay, and the fragmented state of the figurines makes them more difficult to interpret.

Type V. A piece from Méhtelek is similar to the items from Cârcea-*Hanuri* and Beşenova[48]. This has a parallelepipedic shape, knob-nose, "moustaches" and marked genitalia. Interesting is the fact that the piece (Pl. VB2/1–3) is evidently realized in the same way as the published objects from Szajol-Felsöföld (Pl. II/1, 2). One of the two statuettes has the Mons Pubis ('Mountain of Venus') marked by a bulb and the other by a quadrangle without its lower part. As for the rest of the items discovered in Romania, the genitalia are marked by irregular lines, sometimes v-shaped, close with the angle uppermost.

[41] Gallis, 1980.
[42] Lazarovici, 1979, 32; nos. Pl. IV, col. 2/ 1.
[43] Srejović, 1964–1965, Pl. 17/ 4; nos. Pl. IV, col. 2/2.
[44] Srejović, *op. cit*., Pl. 17/1; nos. Pl. IV, col. 2/3.
[45] Srejović, *op. cit*., Pl. 18/1.
[46] Srejović, 1969, Fig. 57.
[47] Suggesting fear, terror, sadness.
[48] Lazarovici, 1980, Fig. 4/4.

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Type VI has analogies with Vinča[49] but without ornaments, the first items having bud-arms crossed by orifices (Pl. VB3/1, 2).

G. Influences

Steatopygy, characteristic of the **IA type**, is a widespread characteristic in various areas and temporal horizons. The problem that rises is its meaning in each area at a certain point in time, but this is very difficult, if not impossible, to establish.

Stylistically and typologically, the most common pieces come from south and west of the Danube, from Hungary and Greece. The items coming from Greece are also the most problematic, because they come from other periods, Palaeolithic and pre-ceramic Neolithic. The subsequent evolution of the steatopygic statuettes from Greece shows characteristics other than those the Starčevo-Criş complex inherited and extended. We see that a type of statuette discovered in Greece and dated from the Palaeolithic to the end of the Neolithic, is preserved in the north Balkans. A possible explanation of this phenomenon could be the amount of time necessary to diffuse the type toward the south-east and central European regions. We must take into consideration the fact that, sometimes, similar situations and needs gave birth to identical solutions, but this theoretical proposition is hard to prove. Regardless, the influences coming from Greece are undeniable, not to mention that it has been demonstrated that the Gura-Baciului-Cârcea complex has a Thessalic origin and that its participation in the genesis of the Starčevo-Criş culture is unquestionable.

Type II has analogies in Hungary and Greece.

For **type III** the influences come from Serbia, starting with the Early Neolithic; this type is tied to the evolution of **type V**, for which there are clear analogies in Hungary.

Influences for **types IV** and **VI** come from the south.

H. The significance of the treatment of the anatomic elements

1. The steatopygy. Steatopygy is an understandable constant. For both types of communities – Palaeolithic and Neolithic, survival (which means **food** and **procreation)** was vital. Accompanied or not by obesity, we consider that steatopygy is rather a symbolic expression of the well-being ideal, of abundance and, at the same time, of the ideal of protection, in other words of fertility and fecundity. In the case of the Starčevo-Criş anthropomorphic statuettes we believe that these are early representations of a Magna Mater type divinity. Depending on the development of the speculative capacity and the symbolic perception, there could be added elements of connection between the animal and human worlds,

[49] Kutzian, *op. cit*., Pl. LXII/6a–b; LXIII/1a-b; Vasić, *op. cit*., vol. I, Pl. XXX/135; vol. II, Pl. XXI/51.

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between the wild and the domestic world, which then established the cycle of the "ages" connected with that of the seasons, life and death.

2. The sex. It seems that the former considerations are confirmed by the fact that when we can establish without doubt the sex of the representations, it is feminine. We have not identified so far any masculine Starčevo-Criş items. The consequence of this observation, connected with the first-mentioned analysis, leads us to the conclusion that the Neolithic Starčevo- Criş type supernatural was dominated by one or more female divinities, with attributes, at least, in the field of fertility and fecundity.

3. The position in the case of all Starčevo-Criş statuettes from Romania is a standing one. The only items which do not conform to this rule are those cited by Pál Raczky[50]. The implications of these enthroned statuettes are beyond the scope of the present work.

4. The arms. We are especially intrigued by the lack of attention regarding the arms. These appear in the form of completely non-functional or useless buds, opposite to real life. We can say that if there is one thing that humans are clearly dependent on, it is the arms and hands. From the earliest times, people were aware of this dependence and often the hand had a multiple symbolic significance, different from one period to another, but always present and abundant. Nevertheless, the arms seldom appear in Starčevo-Criş plastic art, a reality rectified in the Vinča horizon. It is difficult to explain this situation. We can only make some assumptions and one of them is that the force of a divinity lies in her symbolic presence, not in her gesture. We think that the absence of the arms certifies once more that the statuettes represent supernatural forces and not idol worshippers.

5. The column-shaped-neck is another detail that poses serious problems regarding its significance. It is very difficult to find an explanation at this temporal and cultural level, but we have taken the risk of ethnographic analogies. We consider two possible explanations: a deliberate anatomic malformation[51] or something in connection with the life-tree cult.

There is no archaeological confirmation for the first assertion: no human remains presenting this kind of malformation have been discovered to date[52]. On the other hand, noone has found the metal rings required for the exoskeleton, essential in the case of putting into practice such a malformation. It is also true that the number of the Starčevo-Criş burials is not impressive, so it is possible to discover in future that somewhere in the area of this culture – not throughout its entire area – there is such a practice.

As for us, we consider that the column-shaped-neck is an aspect for which only future excavations can offer a better answer.

[50] Raczky, *op. cit.*, Pl. 4/5a–b and 6a–b, 30.

[51] Ron Gluckman, *Stretching One's Neck*, www.gluckman.com/LongNeck.html. see the Kare Tribe named also The tribe of the long neck people Pai Dong, living on the borders between Thailand and Burma, on both banks of the river Pai.

[52] Necrasov, 1965a, 19–28; Necrasov, 1965b, 19–33.

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6. The face. The way the face is represented shows significant variations, from the total lack of anatomical details, to the appearance of all or part of the facial characteristics. There is no explanation for this situation, and this time, anthropology and ethnography are of little use. The missing **mouth** or **nose** is not such a rarity and we cannot find a symbolic significance. A special situation is the case of the **eyes:** the eye is an element with an important symbolic meaning, a fact we were aware of almost from the beginning[53]. The lack of the eyes could be explained more easily if the statuettes represent worshippers. We know that many of the mythologies and religions have an interdiction: no living person is permitted to see the face of a divinity, because mortals cannot survive materially and mentally such a trial. It is not impossible that the pieces with no facial features, and of course with no eyes, had a special target, a meaning we are not aware of, at the present level of information. It is an idea, but a risky one.

On the other hand, we can consider that a divinity needs no eyes, nose, etc. because she is autarchic.

I. Significance and use of the statuettes

This is a very difficult topic. We consider that they had to have a very clearly defined purpose, but we are not aware of the subtle differences now. We consider, and it is not for the first time we say this, that they represent a divinity of fertility and fecundity, perhaps also of life and death, a kind of Magna Mater with power that is hard to describe.

Here we may recall the variety of the shapes, which vary between steatopygy, cylinder and parallelepiped, the distance being important not so much from from the point of view of form and style, but also meaning. We can ask ourselves if the differences are only the result of evolution, or there were differences of significance. We can find an answer if we examine the context of the findings, the types distribution in time and space.

Analysis is difficult because, in many cases, we have no information about the archaeological background, the situation being the result of primitive excavation technique, or uncertain origin (see Zsofia von Torma), or because the discoveries do not provide revealing complexes such as cult places, burials, houses, or fireplaces.

As for the fact that the majority cannot stand and have no holes to suggest a way of suspension, we think that they were put in a special holder or directly thrust into the earth. It is interesting to mention that the way in which they were exhibited does not leave any indication, as in the case of the Vinča perforated statuettes.

[53] See the symbolism of the eye in Egypt.

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J. The importance of the anthropomorphic Starčevo-Criş plastic art

This is also difficult to establish: we have no conclusive information about the manner of exhibition and use. We think it is too narrow-minded to lay the blame on the small number of pieces or to draw the conclusion that it shows a magico-religious life that was limited or lacked subtlety.

The small number of items could be fortuitous, but the result of the specific way of thinking about relations with the supernatural in general and with the divinity in particular, a way of thinking we know nothing about.

K. Conclusions

1. We have identified six types of statuettes (types I and III each having three variants), a large number considering the discovered pieces as a whole.

2. We consider that they show unexpectedly high diversity from a typological point of view, a special situation that can be explained as a result of the territory under discussion being at the crossroads of southern and western influences. To these influences can be added the specific of the local background. This lack of unity among the plastic art is in contradiction to the stylistic unity of the pottery and other characteristic elements.

3. The typological fragmentation is completed with well-marked stylistic variation. The best example is type II where the only characteristic element is the column-shaped- neck.

4. Some of the pieces have possible relation to other types: that is the case with number 4/Pl. IIIA from Tinca Râpa which has obvious Vinča influences. It could easily be put into type VI without the column-shaped-neck.

5. The items from the latest Starčevo-Criş levels are early representations of one or more divinities of Magna Mater type, patron of fertility, fecundity, life and death, of humans, animals and plants (both wild and domestic).

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DOUĂ RECENTE ACHIZIŢII ALE MUZEULUI NAŢIONAL DE ISTORIE A ROMÂNIEI: O FRUCTIERĂ CRIŞ ŞI UN VAS DE TIP PHIALĂ

DEUX RÉCENTES AQUISITIONS DU MUSÉE NATIONAL D'HISTOIRE DE LA ROUMANIE – UNE FRUITIÈRE CRIŞ ET UN VASE DE TIP PHIALE

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Cuvinte-cheie: civilizaţie Criş, fructieră, Geţi, phială din argint.
Rezumat: Recent, în colecţiile Muzeului Naţional de Istorie a României au fost primite două piese de excepţie – o fructieră aparţinând civilizaţiei neolitice Criş, din centrul Moldovei şi un vas tip phială, din argint, descoperit în vecinătatea comunei Măgurele, la sud-vest de Bucureşti. Phiala este decorată cu caneluri-coaste şi cu semne punctiforme şi datează, probabil, din secolul III a.Chr.

Mots clés : civilisation Criş, fruitière, Gètes, phiale argent.
Résumé : Récemment, dans le collections du Musée National d'Histoire de la Roumanie sont deux pièces d'exception – une fruitière appartenant a la civilisation néolithique Criş, du centre de la Moldavie, et un vase de type phiale, en argent, découvert aux alentours de la commune Măgurele, au Sud-Ouest de Bucarest. La phiale est décoré avec des cannelures-côtes et des signes punctiformes; elle date, probablement, du III^{e} siècle av. J.-C.

Recent, Muzeul Naţional de Istorie a României a intrat în posesia a două piese de excepţie. Dată fiind frumuseţea şi importanţa lor, le vom prezenta pe rând.

Mai întâi un vas tip **fructieră (cupă cu picior înalt)** (Fig. 1–5), aparţinând culturii neolitice Criş, provenind din părţile est-centrale ale Moldovei, zona Scânteia, localitatea Miroslăveni, din judeţul Vaslui – după informaţiile lapidare ale donatorului Ion Donoiu.

Pornind de la o bază puţin evazată, având diametrul de 8,2 cm, se înalţă un picior cilindric, înalt de 5,7 cm, care susţine o cupă semisferică, ce are diametrul în dreptul deschiderii de 15,5 cm. Buza este verticală şi rotunjită. Înălţimea totală a vasului este de 13 cm.

Pasta este bine aleasă, miezul ei având o culoare neagră, iar exteriorul roşu-vişiniu. Tot corpul este acoperit cu un slip lucios, peste care s-a aplicat un decor pictat, de culoare neagră-maronie.

Pe picior sunt trasate, orizontal şi paralele între ele, patru benzi. Zona de contact dintre picior şi corpul cupei este acoperită de o bandă relativ lată, suprapusă, pe jumătatea inferioară a corpului, de alte două benzi, de asemenea orizontale şi paralele.

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Jumătatea superioară a corpului cupei este împărțită în trei registre. Între două mari trapeze, pete de culoare, dispuse paralel unul față de celălalt, ce au laturile ce se privesc între ele, arcuite, se află într-un prim registru o bandă meandrică, trasată oblic, situată sub o linie în formă de C culcat si un X cu laturile arcuite şi capetele barelor trapezoidale. În celelalte două registre spațiile respective dintre trapeze sunt umplute cu patru aliniamente oblice, paralele între ele, de mici trapeze, pete de culoare – 4, 3, 3, 1 (de la stânga spre dreapta). Spațiile libere dintre marile trapeze ce servesc de ancadrament sunt ocupate de benzi linii verticale de vopsea – 7, 6, 6 (în sensul invers acelor de ceasornic şi pornind de la primul registru descris).

Fructiera în cauză, nefiind descoperită într-un anumit context, ba chiar locul descoperirii fiind incert, este imposibil a fi mai bine încadrată cultural şi cronologic. Ea constituie totuşi un vas de excepție, prin formă şi decor.

*

A doua piesă ce o prezentăm este un mic **vas de tip phială**, din argint, descoperit, după spusele donatorului, de un grup de copii, în preajma comunei Măgurele, situată la sud-vest de Bucureşti (Fig. 6–8).

Vasul are o înălțime de 3,9 cm. Gura vasului este largă, rotundă, având un diametru la exterior de 9,9 cm. Buza este rotunjită şi puțin evazată spre exterior, iar la interior prezintă un prag. Partea superioară a corpului, înaltă de 2,75 cm, este tronconică, cu pereții arcuiți. Unirea cu partea inferioară se face printr-o zonă carenată ce constituie diametrul maxim, care are 7,6 cm la exterior. Partea inferioară, înaltă de 0,85 cm, are forma unui trunchi de sferă. Corpul se sprijină pe un picior inelar, înalt de 0,3 cm şi cu diametrul de 3,45 cm. Grosimea pereților vasului variază de la 0,2 cm în dreptul buzei, la 0,4 cm la mijlocul părții inferioare a corpului pentru ca, în centrul aceleiaşi părți inferioare, să fie de 0,25 cm.

Cele trei părți ale vasului – partea superioară a corpului, cea inferioară şi piciorul inelar – par a fi lucrate separat şi apoi sudate.

La exterior, vasul este decorat cu caneluri-coaste foarte dese. Partea superioară a corpului este divizată în opt registre relativ egale, despărțite între ele, alternativ, printr-un romb şi o ovă ascuțită în partea de sus şi cea de jos, dispuse vertical. Orizontal, spațiul dintre ove este împărțit, la rândul său, pe jumătate, printr-o linie incizată. Câte o linie incizată delimitează, sus şi jos, spațiul decorat, constituit din acele caneluri-coaste, ce sunt paralele cu laturile celor două romburi.

Zona de deasupra unuia din romburi prezintă o deteriorare recentă, gen tăietură, ce constite punct de reper pentru descrierea decorului, în sensul că registrul superior, dintre rombul nr. 1 şi ovele nr. 1 şi 4, are la stânga rombului, spre ova nr. 4, 19 caneluri-coaste, iar la dreapta rombului, spre ova nr. 1, 20 de astfel de caneluri-coaste. În schimb, registrul inferior conține la stânga 20 de caneluri-coaste, iar la dreapta 19, adică invers decât cel superior.

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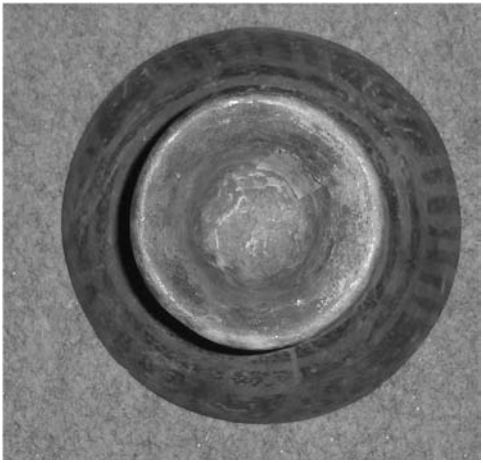

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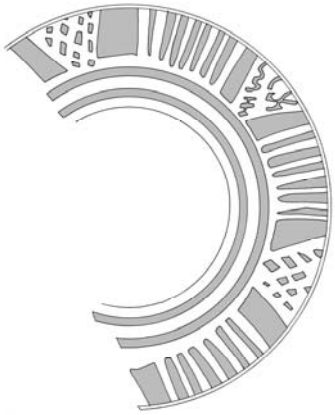

5

Fig. 1–5 Vas fructieră aparținând culturii neolitice Criș /
Vase fruitière appartenant à la civilisation néolithique Criş.

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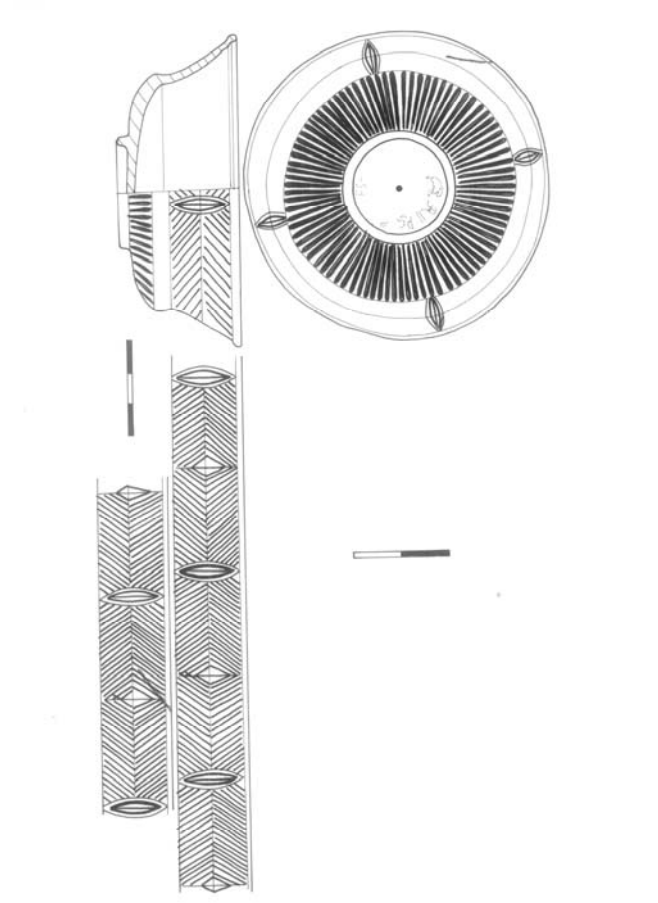

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Fig. 6–8 Vas phială din argint, de la Măgurele / Vase de type phiale en argent, de Măgurele.

Spațiul dintre ovele nr. 1 şi 2 este înjumătățit, la rândul său, de rombul nr. 2. Astfel, între ova nr. 1 şi rombul nr. 2 atât în registrul superior cât şi în cel inferior sunt doar 17 caneluri-coaste. În schimb, între rombul nr. 2 şi ova nr. 2 sunt în registrul superior 21 de caneluri-coaste, iar în cel inferior 18.

Spațiul dintre ovele nr. 2 şi 3 cuprinde între ova nr. 2 şi rombul nr. 3 în registrul superior 21 de caneluri-coaste, iar în registrul inferior 20. Între rombul nr. 3 şi ova nr. 3 sunt în registrul superior 20 caneluri-coaste, iar în cel inferior 19.

Spațiul dintre ovele nr. 3 şi 4 cuprinde, în registrul superior, între ova nr. 3 şi rombul nr. 4 un număr de 23 caneluri-coaste, iar între rombul nr. 4 şi ova nr. 4 se află 20 caneluri-coaste. În schimb, în registrul inferior, între ova nr. 3 şi rombul nr. 4 se află 20 de caneluri-coaste, iar între rombul nr. 4 şi ova nr. 4 doar 19 caneluri-coaste.

Partea inferioară a corpului este şi ea decorată cu un număr de 86 caneluri-coaste, situate între o linie incizată trasată sub diametrul maxim şi până în piciorul-fund inelar.

Pentru eventuale interpretări viitoare, pentru care în prezent nu vedem decât măiestria argintarului, redăm în tabelul de mai jos situația constată şi enunțată mai sus, dar doar pentru partea superioară a corpului.

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	Romb 1 – ova 1	Ova 1 – romb 2	Romb 2 – ova 2	Ova 2 – romb 3	Romb 3 – ova 3	Ova 3 – romb 4	Romb 4 – ova 4	Ova 4 – romb 1
Reg. Sup.	20	17	21	21	20	23	20	19
Reg. Inf.	19	17	18	20	19	20	19	20

Fundul vasului, adică spaţiul cuprins în interiorul cercului format de piciorul inelar este drept şi bine cizelat. În centrul său se află o adâncitură rotundă, provenită probabil de la suportul pe care a fost prelucrat vasul într-o primă fază. În schimb, chiar pe marginea spaţiului liber de lângă piciorul inelar, sunt redate punctiform, cu ajutorul unui punctator foarte fin, diferite figuri şi semne.

De la stânga spre dreapta se observă mai întâi conturul unui animal, ce pare a fi un iepure alergând. Corpul şi capul sunt două ovale tangente, corpul mai mare, iar capul mai mic. În faţă sunt două picioare – cel din stânga redat prin 5 puncte, iar cel din dreapta prin trei. În spate este doar un picior din 5 puncte, sub el aflându-se un mic pătrat, redat prin şase puncte. Iepurele aleargă spre o figură ce ar putea reprezenta un copac sau, mai curând, litera A mare de mână, urmată, la relativ mică distanţă, de două linii verticale, paralele – eventual doi de I, primul redat prin 6 puncte, iar al doilea prin 7. Urmează, puţin mai departe, un P, un S şi o mică linie orizontală, formată din 7 puncte. La o distanţă ceva mai mare se află un P sau poate un R, apoi iarăşi două linii verticale şi paralele – prima din 3 puncte, următoarea doar din două. La distanţă, iarăşi un eventual P, un S şi în final 3 puncte dispuse fără ordine.

Vasul a fost supus şi unei analize fizico-chimice de către colegul fizician dl. Gheorghe Niculescu care a constat următoarea componenţă metalică:

	Interior corp	**Interior buză**
Argint	94,16 % * 0,34	93,72
Cupru	5,36 % * 0,12	5,00
Plumb	0,48 % * 0,03	0,49
Staniu		0,79

Acestea sunt datele de care dispunem, până în prezent, privind această eventuală descoperire fortuită. În privinţa datării, rezolvarea problemei ar fi, eventual, simplă. Zona Măgurele ar putea reprezenta nordul arealului cu descoperiri din secolele IV–III a.Chr. reprezentat de punctele Bălănoaia (cazan de bronz), Daia (locuire), Chirnogi (mormânt cu caracter princiar), Căscioarele (locuire) sau estul aceluiaşi areal, cu descoperirile de la Peretu (mormânt princiar), Zimnicea (locuire şi necropolă), Făcău (mormânt cu caracter princiar), Popeşti (locuire) etc. Descoperirile menţionate fiind arhicunoscute în rândul specialiştilor, nu credem că trebuie făcută o trimitere bibliografică.

Decorul cu caneluri-coaste este deseori întâlnit pe vasele de tip phială din argint atât de la Peretu, cât şi de la Agighiol, Rogozen (Bulgaria) etc. Vasul de la Măgurele, prin dimensiuni, formă şi decor ar putea data, după părerea noastră, din

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secolul III a.Chr., fiind un produs ceva mai recent decât descoperirile amintite mai sus.

Ceea ce în prezent constituie însă un semn de întrebare sunt semnele redate punctat de pe fundul vasului, care se aseamănă cu litere latine şi nu greceşti, ceea ce este inexplicabil. Au fost, eventual, făcute ulterior, sau ţin tot de măiestria argintarului. Întrebarea rămâne, pentru moment, fără răspuns. Am dorit însă să punem în circuitul ştiinţific această piesă pentru ca, eventuale date viitoare, să ne poată lămuri mai bine.

Şi cum *phiala* servea la băut vin, să închinăm pentru Domnul Eugen Comşa pentru întreaga sa activitate – subsemnatul participând, ca student, pentru prima oară la săpături arheologice pe şantierul Radovanu, în anul 1962, iar tatăl meu a fost coleg de serviciu, în anii dinaintea războiului, cu tatăl celui omagiat în prezent.

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SPIRITUALISM IN NEOLITHIC ANATOLIA

SPIRITUALISM ÎN ANATOLIA NEOLITICĂ

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Cuvinte-cheie: neolitic, spiritualitate, Çatalhöyük, Göbekli Tepe, Nevali Çori.
Rezumat: Posibila natură a religiilor neolitice din Orientul Apropiat sau din alte locuri, continuă să fie dezbătută neîncetat. În Anatolia, de obicei, această discuție este focalizată pe definirea unor diferențe în expresia credințelor spirituale ale vânătorilor-culegătorilor şi ale celor care practicau agricultura. Redarea artistică sau expresiile unor astfel de credințe recuperate dintr-o serie de situri preistorice din Anatolia ar putea să pună în lumină dimensiunea schimbărilor care au conturat filosofiile religioase privind lumea spiritelor şi forțele supranaturale. Datele de la Göbekli Tepe, Nevali Çori şi Çatalhöyük acoperă perioada preceramică A-B, iar perioada Neoliticului Ceramic se întinde pe circa trei milenii.

Key words: Neolithic, spiritual, Çatalhöyük, Göbekli Tepe, Nevali Çori.
Abstract: The possible nature of Neolithic religions in the Near East and elsewhere is still debated. In Anatolia, this discussion is usually focused on defining the differences in the expression of spiritual beliefs between sedentary hunter-gatherers and farmers. Artistic renderings or expressions of such beliefs recovered at a number of prehistoric sites in Anatolia could shed some light on the extent of changes that shaped the religious philosophies regarding the spirit world and supernatural forces. The data from Göbekli Tepe, Nevali Çori and Çatalhöyük cover the Pre Pottery A–B and Pottery Neolithic periods cover a time-span of slightly over three millennia.

The gradual adoption of cultivation by sedentarized hunter-gatherers provided them with an economic alternative that may have caused a progressive change in their social structure and performance of spiritual activities[1]. It is argued here that despite the presumed socio-economic changes, perhaps affecting also the organization of communal rituals of spiritual nature, the cosmic world order envisaged by prehistoric farmers would not have differed fundamentally from that perceived by hunter-gatherers. Animism, which seems to be the prevailing belief among the sedentary hunter-gatherers, did not disappear entirely with the development of farming. The realms of the 'profane' and 'spiritual' or the 'living' and 'dead' would not have been understood or treated by farmers as two entirely disconnected and unbridgeable realms. This argument presupposes that behind the

[1] Most settled hunter-gatherers did not cultivate food plants or tried to domesticate animals, at least not as soon as they settled in permanent villages. While wild grain, almonds and pistachio were among the consumed plants, wild cattle, gazelle, wild pig and wild ass were among the animals hunted for their meat (Schmidt 2000a, 47–48).

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particular aesthetic effect of their respective art forms laid encoded expressions of ingrained beliefs, including those pertaining to concepts of supernatural and cosmos[2].

It is still not very clear if certain notions concerning the 'supernatural' or 'universe' among the Neolithic farmers deviated significantly from the animistic foundations of hunter-gatherers' spiritualism. A comparative analysis of human and animal representations in the hunter-gatherers' art of the tenth-ninth millennia, and farmers of the eighth-seventh millennia BC reveal certain conceptual similarities between these two chronologically distinct socio-economic entities. New versions of existing creation myths or world order could have been created to further elaborate on the presumed relations between mortals and immortal mythical creatures, spirits and so on. As far as the expressions of these notions in art forms are concerned, the problem is how to distinguish between a multitude of encoded messages of spiritual nature and symbolic expressions of notions.

Since certain symbolic expressions encountered in the prehistoric art of Anatolia are seldom self-explicit, it is often necessary to refer to ethnographic variables to set the limits of tentative interpretations. The meaning of symbols in the spiritual art of shamanic native groups could go a long way in explaining some of the deep-rooted notions hidden in ornamental schemes based on human and animal figures. On the other hand, when it comes to differentiate between a multitude of encoded messages of spiritual nature and symbolic expressions of simple notions, even ethnographic examples presumed relevant cannot be of much assistance.

The iconographic assemblages of Göbekli Tepe, Nevali Çori, Çatalhöyük East and Köşk Höyük provide material expressions of prevalent spiritual beliefs in the Pre-Pottery and Pottery Neolithic periods.

Göbekli Tepe with its outstanding stone architecture incorporating monumental T-shaped stone pillars is a remarkable Pre Pottery Neolithic site[3]. Located on high terrain, the site was undoubtedly a spiritual center of a large community or related communities of hunter-gatherers. The two main architectural layers, III-II have been assigned to the PPNA and PPNB respectively. The early layer (III) revealed large curvilinear stone enclosures with sunken floors. The T-shaped ca 3.5–5 m high stone pillars erected in these megalithic enclosures and arranged symmetrical, resemble abstract human forms[4]. These surrounded a set of two decorated and carefully shaped more imposing stone pillars. Except for a few enigmatic motifs recalling the so-called pictograms of Jerf el Ahmar, wild species from the local fauna were depicted in naturalistic style on decorated pillars. The

[2] J. Clottes & D. Lewis-Williams argue that the way the shamanic cosmos is conceived is generated by human nervous system rather than intellectual speculation or detached observation of the environment (1998, 19). Among the socially less complex shamanistic societies, the cosmos is usually imagined to consist of three realms one of everyday life, one above and a third realm below. Their own particular spirits and spirit-animals inhabit the realms above and below.

[3] Schmidt 2006.

[4] Peters & Schmidt, 2004, 208, Figs. 3–5.

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megalithic enclosures of layer III were filled-in with soil prior to their disuse[5]. Such 'ritual burial' of buildings with fixtures of cultic significance is known also at Çayönü, Nevali Çori and Çatalhöyük[6]. In enclosure A (the so-called 'Snake Pillar Building'), one of the decorated pillars (P 1) depicts a group of five snakes in addition to a net holding snakes or snake-like figures, and a figure of ram. In the same enclosure a bull, fox, and crane are portrayed on a second pillar with a bucranium sign[7]. In the adjacent enclosure B[8], each of the two central pillars (P 9–10) portrays a fox. A snake is depicted on a third pillar (P 6). Enclosure C produced a number of decorated T-shaped pillars (P 11–13)[9]. On the upper part of one of them (P 12), is a composition of five bird-like figures shown trapped in a net[10]. On the shaft of this pillar a boar and a fox are depicted. The fox at Göbekli Tepe figures together in combination with some other wild species; ox and crane, ox and snake, or feline. In this enclosure, the wild boar figures on six of the stone pillars. In addition, the fill of this enclosure yielded three wild boar stone sculptures[11]. These were probably votive offerings deposited in the fill of the enclosure during the 'ritual burial'. As for bird representations, species such as falcons, eagles, cranes and others figure on some of the pillars[12]. Crane representations are known at Bouqras in Syria[13] and Çatalhöyük in central Anatolia[14]. Figures of vulture, however, represented later in the wall-paintings of Çatalhöyük do not appear on Göbekli Tepe's stone pillars, although the specie is known to have existed according to faunal data. Nevertheless, a stone vulture figurine found buried in the fill of layer II[15], could attest to its symbolic importance in the local iconography.

At Göbekli Tepe snakes are often depicted in groups of three, four, or five, or sometimes in groups of 12 and more, and arranged in a wave-pattern, which indicates a downward movement. In one particular case (P3), a snake is depicted with two heads; one at each end of the body, and looking in opposite directions[16]. The repeated occurrence of the snake motif on T-shaped pillars in the layer III enclosures, except in enclosure C, is rather significant. Presupposing its chthonic affiliation, it is tempting to speculate that rituals performed in enclosures A, B and D may have been associated with the 'domain of the dead' or 'underworld'.

[5] Schmidt 2000a, 46.

[6] This fill, brought over from a PPNA phase village, probably situated somewhere nearby, contained remains of wild cattle, wild ass, gazelle, and wild pig, but no bones of domesticated animals. As for the flora remains found in the same fill, they consist of wild food plant species such as almond, pistachio, wild grain and pulses. Both faunal and flora records suggest that this sacred site was frequented by hunter-gatherer groups from nearby localities.

[7] Schmidt 1999.

[8] Schmidt 2000a, 50, Figs. 4, 7.

[9] Schmidt 2000a, 50–51, Fig. 8.

[10] Schmidt 2000b, 13, Fig. 6.

[11] Peters & Schmidt, 2004:184, Figs. 13–16.

[12] Peters & Schmidt, 2004, 207.

[13] Clason 1989/1990.

[14] Mellaart, 1967.

[15] Peters & Schmidt, 2004, 213, Fig. 23, Table 3.

[16] Peters & Schmidt, 2004: 183.

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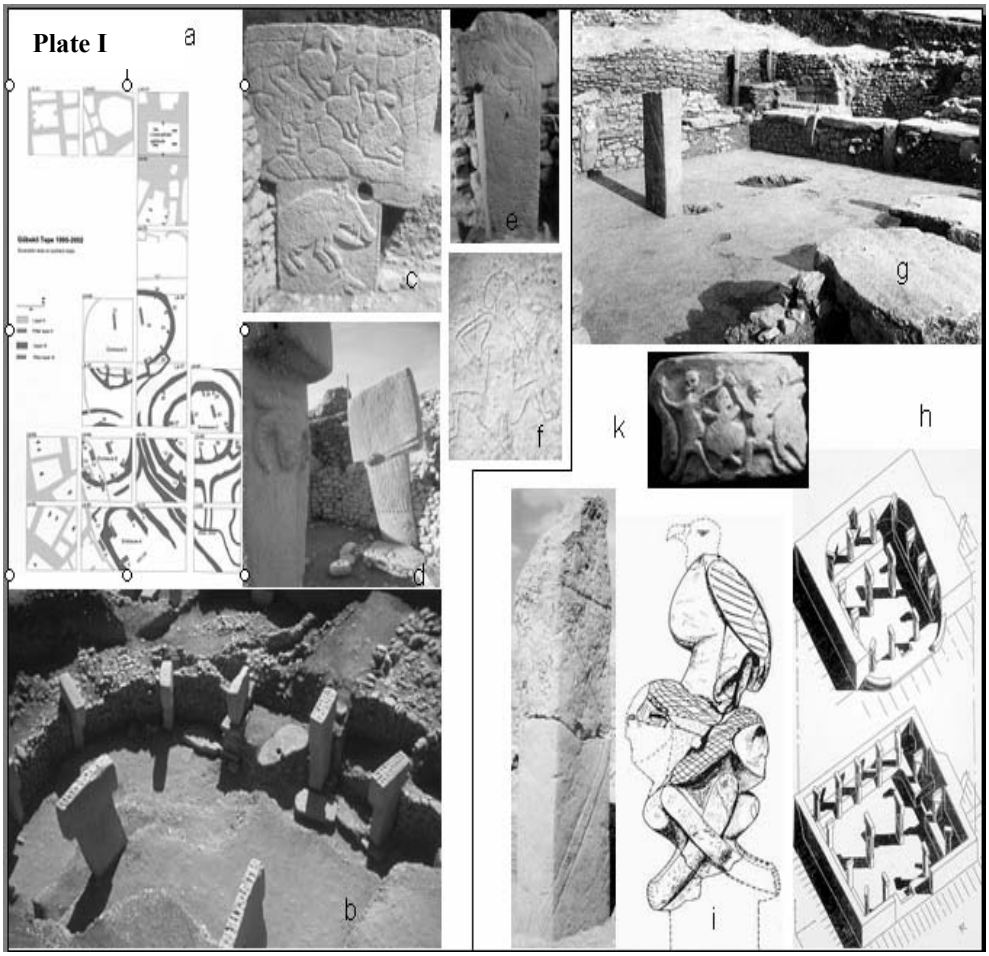

Plate I – a) Göbekli Tepe: general plan of III–IIA–B enclosures; b) Enclosure III D; c) Enclosure IIIC; d) Enclosure A; e) Layer II 'Löwenpfeilergebäude'; f) Carved stone slab from Layer II 'Löwenpfeilergebäude'; g) Nevali Çori: Temple-like building III; h) Neval Çori buildings II (bottom) and III; i) Nevali Çori: Limestone composite figure fragment from the top of a totem-like sculpted pillar; j) Nevali Çori: Limestone pillar representing a schematized anthropomorphic figure; k) Nevali Çori: Limestone bowl decorated with three figures in relief (Peters and Schmidt 2004; Hauptman 1999).

Snake figures are also found arranged differently at Nevali Çori[17], Körtik Tepe[18], Jerf el Ahmar[19], and Tel Qaramel[20]. In central Anatolia, this motif resurfaces in the later phases of the Neolithic period (*e.g.* Çatalhöyük, and Köşk Höyük).

[17] Hauptmann 1999, Fig. 10.
[18] Özkaya & O. San, 2003: Fig. 3; Peters & Schmidt, 2004, 214.
[19] Cauvin 1997; Stordeur 1999.
[20] Mazurowski & Jamous, 2001, Fig. 8.

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Other animals portrayed in Layer III enclosures at Göbekli Tepe include ungulate species such as gazelle, wild ass and wild sheep[21]. It is important to point out that these species also figure in the Neolithic iconography of central Anatolia.

Layer II cult structures of the PPNB phase at Göbekli Tepe are smaller and their pillars less massive than those of layer III. The terrazzo floors of these units were not furnished with built-in fireplaces, ovens, or other domestic installations. A lion figure depicted on a T-shaped pillar in the 'Löwenpfeilergebäude' is one of the few examples of decorated pillars from this layer. Not far from it, a figure of a naked woman carved on a stone-slab was found resting on the floor. Depicted in a sitting position with straddled legs, the figure appears menstruating or having a male sex organ inserted into hers.

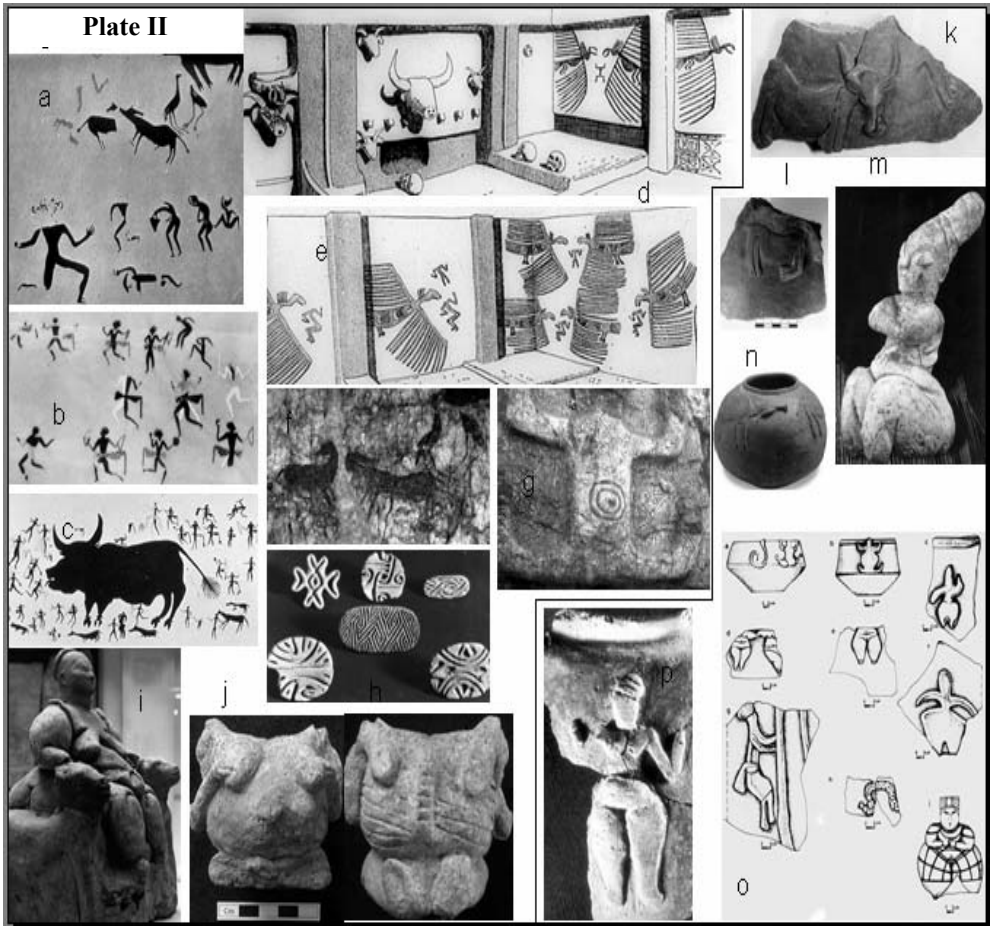

Plate II – a–g) Çatalhöyük East: wall paintings and fixtures; h) Clay seals or amulets from the upper levels of Çatalhöyük; i–j) Two figurines from Çatalhöyük; k–p) Relief decorated ceramics and a figurine from Köşk Höyük. (Mellaart 1967; Öztan, 2002; Yakar 1991; 1994; www.çatalhöyük).

[21] Peters & Schmidt, 2004: 206, Figs. 12, 21.

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At Nevali Çori, a temple-like stone building constructed a short distance from the domestic structures in the village went through a cycle of burial and rebuilding, no less than twice during the PPNB occupation. Limestone sculptures, mostly found buried or in secondary contexts in this temple-like building, depict figures from the spiritual world of a sedentary hunter-gatherer community experimenting with cultivation[22]. Among the sculptures (some in fragments) recovered was a centrally placed T-shaped pillar decorated with abstract anthropomorphic features in low relief. An example of this pillar type was reportedly found at Göbekli Tepe. Some limestone fragments meticulously buried in the filled-in of this building apparently belonged to a totem-like sculpted pillar portraying human and bird features. The symbolism of a bird perched upon the human head could have been of spiritual nature[23].

The symbolism of combining figures of humans and birds are wide open to interpretations. The portrayal of a mythical ancestor or a shaman in the process of transforming into a bird could be just two of them.

The rich iconographic repertory of Nevali Çori include a limestone plaque engraved with human figures jumping in ecstasy, perhaps taking part in a ritual dancing, and a relief decorated limestone bowl[24]. The latter portrays two probably masked pregnant humans, flanking a tortoise. All three figures have raised hands indicating dancing or some other form of rhythmic movement. Although the meaning of this scene is difficult to decipher, the symbolism it portrayed might have been of transcendental nature.

In the south-central Anatolian plateau, Çatalhöyük East with its rich iconographic repertory is an important source of information that allows insights into the spiritual beliefs of Neolithic farmers[25]. The absence of large and freestanding temple-like buildings at this site, if not accidental, could indicate that cult related activities at this time were perhaps organized differently[26]. During the recent excavations at Çatalhöyük attempts were made to precisely record the renewal phases of floors and wall decorations in individual dwellings[27]. According to the excavators changes made during their renewal could signify lifecycles.

[22] At Nevali Çori, the late ninth and early/mid eighth millennium community subsisted on hunting-gathering as well as on some cultivated food plants. Despite the relative abundance of wild food resources the inhabitants could have started domesticating sheep and goat, or obtained them already in domesticated stage from another source (Hauptmann 1999, 78).

[23] Some bird of prey sculptures in the round could have been fastened into the interior walls (Hauptmann 1999, 76, Figs. 11–15).

[24] Hauptmann 1999: Fig. 16.

[25] At a time when farming had become the principal subsistence strategy of this sedentary community, perhaps not all rituals necessitated participation in large assemblies. This community derived its subsistence needs through farming, hunting and gathering, fishing, and perhaps trading in various commodities, including obsidian. See Mellaart 1967; Yakar 1991, 201–218.

[26] Excavators at Çatalhöyük reportedly observed that while in some buildings the usually littered living space was kept purposely clean following one of the periodic floor renewals, in others the transformation occurred in the opposite direction, in other words from ‘clean’ to ‘dirty’ floors (Boivin 2000, 384).

[27] Hodder, 1999.

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Therefore, in view of new findings and theories, J. Mellaart's original distinction between units that served houses and those that were used as shrines at (1967) has been challenged by the proposal that 'shrines' were in fact domestic buildings. At Çatalhöyük, certain walls decorated with animals in relief (Pl. IIg), including those depicted as quadruples with overstretched legs, are rather reminiscent of the much earlier predator representations of Göbekli Tepe. The rich repertory of wall fixtures include plastered heads of cattle, sheep, and goat, beaks of vulture, jaws of fox and weasel, and tusks of wild boar (Pl. IId). The presence of such wild species rendered in naturalistic style and in various combinations in an era when hunting was no longer the principal source of subsistence is rather remarkable. It proves that the symbolic association of these representations with forces of nature and/or the supernatural as perceived by hunter-gatherers was encrusted in the minds of central Anatolian farmers.

Water buffalos, lions, panthers, bears, wild boars, and birds of prey seem to be the principal figures in the iconography of Çatalhöyük. Painted compositions from this village often combining humans with wild animals are of particular interest (Pl. Iib–f). Some of them depict hybrid figures with human legs, vulture head, and body (Pl. IId). These perhaps represent ancestors or shaman-like figures in the process of transforming, through magico-ritual acts, into birds of prey. Such compositions could provide an important insight into the imagery of prehistoric spiritualism, in this case of the Çatalhöyük farmers. They might reflect a belief in the ability of certain persons endowed with supernatural powers to acquire particular animal affinities that lack in humans.

One of the paintings illustrates humans and a variety of animals around a centrally placed but disproportionably large aurochs (Pl. IIc). It probably portrays mythological animal and human ancestors appearing in spirit forms. Another painted scene illustrates a monster-like kneeling human figure facing three much smaller males showing signs of disquiet (Pl. IIa). Such compositions, including those portraying dancing hunters experiencing an altered state of consciousness derived from a so-called spirit possession or a spirit loss might have conveyed mythical accounts involving distant ancestors or creation stories (Pl. IIb). In addition to illustrations of ritual practitioners in action, some painted compositions perhaps depict magico-ritual acts of transforming an invisible spirit or an incomprehensible affliction into a comprehensible animal or human[28]. In other words, such painted compositions may reflect the existence of a perception among the Neolithic farmers of central Anatolia that invisible forces of nature, or events caused by them, if transformed into mentally manageable human and animal forms, would enable communication with them. It is rather obvious that the art of Neolithic farmers reflect a thematic continuity pointing to the survival of certain spiritual concepts developed by hunter-gatherers. They too must have believed in a

[28] Clottes & Lewis-Williams believe that "recent neuropsychological research on altered states of consciousness provides the principal access that we have to the mental and religious life of the people who lived in western Europe during the Upper Paleolithic, for they too were Homo sapiens sapiens and, we may confidently assume, had the same nervous system as all people today" (1998, 12–13).

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universe inhabited both by living creatures of nature and powerful spirits, including those of their ancestors, mythical creatures and supernatural forces that controlled their fate. Based on some published ethnographic records, it is possible to hypothesize that prehistoric shamanic groups too could have believed in the perception that the potency of powerful animal could be drawn from its blood. Among the African San shamans this 'potency' was first transferred to antelope paintings drawn with a pigment mixed with the hunted animal's blood. Shamans considered such paintings not only sources of 'potency' transferred to them during a trance dance but also gateways into a 'spirit world'[29].

The iconographic repertory of Neolithic Anatolia is also very rich in stone and clay figurines depicting numerous fertility aspects of women. A clay figurine recently recovered in the fill of a burnt house at Çatalhöyük is quite remarkable because so far it is unlike anything known[30]. The front part of this figurine depicts a pregnant woman, while her back is shaped like a skeleton with clearly emphasized ribs, vertebrae, scapulae and the pelvic bones. This figurine strengthens the conviction that the Neolithic farmers of Anatolia, believed in a life cycle of birth, death and rebirth, not only for plants, but also for humans. In fact it corroborates Mellaart's original view that certain figurative wall compositions associated with forces of nature in combination with breast-like wall-fixtures incorporating the lower jaws of wild boar or beaks of vulture might have symbolized the perpetual life cycle.

At Köşk Höyük[31], the sixth millennium village did not reveal yet sacred compounds or shrines. Nevertheless, some houses produced an impressive repertory of anthropomorphic vessels, female figurines, ceramic vessels decorated with bucrania, animal and human figures (Pl. Iik–p). They clearly demonstrate the continued use of a broad range of symbols in warding off evil spirits, ensuring fecundity, abundance, and so on. However, by the mid or late sixth millennium B.C., they were no longer rendered on walls, but applied in relief on domestic vessels.

On the basis of presented data the following inferences could be proposed: Hilltop sanctuaries with megalithic features such as Göbekli Tepe could not have been constructed or maintained by a small band of hunter-gatherers. It would have required a joint and coordinated effort relying on a large workforce and experienced masons. Probably sites such as this were regularly used to perform communal rituals of socio-religious nature, such as ancestors' commemoration, communion with the dead and the like. Moreover, they could have been used to celebrate festivities including those of social nature, such as the affirmation of social bonds, gender and age initiations, marriage and so on. Communal festivities would have resulted in the acquisition of a larger group identity with a common religious philosophy.

[29] Mentally in a state of trance caused by his rhythmic dance, the shaman could have imagined himself mingled with animated forms and entering the domain of spirits. South African San rock images depict shamans turned into antelope (Clottes & Lewis-Williams, 1998, 17, Fig. 10).

[30] See E2815 in www.catalhöyük:figurines.stanford.edu.

[31] Öztan, 2002.

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The decorated enclosures with sunken floors perhaps symbolized the openings or passages to the realm of mythical ancestors, immortal forces of nature, and the like. If so, one could hypothesize that the freestanding T-shaped stone pillars in the Göbekli Tepe enclosures could have represented mythical founders of the community/ tribe/people in question. As for the animal figures portrayed on some of these pillars, they may have symbolized particular affinities of deified forces of nature or mythical ancestors. These stone pillars could have served as mediums for the manifestation of ancestors' spirits and/or supernatural forces (of nature). It is possible to speculate that shaman-like ritual practitioners could have called upon these 'spirits' perceived inhabiting in the domains below and above the world of the living Indeed, the decorated stone pillars could have served a purpose similar to that of totems in some shamanic societies[32].

The fact that sculptures of humans and animals, including those depicted on the T-shaped pillars, are mostly males[33], could suggest that hunter and gatherers initially associated fertility with the physical strength and virility of males and not with female attributes of reproduction. Predators symbolizing ferociousness and untamed power constituted attributes assigned to male ancestors and/or supernatural forces. Later, the Neolithic farmers seem to have assigned such attributes also to female personifications of nature's life cycle.

The persistence of the snake and bird motifs in art of Neolithic farmers of Anatolia could suggest that they too, like their predecessors, believed in some sort of a compartmental universe. In shamanism snakes and birds are considered important agents of communication between the separate domains of the cosmos. The snake could have represented a number of things, ranging from a manifestation of a particular chthonic force or spirit, to being an intermediary capable of linking the domains of the living and the dead. Birds of prey, such as those painted on walls (*e.g.* Çatalhöyük East) could have sometimes depicted the feeling of flight experienced by a shaman during a ritual performance in a state of self-induced trance[34].

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[32] The word totem comes from a North-American Indian language, but it has been widely used to refer to animal or plant species and occasionally other things which are held in special regard by particular groups in a society. Among the Bantu peoples, totem is a little more than a clan symbol or emblem; it is imbued with magical power capable to injure members of the totemic group who abuse it.

[33] Peters & Schmidt, 2004, 183–184, Table 2; 214.

[34] For the Buryat of Siberia, for instance, the eagle is the prototype of the shaman (Clottes & Lewis-Williams, 1998, 26).

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SOCIAL TRAJECTORIES AND IDIOSYNCRASIES. THE NORTH EUROPEAN PLAIN IN THE EARLY NEOLITHIC AND BEYOND

TRAIECTORII SOCIALE ŞI IDIOSINCRAZII. CÂMPIA NORD-EUROPEANĂ ÎN NEOLITICUL TIMPURIU ŞI ULTERIOR

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Cuvinte-cheie: Cultura Ceramicii Liniare, neolitic timpuriu, colonizare, case lungi.
Rezumat: Lucrarea are ca scop să discute modificările sociale majore în perioada Neoliticului timpuriu din Câmpia Nord-Europeană, ca şi interrelaţiile diacronice ulterioare, în care structura societăţilor neolitice a fost transformată în timp. Se vor aborda trei dintre faţetele lor majore: modul de viaţă al purtătorilor Ceramicii Liniare, interacţiunile dintre fermierii Ceramicii Liniare şi vânătorii-culegătorii locali, ca şi schimbările la scări diferite în perioada post Ceramică Liniară. Aceste traiectorii sociale şi idiosincrazii sunt ilustrate prin studierea a două regiuni din partea poloneză a Câmpiei Nord-Europene: Kujavia şi Wielkopolska. Regiunea Kujavia este unul dintre cele mai importante centre ale fermierilor neolitici din Europa Centrală, ocupată în mod continuu de la apariţia primelor comunităţi de fermieri în această regiune. Aceşti fermieri timpurii au dat naştere, până la urmă, comunităţilor locale de fermieri din zona de câmpie. Aceste grupuri au început o dispersie regională, străbătând câmpia până au ajuns în regiunea Wielkopolska, care nu a fost ocupată anterior de către comunităţi timpurii ale fermierilor.

Key words: LBK culture, Early Neolithic, colonization, longhouse.
Abstract: The chapter aims to discuss major social developments in the Early Neolithic in the North European Plain as well as subsequent diachronic interrelations in which the fabric of Neolithic societies was transformed over time. It will explicitly investigate their three major facets: the Linear Band Pottery lifeways, interactions between the LBK farmers and local hunter-gatherers as well as multiscalar changes in the post-LBK period. These social trajectories and idiosyncrasies are exemplified by looking at two regions in the Polish part of the North European Plain: Kujavia and Wielkopolska. The Kujavia region is one of the most important Neolithic farming centers in Central Europe continuously occupied since the emergence of the first farming communities in the region. These early farmers gave eventually rise to the emergence of the local farming communities in the lowlands. These groups began a regional dispersal across the lowlands reaching for instance the Wielkopolska region that has not been earlier occupied by the early farming communities.

Introduction

The complexity of social developments of the Neolithic communities inhabiting the North European Plain from its earliest phase, which is the middle of

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the 6th millennium BC, until the end of the 5th millennium BC is astonishing. The Linear Band Pottery (LBK) that marks advent of agriculture into this part of Europe emerged as a coherent and peculiar phenomenon, with a high degree of uniformity. In the long run, it became an unequivocal point of departure and a point of reference for further developments of the lowland communities. The process involved localized transformation and modification of these constituent principles and rules. The intimate nature of social organization and its continuous transformation needs to accommodate a temporal dimension and can only be grasped within cultural and historical trajectories of the region. Accordingly, attention is to be focused on the diachronic interrelations in order to outline the manner in which the fabric of Neolithic societies was transformed over time.

In this chapter, I will explicitly investigate three major facets of this process: the LBK lifeways, the interaction between LBK farmers and local hunter-gatherers, and the multiscalar changes in the post-LBK period. In particular, I will draw special attention to the nature of Neolithic spatiality, especially domestic architecture, and the importance of domesticated animals, mainly cattle, as well as food related practices performed within the settlement space. The chapter will then scrutinize changes in the life ways of post-LBK successors. Changing relations between farmers and hunter-gatherers in the North European Plain as integral element of these transformations will also be debated. Finally, some general implications of this regional trajectory for further development of the Neolithic in the North European Plain will be pinpointed.

Social trajectories and idiosyncrasies in the development of the Neolithic groups in the North European Plain will be exemplified by looking at two regions in its Polish part, namely Kujavia and Wielkopolska. The Kujavia region is one of the most important Neolithic farming centers in Central Europe, continuously occupied since the emergence of the first farming communities in the region. These early farmers eventually gave rise to the emergence of local farming communities in the lowlands known as the Brześć Kujawski groups of the Lengyel culture. These groups began a regional dispersal across the lowlands, reaching for instance the Wielkopolska region that had not been occupied earlier by farming communities.

LBK life ways

Early farmers emerged in the North European Plain in the second half of the 6th millennium BC and continued uninterrupted development through the first half of the 5th millennium BC. They are represented by the Linear Band Pottery Culture communities and are characterized by remarkable uniformity over vast geographical distances and limited stylistic variability of material culture. It has been argued[1] that they reached few enclaves of the Polish part of the Northern

[1] Kruk & Milisauskas, 1999, 24–25.

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European lowlands, such as Kujavia and the Pyrzyce region, from southern Poland by moving northwards along the Vistula River. Some other groups supposedly migrated from areas south of the Carpathians and probably Lower Silesia – the latter especially near the end of the LBK[2]. It has been stressed that these groups colonized only fertile black soils in these enclaves. This continuous migration is believed to have ceased only after the soil zone had been suffused[3]. Further development of LBK communities in Kujavia involved movement into infertile sandy soils or even dunes.

The beginning of the Neolithic in the North European Plain is marked by the emergence of a new spatiality – one created by the house. Monumental longhouses were eminent signature of the LBK occupation. They were not simply dwelling structures but powerful means for creating communal identity and a sense of becoming, where the everyday life of inhabitants was linked with the timeless and stable world of ancestors, providing stability and security for them. Accordingly, the collective identity seemed to predominate with hardly any room for individuality to be articulated independently. Their significance was further supplemented and enforced by architectural permanence of these structures, which contributed to a perception of long-term social stability[4]. Over time, longhouse settlements became cultural landmarks and depositories of memory and the focal locales of communal identity.

Early farming immigrants from Southeastern Europe brought with them also a whole array of new material culture, including simple style pottery, with curvilinear and rectilinear motifs, and stone technology, in the form of symmetrical axes and heavy adzes with a plano-convex cross section. LBK sites reveal also a number of exotic items whose presence is ascribed to "exchange"[5]. These comprise *Spondylus* shells, axes of amphibolite or basalt, or the good quality flint tools, including chocolate-colored flint. It is interesting to note that the products obtained through exchange were not necessary for the survival of these communities. Thus, the importance of exchange certainly went beyond simple economic requirements, and exotic items were appropriated and channeled into ritual practices.

These conditions defined intertwined relations between early farmers and animals[6]. Of special significance were cattle, clearly for more than providing meat or milk. It was well manifested by its ceremonial consumption, which involved eating of roasted cattle marrow and carefully chosen fragments of cattle-specific locales at the settlement, in particular in the space between longhouses. The food was probably cooked in a hearth or oven located also outside longhouses. The remains of communal consumption were deposited exclusively in the so-called clay pits, located between longhouses and not appearing in other types of pits used at these settlements. This was performed on a regular basis in the same way

[2] Czerniak 1994, 117–118.
[3] Czerniak 1988, 59–70.
[4] See Pollard 1999, 85.
[5] *E.g.* Thorpe 1996, 32.
[6] See more Marciniak, 2005.

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throughout the whole region, as manifested by an identical deposition of cattle bones at different settlements, and over a considerable time span, as indicated by the same anatomical composition of cattle bones in all layers of deep pits.

This evidence is indicative of cattle being important social and symbolic resource providing metaphors for the group creation and maintaining its identity. The importance of cattle was arguably built into the continuing process of farmers moving northwards, into new areas, which was accompanied by social fragmentation, an intrinsic feature of these communities. For groups living in a rather hostile environment and relative isolation, domesticated animals were the very basis for maintaining their stability and provided security in the "new frontier" situation.

Other domesticated animals, in particular sheep/goats, were treated in an ordinary fashion. They were used for everyday consumption, as indicated by significantly different body part representation when compared with cattle, and characterized by a variable composition of all anatomical parts. This kind of eating took place usually in the house and/or directly around the house, and bone remains were deposited in pits around the entrances to the houses.

LBK communities and its foraging neighbors

The emergence of the early Neolithic groups in this new territory enabled contacts with local hunter-gatherers that inhabited areas of the North European Plain prior to their arrival. These contacts supposedly led, in the long run, to the acculturation of the indigenous population[7].

The emergence of the early LBK groups in the North European Plain made contacts with the local hunter-gatherers potentially possible. Surprisingly, however, evidence of large scale interactions between these two communities is very limited and hardly conclusive. As mentioned above, early farmers reached only few enclaves in the North European lowlands, including Kujavia. However, Mesolithic occupation of Kujavia is only represented in the early phases, by individual sites of the Mesolithic Komornica culture, and in the late phases, by a small number of the Chojnice-Pieńki and Janisławice culture sites[8]. A lack of evidence of contacts between early LBK farmers and local Mesolithic hunter-gatherers is also reported for the whole of Central Europe[9]. This implies a lack of rivalry over new areas to be occupied and limited contacts between the two societies. The economic self-efficiency of these two groups posed additional restrictions.

Limited relations probably existed on the periphery of the territories of these two communities and/or in areas of flint exploitation[10]. This might have led to the

[7] E.g. Kozłowski, 1989.
[8] Kozłowski, 1988, 45.
[9] Milisauskas & Kruk, 1989, 408.
[10] See more Marciniak, 2008a.

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assimilation of small groups of local hunter-gatherers, though evidence of this is very ambiguous. A major evidence of contacts between early farmers and indigenous foragers is the distribution of flint tools and debitage of southern origin, such as Jurassic and chocolate-colored flint, in the lowlands.

It is worth stressing that early farmers in the Polish part of the North European Plain relied almost exclusively on imported flint, mostly of the chocolate-colored type, mined in the SW part of Poland, about 300 km south of the centrally placed Kujavia. It comprises between 90–100 % of all the items from early Kujavian assemblages[11]. Interestingly, the Kamienna River region, from which flint was imported, had not been intensively occupied by early LBK farmers, but it had been exploited by the Janisławice Mesolithic hunters for a long time. These communities supposedly participated in delivering this flint to LBK groups[12].

A local Baltic flint was exploited to a far lesser degree (normally below 25 %). It was used, to a larger extent, only during shortages of the better quality flint from the south. It became more commonly used only in later phases of the LBK, which are linked with attempts to colonize sandy soils by these communities[13]. The amount of imported flint raw material decreased systematically in subsequent phases[14].

Contacts of LBK communities with local foragers facilitated access of these highly valued projects but did not modify the very logic of their lifeways. Although early farmers and hunter-gatherers co-existed, they remained independent in terms of subsistence base as well as social and ceremonial environment. Certainly, the process known as acculturation of local foragers on the North European Plain did not begin in this period. I would argue that the peculiar nature of early LBK groups, as described above, defined their contacts with local foragers. Accordingly, it is this very nature and character of early farmers, rather than a lack of physical proximity or economically understood necessities that explains an absence of their contacts with local Mesolithic foragers in the North European Plain in this period.

Further development of LBK communities in Kujavia involved movement into infertile sandy soils or even dunes. This process made the assimilation of local hunter-gatherers increasingly easier, and in the long run contributed to the complete disappearance of these groups in Kujavia. The newly emerged local farming groups were formed as a synthesis and convergence of various elements from different areas, including those of local foragers. These later developments certainly mark a real “Neolithic revolution” with regard to contacts with indigenous foragers.

[11] Balcer, 1983.
[12] Domańska, 1988, 86.
[13] *Ibidem*, 83.
[14] Kozłowski, 1988, 46.

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Post LBK developments

Symptoms of increasing differentiation in terms of lifestyle and everyday practices were already visible in the developmental process of the last phases of the LBK. This process was certainly intensified along with the expansion of these communities and their inevitable and gradual regionalization. Consequently, the following Middle Neolithic brought about considerable changes in almost all spheres of early farmers' life. Interestingly, however, references to earlier tradition remained clearly visible in all settings.

The post-LBK communities were no longer characterized by a strong communal self-identity. Instead, identities of small groups were only loosely constructed within the general framework and created with reference to neighboring groups, including local foragers. This inevitably led to the creation of a considerable mixture of local communities that had common elements. This process was, arguably, initiated by the emergence of the household, following the disintegration of the LBK complex. It marked and brought about considerable changes in the social and later in the economic lives of local groups. These show the decreasing importance of longhouses, which were transformed from a communal domain into a private sphere in the Middle Neolithic[15]. At the same time, communality was moved to the tombs, a phenomenon manifested in the emergence of long barrows. From Phase II of this culture onwards, Lengyel communities began a regional dispersal from early farming centers across the lowlands reaching for example the Wielkopolska region that had not been earlier occupied by farming communities.

Changes in the relations between people and domesticated animals and plants were constituent elements in dynamic development of the lowlands communities. They made possible the relative separation of economic and subsistence practices from social and symbolic domains. Changes in patterns of consumption involved decline of ceremonial consumption of cattle and emergence of the economically more efficient exploitation of domestic animals. The social and ceremonial importance of animals was still considerable but was executed in a different way. It was manifested by increasing popularity of rituals and ritual feasting organized at the regional level[16]. Consequently, this enabled these groups to conduct a more practical style of life, which turned out to have a considerably important economic advantage[17].

The Lengyel communities from Kujavia performed a wide range of consumption modes and deposition practices. Some of them were identical to the

[15] See also Stea & Turan, 1990, 110.
[16] Marciniak, 2008b.
[17] Marciniak, 2008c.

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LBK, although in most cases the earlier traditions had been considerably transformed and modified. This is indicative of changing relations between humans and animals, as well as transformation of social means of creating group identity and stability.

The overall picture of consumption among Lengyel communities in this traditionally farming region is far more diverse than that among their LBK predecessors. It is also more diverse than in the newly settled Wielkopolska region. The consumption pattern was particularly complex. A majority of domesticated animals were eaten in accordance to contemporary nutritional standards. At the same time, marrow, especially that of sheep and goats, was also commonly consumed. This is a reminiscent of the early Neolithic practices. Pork, at the beginning of the occupational sequence in the region, was almost exclusively eaten in a way closely reminding the LBK beef consumption.

The North-East frontier of the post-Linear occupation zone is believed to be traditionally delimited by two regions: Kujavia and the Chełmno Land. A large number of post-Linear sites were discovered in this region, most of which of small size and no trace of permanent occupation such as longhouses[18]. The only exception is the discovery of a longhouse at Bukowiec in the NE edge of the region[19] and settlement of the Brześć Kujawski type at Zelgno, site 12, Chełmża commune.

The results of recent rescue excavations made possible the addition of yet another region to this picture, namely the Starogard Lake District, with two settlements of the Brześć Kujawski type at Barłożno, site 15, Skórcz commune and at Bielawki, site 5, Pelplin commune as well on the the Sępopol Plateaux in Masuria represented by Równina Dolna, site III, Korsze commune, which is the furthest NE situated post-Linear site[20]. The latter is placed in a region believed to be occupied by hunter-gatherer groups of the so-called para-Neolithic cultures of the Eastern European circle.

As a result of the developments, the post-LBK communities entered into closer relationships with a new and almost exotic – as seen from the Circumcarpathian perspective – indigenous world of woodland hunter-gatherers, in particular the Ertebølle culture, but also cultures of the East European and Siberian provenance such as the Zedmar-Neman-Narva culture. The former contacts seem to be particularly close and reciprocal. This is indicated by a number of affinities in everyday object production, implying a mutual transmission of the transformed concepts and ideas. Identical animal teeth necklaces and horn core axes were used by both the post-LBK communities and the lowlands hunter-gatherers, and the pottery produced by Ertebølle culture groups was clearly technologically and stylistically similar to the post-Linear tradition. The only exceptions are sharp-bottomed forms and decoration in the form of holes placed beneath the rim, which is similar to the Niemen-Narva-Zedmar tradition. Interestingly, these contacts were

[18] Kirkowski & Sosnowski, 1994.
[19] Kukawka & Małecka-Kukawka, 1999.
[20] Czerniak, 2007.

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reciprocal. Technology of the post-LBK pottery, namely friable pottery tempered by crushed rock, sand, and large amount of mica, could originate from the Ertebølle culture[21].

Such a translation between two cultures is never neutral as one is becoming involved in it from a certain location and embedded in local tradition, and this is something that cannot be avoided. At the same time, in such a translation "something different is brought over, made available for understanding, appreciation, consumption"[22]. These changes in the social arena were continued due to the emergence of new areas, which were gradually inhabited/colonized. Part of this process led to the transformation of the LBK tradition caused by the internal dynamics of these societies, whereas the impact of external factors was minimal. In the course of the later LBK, a village-like agglomeration began to emerge. As a result, the individualization of emerging groups increased and was visible in an increasing differentiation of the material culture.

Conclusions

This very short overview of the relations between farming communities and local foragers in the North European Plain indicates that changes in their character is to be ascribed to a considerable transformation in their lifeways. Considering the character of LBK communities, existing contacts with foragers only facilitated an access to non-subsistence related products and did not destroy the integrity of the LBK communities. The situation changed in the post-LBK phase, where constituent elements of the LBK tradition got disintegrated and replaced by spatially and temporarily more diverse lifeways. After about fifteen hundred years of the Neolithic in central Europe, in which the larger community dominated society, the household became the paramount form of social association. This facilitated contacts with local foragers and all these factors were responsible for considerable changes and transformations in both communities.

I would argue that the development of the post-LBK cultures cannot be grasped in terms of a simple continuity of their cultures or traditions, despite their genetic relationships. This is because any culture is "an accumulation of codes and objects that are always vulnerable to critical and creative arrangement of new associations"[23]. A selection and hierarchy of available resources depends on particular situation of the moment. As argued by Clifford, "individuals and groups always improvises local representations of the collected past using alien media, symbols and languages". The process usually occurs in conditions of oscillation

[21] *Ibidem.*
[22] Clifford, 1997, 182.
[23] Clifford, 2000, 20.

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between two metanarrations: homogenisation and demise from one side and emergence of difference and a new cultural invention from the other[24].

The relation between ideology, the nature of social grouping (morphology), and household composition (space organization) is key to understanding what happened in the post-early Neolithic period and why this process was differently designed in various regions and at different times. The post-LBK period was marked by the departure from the normatively understood space and community and introduced other social variables, like gender, age, and kinship that became dominant in the social life of European farmers. The appearance of gender and age differentiation is sometimes linked with changes in social power relations, understood as ideological and economic[25]. In the course of the development of Lengyel communities and the emergence of TRB groups, a gender differentiation seems to have crystallized and become one of the important categories of social life. This process was in accord with a decrease of communality and an increase of individuality that appeared at that time. It was also parallel to the emergence of the household as another social entity, and the two were mutually intertwined.

This process was certainly intensified along with the expansion of these communities and their inevitable and gradual regionalization. Local communities, like those in the Wielkopolska region, found themselves in a new landscape. They had to create their own identity, in different social and cultural conditions than their LBK ancestors hundreds years earlier. They had to use recontextualized resources brought with them from the core area. Their significance was thus given by reference to modified and transformed practices and activities of the late LBK communities. Their meaning had shifted once again from experiential to referential, albeit articulated differently as compared with the beginning of farming occupation of the lowlands.

The post-early Neolithic period brought about considerable changes in the relations between people and domesticated animals. They were an intrinsic element of transition from colonization to acculturation. This comprised changes in animal categorization, including classification, and had far reaching consequences for the whole economy. As a result, social and symbolic significance of animals was replaced by the economically more effective way of their maintenance and use. The social and ceremonial importance of animals was still significant, but it was executed in a different way and was far distanced from everyday life, as compared with the early Neolithic. This was manifested by increasing popularity of rituals and ritual feasting organized at the regional level. Lengyel farmers prepared food for small groups of people inhabiting subsequent buildings. This was a consequence of social changes occurring during this period, namely, the emergence

[24] *Ibidem*, 25.
[25] Chapman, 1997, 132–33.

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of households as the main social unit, as well as increasing gender, age, and kinship differences. Consequently, all these processes enabled local groups to conduct a more practical style of life, which turned out to have a considerably important economic advantage.

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MASS SPECTROMETRIC ANALYSIS OF 7000-YEAR-OLD SEX STEROIDS
(METHODOLOGICAL STUDY)

ANALIZA SPECTROMETRICĂ DE MASĂ A STEROIZILOR SEXUALI CU O VECHIME DE 7000 DE ANI
(STUDIU METODOLOGIC)

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Cuvinte-cheie: eşantioane arheologice de oase, MALDI TOF MS, hormoni sexuali, Ungaria.
Rezumat: În acest studiu, am aplicat o tehnică numită analiza automată rapidă, Matrix Assisted Laser Desorption/Ionization Time-Of-Flight Mass Spectrometry (MALDI TOF MS) pentru analiza hormonilor steroizi ca biomarkeri ai sexului în schelete umane. Metoda amprentei masei hormonale (Hormone Mass Fingerprinting sau HMF) este extrem de potrivită pentru determinarea sexului în resturile paleoantropologice. Am extras şi am analizat cu succes hormoni sexuali ca estron, estradiol, estriol şi testosteron din eşantioane arheologice de oase cu o vechime de 7000 de ani şi, prin această metodă, am determinat sexul acestor oase umane.

Key words: archeological bone samples, MALDI TOF MS, sex hormones, Hungary.
Abstract: In this study, a rapid, high-throughput, sensitive Matrix Assisted Laser Desorption/Ionization Time-Of-Flight Mass Spectrometric (MALDI TOF MS) technique has been applied for analysis of sexual steroid hormones as sex-specific biomarkers in human skeletal remains. The hormone mass fingerprinting (HMF) method is extremely suitable for sex determination of fragmented paleoanthropological remains. We successfully extracted and analyzed sex specific hormones as estrone, estradiol, estriol and testosterone from 7000-year-old archaeological bone samples and used the method for sex determination of these human bones.

Introduction

Establishing identity from the human skeletal remains is of vital importance in the field of military exhumation, forensic osteology, physical anthropology and bioarchaeology. The identification of an unknown individual contains many parts as a complex puzzle and one of the most significant of them is the determination of the individual's sex. Currently, the morphological sex investigation of excavated skeletal remains is widely accepted in anthropological science. The methods used

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in this field have been primarily focused on the pelvis, where the sexual dimorphism difference is best seen, the skull and the long bones, where the size and morphology are varied and best represented[1]. However, the sex determination of fragmented and infantile bones is impossible with these classical methods. Bioarchaeologists now routinely analyze the elemental and isotopic composition of ancient and forensic human remains to reconstruct past life habits and diseases[2]. More recently, progress has been made in delineating the biomolecular components of the fossils through the extraction and sequencing of ancient proteins and DNA[3]. However, the sex estimation of paleoanthropological findings by sex specific biomarkers is not a general method[4]. Sexual hormones and other steroids are essential biomolecules in human and animal organisms, with pronounced biological activities, at low concentrations. It is a well known fact that the manifestation of sexual dimorphism is regulated by steroid hormones, after the initial fetal period[5]. They regulate maturation and reproduction involved in bone metabolism, affecting osteogenesis and bone mineral density. Their etiologic importance is also understood, as these substances play a role in several frequent chronic diseases, like breast and prostate cancer, or osteoporosis[6].

A rapid, high-throughput, sensitive matrix-assisted laser desorption/ ionization time-of-flight mass spectrometric (MALDI TOF MS) technique has been developed for the analysis of steroids in human tissues. The method was used for molecular sex determination of ancient human skeletal remains and it was thoroughly tested with well known clinical and forensic human bone samples.

Materials and Methods

Estrone (1,3,5(10)-estratrien-3-ol-17-one), β-estradiol (3,17β,-dihydroxy-1,3,5(10)-estratrien), estriol (1,3,5(10)-estratrien-3,16α,17β-triol), progesterone (4-pregnene-3,20-dione) and testosterone (17β-Hydroxy-3-oxo-4-androstene) (Sigma-Aldrich Kft., Budapest, Hungary) were used as analytical steroid standards. The reference solutions were prepared by dissolving of 0.1 mg of the steroid hormones in 10.00 cm^3 of dichloromethane (LiChrosolv, Merck KGaA, Darmstadt, Germany). Following the complete dissolution the 100 µl of the reference solutions were diluted up to 1.00 cm^3. The C_{70} fullerene (Gold grade)was purchased from Hoechst AG (Frankfurt, Germany).

[1] Acsádi & Nemeskéri, 1970.
[2] Márk 2002, 213; Nagy *et alii*, 2007, 55; Benson *et alii*, 2006, 1; Lee-Thorp & Sponheimer, 2006, 131.
[3] Nielsen-Marsh *et alii*, 2005, 4409; Asara *et alii*, 2007, 280; Herrmann & Hummel, 1994.
[4] Lin *et alii*, 1978, 215; Sobolik *et alii*, 1996, 283.
[5] Hughes *et alii*, 1999, 23.
[6] Thomas *et alii*, 2008: 2604; Leder 2007, 241; Wells, 2007, 415.

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The skeletal remains are dated from the Late Neolithic site of Hódmezővásárhely-Gorzsa-Czukor major (Hungary) (Fig. 1), the radiocarbon dates from the settlement and the cemetery are around 4850–4550 BC (2σ, 95% confidence)[7]. The determination of the sex, based on morphological alterations was carried out earlier[8]. The bone samples were taken in 2005, with the permission of the archeologist F. Horváth (Móra Ferenc Museum, Szeged, Hungary), from 13 specimens (5 males, 8 females).

Fig. 1 – The location of the archaeological site Hódmezővásárhely-Gorzsa-Czukor-major.

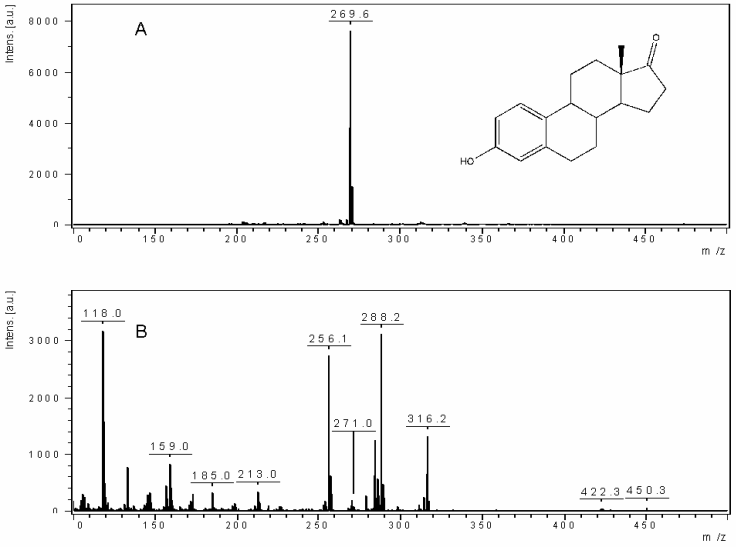

Fig. 2 – MALDI TOF MS spectra of estrone standard in negative (A) and positive (B) mode.

[7] Hertelendi *et alii*, 1998, 659.
[8] Farkas & Marcsik, 1988.

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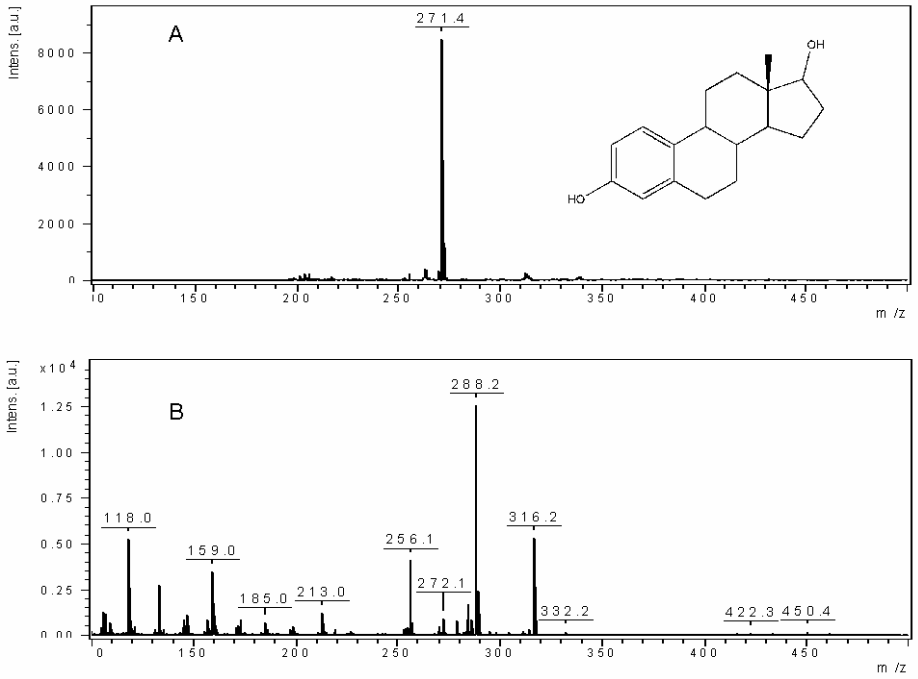

Fig. 3 – MALDI TOF MS spectra of estradiol standard in negative (A) and positive (B) mode.

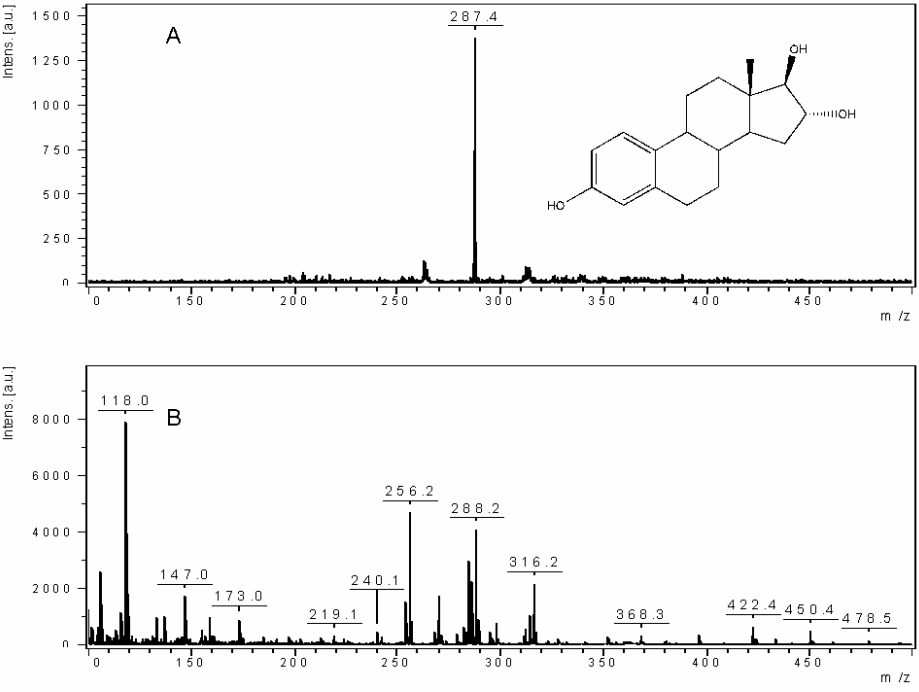

Fig. 4 – MALDI TOF MS spectra of estriol standard in negative (A) and positive (B) mode.

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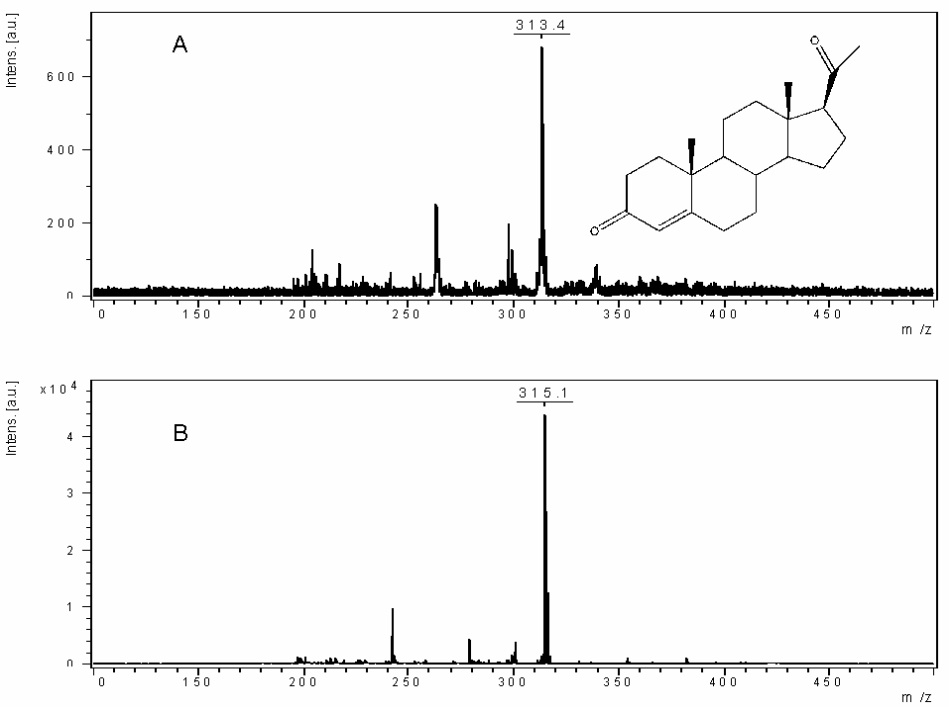

Fig. 5 – MALDI TOF MS spectra of progesterone standard in negative (A) and positive (B) mode.

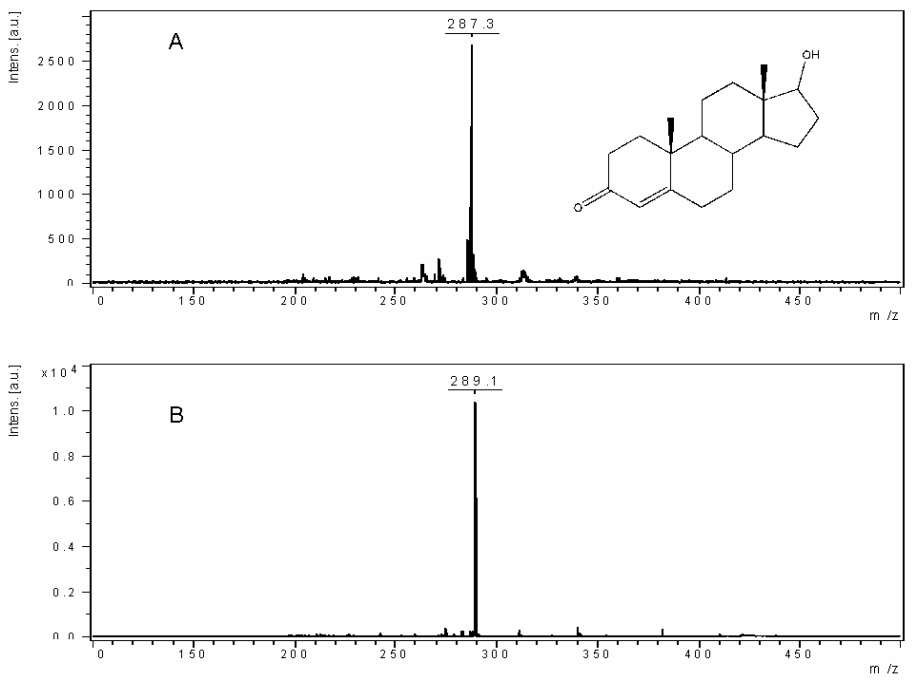

Fig. 6 – MALDI TOF MS spectra of testosterone standard in negative (A) and positive (B) mode.

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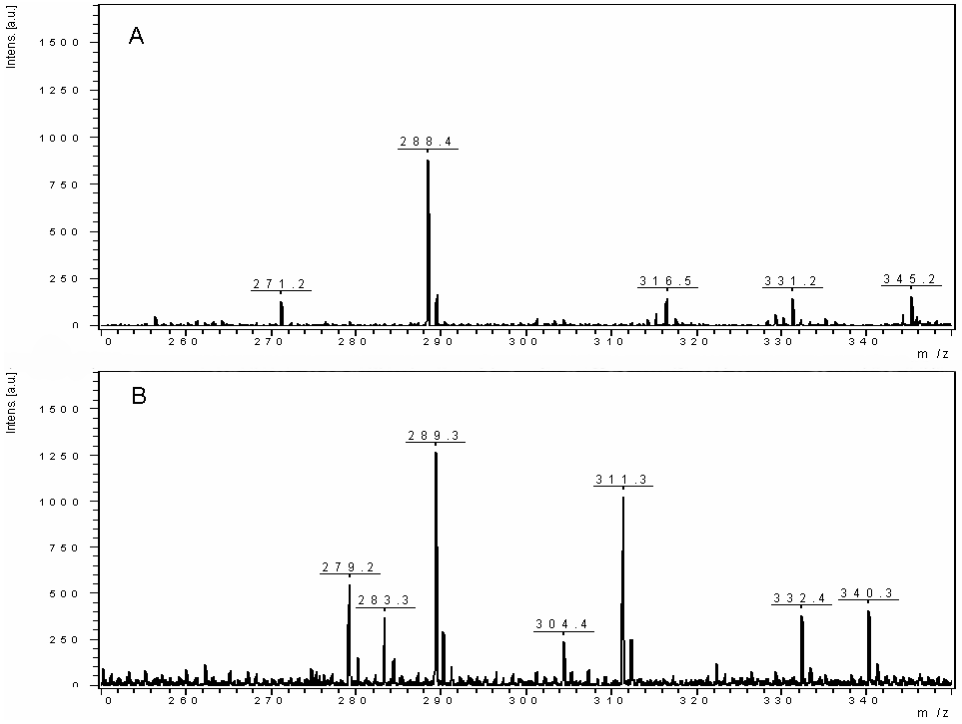

Fig. 7 – Positive ion MALDI TOF spectra of 7000-year-old archaeological bones. A) Steroid profile of a female anthropological sample, it shows the protonated quasimolecular ion of estrone at m/z 271.2 and the positively charged molecular ion of estriol at m/z 288.4. B) Steroid profile of a male bone sample, the positively charged molecular ion of testosterone appears at m/z 289.3.

Steroid extraction

Estrogens and testosterone have been detected after a clear cut extraction procedure. The bone fragments were trimmed free of soft tissues and washed to remove contaminants with phosphate buffer saline (PBS) and distillated water. Bone powder was ground by hand with an agate mortar; the particle size was ca. 0.2 mm. In brief, steroid hormones were extracted from 100 mg of pulverized bone samples as follows: 100 mg of calcificated bone powder (thoracic vertebra) was homogenized with 1.00 cm^3 of dichloromethane (LiChrosolv, Merck KGaA, Darmstadt, Germany) in an ultrasonic bath, at 15 minutes. The extract was centrifuged and the supernatant was collected. The supernatants were evaporated to dryness at room temperature and the solid residues were re-dissolved in 10 μL of dichloromethane/methanol/water (7:2:1, v/v).

MALDI TOF Mass Spectrometry

2 μL of the standard solutions and the bone extracts were loaded onto the target plate (MTP 384 target plate ground steel TF, Bruker Daltonics, Bremen,

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Germany) by mixing with the same volume of a saturated matrix solution, prepared by dissolving C_{70} fullerene in toluene. The mass spectrometer used in this work was an Autoflex II TOF/TOF (Bruker Daltonics, Bremen, Germany), operated in reflector mode. The ions were accelerated under delayed extraction conditions (80 ns) in positive and negative ion mode, with an acceleration voltage of 20.00 kV. The instrument uses a 337 nm pulsed (50 Hz) nitrogen laser, model MNL-205MC (LTB Lasertechnik Berlin GmbH., Berlin, Germany). External calibration was performed in each case, using saturated α-cyano-4-hydroxycinnamic acid solution in acetonitrile/0.1% TFA (1/2, v/v) and Bruker Peptide Calibration Standard (#206195 Peptide Calibration Standard, Bruker Daltonics, Bremen, Germany). Hormone masses were acquired, with a range of 50 to 1000 m/z. Each spectrum was produced by accumulating data from 500 consecutive laser shots. The Bruker FlexControl 2.4 software was used for control of the instrument and the Bruker FlexAnalysis 2.4 software for spectra evaluation (Bruker Daltonics, Bremen, Germany).

Results and discussion

Non-derivatised, neutral steroids are difficult to analyze by MALDI TOF mass spectrometry, using common matrix materials (α-cyano-4-hydroxycinnamic acid, sinapinic acid, 2,5-dihydroxybenzoic acid). Nevertheless, the ionization of estrogens and androgens was made more effective by using C_{70} fullerene as matrix. Shown in Fig. 2 are the MALDI TOF mass spectra of estrone (MW: 270.4 Da). In Fig. 2A the deprotonated quasimolecular ion was present at 269.6 m/z, by using negative ion mode, while Fig. 2B shows the mass spectrum by using positive mode, where the $[M+H]^+$ quasimolecular ion was observed at 271.0 m/z. The mass spectra of estradiol (MW: 272.4 Da) and estriol (MW: 288.4 Da) are displayed on Fig. 3 and Fig. 4. The deprotonated quasimolecular ions at m/z 271.4 (Fig. 3A) and m/z 287.4 (Fig. 4A) were clearly observed, by using negative ionization mode, while the $[M+H]^+$ quasimolecular ion was identified at m/z 272.1 for estradiol and the positively charged molecular ion of estriol was observed at m/z 288.2, furthermore several fragment ions of the steroid hormones were detected in positive mode (Fig. 2B, 3B and 4B). In Fig. 5 the mass spectra of progesterone (MW: 314.5 Da) are shown in positive (Fig. 5A) and negative (Fig. 5B) mode. The molecule was traceable as deprotonated (313.4 m/z) or protonated (315.1 m/z) quasimolecular ions. The testosterone (MW: 288.4 Da), as a male sexual hormone, was also measured, by using both ionization modes (Fig. 6). In this case the deprotonated (287.3 m/z) (Fig. 6A) or protonated (289.1 m/z) (Fig. 6B) quasimolecular ions were clearly detected and identified, without any significant fragmentation.

Although the identification of the deprotonated quasimolecular ions were carried out at the all cases and the mass spectra are extremely clear by using the negative ionization mode, nevertheless, the $[M-H]^-$ ions of estriol and testosterone were detected at similar m/z values (287.4 m/z for estriol and 287.3 m/z for

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testosterone). We can distinguish a significant difference between the female and male sexual hormones, by using positive ionization mode. On the score of our result, the positive ionization mode was used for sex determination of the human skeletal remains (Fig. 7A–B). The presence of the testosterone (289.1 m/z) and estrogens was used for sex identification. The results of the morphological and HMF sex determination techniques were strongly correlated.

Conclusion

We developed a high-throughput molecular sex estimation technique for ancient skeletal remains, by using MALDI TOF MS. In our study, 7000-year-old steroid hormones were extracted and identified, the appearance of female and male steroidal profiles correlated with the morphological and the genetic sex of the human remains. On the score of our results the hormone mass fingerprinting (HMF) is a potentially useful method for anthropological analysis of fragmented ancient and forensic skeletal remains. The sex of the highly fragmented archaeological bone samples as well as extremely disintegrated forensic remains wasdeterminable by using the novel HMF technique.

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THE BALKAN NEOLITHIC: A STUDY IN SEDENTARY VILLAGE LIFE

NEOLITICUL BALCANIC: UN STUDIU AL VIEŢII DIN AŞEZĂRI

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Cuvinte-cheie: Neoliticul balcanic, sedentarism, economie, agricultură timpurie, producție.
Rezumat: Bogăția documentației neolitice din Balcani a inițiat câteva proiecte majore și a fost stimulul cercetării din fosta Iugoslavie, sub îndrumarea lui Ruth Trigham, din anii '70 și până în anii '80. Au apărut și s-au dezvoltat teme referitoare la viața sedentară și societățile cu agricultură incipientă din Balcani. Această lucrare menționează câteva, cum ar fi intensificarea producției ca o consecință a vieții sedentare și ireversibilitatea unui stil de viața sedentar. Oricum, principala temă a lucrării este discutarea gospodăriei ca unitate de producție a neoliticului din Balcani și cum a fost aceasta studiată în două situri din fosta Yugoslavie, Selevac și Opovo Ugar-Bajbuk.

Key words: Balkan Neolithic, sedentism, economy, early agriculture, production.
Abstract: The richness of the Neolithic record in the Balkans has spurred several major projects and was the impetus behind research in former Yugoslavia under the direction of Ruth Tringham from the 1970's through the 1980's. Several themes relating to sedentism and early agricultural societies in the Balkans were born and developed. This paper mentions a few, such as the intensification of production as a consequence of sedentism and the irreversibility of a sedentary lifestyle. However, the main focus of the paper is discussion of the household as the production unit of the Neolithic in the Balkans and how it was studied at the two sites from former Yugoslavia, Selevac and Opovo Ugar-Bajbuk.

Introduction

Twenty-five years have passed since my colleague, Tim Kaiser, and I published "Sedentism and Economic Change in the Balkan Neolithic"[1]. We were both grad students then at the University of California, Berkeley, working with Ruth Tringham in Yugoslavia. It was, in fact, the research that gave me the opportunity to meet Eugene Comşa. Much has happened since then, not the least of which is the disintegration of the country in which we had conducted our research and the formation of smaller nations on the land once called Yugoslavia.

[1] Kaiser & Voytek, 1983, 323–353.

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Our prehistoric investigations relate rather well to the current picture in the Balkans. That is, the village organization noted in the neolithic might not have differed too greatly from the patterning seen today – networks of villages clustering (now according to nationality), struggling to form and support some supra-village entity which can function in a modern world.

This thought was fueled by a paper presented at the University of California, Berkeley, during a seminar on post communist society, in which the speaker, a historian, remarked that even in the 15th century, one renowned Latin writer, Janus Panonius, had noted that the rustic and nonurban vastness of the area "had many villages but not a single town" (*Pagus complures, oppida nulla gerit*)[2].

Returning to an archaeological context, we could argue that since Childe's *Dawn of European Civilization*, the Balkan Neolithic has been viewed as the case study of village farming life. He began the chapter entitled, "Farming Villages in the Balkans", by describing the setting:

> The rugged peninsula between the Black Sea and the Adriatic, despite the severity of the winters and the retardation of spring, enjoys, owing to its latitude and the prolongation of autumnal warmth, a climate intermediate between the Mediterranean and the Temperate. So the adaptation of an Asiatic rural economy would be less difficult there than in the rest of the European woodland zone. And incidentally the ancestors of one-corn wheat (*Triticum monococccum*) and several fruit-trees grew wild there. So the fertile valleys intersecting the Balkan ranges are, like Thessaly and South-west Asia, studded with *tells* representing the sites of permanent, though formally neolithic villages[3].

The richness of the neolithic record in the Balkans has spurred several major projects and was the impetus behind the research in former Yugoslavia, again under the direction of Ruth Tringham. Over the past 25 years or so, several themes relating to sedentism and early agricultural societies in the Balkans were born and developed, including – just to name a few – (1) intensification of production as a consequence of sedentism[4]; (2) the irreversibility of a sedentary lifestyle (that is, the "domestication of the humans"[5]; (3) transhumant or semi-sedentary socioeconomic systems and their relationship both chronologically and culturally, to sedentary communities[6]; and (4) household formation and the development of the household as a production unit[7] – that is, the development of a human grouping in which the basic economic functions of production, consumption, inheritance, shelter, and biological reproduction are organized and carried out[8]. These themes, and others, were developed for the publication of the volume, *Selevac: A Neolithic Village in Yugoslavia* [9]. They are clearly presented and summarized in the concluding chapter of that volume. This

[2] Banac, p.c., 1994.
[3] Childe, 1957, 124.
[4] Kaiser & Voytek, 1983, *op. cit.*
[5] Voytek & Tringham, 1989, 492–499.
[6] Voytek, 1990, 482–484.
[7] Tringham & Krstić, 1990a, 567–617.
[8] Arnould & Netting, 1982, 571–575; Wilk & Rathje, 1982, 617–639.
[9] Tringham & Krstić, 1990b.

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work attempts to expand on the last-mentioned theme, namely, the household as the production unit of the neolithic in the Balkans.

Background

The investigation of the household as the production unit of the agricultural villages of the Balkan neolithic has figured largely in a research project in former Yugoslavia more recent than Selevac, at the site of Opovo[10]. At Selevac, the nature of the site, excavation systematics, and cultural deposit allowed the testing of hypotheses on changes through time in the exploitation of subsistence and non subsistence resources. However, the limited size of the excavated area precluded the study of intra-site associations among the house structures.

For our research purposes, the house structures were assumed to represent households as defined above. The connection between the structures and households has been derived from several authors, including Flannery who posed the concept of the "archaeological household cluster"[11]. He himself defined the household simply as a group of people who interact and perform certain activities. The evidence for activities within structures at Opovo, Selevac, and other sites in the Balkans such as Gomolava and Banica in Yugoslavia and Stara Zagora in Bulgaria, argues for their representing individual production and consumption units. It includes food-processing equipment such as querns and mortars, clay hearths or ovens, evidence for internal differentiation, as well as storage facilities, tools, vessels, and figurines. Evidence for resource usage within and between these structures, that is, between the households, was the focus of the Opovo research.

My own research in the Balkans has focussed on lithic resources. That is why I came to know Professor Comşa. At Selevac, there had been evidence to argue for an intensification in the exploitation of lithic resources through time which accompanied other evidence for increasing sedentism. "Sedentism", as being used in this paper, should perhaps be immediately defined since it has enjoyed various meanings. For the arguments presented here, "sedentism" means a settlement pattern that involves year-round occupation by an entire community over a number of years, at least two to three generations. The lithic evidence at Selevac, along with results from other resource and settlement studies, helped support the argument that the earliest food-producers in Southeast Europe had not been sedentary – neither those in the Aegean sphere, nor those in the Danube Basin – until the Middle Neolithic at least[12].

The process of "settling down"[13] appears to have occurred first in Southern Bulgaria, then elsewhere in the Balkans. The river basins of Southern Bulgaria tend to be circumscribed and increased dependence on agriculture there may have led to a cyclical fallowing system rather than the directional movement which is apparent in

[10] Tringham *et alii,* 1985, 425–444; Tringham *et alii*, 1992, 351–386.
[11] Flannery, 1976, 25.
[12] Kaiser & Voytek, 1983, *op cit.*
[13] Harris, 1978, 401–417.

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the Western Balkans. Long-term fallowing might explain the apparent abandonment and relocation of populations at Bulgarian *tell* sites. Furthermore, in the Western Balkans, especially along the Dinaric Alps, a transhumant component might have been longer in place than in Southern Bulgaria[14].

By the middle of the Vinča period in former Yugoslavia, ca 5200 BC, fully sedentary settlements were widely established. The Vinča archaeological culture occupied a large area of the Balkans. The sedentary settlement pattern of these people is dramatically documented at *tell* sites such as Vinča itself on the Danube and Gomolava on the Sava river. These *tells* were formed, not only because of the length of time involved in the settlement, but also because of the nature of the architecture and building practices. The house structures were composed of wattle and daub which when burnt and collapsed, provided ample material for the buildup of the *tell*.

In addition to the settlement data, there is also evidence for changes in other production activities which accompanied the development of sedentism in the Balkan neolithic. As mentioned earlier, some of the effects of this development are documented at Selevac where evidence for changes in lithic and ceramic production activities reflected the processes of intensification, specialization, and diversification in response to both the biological and social demands imposed by sedentism[15].

The biological demands relate to increased population which most studies will agree follows when a group "settles down". For example, Kelly has recently discussed some of the factors to be considered when investigating the connection between population growth and sedentism – including increased fecundity and decreased child mortality[16]. Besides the fact that increased population leads to increased demand quantitatively, other demographic factors affect settlement patterns, the nature of resource use, and social organization[17]. That is, changes may result in the age and structure of the population, including gender ratios. These changes can upset relationships between producers and consumers, causing redefinition of producers and creating a need for new roles[18].

A related problem is determining what changes had occurred within the society that would have allowed population increases. To answer this question, archaeologists can look to contemporary analyses of population growth and see that the study of decision-making behavior is providing valuable models and methods for understanding demographic processes. In a work by Nardi[19], for example, she found that the decision of a family to have children was more important in understanding population growth than any biological variables. Some of the changes which will figure in this decision-making process include:

1. changes in the nature of the production unit;
2. changes in the value of labor;

[14] Sterud, 1978, 381–408.
[15] Kaiser & Voytek, 1983, *op. cit*. 326.
[16] Kelly, 1992, 58.
[17] Green, 1980a, 209–241; *idem*, 1980b, 311–355.
[18] Goldschmidt, 1980, 48–61.
[19] Nardi, 1981, 48.

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3. changes in the ability to support increased numbers of people.

The first of these might be the most important in the Neolithic case study since in most cases, the production unit is also the family which makes the direct decision as to whether or not increase its size. This has been discussed, for example, by social scientists working with agrarian societies[20]. Chayanov, in his study of Russian peasants, makes it clear that the decision-making in a peasant farm rests with the family unit[21]. The production unit would be involved in those short-term decisions whose effects are recorded in the archaeological record and translated into such general terms as "strategy"[22].

We would postulate that during the course of the Balkan neolithic, there was a change in social structure accompanying changes in settlement pattern and, to a certain extent, the subsistence economy. The change was from that of an extended multi-kin unit, cooperatively exploiting dispersed resources and coordinating consumption, to that that of a family household perhaps with some supralocal authority[23]. Increased family size has been suggested as being at least a short-term response to the need for seasonal or temporary labor to deal with the agricultural cycle[24]. Chayanov also points out that the labor force determines the highest possible limit for the volume of agricultural activity. Not only numbers (quantity) of labor but also its structure (age and sex composition of the population) can effect changes in production[25]. Intensification in non-capitalist societies will depend on whether or not labor investment can and will increase[26].

If the changes in production unit suggested for the neolithic had occurred and family households became the major production and consumption unit, both the incentive and the means to increase population would be found in the same group. That is, the controls on population would lessen or at least change and the larger community's view or concern would not necessarily curtail population growth. In turn, intensification of production would be required to take care of the increased need. In addition, the production unit, the family, would directly realize its ability to care for the members differently, as being tied more directly to labor which it would produce. In turn, intensification of production would be required to take of the increased need.

Household production at Opovo

At Opovo, different hypotheses concerning household production were postulated. One of these, again regarding the exploitation of stone resources, was that

[20] Chayanov, 1966; Green, 1980a, *op cit.*; Green, 1980b, *op. cit.*; Netting, 1974, 21–72.
[21] Chayanov, 1966, *op. cit.*, 53.
[22] Green, 1980b, *op. cit*, 327; Earle, 1980, 5.
[23] Green, 1980b, *op. cit*.; Netting, 1974, *op. cit.*; Yellen, 1977.
[24] Green, 1980b, *op. cit.*
[25] Chayanov, 1966, *op. cit.*, 53–59.
[26] Netting, 1974, *op. cit.*

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the household units of Opovo – as relatively autonomous economic units – would have had differential access to lithic raw materials. As Kelly has pointed out, a reduction in residential mobility might call for efforts to increase household production and storage by restricting sharing networks[27]. He also points out that space differentiation within a settlement might reflect privatization of space and thus, efforts to eliminate conflict[28]. Similarly, one might consider evidence for restriction of lithic sources a reflection of "privatization" of these resources and a reduction in the "demand sharing" found among foraging societies[29].

The expectation was that a spatial analysis of the types of lithic materials within the site would reflect the restriction of sources. Research on this question at Selevac tended to support the theory of differential access among households[30]. In that study, the concept or institution of the "trade partnership" had been used as a model for resource distribution during the Balkan neolithic. The trade partnership was defined, following Spence, as a "sort of kin relationship, linking individuals, families and even kindred, in a lifelong tie that may be further reinforced by marriage"[31]. This concept was especially attractive, although it was recognized that such an institution could not be directly imposed upon neolithic societies in Southeast Europe. The aspects which recommended it included the fact that trade partnerships experience changeability and adaptability similar to that described for households themselves[32]. In this respect, the concept interjects some dynamics into the social structure being considered by the archaeologist[33]. This is important in view of the obvious fact that we are dealing with dynamic, changing units whose growth and development are not unilinear, but are tied into the domestic cycle of households.

Furthermore, although considered characteristic of egalitarian societies, the concept of trade partnerships allows for the fact that an ideal egalitarianism may not have been characteristic of the neolithic. As pointed out by Meillassoux[34] and more recently discussed by several other anthropologists, pre-capitalist societies cannot be considered egalitarian if that term is taken to mean that no exploitation exists. Dominance or inequality, although ephemeral, does exist within such societies on the basis of age, sex, and/or kin relationships. Trade partnerships are also established between sectors of the society that are based on age or sex, usually involving senior males or heads of households[35]. In other words, this model proposes that the individuals are those involved in the social control of labor and the manipulation of production[36].

[27] Kelly, 1992, *op. cit.*, 53.
[28] Kelly, *ibidem.*
[29] Peterson, 1993, 870.
[30] Voytek, 1985; Voytek, 1990, *op. cit.*, 482–484.
[31] Spence, 1982, 187.
[32] Goody, 1971; Netting, 1974, *op. cit.*
[33] Gledhill & Rowlands, 1982, 144–149.
[34] Meillassoux, 1975.
[35] Spence, 1982, *op. cit.*, 188; Sherratt, 1982, 23.
[36] Bender, 1978, 204–222.

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Armed with this model, we examined the pattern of lithic resource distribution within the excavated area of Selevac. We found there to be little or no overlap in the use of lithic raw materials among the households. Although the source was generally the same, the working of cores and the use of the resultant flakes and blades seemed to be specific to individual structures[37].

These findings led us to examine the pattern of lithic resource distribution among the houses at Opovo where, as mentioned, the house structures were more clearly defined and systematically excavated. The result showed a pattern different from Selevac, a pattern with evidence for sharing resources, at least of the materials used for chipped stone tools. For example, cores from one structure were found which could be refitted with blades associated with other structures.

Several reasons can be offered for the difference in the patterns of raw material distribution between these two sites. One of these was suggested by the nature of the stone tools themselves. That is, although the raw materials used for chipped stone tools appeared to be evenly distributed among the households at Opovo, the stone used for adzes and other ground edge tools as well as the stone used for grindstones were not. This suggested that the edge tools and grindstones, given their reuse properties and their functions, could have been part of an acquisition pattern unlike that which characterized the procurement of chipped stone materials.

Another factor to examine would be the variability among the households which inhabited the Vinča sites in terms of composition and organization. The study of the house structures at Opovo, undertaken by Tringham and Stevanovic, suggests that the nature of the use of the structures represents differences in the nature of the household organization among Vinča settlements[38].

Conclusion

Variability among households in simple farming societies today can be related to the type and amount of labor required for effective crop production. Extended family households are at an advantage in "cooperatively exploiting widely dispersed resources and coordinating their consumption." Nuclear family households, on the other hand are at an advantage when intensive agriculture is practiced[39].

Others have also argued for flexibility/adaptability of the household form and function which changes when economic and environmental conditions vary[40]. Whether one can depend on such a formula is, of course, open to question. However, Netting's words suit the comparison of Opovo and the other neolithic sites. That is, the ecological setting of Opovo in the Pannonian Plain would have played a role in the organization of the inhabitants and their settlement of the region. To some extent, the results differentiated them from Vinča populations further south such as those

[37] Voytek, 1985, *op. cit.*
[38] Tringham *et alii*, 1992, *op. cit.*, 381.
[39] Netting, 1974, *op. cit*., 29.
[40] Wilk, 1981, 1.

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occupying the settlements of Gomolava and Selevac. At those sites, intensification of production took the form of increased permanence of settlement and labor investment in working the land and in husbandry. In the Pannonian Plain, intensification may have been accomplished through diversifying settlements whose inhabitants still maintained the close ties of an extended family. In such a configuration, Opovo would represent one diversified, almost specialized, settlement.

This framework recalls Rafferty's model in which three different settlement patterns result from different environmental conditions and different cultural responses to resource stress. These responses include migration, population limitation, and technological/organizational change. The three settlement patterns are nonsedentary, nucleated sedentary, and dispersed sedentary[41]. As she argues, these patterns are connected to the nature of the subsistence economy, whether it is focal or diffuse which she relates to environmental characteristics, especially resource productivity and diversity.

In sum, the variability in household organization which we seem to be witnessing within the Vinča archaeological culture, related to the ecological setting and agricultural practice, directly relates to the flexibility and adaptability of the social structure of the household units during the Balkan Neolithic.

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[41] Rafferty 1985, 127–128.

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HOUSEHOLDS, ENCULTURATION AND EVERYDAYNESS WITHIN THE VINČA COMMUNITIES

GOSPODĂRII, ENCULTURAŢIE ŞI VIAŢĂ COTIDIANĂ ÎN COMUNITĂŢILE VINČA

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…He who does not know can become knowledgeable from learning [1]
(Akan culture)

Cuvinte-cheie: enculturație, Vinča, gospodărie, simboluri.
Rezumat: Ca un concept cheie în literatura academică contemporană, gospodăria se prezintă sub cel puțin două aspecte – ca o unitate socială elementară şi ca un principal agent social în procesul de enculturație şi reproducție socială, într-o varietate de societăți complexe.
Absența surselor scrise pentru sfârşitul mileniului 6 şi începutul mileniului 5 B.P. în Balcani este una dintre cele mai mari probleme pentru reconstituirea vieții de zi cu zi şi a procesului de producție culturală şi reproducție în locuințele preistorice ale Culturii Vinča. În acelaşi timp, informația conținută în cultura materială ar putea fi, în unele cazuri, mai complexă decât sursele scrise, în ceea ce priveşte codificarea valorii şi calității vieții de zi cu zi.
Date privind sistemele simbolice de comunicație Vinča sunt puse în legătură cu simbolurile vizualizate, cu toate că ne referim, de asemenea, la simbolurile verbalizate care probabil au jucat un rol esențial în viața de zi cu zi. Figura femeii, cu caracteristici iconografice specifice, s-a repetat de la o generație la alta, de la o gospodărie la alta şi de la o aşezare la alta. Aceste mesaje, vizualizate şi materializate, au legat indivizii şi diferitele unități sociale, împuternicind identitatea lor socială ca purtători ai unei culturi specifice, în multe cazuri diferită de cea a vecinilor lor.
Semnele culturii Vinča necesită o diversitate de modalități de abordare, fiecare dintre ele relevând anumite caracteristici specifice. Abordarea noastră de antropologie culturală implică semne din procesul de enculturație ca o modalitate activă şi abstractă de transmitere a mesajelor specifice de la o generație la alta şi în diferite unități contemporane sociale şi de rudenie.

Key words: enculturation, Vinča, household, symbols.
Abstract: As a key concept in the contemporary academic literature on Prehistory, the household has at least two aspects – as an elementary social unit, and as a main social

[1] *nea onnim sua a, ohu* http://www.marshall.edu/akanart/akanknow.html (Akan Cultural Symbolic Project). See Arthur and Robert 1998–2001.

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agent in the process of enculturation and social reproduction and production within a variety of complex societies.

The absence of written records for the later 6th and early 5th millennia BCE in the Balkans is one of the biggest problems for the reconstruction of everydayness and the process of cultural production and reproduction within prehistoric households of the Vinča culture. At the same time, the information contained in material culture could be in some cases more complex than written records in coding the value and quality of prehistoric everydayness.

Data about Vinča symbolic systems of communication are related to visualized symbols, although we also refer to verbalized symbols that presumably played an essential role in everyday life. The figure of the woman with specific iconographic characteristics was repeated from generation to generation, from household to household, and from village to village. These visualized and materialized messages connected the individuals, and the different social units, empowering their social identity as carriers of a specific culture, in many cases different from the culture of their neighbors.

The signs of the Vinča culture require a variety of research approaches, each of which would reveal specific characteristics. Our cultural anthropological approach involves signs in the enculturation process as an active abstract means of transmission of specific messages from generation to generation and within different contemporary kinship and social units.

Introduction

As a key concept in the contemporary academic literature on Prehistory, the household has at least two aspects – as an elementary social unit (Fig. 1) and as a main social agent in the process of enculturation and of social reproduction and production[2] within a variety of complex societies[3].

House structures within Vinča settlements have been a main focus of research since the discovery of the Vinča culture[4]. However, the house itself does not equal the household, thus, the anthropological study of the prehistoric household requires an elaboration of specific methodology for an adequate analysis of the

[2] Enculturation is the process of the transmission of culture from one generation to another, but also between contemporaneous social units at different levels of complexity, organization and interrelations.

[3] About the complexity theory in archaeology see Bentley & Maschner, 2008. It is interesting to note that neither household nor family are included as specific topics in the newly published fundamental collective work on the archaeological theories (Bentley *et alii*, 2008). Such methodological position empties the social theory about Prehistory from its elementary theoretical cells and makes its skeleton too amorphous. From this perspective, another collective work, focused on Prehistoric Europe, requires a special attention where the household is analyzed in its genesis and further development (Borić 2008; Gerritsen 2008). The problem of household in anthropological archaeology has been lately a subject of a monographic study by Stella Souvatzi whose area of research is prehistoric Greece (Souvatzi 2008).

[4] Lazarovici 1979; Srejović 1988, and cited literature; Tringham & Krstić, 1990; Tripković 2003; Tasić 2005. Generally for Europe see Jones 2008.

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archaeological record[5] and for the construction of cultural models of past social practices. One specific topic is the role of symbols and signs in the enculturation process of the local households and different other social groupings as elements of everydayness and ritualized life[6].

The signs of the Vinča culture are just one of the rich polysemous symbolic systems of communication used by the Vinča communities, which also include language, anthropomorphic figurines, rich vessel ornamentation, mythology, rituals, folklore, etc. Among the different interpretations of the Vinča signs[7] is their meaning as potters' markers[8]. In our opinion, the symbolic aspects of Vinča culture can be understood as a means of symbolic communication for interactions between the generations (the diachronic aspect of enculturation), or between contemporaneous households (the synchronic aspect of enculturation), which could have included invisible social characteristics of differentiation and stratification[9] in terms of open or sacred knowledge. Despite the fact that the signs have required special typological and semiotic studies in modern times[10], their incorporation into the general problems of enculturation and other forms of symbolic prehistoric communications provides another opportunity to investigate the deep symbolic and advanced social development of the communities of the Vinča culture.

This paper proposes that at least some signs functioned within Vinča households in the enculturation process as learning tools for abstract thinking and as symbolic messages within and between households and other social units.

Prehistoric households and the process of learning

Different speculations can be offered regarding the number of members within the Balkan prehistoric households. According to indirect data from the later Copper Age, one feasible model estimates an average of 6–8 people (based on data from the Yunatsite tell). Models of two and three-generational households as well as sibling-sharing of the houses can be further proposed for Balkan Prehistory. We do believe that the grandparents were actively involved in the enculturation process[11] and that specific relations between siblings took place, which included sharing the house and even organizing one and the same household. However,

[5] See *e.g.*, Jongsma & Greenfield, 2002.
[6] Nikolova 2004.
[7] See *e.g.*, Merlini 2005b, and cited literature.
[8] Tringham & Krstić, 1990, 609.
[9] Cp. Tringham & Krstić, 1990, 609.
[10] See *e.g.*, Winn 1981; Lazarovici 2003; C.-M. Lazarovici 2003; Merlini 2005b.
[11] From the Early Bronze period, the grave of an old woman with a child is known from the Mokrin cemetery of Maros culture (Maros, Banat) interpreted in my work as possibly a grandmother with her grandchild.

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direct evidence is missing, and the problem requires future argumentation. For now, it is worth recognizing that enculturation was a very complicated, complex and multi-dimensional process involving different generations and people with various close and distant kinship or common-interest relations. Indirectly, this is confirmed by the fact that life in a multi-leveled community requires the reproduction of similar patterns of solidarity within several generations, ethnographically documented in village communities by strong kinship connections and a richly ritualized life[12].

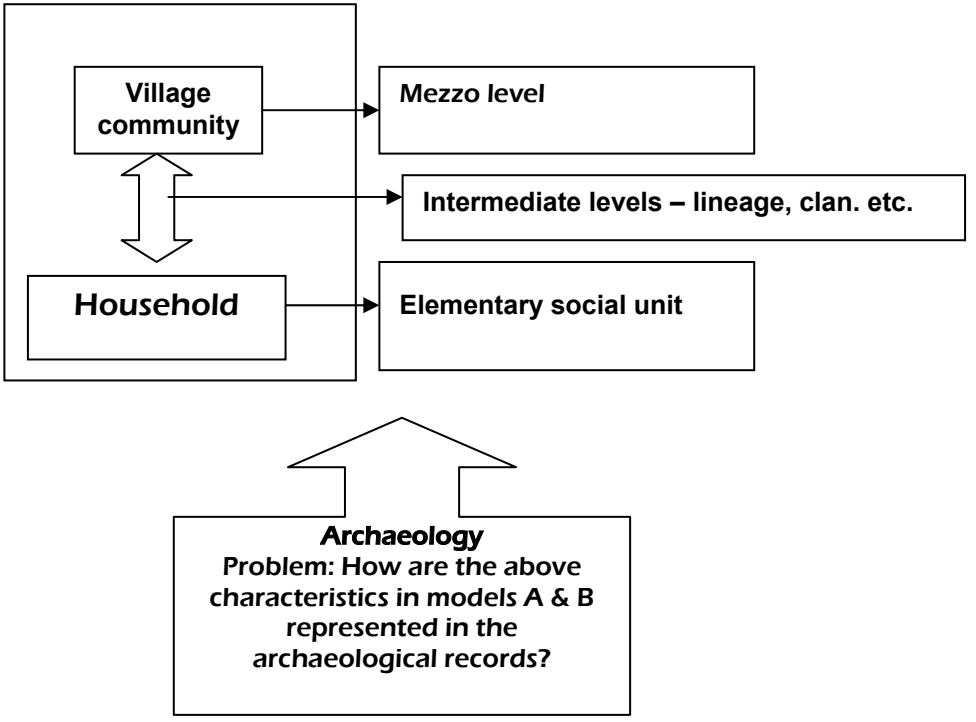

Fig. 1 – The household as an elementary social unit and as a social agent of enculturation.

We can propose that the enculturation process in prehistory (Fig. 2) that was a life-long process starting with the birth of the children. If we accept that some or most of the household members were seasonal producers of ceramics (including pottery, figurines and other ceramic objects), we should propose the participation of children in this process as well. Using ethnographic models of specialized potters, teaching the children pottery production might have been one of the essential goals of the family, and early mastery of this knowledge could have been

[12] See further for Balkan Prehistory in general Bailey 2000; Bailey 2005; Nikolova 1999.

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one of the requirements of children remaining in a given household until reaching the age of adults. Small cups or miniature models of different types of vessels discovered on prehistoric sites in the Balkans could have been made by the parents or even by the children themselves as a means of education.

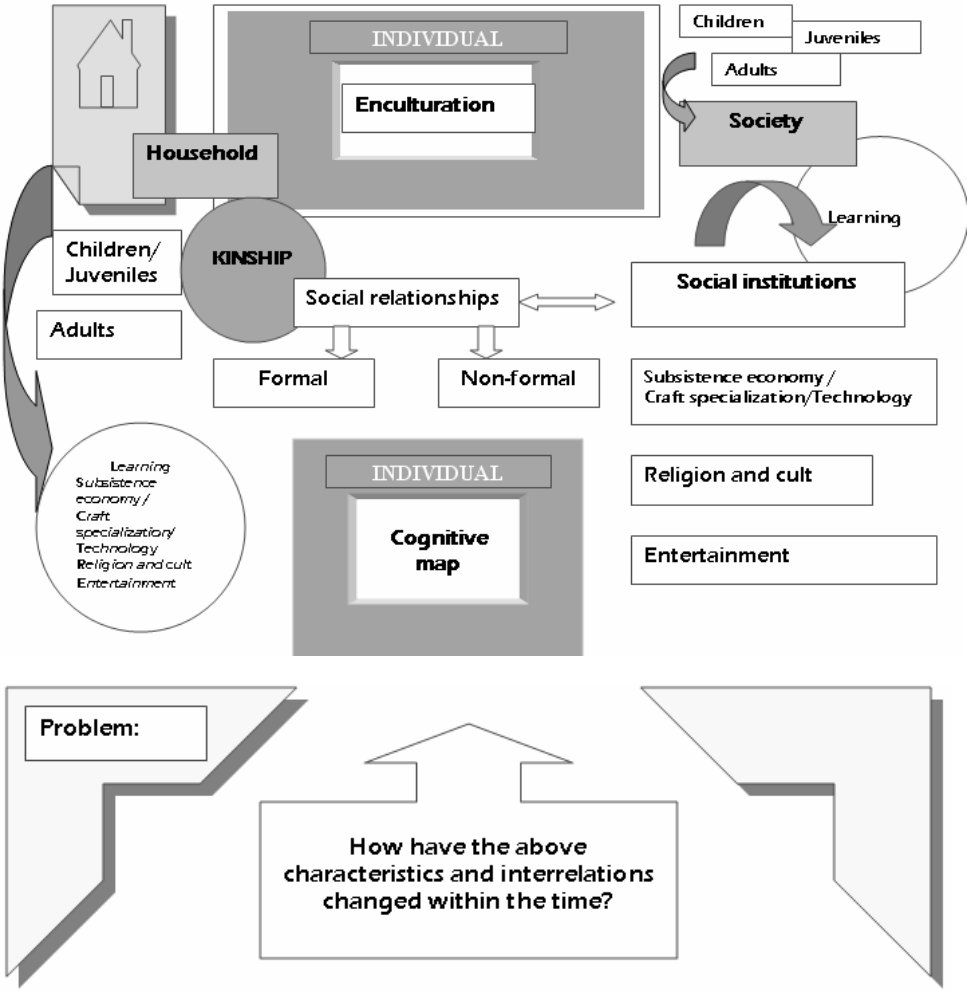

Fig. 2 – Enculturation and learning in prehistoric society.

Since pottery production was an essential activity of every prehistoric village, it was widely involved in a variety of symbolic communications. The most expressive is ornamentation, but signs on the vessels represent a level of abstract thinking probably expressing codes for specific cultural messages (household, genealogical, religious, social, etc.). On one extreme, some expressions are composed of simple signs, while on the other, pre-writing formulae (probably used

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in special religious or witchery rituals)[13] as an expression of sacred knowledge that in turn points to a possible advanced level of social stratification. Recent evidence about the signs of pre-writing is not limited to ceramic finds, but perhaps to wooden finds as well (*e.g.*, the records from Dispilio[14]). Logically we can propose that the distribution of pre-writing signs was much wider and more complex than is usually documented by archaeology.

To try to decode the signs is beyond the goals of this study[15]. There is another objective that we have been following – to include the signs within the household context as one of the symbolic means of communication.

To begin with, both biological and cultural reproductions were equally essential for prehistoric households. The beginning of a new generation was probably preceded by marriage[16] although we do not have direct evidence for the existence of traditional forms of marriage in any Balkan prehistoric culture. That problem requires further special research. Usually the double graves in prehistoric cemeteries (male-female, adult-child) are interpreted as family burials, but they can include other rituals and social norms related to siblinghood, grandparents-grandchildren, lineage and religious traditions, etc. Future contextual analysis of the signs could be helpful, since the vessels with signs could have functioned as gifts exchanged between non-blood / blood kinship groups (Fig. 3) or social groups with common interest.

The institutionalization of new kinship relations required a number of ceremonies that presumably involved material culture in a system of gift exchange (pottery, figurines, non-artificial objects, etc.). Incised ornaments with clearly symbolic meaning, like the meander ornament, occur on one and the same type of objects (*e.g.*, figurines) (Fig. 4) in relatively distant regions during prehistory (as in the Vinča culture of the west-central Balkan region and in Samovodene in north-central Bulgaria). Their significance is more convincing in terms of common household traditions and cross-cultural interactions and gift exchange than in terms of a common Goddess. In other words, beliefs and symbolism concerning ancestry was possibly more strongly represented in everyday and ritual objects than the abstract supernatural being. Even in some modern religions, it is a common belief

[13] Instances are known from the neighbor of Vinča, the Gradeshnitsa culture (Merlini 2005a and cited literature).

[14] See http://www.auth.gr/dispilio/.

[15] See Merlini 2005a, 2005b.

[16] We do not have direct evidence about when marriage emerged in prehistory. The ethnographic models represent very late historical developments and cannot be used directly for prehistoric reconstruction. In my understanding, marriage occurred because of strong kinship affinities in social relations within the prehistoric population. Marriage was a means for establishing non-blood kinship relationships or for the restructuring of blood relations (in cases of cousin marriages). Accordingly, it is logical to think that the institution of marriage emerged together with the entire social structural complex of the household, presumably since the Early Neolithic.

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that people live to serve the ancestors. Since in prehistory the idea of fertility was directly connected with the biological reproductive function of the woman, the female image of fertility was logically much more popular than the male[17].

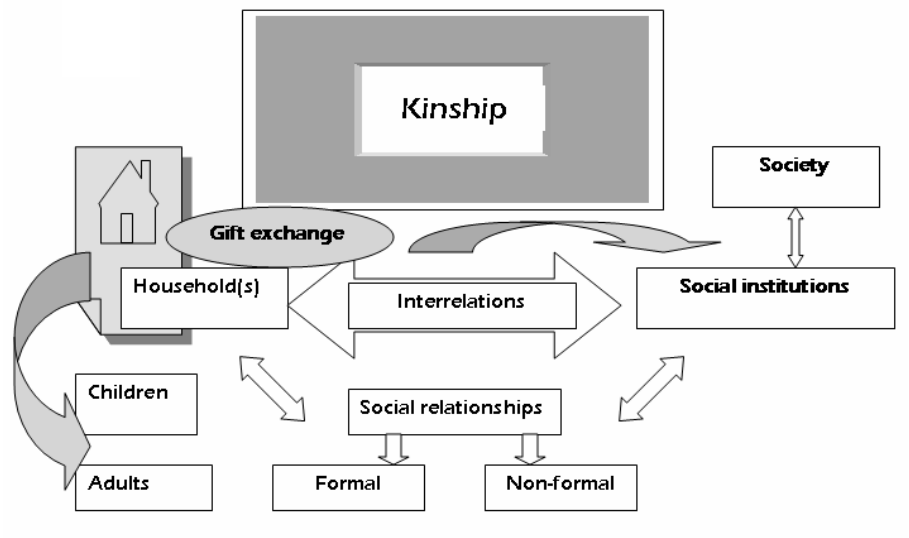

Fig. 3 – Households, kinship and gift exchange in the process of enculturation.

In deconstructing ancient enculturation, an essential early stage of the socialization of children possibly started at about the age of one when simplified kinship terminology was introduced (mom, dad, sister, brother, etc.), and the child began to talk by repeating words and creating elementary sentences. The child's sense of belonging to a certain household required a long process of introduction to the objects in the house in order to recognize a certain house as its home. By the age of 5–6 years, the signs still did not play a considerable role because abstract thinking is not well developed in such young individuals. We believe that the development of effective operational habits requiring abstract thinking, which possibly started around age 10–12, if not earlier, was too difficult and complicated a process for young children. In prehistory, the advanced development of abstract thinking took place during the same period as the initial introduction to the production and reproduction of subsistence activities – agriculture, stockbreeding, pottery production, stone industry, etc.

In this later process, the signs and symbols were an excellent learning tool for abstract thinking. The signs could have had very broad or very specific meanings. They might have connected larger communities, or their information might have

[17] About the variety of meaning of the prehistoric figurines in Southeast Europe see Bailey 2005, 100 sq.

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been coded for the members of a given household only, or for specific groups of people with kinship, religious or other social relationships.

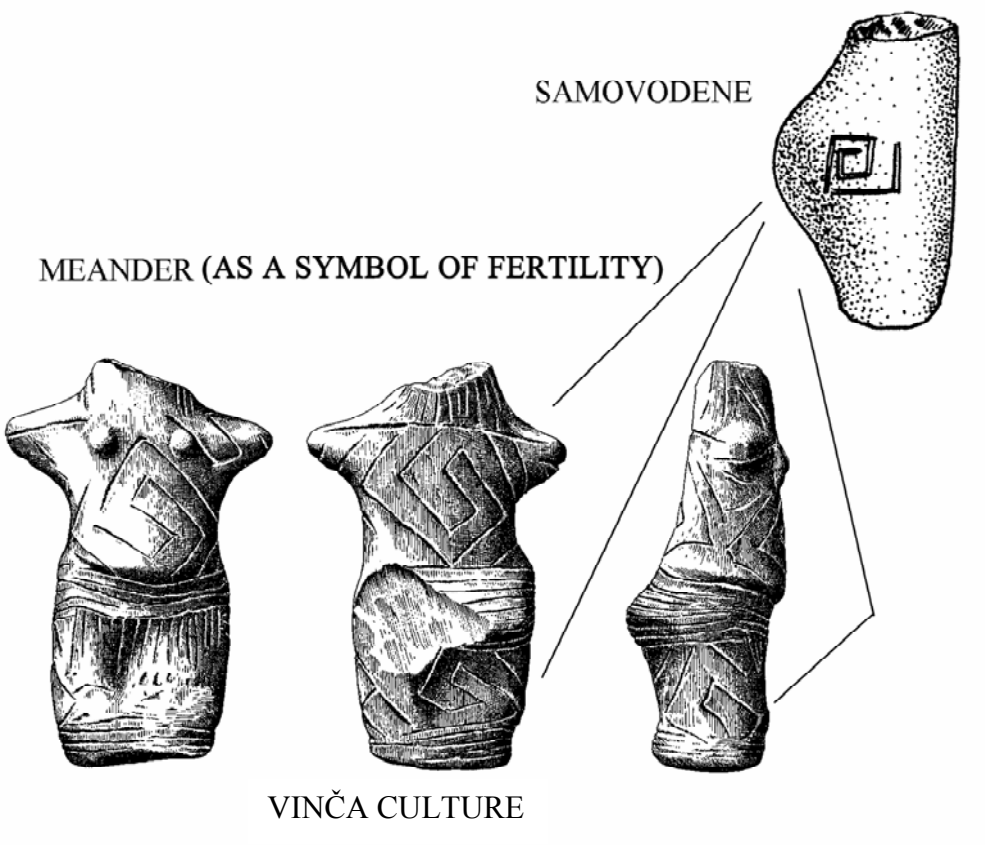

Fig. 4 – The meander ornament as a symbol of fertility in Vinča culture found close to the Samovodene culture site in north-central Bulgaria. Most probably, in both cases, the figurines represent a belief in the ancestors and their ability to influence fertility in the living world.

In traditional cultures (and by analogy in Prehistory) where the material culture was as important as the oral tradition – and where written sources were missing, in particular, in the process of enculturation – knowledge was understood to be a lifelong process depending on age. In Akan symbolism (traditional culture in Ghana and the Ivory Coast, West Africa) the potsherd (***kyemfere***) symbol "depicts this belief that experience and wisdom come with age by posing the question: If the potsherd claims it is old, what about the potter who molded it?"[18]. It is significant that the symbols are related to specific phrases and sentences.

[18] *Kyemfere se odaa ho akye, na onipa a onwenee no nso nye den?* (Arthur & Rowe, 1998–2001).

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Deliberation and conclusions

The absence of written records for the later 6th and early 5th millennia BCE in the Balkans is one of the biggest problems for the reconstruction of everydayness and the process of cultural production and reproduction within prehistoric households of the Vinča culture. At the same time, the information contained in material culture could be in some cases more complex than written records. However, articulating the everydayness as a research topic is a problem because it is difficult for the researcher to approach the historical actuality of everyday[19]. Beyond reminding that habits and actions have quantifiable meanings, there is another approach: the value and quality of everydayness[20]. The "destructuring" of everydayness depends on our general concept of culture, as well as on evidence from the cultural record. For instance, applying the concept of M. Bakhtin about *multiaccentuality* – that culture is dynamic with an in-built capacity for flexibility and change[21] – an analysis of the reproduction of one and the same tradition within many generations becomes a problem and requires in-depth research since the changes could occur as invisible (and even dissimulated) aspects of the material culture and household everydayness. In addition, the everyday world is often contrasted to the ritual world (that is, everyday activities take place outside ritual action) in which ritual objects do not possess any tangible (practical) representation[22]. Last but not least, the non-linear codification of reality[23] can be expected to be a dominating characteristic of the Vinča everydayness in light of our knowledge about prehistoric cognitive thinking[24].

Data about the Vinča symbolic systems of communications are related to visualized symbols, but we can also refer to verbalized symbols that presumably played an essential role in everyday life. The figure of the woman with specific iconographic characteristics was repeated from generation to generation, from household to household and from village to village. These visualized and materialized messages connected the individuals, and the different social units, empowering their social identity as carriers of a specific culture, in many cases different from the culture of their neighbors.

Ethnocultural symbolism and ethnohistoric consciousness were extremely strong in the Vinča culture, in which the transmission of ethnographic peculiarities of regional cultures was of primary importance. At the household level, however,

[19] Highmore 2002, 1, 22.
[20] Highmore 2002, 1.
[21] Smith 2001, 188.
[22] *E.g.*, Moisseeff 2002, 261.
[23] After Lee 1977.
[24] For the cultural theories of everyday life and everydayness see also Heller 1984; Lüdtke 1989; Featherstone 1992, Phillipson 1993, Chaney 2002.

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females may have been taught that their main social function was raising children (which for that time was really of primary importance), while the males were needed to guarantee the main subsistence and possibly to defend the community. It seems to me that, on the whole, the absence of a highly developed system of abstract symbolism characterizes the Vinča culture and that explains the fact that the signs are usually simple[25] and cannot be related to the reproduction of language in an adequate writing system. The signs seem more like an integrative part of the visualization of certain concepts from the everydayness.

In conclusion, we would like to point to the following:

1. The signs of the Vinča culture require a variety of research approaches, each of which would reveal specific characteristics. Our cultural anthropological approach involves the signs in the enculturation process as an active abstract means of transmission of specific messages from generation to generation and within different contemporary kinship and social units.

2. The relationship of the signs to household practices is most conceivable.

3. The Tărtăria tables and Gradeshnitsa platter indicate that simple signs occur together with developed abstract thinking that requires visualizing something close to a writing system. Accordingly, we can propose polysemous meanings for the symbols and signs and their multiple function in everyday and ritual practices.

4. It is an open question whether, in some cases, the simple signs were an attempt to ritualize everydayness by communicating sacred concepts in the non-sacred world. Or were they mostly related to concepts of genealogy and non-ritual social practices? The example of the meander ornament was used in this study to show that the figurines popular in Vinča and neighboring cultures were most probably related to the ancestral cult and the idea of woman as the main agent in terms of biological reproduction. If one continues this idea, the more elaborated signs and messages could also be related to the ancestral cult, which does not exclude either witchcraft or the existence of pre-writing signs functioning as sacred signs and messages from the ancestors (previously existing respected persons who held sacred knowledge).

5. The signs of the Vinča culture necessitate a detailed contextual analysis within the household archaeology – documentation of the location of the findings, correlation with features within the houses and especially their relations with other symbolic objects and means of communication. Future contextual documentation will probably assist the development of our knowledge of the meaning of Vinča signs as well.

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[25] *E.g.*, Winn 1981; Tringham & Krstić, 1990, Plate 16.1.

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DID SOUTHEASTERN EUROPE DEVELOP AN ARCHAIC SYSTEM OF WRITING IN NEO-ENEOLITHIC TIMES?

A DEZVOLTAT EUROPA DE SUD-EST UN SISTEM ARHAIC DE SCRIERE ÎN PERIOADA NEO-ENEOLITICĂ?

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Cuvinte-cheie: preistorie, Europa de Sud-Est, scris danubian, bază de date, sistem de scriere.
Rezumat: Lucrarea inspectează structurarea internă a sistemului de semne dezvoltat în vremuri neo-eneolitice în bazinul Dunării, exploatând o bază de date care însumează circa 3000 de semne, de pe 647 obiecte inscripționate, în conformitate cu 118 variabile. Statisticile din baza de date ne oferă noi informații pentru a verifica dacă aceste culturi puteau să fi manifestat o formă timpurie de scris (așa-numita „scriere danubiană") și pentru a studia principiile de organizare ale acestui posibil sistem de scriere. O atenție specifică este acordată compoziției generale a inventarului de semne utilizate de comunitățile civilizației danubiene (Câte sute de semne se foloseau? Și care erau acestea?), investigării folosirii semnelor pe obiecte, în concordanță cu tipologia lor (figurine, vase de cult, altare miniaturale, fusaiole…), frecvenței folosirii semnelor, cu diferențele regionale în secvența de timp amintită.

Key words: Prehistory, Southeastern Europe, Danube script, database, system of writing.
Abstract: Merlini inspects the internal structuring of the sign system developed in Neo-Eneolithic times in the Danube basin exploiting a database that records a corpus of more than 3000 signs from 647 inscribed objects and 756 inscriptions according to 118 variables. The statistics from the database give new information to verify if these cultures might have expressed an early form of writing (*i.e.* the so-called "Danube script") and to investigate the organizing principles of this possible system of writing. A specific notice will be done on the overall composition of the sign inventory utilized by the communities of the Danube civilization (How many hundreds of signs were in use? And which were they?), on the investigation of sign employment on objects according to their typology (*i.e.* figurines, pots cult vessels, mignon altars, spindle whorls…), on the frequency of sign use with the regional differences and the time frame.

1. Addressing the Danube script and the Danube civilization

A Neo-Eneolithic archaic script occurred in Southeastern Europe. The *Danube script* appeared originally in the *Danube civilization* with hub in the Danube valley and tributaries.

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I employ the term "Danube Civilization" for the Neo-Eneolithic societies of Southeastern Europe that flourished from c. 6400 to c. 3500–3400 BCE. This terminology is coherent with the acknowledgment that the Danube River and its tributaries favored the emergence of an institutional, economic, and social network of developed cultures characterized by extended subsistence agrarian economy and lifestyles, urbanism, refined technologies (particularly in weaving, pottery, building and metallurgy), long distance trade which involved also status symbols artifacts, complex belief system and sophisticated patterns of religious imagery[1], and an effective system of communication by the mans of symbols and signs (the Danube Communication System) among which writing technology[2].

The term "Danube Civilization" is consistent also with the challenge to demonstrate that "early civilization" status can no longer be limited to the regions which have long attracted scholarly attention (*i.e.* Egypt-Nile, Mesopotamia-Tigris and Euphrates, the ancient Indus valley), but has to be expanded to embrace the Neo-Eneolithic and civilization of the Danube basin and beyond. It is not a synonymous of the term "Old Europe" coined by Marija Gimbutas[3] because she identified under this blanket-expression an extended area examined as a quite undifferentiated unit. Sometimes, it broadened from the Aegean and Adriatic, including the islands, as far north as Czechoslovakia, southern Poland, and the western Ukraine[4]. Other times, it enlarged "from the Atlantic to the Dnieper"[5].

The script is an important mark of the high status of the civilization that flourished along the Danube River and tributaries. The over-arching terminology of "Danube script/Danube signs" includes what has been called the "Vinča script" and "Vinča signs" which has to be strictly limited to the Vinča culture that developed in the core area of the great Danube basin[6]. The Danube script has to be extended in time (from Early Neolithic to Late Copper Age) and in space (embracing the whole Southeastern Europe)[7].

In its comprehensive meaning, the term "Danube script" indicates the original successful experiment with writing technology of these ancient populations and not a to some extent unity of literacy that lacks documentary evidence. When the databank of the Danube script inscriptions that the present author developing (*DatDas*, Databank for the Danube script) will reach the needed critical mass of information, further investigation is required to go over the unitary term "Danube

[1] For example, most of the scholars agree in seeing a ritual, religious or at least spiritual function for anthropomorphs (Gimbutas 1974 1982; Todorova 1986; Todorova & Vajsov 1993; Comşa 1955).
[2] Merlini, 2002b.
[3] Gimbutas 1974–82; *ibidem* 1991.
[4] Gimbutas 1974–82, 17.
[5] Gimbutas 1989, XIII.
[6] Winn 1973; *ibidem* 1981; Merlini, 2004a, 54.
[7] Merlini, 2008b.

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script" dealing with the distinct paths to the cultural institution of writing in the regional Neo-Eneolithic and traditions of Southeastern Europe. Up to now, regional and cultural subdivision was successfully, although prototypically, tested creating some sub-databanks. *DatTur* is established from the signs utilized by the Turdaş group[8]; *DatVinc* registers data on writing in the Vinča culture; *DatPCAT* records inscribed finds and inscriptions from the Precucuteni-Cucuteni-Ariuşd-Trypylla cultural complex evidencing a late script related to the Danube script[9]. It is not for a case that Owens evidences the occurrence of "Balkan scripts"[10]. However, this statement has to be demonstrated on the basis of the understanding of the interconnections of sign use in the different cultural regions)[11].

2. DatDas: the databank of Danube signs, inscriptions, and inscribed artifacts

Although it is quite probable that the Danube script will remain undeciphered, it is possible to detect some features of its historical framework and semiotic code thanks to statistical work made practicable by a dedicated databank[12]. The *Databank for the Danube script* (*DatDas*), developed by the present author, organizes a catalogue of 4,410 actual signs recorded from the corpus of 954 inscriptions composed of two-more signs and 819 inscribed artifacts (some finds have two or more inscriptions) possibly checked in their original. Between 2001 and 2008, the author had the possibility to visit and examine many Neolithic and Eneolithic collections of the Danube Civilization in the modern-day countries of the Republic of Serbia plus Kosovo, Romania, Bulgaria, Greece, Hungary, Republic of Macedonia (F.Y.R.O.M.), Ukraine, Czech Republic, Slovenia, Croatia, Germany, and Austria.

DatDas records circa 174,000 significant statistical data. It is the largest collection of inscribed artifacts belonging to the Danube Civilization and the most numerous corpus of inscriptions of the Danube script thus far assembled.

The system consists of a database structure related to an interface software that makes possible to view and query archaeological and semiotic information in an integrated fashion including photographs and drawings.

The main purpose of this work is to put under scrutiny and discuss if and how the documented presence and development of the Danube script fit the existing body of archaeological knowledge about the Danube civilization in general and its cultural complexes, cultures and cultural groups in particular.

[8] Merlini, 2008c.
[9] Merlini, 2004c; *ibidem* 2007d; *ibidem* 2008d.
[10] Owens 1999.
[11] Merlini, 2007a.
[12] Merlini, 2005b.

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3. The origin of the script from the Starčevo-Criş (Körös) cultural complex

The structured and statistically inquired set of data from *DatDas* leads to an original overview on the Danube script via setting up its cycle of life in sync with Neo-Eneolithic and cultural complexes, cultures and cultural groups of Southeastern Europe.

Based on the chronological distribution of the corpus of the signs, one can outline the cycle of life of the Danube script according to six phases: formative phase (circa Early Neolithic); Accumulative phase (ca. Developed and Middle Neolithic); Blooming phase (ca. Late Neolithic) when the script reached the peak; Stamina phase (ca. Eneolithic-Early Copper Age); Fall phase (ca. Middle Copper Age), and Eclipse phase (ca. Late Copper Age).

The formative phase of the Danube script (ca. Early Neolithic) clusters more than 10% of the montant global of signs, challenging the supposition of some authors such as Makkay according to which pottery signs are unknown in the early ceramics[13].

The Danube script originally appeared in the central Balkan area and had an indigenous origin. The start-up of literacy happened mainly in Serbia (for magnitude) and Romania (for temporal deepness). However, it involved also Bulgaria, Hungary, F.Y.R.O.M., and Albania.

The experiment with literacy sprang mainly from Starčevo-Criş (Körös) communities and subsequently from the early Vinča culture carriers. During the Early Neolithic, the signs of the Danube script are concentrated in the Starčevo-Criş (Körös) cultural complex for 76.9% of the total occurrences (including data when the distinct Early Neolithic culture is not specified). According to the radio-carbon dating and to stratigraphical data, the Starčevo-Criş (Körös) assemblage developed for a long period comprised between ca. 6400–5400 CAL BC contemporaneously with the Vinča A1-A3 culture[14]. The Starčevo-Criş (Körös) cultural complex was not only the incubator of the script, but gave a significant contribution to it clustering 6.6% of the total amount of signs of the writing system.

According to *DatDas* evidence, the earliest experiments with literacy started in Romania around 6000–5900 BCE at Starčevo-Criş (Körös) IB, IC horizon – some two thousand years earlier than any other known writing. The oldest known inscribed piece comes from a "community dwelling" dedicated to a religious cult at the site of Ocna Sibiului (Transylvania, Romania). It is a small and high schematized conic statuette standing on a mignon altar[15] belonging to the Starcevo-

[13] Makkay 1969, 12.
[14] Lazarovici C.-M. & Lazarovici, 2006c, 41, 69, 83, 118.
[15] Paul 1990, 28; 1995; 2002 on-line; Gimbutas 1991, 313, Figs. 8–9; Merlini, 2005b; Lazarovici, & Gumă, 2006.

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Cris (Körös) IB-C culture, dated ca. 6000–5900 CAL BCE[16]. Therefore, it is significant to note that writing technology was present since the earliest manifestation of the Neolithic horizon in Central-western Balkans, although in a quite primitive and archaic form.

Then *ars scribendi* spread in the Starčevo-Criş (Körös) IIA phase in Hungary and Bulgaria at a horizon dated 5950-5850 CAL B. The script propagated quickly during the Starčevo-Criş (Körös) IIA phase which changed the evolution of the first stages of the Early Neolithic with a complex economy characterized by dynamic agriculture, cattle and sheep farming, hunting and fishing, settlements made of surface dwellings and not only pit-houses, development of pottery with complex shapes such as cups or bucranium idols, variety of painting. In the Starčevo-Criş (Körös) IIB-IIIA, the development of the script was not very energetic with a lower rate of signs occurrence than the previous phase. However, in this period one has to add the contribution from the Sesklo III cultural group in Thessaly as well as from the Gălăbnik group in the Upper Struma valley, which is a local evolution of Karanovo I and II horizons.

The Starčevo-Criş (Körös) IIIB was a period of social and economic transition for this cultural complex, which reverberated also in the increasing utilization of the script. It was in part related to the starting of the first civilization of the so-called Balkan – Anatolian Complex (Vinča and Polychromy), which changed also the features of the Starčevo-Criş (Körös) cultural complex in its late phase[17].

In the Starčevo-Criş (Körös) IIIB-IVA, the rate of the script decreased to 7.9%. This phase is characterized by diminishing in strength for this cultural complex, as clearly seen in many villages such as Gura Baciului, Gornea, Ostrovu Golu, and others. The decline was generated by the development of the above-mentioned Vinča and Polychromy cultures. At Gornea, Starčevo-Criş (Körös) IIIB-IVA linear decorations have been found[18] that could be antecedents to some signs of the Danube script and are remarkable examples on how linear decorative incisions on ceramics might have evolved in a short time into a linear writing. The decorative design matches literacy from two semiotic points of view: the alike in outlines of the marks that are linear in shape and have standardized silhouettes; their linear sequence along a row.

Literacy occurs nearly at the same time or immediately later in the Karanovo I horizon in Bulgaria. However, this Early Neolithic leading culture records only 5.6% of the total frequencies.

DatDas evidence connects the earliest stages of the Danube script to magic-religious liturgies and identity/affiliation expressions. The sacral root is

[16] Maxim 1999; Biagi & Spataro, 2004; Lazarovici, 2006.

[17] Lazarovici 1977b, 67-68; *ibidem* 1978, *ibidem* 1979, 111–114, *ibidem* 1987–1988, Lazarovici & Nica 1991; Lazarovici C.-M. & Lazarovici, 2006c, 66-68.

[18] Lazarovici 1979, Fig. VIIF, 35; 36.

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documented by miniaturized altars for worship belonging to the earliest stages of the Starčevo-Criş (Körös)[19] and Karanovo cultures. They possibly imitate shape and inscriptions of monumental communitarian altars or shrines[20]. The identity/affiliation expression is rendered by seals ascertained to the more or less contemporary Starčevo-Criş (Körös) IIA[21] and Karanovo I cultures[22]. Do the earliest occurrences of the script provide indication of a double different function of it, one in rituals in order to support and convey the communication with the divine sphere and the other in daily life? Alternatively, are the seals carriers of magic-religious messages?

In the earliest experiment with literacy, limited to 1.6% is the involvement of Banat I, which appeared at the level of Starčevo-Criş (Körös) IVB/Vinča A3 as result of the absorption of Starčevo-Criş (Körös) elements by Vinča A (A1-A2) communities settled in the territories now Southwestern Romania and neighboring regions of Hungary[23].

Equivalent (1.6%) is the contribution, in Greece, from Sesklo III, *i.e.* at the apogee of this settlement, as shown by geometric patterns[24]. Sesklo III is positioned at the transition to the Middle/Developed Neolithic and indeed the Greek chronology ascertains it to this period[25]. However, *DatDas* inserts Sesklo III into the Early Neolithic, because it predated the Vinča A culture.

Marginal is the input to the formative phase of the Danube script from the Gălăbnik group (1.1%), in Bulgaria.

In conclusion, the Danube script sprang around 6000–5900 CAL. BCE, from Starčevo-Criş (Körös) communities and almost at the same time in the Karanovo I assemblage. The start-up was quite rapid and in one century involved a high number of villages and networks of villages. The vigorous development of the Danube script is synchronic to the speedy diffusion of the Neolithic life style in Southeastern Europe. In a matter of decades, the entire central Balkan region was inhabited by Neolithic communities in the south-west axis from Yannitsa[26] to Szarvas[27]; in the east-west axis from Struma valley[28] to the Morava valley[29].

[19] Paul 1990, 28; 1995; 2002 on line; Gimbutas 1991, 313, Figs. 8–9; Ciută, 2001; 2002; Merlini, 2004a; 2005b; Lazarovici, 2006; Lazarovici & Gumă, 2006.
[20] Lazarovici C.-M., 2003, 86: Fig. 1.7.
[21] Banner 1935, 9, Pl. VIII 3–4; *ibidem* 1942, 24–25, Pl. XVI, 3–4; I. Kutzián 1944–47, 83, Pl. XLVI, 3a-b; Makkay 1984, 28 object 101.
[22] Georgiev 1967, 97, Fig. 17; Makkay 1984, 12.13; Kalchev, 2005, 57; Lazarovici, 2000b; Lazarovici C.-M. & Lazarovici 2006c.
[23] Lazarovici 1990; *ibidem* 1991, 32–33; Luca, 2006a, 32.
[24] Tsountas 1908.
[25] Kotsakis 2006, 211.
[26] Chrysostomou 1993, 135–146; *ibidem* 2002.
[27] Raczky 1987.
[28] Todorova, 2003; Čohadžiev, 2001; *ibidem* 2003; *ibidem* 2006.
[29] Tasić N.N. 1997.

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The top of the start-up stage of the Danube script was in correspondence to the late Starčevo-Criş (Körös) communities and the early carriers of the Vinča culture. In the formative stage of the script, the peak in concentration of signs is reached by the last phase of the Starčevo-Criş (Körös) cultural complex, the IVA-IVB, which amassed 55.8% of the signs with certain cultural reference. Significant Starčevo-Criş (Körös) IVA-IVB inscribed artifacts are mainly from Romanian settlements such as Ostrovu Golu, Gornea, Trestiana, and Beşenova Veche. The first tablets with sings appear in the late phase of Starčevo-Criş (Körös) IVA at Perieni and Glăvăneşti (Romania)[30]. In this period, one has also to add the contribution from the already mentioned Banat I cultural group. From the point of view of the cycle of life of the Danube script, the Vinča A culture belongs to the Accumulative phase of it. With large spreading area, long duration, and dynamism, late Starčevo-Criş (Körös) and early Vinča communities influenced the cultural and social evolution of a vast territory and contributed to the appearance of many other cultures, cultural groups, or local variants. It is not for case that the other two cultures with significant input for the Danube script experienced a long coexistence with them: the Banat I cultural group and the Gălăbnik II cultural group.

Future comparative research on the script inventories and inscriptions utilized by Starčevo-Criş (Körös) and Vinča communities will provide data on the quota of signs and organization of the reading space that was transmitted from the Starčevo-Criş (Körös) to the Vinča culture, giving new significant information on the state of conflict–coexistence between the two populations.

4. The pivotal role of the Vinča cultural complex

The Accumulative phase of the Danube script (ca. Developed/Middle Neolithic) records about 18%. If the Danube script emerged after a transition that evolved over a long period, then it dynamically developed and quickly spread along the Danube valley and Tributary Rivers in southern Hungary, Macedonia, Transylvania and northern Greece[31].

If the earliest occurrences of the script are in the Starčevo-Criş (Körös) cultural complex, the Vinča culture – which was the core of the Developed Neolithic[32] – employed the Danube script at most and played a pivotal role in its spread. The Vinča culture gathers 26.7% of the total frequencies throughout the Accumulative, Blossoming, Stamina, and Fall phases of the system of writing (including data when the distinct culture is not specified). It clusters 42.6% of the

[30] Lazarovici 1994.
[31] Merlini 2004a.
[32] Lazarovici 1977a; *ibidem* 1979.

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occurrences throughout the Accumulative phase of the script (including data when the distinct culture is not specified).

Concerning the utilization of writing technology, the Vinča culture was the most developed, the most lasting and territorially the largest in Southeastern Europe. The Danube script had peak during the phase B of this culture, although a significant role was played also by the phase A, which beginning can be fixed – according to stratigraphy, pottery typology and radiocarbon data – between 5400-5200 CAL. BCE.[33] Makkay's and other scholars' statement according to which the Vinča culture applied pottery signs from the end of phase A until the very end of B2 phase[34] is not verified due to the appearance of them in the earliest Vinča A stages and their presence also in the C and D phases.

Within the Vinča cultural complex, an extensive number of settlements employed the Danube script. Throughout the Vinča A, the hub was the fertile region of the Middle Danube and Morava basins, mainly in the Serbian territory. The Vinča mound played the pivotal role, amassing 55.6% of the inscribed Vinča A objects. However, a significant role was played by the Romanian area gathering ¼ of the signs and remarkable is the early presence of the F.Y.R.O.M. region. The C14 analysis of the remains from Milady Tărtăria, which accompanied the inscribed tablets in the ritual grave, fixed them at 5370-5140 CAL. BCE, i.e. at Vinča A2 horizon or the coeval Starčevo-Criş (Körös) IVA[35]. Concerning typology of pottery, one can synchronize the Vinča A2 in Serbia, Romania and F.Y.R.O.M. with the Karanovo II in Bulgaria[36].

In the Vinča B phase, the script was spread mainly in Serbia, but with slightly increasing presence in Romania. The entry of Bosnia and Herzegovina has to be signaled.

A regionalization process happened in the core area of the Danube civilization during the stages Vinča B1 and B1/B2, with the appearance of a number of cultural groups and local variants. A further tendency to regionalization is observable in the articulation of the script throughout its Blooming phase coeval with the emergence of new canons in art and ceramics such as pentangle-mask figurines at Vinča – *Belo Brdo* to replace the triangle-masked ones.

During the Accumulative phase of the script, the protagonism of the Vinča B and Vinča A cultures is followed by the Banat II settled in Romania (9.2%), on the high plains area of the actual region of Banat[37]. The radiocarbon data are placed in

[33] Schier 1995; *ibidem* 1996, 150; Gläser 1996, 177; Mantu, 2000, 78, Lazarovici & Lazarovici C-M., 2003; Lazarovici C.-M. & Lazarovici, 2006c.
[34] Makkay 1969, 12.
[35] Merlini 2004a, 289; *ibidem* 2006c online; *ibidem* 2006d; *ibidem* 2008a; Lazarovici & Merlini, 2005; Merlini & Lazarovici, 2008; Lazarovici & Merlini, 2008.
[36] Lazarovici 1998, 3.
[37] Lazarovici C.-M. & Lazarovici, 2006c.

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the interval of ca. 5300–4950 CAL. BCE (Mantu C. M. 2000: 79), consistent with those established by R. Gläser for the Vinča B culture (5200–4850 CAL. BCE)[38].

The accumulative spread of the Danube script within a culturally interconnected core region is documented by significant presence also in the Alföld culture in Southern Hungary (7.2%) and the Vinča A/B (4.3%) in the Republic of Serbia. Farther was the contribution from Karanovo III (3.4%) in Bulgaria, LBK I culture (3.0%) in Slovakia and Germany, Anzabegovo-Vršhnik IV (2.4%) in F.Y.R.O.M., Szakálhát (2.4%) in Hungary. Finally, we have Linear pottery – musical notes (2.1%), in Hungary and Germany, as component of the great early Linear civilization. The western area of this culture was characterized by pottery decorated with incised narrow lines and small alveolus "musical notes"[39]. Residual was the input from Anzabegovo-Vršhnik III (1.4%) in F.Y.R.O.M., Butmir I in Bosnia and Herzegovina, Blaz III in Albania (1.0% each), Danilo in Croatia (0.9%), Pişcolt I (Satmár I/Chumeşti) in Romania and Hungary, Paradimi II in Greece (0.7%), and Dunavec II in Albania (0.6%).

Zooming on the role of the single settlements in the Accumulative phase of the Danube script, the Vinča mound had the main position and the system of writing lasted until the Eneolithic-Early Copper Age. At Parţa the script reached its acme in the Accumulative phase, however it was present during the previous and subsequent phases. At the third level for magnitude, there are some urban agglomerates where the script occurred only during the Developed and Middle Neolithic. In order of number of signs, they are at first Dispilio and Mozőkövesd, which are followed by Anzabegovo, Giannitsa, Fratelia, and Selevac.

5. The Blooming phase of the experiment with writing

Throughout the Blooming phase (ca. Late Neolithic), the script reached the peak concentrating nearly 60% of the total amount of the signs. The Danube script is eminently a Neolithic affair. About 88% of the signs belonging to multi-sign inscriptions are concentrated in the Neolithic period. In particular, it is a Late Neolithic affair. After a gradual start-up and a dynamic increasing phase, the climax was achieved during the Late Neolithic.

Throughout the Late Neolithic, far-reaching changes occurred in the social, cultural, and even ethnic makeup of Southeastern Europe with the emergence of new cultural complexes and groups. In the horizon Vinča C, Turdaş, Gradešnica, and Karanovo IV and V, the Danube script developed at most and reached the greatest variety and richness. The Blossoming phase of the Danube script was

[38] Gläser 1996, 86.
[39] Comşa 1963; Lazarovici 1983/1984; Kalicz & Makkay 1977.

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coeval with the start up of writing technology in the area of proto-Sumerian civilization[40].

The Blossoming phase of the Danube script was sustained at first by the Vinča C culture, accounting 32.6% of the recurrences of the period (including data when the distinct culture is not specified). Among the four Vinča phases, the Vinča C was when the system of writing spread at most. In addition, it revolutionized the spreading model of the script settled during the previous phases with a resolute extension towards South involving substantially the Bulgarian and Greek territory. This trend is connected to the social, economic, and cultural upheaval that some scholars call "Vinča shock" due to successive migrations from South with several intermediate stages[41]. The Vinča C phase is characterized by the increasing number of settlements and by the even wider rising figure of sites that employed the Danube script. In a number of cases, they appeared after the "Vinča shock" and their cycle of life was restricted to the Late Neolithic. The main Vinča C nodes of the script network that elaborated the innovation were Jela and Vinča, both in the Republic of Serbia, and quite far Kurilo in Bulgaria. Comparing to the previous phases of the Vinča cultural complex, the Vinča C valorized the script on a wider range of artifacts and particularly on anthropomorphic statuettes. The typological articulation and features of the Vinča C cultic inscribed objects reflect the employment of the Danube script in a transforming magic-religious system, beliefs, and architecture in correlation to an intense religious life. An example is the growing utilization of communitarian altars with sacred signs within temples, such as that ones standing in the temple at Kormadin, in the Republic of Serbia[42] or at Parța[43].

In the Blooming period of the script, the second gravitation of writing was the Turdaş cultural group (22.2%), which had genesis on Vinča B foundation implanted with Vinča C1 elements and established in the Southwestern Transylvania and in the basin of the medium course of the river Mureş. My database *DatTur* records signs of the "Turdaş script" established upon 135 objects and 141 inscriptions[44].

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[40] Merlini, 2005c; *ibidem* 2006c.

[41] Lazarovici 1979, 118, 137, *ibidem* 1987; *ibidem* 1991; *ibidem* 1994; Kalmar 1991, 124 following.

[42] Jovanović 1991; Sandars 1968, 203, Fig. 179b.

[43] Lazarovici *et alii*, 2001.

[44] *DatTur* is based on a direct study of the objects kept at the Muzeul Național de Istorie a Transilvaniei Cluj-Napoca, the related literature (*e.g.*, Torma 1879; *ibidem* 1880; *ibidem* 1882; *ibidem* 1894; *ibidem* 1902; 1972; Vasić 1910; *ibidem* 1911–34; *ibidem* 1932–36; Garašanin 1951; *ibidem* 1993; *ibidem* 1997; *ibidem* 1998a; *ibidem* 1998b; Todorović & Cermanović 1961; Milojčić 1965; *ibidem* 1967; Makkay 1968; *ibidem* 1969; *ibidem* 1990; Todorović 1969; Winn 1973; *ibidem* 1981; *ibidem* 1990; *ibidem* 2004a online; *ibidem* 2004b online; Gimbutas, 1974–1982; *ibidem* 1989; *ibidem* 1991; *ibidem* 1999; Paul 1979; *ibidem* 1990; *ibidem* 2002; Masson 1984; Haarmann 1995; *ibidem* 1997; ibidem 1998a; *ibidem* 1998b; *ibidem* 2002a; *ibidem* 2002b; Lazarovici 1977b; *ibidem* 1979;

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The inventory of the "Turdaş script", established in the present work from DatTur, is made up of 151 signs emerging from a sign catalogue of 498 units. It is mainly made up of abstract signs rather than figurative or naturalistic motifs. There are 110 abstract signs, only 13 pictograms/ideograms, and possibly 28 signs to represent numbers. Therefore 89.4% of the signs of writing (numbers excluded) have shapes that are non-representational. Indicative of the abstract nature of the signs composing the "Turdaş script" is the high presence of root-signs: among the abstract signs, 22 vary their outline and only eight show an unvaried shape. Therefore, the basic elements of the "Turdaş script" consist of a core set of abstract signs. Among the abstract signs, 80 are derived signs, *i.e*., simple or complex variations of the root-signs. The "Turdaş script" is characterized by a low number of basic signs when these are compared to those derived from their modifications. This feature is due to the high productiveness of root-signs in originating variations. The massive use of diacritical markers in order to vary the root-signs and the practice of doubling or multiplying them in order to extend the signs system is another important indicator of the high level of abstractness of the "Turdaş script".

The database provides evidence that the Turdaş culture/group participated in a leading position in the development of a Neo-Eneolithic/ system of writing in the Danube basin, because the eponymous settlement concentrated 16.7% of the inscribed objects and 14.8% of the inscriptions recorded in *DatDas*. *Only* the settlement of Vinča (Republic of Serbia) reaches a higher score (18.5% and 17.5% respectively). However, if the chronological framework is limited to the Late Neolithic, Turdaş acquires a starring leading role, accounting for 28.3% of the inscribed artifacts and 25.8% of the inscriptions, whereas Vinča is subjected to an evident crisis and falls to 8.9% and 8.1% respectively.

The Turdaş culture played a pivotal role in the blossoming and spread of literacy in Neo-Eneolithic Southeastern Europe, but not in the genesis of it. For decades, it was ascertained to be Early Neolithic and synchronized with the Vinča A culture[45] or to the Developed Neolithic, related to the Vinča B level[46]. Garašanin tried to utilize the archaeological discoveries from Romania and especially from Turdaş when he settled his periodization of the Vinča culture, defining the following periods: Early Vinča, comprising Vinča-Turdaş Ia, b phase (at Vinča

ibidem 1994; *ibidem* 1998; *ibidem* 2000a; *ibidem* 2003; *ibidem* 2004a; *ibidem* 2004b; *ibidem* 2006; Lazarovici C.-M., 2006a; *ibidem* 2006b; Lazarovici C.-M. & Lazarovici, 2006c; Lazarovici & Merlini, 2005; Luca 1997; *ibidem* 2001; *ibidem* 2003; *ibidem* 2006b; Merlini, 2001 online; *ibidem* 2002a; *ibidem* 2004a; *ibidem* 2004b; *ibidem* 2005b; *ibidem* 2006a; *ibidem* 2006b; *ibidem* 2007b; Starović 2004; *ibidem* 2005), and the unpublished *Notebook* from Baroness von Torma.

[45] Winn 1981; Gimbutas 1974–1982, 254; *ibidem* 1991, 258, who maintained a date of 5200–5000 BC.

[46] Garašanin 1951; *ibidem* 1958; *ibidem* 1993, 8.

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site, the layer of 8.5 meters in depth); Vinča-Turdaş IIa (at Vinča, a depth from 8.5 meters to about 7.6); Vinča-Turdaş IIb (at Vinča, a depth from 7.6 meters to about 6.6)[47]. The utilization of the term Vinča-Turdaş for both Vinča A and B phases by M. Garašanin's chronological system created confusion and misunderstanding for a long time.

Both of these answers are obsolete, after the revision of the Turdaş chronology made by the Romanian specialists. New C14 dates[48] and further archaeological evidence[49], postdate the origin of the Turdaş culture/group to the end of the Vinča B/C phase and its entire evolution synchronized with the Vinča C1-2 phase. The Turdaş culture/group belongs to the Late Neolithic.

According to this chronological framework, the "Turdaş script" has to be ascribed to the Late Neolithic new cultural impulse due to the collision and merge between Vinča C1 communities of immigrants from Serbia to Transylvania (through the Mureş river Valley or the Poiana Ruscă Mountains) and an indigenous Vinča B foundation. It is still under investigation if the Turdaş culture/group as well as the "Turdaş script" resulted from a migratory wave from Serbia that implanted Vinča C1 elements on a native Vinča B2 foundation[50]. According to Draşovean, the earliest layer at Turdaş is Vinča C1. Significant is the still unpublished analysis on Vršac-*At* pottery (Republic of Serbia) carried out by Gh. Lazarovici and Draşovean. At the oldest Vinča C level, identical pottery to artifacts (ceramic, statuettes, cultic house models) from Turdaş appear; at the sub[51]sequent

[47] Garašanin 1998a, 69.

[48] According to radiocarbon data, the beginning of the Turdaş cultural group is at the beginning of the V millennium BC. C14 data are, p. Turdaş, pit house 1/1993, p. Deb 5762 = 5825 ± 60 BP, (4734–4549 CAL. BC), pit house B2/1994, p. Deb-5765 ± 70 BP (5044–4895 CAL. BC); Orăştie – *Dealul Pemilor*, pit house 1/1992–1993, p. Deb-5762 = 5825 ± 60 BP, (4768–4582 CAL. BC), and pit house 2/1994, p. Deb 5775 = 5790 ± 55 BP (4734–4582 Cal. BC) (Luca 2001, 140–142, Pl. VI–IX). An aged skull fragment (much older then the earliest Turdaş level) belongs to the same pit house 2/1994, having Deb-5765 = 6070 ± 70BP. Luca maintained that it was kept and put to use by many generations (Luca 2001, 139–143). In conclusion, Luca considers that the earliest Turdaş level at Orăştie, is situated between 4768–4582 CAL B.C. (Luca 2001, 142; see also Luca 2008). Lazarovici (2006) considers this data in quite good relationship with those obtained for Vinča C1-C3, C3-D1 or D sites in Serbia and coeval with those for Vinča C2-C3 from Vinča Belo Brdo established by Schier between 4980/4800–4600 BC (Schier 1996). See the assesment in Merlini 2008e.

[49] While sites from this group (Turdaş, Lumea Nouă, etc.) contain Vinča C finds, none contains Vinča A artifacts, as supposed in the past. The misinterpretation is due to an incorrect interpretation of some shapes and designs (Draşovean 1996, 97; Draşovean & Mariş 1998, 98; Luca, 2006b, 349). It is also verifiable that some ornamental elements of "Turdaş type" (incised bands, painted with black/red incrusted technique) are occasionally present at Zau de Câmpie in the Vinča B level (B2 or C, see Lazarovici, 2000a, 18–24, but the Turdaş group itself belongs to the Late Neolithic. See, for example, the reprint of Martin Roska's and Posta Bela discoveries from 1909 (Lazarovici & Maxim 1996, 223–267), the Tăulaş materials (Dumitrescu & Lazarovici 1985-1986), or the new archaeological materials from Turdaş-Luncă (Luca 1993; *ibidem* 1996a; *ibidem* 1996b; *ibidem* 1997; *ibidem* 2001) or Orăştie-*Dealul Pemilor, point X2* (Luca 1996b; *ibidem* 1997; *ibidem* 2001; Luca & Pinter, 2001) and the Deva-*Tăulaş* (Luca 1996).

[50] Lazarovici 1987–88, *ibidem* 1994; Draşovean 1996, 93–100.

[51] Draşovean 1996, 273.

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horizon, only Vinča C material occurs and none is identical to the Turdaş material[52], or if the Turdaş cultural phenomenon was already formed when the first Vinča C1 immigrants arrived to modify it[53]. This hypothesis can be substantiated by the discoveries from Mintia-Gerhat[54].

According to the archaeological material, it is more probable that, even if the oldest Turdaş cultural stratum predated the Southwestern migration, the *ars scribendi* was brought to Transylvania by Serbian migrants and then developed as a slight regional variant with its own identity as documented by the wide overlapping of signs inventories.

Coherently, the sudden appearance of a system of writing at Turdaş could be explained by the start-up of the Vinča C phase due to strong cultural transformations taking place all over Southeastern Europe[55]. It was not, as believed traditionally, an abrupt introduction of Near East influences.

According to the chronological framework, the usual association between the "Turdaş script" and the Tărtăria tablets is fallacious, since the tablets are much older than the Turdaş finds as documented by the C14 date of the bones recovered with the tablets (5370–5140 BC calibrated)[56].

The "Turdaş script" developed as a light regional variant under the framework of the Danube script, having 137 signs in common with the Danube script and only 14 exclusive to the "Turdaş script". Future research will establish if the evolution of the regional variant only affected the outline of the signs, or if there were changes in the organizing principles with consequences for their meaning. It would be significant to investigate if the eventual changes in the script were in some way synchronized with the three phases along which the Turdaş group evolved while occupying central Transylvania.

The third central culture from the Blossoming phase of the Danube script was the Gradešnica – Brenica (11.2%), which settled in Northwestern Bulgaria and was characterized by extensive utilization of the script as well as by engraved abstract geometric ornaments forming spiral-meander motives often incrusted with white or red paint.

Several authors noted signs and pictograms belonging to the Gradešnica – Brenica cultural group even if it is based often on a misunderstanding[57]. The "Gradešnica tablet or plate" and coeval artifacts have been considered by Bulgarian literature to be the first written record in human history: the "Gradešnica-Karanovo

[52] Lazarovici C.-M. & Lazarovici, 2006c, 569.
[53] Luca 1997, 73; *ibidem* 2006b, 349.
[54] Draşovean & Luca 1990.
[55] Including migration phenomena from Southwestern regions of the Central Balkans to Transylvania.
[56] Merlini, 2004a, 289, 2006b; Lazarovici & Merlini, 2005.
[57] According to Gimbutas, from Gradešnica comes "one of the best examples of Old European script" (Gimbutas 1982, 87).

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writing"[58]. However, even if most of the authors consider the famous Gradešnica find as a tablet or a plaque, dazzled by a first-eye of its shape and aligned signs along reading rows[59], nonetheless it is actually a little, rounded shallow receptacle with evident lips and two holes for suspension[60]. Besides, my semiotic investigation – which revises the published signs and publishes the totality of the signs occurring on the internal and external lips of the Gradešnica little tray[61] –, establishes that the outside face of the artifact appears employing contemporaneously two communication channels: iconic symbolism of a stylized pregnant Moon which is "oranting through dancing with movements directed toward the four corners" and an inscription surrounding it depicting constellations. Connecting pregnant dancing Moon and zodiacal constellations, which mythological chronogram is explained on the outside of the Gradešnica platter? One can presume that it reports a myth which was exploited in Danube basin as one of the foundations of all the regional spiritual beliefs and which was common to other primitive agricultural societies**.** It could well concern the creation and re-creation of the world, which is closely connected to the dancing Moon in the Sky and the giving birth. The motion of the universe is a perpetual act around motherhood and its rotating life on the one hand is generated by it while on the other hand supports the creative action. Motherhood creates Sky and constellations and it is sustained by them in its generative process. The initiating nature and the magic-religious function of the fourfold anthropomorphic figure and the surrounding signs of constellations are outlined by their location on the non-visible part of the ritual vessel.

The inside of the Gradešnica flat receptacle bears a long inscription that, according to the majority of scholars, is divided into four horizontal registers[62]. However, if one looks at the humanoid stylized on the outside of the vessel and turns it, one can see that the signs on the inside are actually aligned vertically and not horizontally[63]. The large majority of the signs incised on the front of the Gradešnica platter can be included in the inventory of the Danube Neo – Eneolithic/ script. The author accepts with reserve V. Nikolov's interpretation according to which they make up a schematic model of the lunar circle (not a lunar calendar), where its four phases are embodied in the four columns.

[58] Georgiev 1969, 32-35; Nikolov & Georgiev 1970, 7–9; Nikolov & Georgiev 1971, 289.
[59] Winn 1981, 210, Renfrew 1973, 177, Masson 1984, 108.
[60] Gimbutas 1991, 313, Figs. 8–12.
[61] Merlini, 2005a; *ibidem* 2006a.
[62] Nikolov 1974; Masson 1984, Todorova 1986.
[63] Čohadžiev, 2006, 72. The in column layout has been judged strange by several scholars – blind from contemporary eye – for a written text structured in supposed guidelines for a religious literate adept. The author's studies provide documentary evidence on how the vertical alignment of the signs was employed in other inscriptions of the Danube script and follows a widespread feature of other ancient writing systems.

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The signs in sequence over the two faces of the Gradešnica platter prove that night sky and celestial bodies were studied during the Eneolithic time because it was assumed that they controlled life and events on Earth. The knowledge of the sidereal cycle was embedded over the outside of the Gradešnica platter and the knowledge of the synodic cycle was incised over the inside. The first was a esoteric (initiatic) knowledge founded on the observation that the moon acts as a kind of gate as it passes in front of the 12 constellations of the zodiac, opening the way for specific influences which strengthen animal and human fecundity as well as root, leaf, flower or fruit of plants which are sown and cultivated. The second was an exoteric (public) knowledge and involved the recognition of Moon phases influences on animals, crops and plant.

Both the sign sequences on the platter involve the "reading" of the time with the accent placed on the full moon, although they do not seem to be specific calendars. Signs both on the faces of the lunar cycle and the lunar zodiac establish a working relationship between the two time systems giving the possibility of a daily application of the lunar zodiacs, as evidenced by the Chinese calendar and to a certain extent by the diagonal calendar divisions (or decans) of the ancient Egyptians.

Throughout the Late Neolithic, quite far was the input from the fourth pillar in the flowering of the system of writing: Karanovo V – Mariţa (5.2%), in Bulgaria including Dikili Tash I and Sitagroi II, Sitagroi IIIA. The Tisza-Herpály-Csöszhalom complex, settled principally in Hungary but also in Romania, scores 4.8%. Karanovo IV-Kalojanovec, in Bulgaria, rates 4.7%[64].

Vinča settlement maintained a key position during the Blooming phase of the Danube script, due to concentration of signs and ongoing presence of them. However, it was not more the hub of literacy, which became Turdaş. Significant and increasing in time was the role of Jela, Gradešnica, Sitagroi, and Kurilo. All these main centers assembled signs exclusively in this phase of the script. The flourishing stage of the system of writing was characterized by its widespread as well as by its presence at well-structured proto-cities, which interpreted it and eventually developed regional variants but declined at the end of the period.

In the Blooming phase of the script, limited was the contribution from the Banat III culture (3.1%), with inscriptions mainly in Romania but also in Hungary. Classical Dimini and Paradimi III, both in Greece, register 2.3% each. Zau III (former CCTLNZIS III according to Lazarovici Gh. 2007), in Romania, rates 1.4%. Residual is the contribution from Late Bandkeramik (0.7%) in Czech Republic and from Boian-Poljanica (0.6%) in Romania, which was determined by three factors: late Dudeşti elements in the early and middle sixth millennium BC; influences of the linear pottery culture; and southern pressure[65]. Inconsistent is the input from

[64] Renfrew *et alii*, 1986, 225; Perlès 1990.

[65] Milojčić 1944–1945: 110; Comşa 1954: 362–363; *ibidem* 1955: 14, Fig. 1; Lazarovici C.-M. & Lazarovici, 2006c.

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Hamangia III (0.3%), present with signs in Bulgaria even if it spread also in the Romanian Dobrogea and and the right bank of the Danube in Southeastern Muntenia[66].

During the flourishing period of the Danube script, the increasing distribution of inscriptions on prestige objects is a clue of a rising social hierarchy. *DatDas* does not verify a correlation between the increasing role of the copper centers and the spread of the Danube script in the Vinča C, Gradešnica and Karanovo V – Mariţa cultures. Major mine sites such as Rudna Glava, Maidanpek[67], Zlot, Belovode in Serbia[68], Ai Bunar in Thrace[69], and Rudna Hlava, Prochorovo, Medni Rid in Bulgaria[70] do not employ signs of the Danube script or use them at a very low rate. A correlation exists between the utilization of the Danube script and the first copper deposits formed and accumulated during the late Vinča phases at Vinča, Divostin, Fafos, Pločnik[71]. The system of writing appears to have played some role not in the large-scale mining, smelting of copper ores and casting of the molten metal, but in the circulation and storing of the copper.

6. The Stamina phase of the script

The Stamina phase (ca. Eneolithic-Early Copper age) was a resistance period for the system of writing within an economic socio-cultural framework that reached a high degree of civilization equalizable to that one of the Eastern Mediterranean basin. However, the peripheral position and the beginning of attacks and intrusions from the neighboring less advanced populations from Eastern steppe led to a decrease in the rhythm of evolution[72]. If it was a declining phase, however it was still vital, with nearly 10% of the totality of the signs. If one adds the rates of Neolithic and Eneolithic, the cluster reaches the 96.8%.

During the Stamina phase of the Danube script, it was mainly spread in five leading cultures that sum 84.1% of the total occurrences of the period. The main gravitational centre was the Bulgarian Gradešnica-Slatino-Dikili Tash II culture (25.9%), which developed the script in parallel to an exceptional variety and elegance of ceramic forms (such as the amphorae with plane handles and fruit-dishes on high legs) and rich graph ornamentation. The system of writing spread in Southwestern Bulgaria along the river Struma as well in North Greece (the tell Sitagroi – IIIB layer) in connection to intensive contacts in the present-day Western

[66] Comşa 1971: 16; Haşotti 1997: 18–19.
[67] Jovanović 1971, 18–21; *ibidem* 1979, 42–46; *ibidem* 1996; Ottaway 1996.
[68] Tasić N. 1968.
[69] Cernâh 1978, 56–76; Bailey 2000.
[70] Pernicka *et alii*, 1997, 143–145.
[71] Jovanović 1979.
[72] Luca 2006a, 45.

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Bulgaria and the existence of primitive pre-state formations, what probably the tribe unions were Čohadžiev S. connects the emergence of the need to code information in a "pre-script" form to the intensive contacts in the present-day Western Bulgaria and the existence of primitive pre-state formations, what probably the tribe unions were[73].

The second pivotal role was played by the Vinča D culture (20.3%), settled mainly in the Republic of Serbia and in part in Romania as evolution of the Vinča C and final phase of the Vinča group at a reasonable date of 4700–3500 CAL BC. Nearly half of the inscribed objects are anthropomorphic statuettes. All of them are from the settlement of Vinča. In most of the cases, they have an unknown gender. When it is known, it is female.

In this period, a related script developed in Cucuteni-Trypillya area[74]. The Vinča D culture was followed by the Precucuteni – Trypillya A (18.2%), established in Romania, Republic of Moldavia and Ukraine, and by the Cucuteni A1-A2 (11.0%), developed in Romania and Republic of Moldavia. The Precucuteni – Trypillya A phenomenon has a Balkan origin in Boian III–IV and Mariţa I-III. The Cucuteni A1-A2 phase is correlated with Precucuteni III and Gumelniţa A1-A2[75].

Exploiting the dedicated database *DatPCAT*, the author tested the *possibility* that Moldavian and Ukrainian Eneolithic might have expressed an early form of writing – *i.e.* not just the possibility that decorations and symbols in groupings on vessels could constitute a sort of pictographic or ideographic writing, but if these cultures left written messages through inscriptions made by geometric, abstract, high schematic, linear, and not very complex signs typical of a script. The conclusion is that there is documentary and statistical evidence of a writing system, although with archaic traits. In some cases, mythograms are rendered: chains of writing signs and symbols capable to induce the spectator to recall and orally express a myth, a story or an epopee, as well as to support him/her in performing the related ritual practices. Mythograms purpose was probably to record (fix), preserve, and transmit portions of spiritual knowledge. The most frequent inscribed objects are human figurines that are present throughout the whole chronological sequence.

Writing technology is an attribute that can easily fit in well with the type of civilization that flourished in Eneolithic times on the Eastern border of the Danube civilization. Distinctive attributes of the Precucuteni-Ariuşd-Cucuteni-Trypillya cultural complex are a highly productive mass farming system, a large number of proto-cities *i.e.* fortified and mega-size settlements with a planned layout[76], an

[73] Čohadžiev 2006, 71.
[74] Merlini 2004b; *ibidem* 2007c.
[75] Lazarovici C-M. & Lazarovici, 2006c.
[76] Šmagli 2001, concerning the settlements of Uman area.

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elaborate architecture for community dwellings and cult buildings, a semi-hierarchic organization of society, a sophisticated religion, the smelting and the forging of metal, the mass movement and control of raw materials such as salt, flint and copper, a strong trade over long distances, a system of calculation, a careful observation of the movement of celestial bodies, messages on pottery through multicolored symbols. These communities used clay tokens – the same, as in Mesopotamia.

According to *DatPCAT* evidence, the cycle of life of writing is in accord with the socio-economic and institutional development of the cultural complex. It is sustained during its start-up phase in agreement with an already well-advanced society. It is maximum at the time of its maturity. Finally, it decreased and than collapsed in conjunction with its decline and eclipse. According to Videiko, who considers also symbolic painted patterns, several sign systems developed during the more than 2500–years of Trypillya culture. They had local features and were connected with sacral sphere. The Old Tradition (Trypillya A – BI – BI/II, 5400/5300–4000) was connected with the Vinča script and other cultures belonging to the Danube Civilization (such as Linearbandkeramic, Karanovo...). The "New Tradition" (Trypillya BII-CII, 4000–2750 BC) was based both on some old signs and on the development of an original sign system on painted pottery. It looks like the ancient sacral script was forgotten between 5000–4000 BC and than reinvented with some local features[77]. Quite in synchrony with this point of view, *DatDas* records 69.94% of the Precucuteni-Ariuşd-Cucuteni-Trypillya signs in the Eneolithic-Early Copper Age; 25.77% in the Middle Copper Age, and 4.29% in the Late Copper Age.

Features of the semiotic code of the "Precucuteni-Ariuşd-Cucuteni-Trypillya script" evidence the weakness of any parallelism between it and Mesopotamian writing for chronological and graphic reasons. Considering the Balkan origin of the Precucuteni-Trypillya A phenomenon in Boian III–IV and Mariţa I–III cultures[78] as well that 79% of the Precucuteni-Trypillya A sings are correlated with those from the Danube script, one can hypothesize that the system of writing which set up throughout the Eneolithic period in the Moldavian-Ukrainian was cognate of the Danube script and had origin from it. Through time and according to a drift from West to East, two active centers with strong connections developed close and related sign systems: the Danube basin and the Moldavian-Ukrainian region.

Throughout the Stamina phase of the Danube script, the Petreşti culture, in Romania, rates 8.7%. The contribution from Gumelniţa A (Romania) is 4.6%, from Lengyel (Hungary) is 5.6% (Lengyel I 2.8% and Lengyel II 2.8%). Marginal is the input from the Sălcuţa-Krivodol-Bubanj Hum complex (1.5%) in Bulgaria and

[77] Videiko 2004.
[78] Lazarovici C.-M. & Lazarovici, 2006c.

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Romania, Hamangia IV in Romania (1.0%), Bodrogkeresztúr culture in Serbia (0.8%), and Maliq II in Albania (0.8%).

Slatino is the most important node of the script during this phase, with presence descending from the Blooming phase[79]. Another significant center is Vinča. Daia Română (Romania), Târpeşti (Romania), Isaiia (Romania), Lozna (Romania), Sé (Hungary), and Kisunyom-Nàdasi (Hungary) play a relevant role, but are present exclusively in this stage of the Danube script.

7. The cultures of the Eclipse phase of *ars scribendi*

The Danube script flourished until around 3500 BC when a social upheaval took place: according to some, there was an invasion of new populations, whilst others have hypothesized the emergence of new elite. During this strong social and cultural transformation, the Danube script vanished articulated into two phases. The Fall phase (ca. Middle Copper age) records around 2%. In the Eclipse phase (ca. Late Copper age), the collapse was actually abrupt: 0.7%.

During the Fall phase of the Danube script (corresponding to ca. the Middle Copper Age), writing technology appears in two horizons: the Karanovo VI-Gumelnița-Kodžadermen cultural complex (mainly in Bulgaria but also in Romania), and the Cucuteni A3-A4 – Trypillya B (in Ukraine). The first one rates 51.7% of the frequencies; the second one is attested at 48.3%.

Ovčarovo is the most significant settlement of the Fall phase of the Danube script. A key role is played by Čapaevka in Ukraine. Aleksandrovka (Ukraine), Vitănești (Romania) and Djakovo (Bulgaria) have a presence of signs concentrated in this phase of the Danube script.

The Late evidences the Eclipse stage of the Danube script, which endured principally in the Kostolac culture (55.2%) in Serbia. The other two resisting "Fort Alamos" are the Cucuteni AB-B – Trypillya C (24.1%) in Romania and Ukraine and the Coțofeni (20.7%) in Serbia and in central and Southern Romania. The most significant site is Lepenska potkapina (Republic of Serbia).

Conclusions

DatDas provides documentary evidence that the Danube script developed through a network of four-range hierarchical nodes of political authority. Pivotal settlements elaborated the innovation and had a wide area of radiation, while

[79] For Slatino see Čohadziev 1986; *ibidem* 1997; *ibidem* 2003; *ibidem* 2006.

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intermediate villages may have developed regional variants, local sites may have been regular users of the sign system, and subsidiary nodes may simply have been sporadic exploiters of the sign system.

DatDas records for evidence the pivotal role of major cultural centers such as (in order of importance) Vinča (Republic of Serbia) and Turdaş (Romania). Vinča records the main frequency of signs, which are distributed nearly throughout the entire sequence of the script from the accumulative phase of it up to the eclipse one. Turdaş clusters the signs within the blooming phase of the script, when the Transylvanian settlement became the focal centre of literacy.

Due to the intense networking coinage of literacy, the Danube script was not confined to these two major cultural agglomerates, but its influence irradiated far and crowdedly into neighboring regions. Any settlement that participated to the collective experiment with writing technology gathered on the average 24.9 signs as units of bi-more sign inscriptions, evidencing that the system of writing was not a "candle in the wind" within them, but set up strong roots and developed according to a highly decentralized model[80].

Here are the most important regional-size settlements in order of importance. Jela (Republic of Serbia) accumulated the corpus of signs exclusively in the Blooming phase of the Danube script as well as Gradešnica (Bulgaria). Parţa (Romania) experimented literacy from the Formative phase of the Danube script until the Blooming one, evidencing deep roots and long-lasting utilization of writing technology even if restricted to the Neolithic. Slatino (Bulgaria) assembled signs mainly in the Eneolithic-Early Copper Age. At Sitagroi (Greece), signs are clustered in the Blooming phase of the system of writing. Vršac-*At* (Republic of Serbia) gathered signs mainly in the Blooming phase of the script, but with sporadic evidence also during the Formative phase of it. Kurilo (Bulgaria) collected signs restrictedly to the Blooming phase of the Danube script.

As documented by *DatDas*, few settlements played an enduring role in the development of the Danube script. Most of them experimented with literacy only in one or at least two phases of the Neo-Eneolithic in synch with their cycle of life comprised within a limited horizon.

Crossing hierarchical and decentralized profile in the development and spread of writing technology, high average presence of signs even in not central villages and rapid turnover of literate settlements, one can sketch a distinct geo-cultural profile of the development of the Danube script as characterized by few urban agglomerations that assumed the role of centers of gravity of writing technology within a milieu of disseminated literacy according to an extremely dynamic – and sometimes dramatic – historical framework.

[80] Haarmann 2008, 26.

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The development of the Danube script is study case of the evidence that statehood was not a mandatory ingredient in the formative process of an early civilization. In a traditional perspective, statehood, hierarchies of authority hinged on an autocratic centre and a rigid multi-stratified society are considered essential for achieving a higher organizational level of cultural development: civilization. The trajectory of the Danube script demonstrates that there were other major civilizations of the Ancient World where these supposed conditions were marginal or even absent.

The model of development and spread of writing innovation within the Neo-Eneolithic cultures of Southeastern Europe indicates that the Danube civilization worked according to a scheme of civilization far from the state-burocratic political centered prototype provided by the Sumerian city-states or the dynastic Egypt.

The Danube civilization was organized as networks of nodes (central settlements and regional cultures) linked by common cultural roots, exchange relationships of mutual political advantage and shared socio-economic interests. It was a complex society characterized by semi-equality in social relations, observance of reciprocal economic interest, rise of urbanism and limited necessities of defense structures. If the Danube civilization worked as network of political authority, however there is no substantiation that this fit into traditional statehood.

The course of the Danube script evidences that the related civilization was organized as a network of nodes linked by three key features within political-institutional, socio-economic and cultural spheres. The political-institutional frame was based on ranking web of centers and exchange relationships for mutual political advantage. Scattered agrarian settlements on one hand were focused on the exploitation of their ecologic-economic niche, but on the other hand shared strong common socio-economic interests within an economically integrated commerce-and-culture area[81]. Finally, common cultural roots were so cogent to designate an intellectual koine. The cultural interconnected background possibly included language or compatible languages. The communication of abstract packages of information by means of writing and the practical skills involved in the knowledge of literacy required shared linguistic grounding or linguistic mediation and not merely an exchange of artifacts and repeated contacts. Symbolism was a complementary and possibly more important system for communication.

The work aimed to square the cycle of life of the Danube script with the dynamic of cultural complexes, cultures and cultural groups of the Danube civilization is at the first steps. I am in agreement with Owens when he pointed on the multiple occurrences of "Balkan scripts"[82]. However, this statement has to be demonstrated based on the understanding of the interconnections of sign usage in the different cultural regions.

[81] Maisels 1999, 236–7, 224, 226, 252 ff.; Haarmann 2008, 26–7.
[82] Owens 1999.

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SPONDYLES ROUMAINS, SPONDYLES AMERICAINS

SCOICILE SPONDYLUS DIN ROMÂNIA ŞI DIN AMERICA

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Cuvinte-cheie: cochilii, Spondylus, Europa neolitică şi eneolitică, America pre-columbiană, şamanism.

Rezumat: Această lucrare este un profund omagiu în onoarea mentorului şi prietenului meu Eugen Comşa şi se referă la o scoică ciudată, a cărei „călătorie" de-a lungul Europei în timpul perioadelor neolitică şi eneolitică, l-a pasionat pe Eugen Comşa, ca şi pe mine. Lucrarea se referă la cercetările recente asupra speciei *Spondylus gaederopus* şi asupra a ceea ce eu am numit *Ruta spondylus – Drumul Spondylus* de la Marea Mediterană şi până la Canalul Mânecii. Sunt prezentate, de asemenea, date comparative cu o altă specie, *Spondylus princeps* din Oceanul Pacific, cunoscută în America pre-columbiană. Bunuri de prestigiu? În conexiune cu religiile vechi ale Europei şi Americii şi, în principal sau parţial, cu credinţele şamaniste?

Mots-clés: coquillages, spondyles, Europe néolithique et énéolithique, Amérique précolombienne, shamanisme.

Résumé: Ce profond hommage en l'honneur de mon maître et ami Eugène Comşa fait état d'un étrange coquillage dont les pérégrinations néolithiques et énéolithiques à travers l'Europe le passionne tout autant que moi. Il rend compte des récentes recherches sur *Spondylus gaederopus*, sur ce que j'ai appelé *La route des spondyles de la Méditerranée à la Manche*. Viennent se greffer des données comparatives également actuelles avec une autre espèce, *Spondylus princeps* de l'Océan Pacifique et propre à l'Amérique précolombienne. Objets de prestiges ? En rapport avec les anciennes religions d'Europe et d'Amérique et principalement, ou pour une part, avec des croyances de type shamanique?

Les recherches sur le terrain, d'Eugen Comşa tout au long de la seconde moitié du vingtième siècle et au seuil de ce nouveau millénaire, la somme de ses études scientifiques, ses considérations de toutes sortes accumulées (depuis et encore) tétées et sont pour le moins – épithète emprunté à Marcel Proust dans *Le temps retrouvé* – épastrouillantes ! A la fois étonnantes et surprenantes, anciennes et modernes, fidèles et interrogatives, qu'il s'agisse de ses domaines de prédilection comme la Préhistoire et la Protohistoire ou encore plus largement de

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l'Histoire des Balkans, plus largement encore de l'Europe et de ses racines profondes.

Nul n'ignore l'étonnante bibliographie d'Eugen Comşa, son énergie à revendre, son écoute attentive, ses interventions pointilleuses mais non teintées d'humour dans tous les débats balkaniques au gré des manifestations scientifiques où je l'ai retrouvé.

Un colloque ou un symposium sans lui perd une grande partie de son intérêt et je me souviens, non sans nostalgie, de la sempiternelle question : Comşa est-il là ?

L'objet de cet hommage scientifique certes, mais inévitablement teinté de romantisme, concerne un coquillage cher tout autant à Eugen Comşa qu'à moi-même, un coquillage qui tout au long de la protohistoire (Néolithique et Enéolithique) a suscité une « vogue » sans précédent et par là même de nombreuses interrogations : le spondyle.

En Amérique centrale et du Sud (période précolombienne), tout aussi énigmatiques que dans les Balkans (Néolithique et Enéolithique) et dans la plus grande partie de l'Europe, de part et d'autre de l'Atlantique (rivages de la Méditerranée et du Pacifique), des spondyles écarlates sont à l'origine d'histoires semblables (voire dans leurs cheminements identiques par leurs implications : *gaederopus* d'un côté, *princeps* et autres espèces de l'autre), de mythes structurés et de séquences d'enracinement socio-économiques, culturelles et religieuses pour lesquels d'une manière générale on se perd encore hélas en conjectures s'agissant de notre propre continent[1].

Cette courte étude comparative Europe-Amérique ou plutôt cette brève synthèse sur une série de recherches à ce sujet (avec à l'horizon une monographie en cours de rédaction sur la protohistoire des spondyles[2] m'est venu à l'esprit alors que je m'interrogeais sur les raisons de l'étonnant dynamisme d'Eugen Comşa.

En réfléchissant bien, je crois que l'on peut apporter une première réponse (sinon la seule) : sa passion pour le chocolat ! Le chocolat dont l'origine est surtout mexicaine, plus exactement aztèque (ou plus ancienne), contient un alcaloïde la théobromine voisine de la caféine. Il échauffe les esprits ! D'où ces quelques lignes à la fois de déférence et d'amitié envers mon maître et ami mêlant l'Amérique et l'Europe au travers d'un coquillage qui, là-bas comme ici, « se mange » tout autant… : l'Equateur est en même temps un grand producteur de coquilles de spondyles et de fèves de cacao !

A la recherche des spondyles

Le spondyle (classe : Bivalvia Linné, 1758, famille : Spondylidae Grey, 1826, environ deux cents espèces) est un mollusque bivalve des mers chaudes

[1] Séfériadès 1995–1996 ; Chapman 2007.
[2] Séfériadès à paraître.

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vivant à des profondeurs variables (1 à 50 mètres). La coquille est en général massive, inéquilatérale et inéquivalve. La valve inférieure est plus bombée. Le spondyle vit solitaire, fixé sur les fonds rocheux par cémentation ou accrochage. Il est souvent invisible de par ses associations (lamellibranches, desmosponges etc.). La microstructure du test révèle un ectostratum de calcite (couche externe épineuse à structure foliacée), un mésostratum, un endostratum et un myostratum aragonitiques[3]. La coquille livre donc un matériau de choix pour la taille/abrasion, la sculpture jusqu'au fin polissage d'où souvent la confusion par les archéologues jusqu'à une date récente avec le travail de matériaux calcaires, principalement le marbre. Notons déjà que l'actuel artisanat malgache recouvre de toutes petites tortues sculptées et polies à la main dans l'aragonite à mettre en parallèle avec le minuscule contour découpé en spondyle représentant une ourse en gestation de la grotte néolithique égéenne de Kitsos[4].

Spondylus gaederopus concerne la Méditerranée, le Golfe Persique (?), la côte nord-ouest de l'Afrique au-delà du détroit de Gibraltar (Maroc, Sénégal). Rappelons qu'en dépit d'une série de rumeurs souvent peu avouables, aucun spondyle n'existe ou n'a existé en Mer Noire (pour des raisons essentiellement de température et de salinité). L'espèce aux épines fortes, vivement colorée en violet-rougeâtre-pourpre se rencontre (isolée ou constituant parfois de véritables bancs) à des profondeurs de 2 à 30 mètres.

Spondylus princeps Broderip, *Spondylus calcifer* Carpenter et *Sponylus leucacanthus* Broderip concernent par contre la zone maritime s'étendant du Golfe de la Californie à l'Equateur. *Spondylus princeps*, de forme régulière est attesté du Golfe de Californie à l'Equateur, à des profondeurs de 3 à 30 mètres ; *Spondylus calcifer* de taille plus grande, du Golfe de Californie au Pérou, jusqu'à 18 mètres de profondeur ; *Spondylus leucacanthus* est caractéristique de l'Equateur (île La Plata notamment), entre 18 et 90 mètres de profondeur mais seulement sur des fonds sableux. Les couleurs de ces trois espèces varient de l'orange au rouge corail avec parfois des nuances de violet[5] .

Les eaux étant trop froides (courant de Humbold), on ne trouve pas de spondyles le long des côtes péruviennes mais seulement à partir des côtes équatoriennes (courant chaud El Niño). Là, ces coquillages font l'objet à partir d'embarcations (canoës et balsas) d'une pêche souvent difficile et dangereuse (plongée en apnée de plus en plus éloignée du rivage), les plus beaux spondyles étant récoltés à de grandes profondeurs, Des représentations iconographiques de la Période Intermédiaire Récent (1000–1450 ap. J.-C.) (Lambayeque, Nord du Pérou) illustrent les techniques de la pêche en eaux profondes : deux plongeurs sont reliés

[3] Zavarei 1973.
[4] D. Vialou in Lambert 1981.
[5] Bussy 1996–1997.

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par une corde à deux hommes sur un bateau[6]. Bartolomé Loiz (voyage de Pizarro), fait référence à des radeaux en balsa chargés de spondyles.

En Europe, en Mer Adriatique comme en Mer Egée, de la Dalmatie au Dodécanèse (domaine des fameux pêcheurs d'éponges), la pêche aux spondyles est encore pratiquée de nos jours. A ma connaissance, seul un texte de la Renaissance (« De l'huître qu'on pêche communément au rivage de l'île de Lemnos ») nous renseigne sur les techniques de pêche que je crois identiques à celles du Néolithique et de l'Enéolithique des Balkans : « … Nous avons vu pêcher des huîtres qu'ils nomment *gaideropada*, il nous a semblé bon d'en écrire la manière. C'est que le pêcheur tient une longue perche ferrée d'un fer plat par le bout, pour donner de grands coups au-dessus les huîtres, qui se tiennent attachées aux rocs, pendantes ; et après qu'il les a abattues en la mer, il les élève avec une main de fer qu'il tient à l'autre bout de la perche, dont il se sert aussi à pêcher les hérissons de la mer. Telle manière d'huître est grandement différente à la nôtre, car ses écailles s'entretiennent si fort à deux crampons, qu'on a grande peine à les ouvrir. Et parce qu'ils ressemblent à un fer d'âne, les Grecs les nomment en leur vulgaire *gaideropoda*, c'est-à-dire pied d'âne »[7]. Comme le long des côtes équatoriennes, c'est évidemment plus on plonge profondément plus on est en mesure de récolter les plus beaux spécimens. Toutefois, comme c'est le cas dans le Golfe de Kavala encore actuellement, la mer continue de rejeter sur les rivages de nombreuses valves (principalement gauches) de spondyle, entières ou fragmentées, parfaitement polies alors que, comme j'ai pu l'observer, jusqu'à une profondeur d'au moins dix mètres, les coquillages semblent actuellement absents. Cependant, « du fait de leur fixation aux rochers, il est rare de récolter des valves droites (inférieures), les plus profondes et les plus épaisses et de ce fait les plus utilisables. La puissance de leurs ligaments et la disposition des dents en crochet de la charnière ne favorisent pas non plus la séparation des valves d'où leur récupération peu fréquente. Enfin, le biotope rocheux et algual des spondyles ne facilite pas les déplacements post-mortem des valves. Pour toutes ces raisons, cette espèce est rarement rejetée sur les rivages, d'où sa rareté et sa valeur « commerciale » » (Cataliotti-Valdina).

De la Méditerranée à la Manche

A ma connaissance les plus anciennes relations en Europe entre l'homme et le spondyle remontent au Paléolithique Ancien (Terra Ammata à Nice). Le coquillage est toujours présent, au moins comme aliment, au Paléolithique Moyen

[6] Bussy 1996–1997 pour plus de détails.
[7] Bellon du Mans 1555.

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(Devil's Tower à Gibraltar) puis durant la transition Paléolithique Moyen/Paléolithique Récent (Aurignacien) : niveau III de la grotte de Lezetxiki (Pays basque espagnol). On est donc peut-être ici en présence de la plus ancienne diffusion sur une grande distance (du rivage occidental de la Méditerranée à la côte cantabrique, soit 450 km à vol d'oiseau) concernant ce coquillage[8].

En contexte archéologique méditerranéen, les spondyles les plus méridionaux se rencontrent dans le Néolithique de Sicile et de l'archipel de Malte[9] : une dizaine de perles dans la tombe 3 (adulte probablement de sexe féminin) de Vulpiglia (Syracuse) associées à un vase (faciès de Serra d'Alto), un éclat et une lame de silex, une lamelle et une pointe en obsidienne ; à Malte, les spondyles, de Zebbug à la phase tarxienne, sont attestés également dans un contexte funéraire (perles, boutons et figurines « oiseaux »), dans l'hypogée de Hal Saflieni interprété comme un sanctuaire (près de sept mille squelettes humains) cependant que le cercle de pierres de Brochtorff à Xagha (île de Gozo) a livré un pendentif anthropomorphe qui, curieusement, n'est pas sans rappeler les perles originales (Boian-Vidra) d'Andolina[10]!

En domaine égéen, les spondyles se rencontrent du Sud du Péloponnèse à la Grèce septentrionale. Ils semblent beaucoup plus nombreux plus on se dirige vers le Nord, disparité qui tient selon moi au déséquilibre des recherches : spondyles en des lieux cultuels comme la grotte d'Alépotrypa dans le Magne, la grotte de Franchthi en Argolide, la grotte de Kitsos en Attique ou la grotte de Théopétra en Thessalie nord-occidentale. Le tout petit contour découpé dans du spondyle représentant une ourse de Kitsos est à mettre en relation avec le Braurôn, sanctuaire dédié à Artémis où, selon Euripide, Iphigénie fut inhumée[11]. Spondyles par ailleurs attestés dans des habitats comme à Dimini, Aghia Sofia Magoula, Pevkakia ou Sesklo (figurine) en Thessalie, Dikili Tash (tête de massue), Sitagri, Stavroupolis, Dimitra ou Promachon-Topolnica en Macédoine orientale grecque, Néa Nikomédia et Dispilio en Macédoine occidentale (lac de Kastoria), Paradimi en Thrace grecque, Asagi Pinar en Thrace turque.

Plus au Nord, en Bulgarie, nul n'ignore les grandes nécropoles de Varna et de Durankulak du bord de la Mer Noire qui ont livré en association avec principalement la pierre taillée et polie, le cuivre et l'or un grand nombre de spondyles. Le « trésor » du tell Omurtag (Nord-Est du pays) comprend, rassemblés dans un vase Karanovo VI, principalement des fragments de bracelets en spondyle, des instruments en os, de pierre taillée et polie, des incisives de porc et une pierre ponce[12].

[8] Arrizabalaga *et alii*, 2008.
[9] Chilardi *et alii*, 2002.
[10] Comşa 1973.
[11] Séfériadès à paraître.
[12] Gaydarska *et alii*, 2004.

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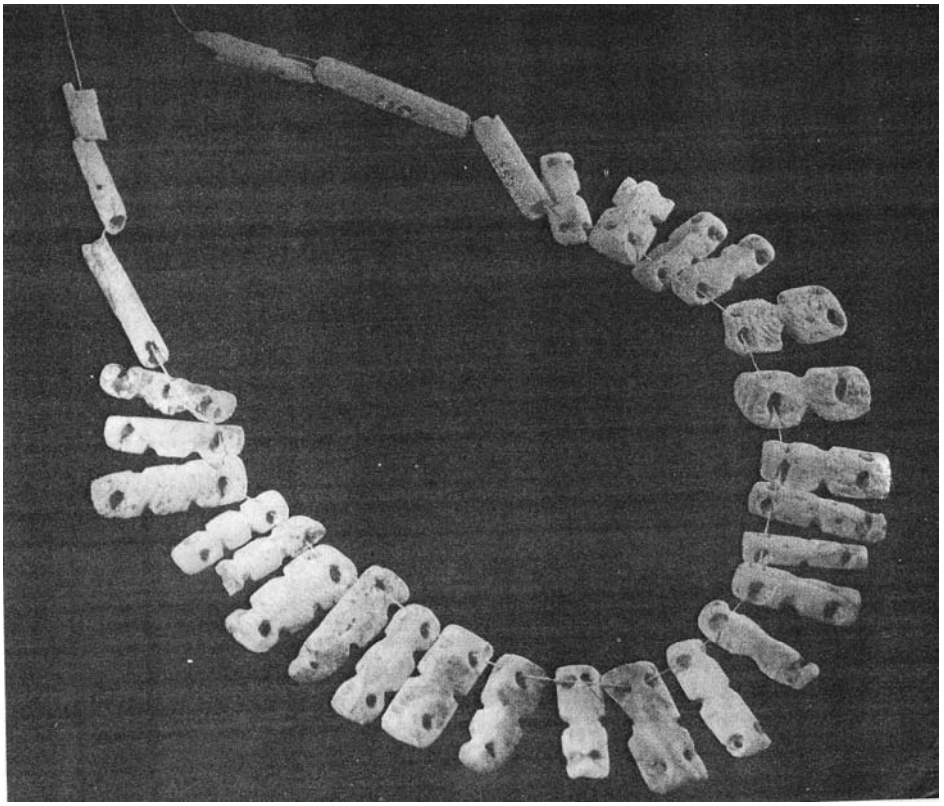

Fig. 1 – « Perles » anthropomorphes en spondyle d'Andolina (dép. de Ialomița) (photographie I. Miclea).

Plus au Nord, à l'Ouest et au Nord-Ouest encore, les spondyles se rencontrent en grand nombre en Roumanie, dans l'espace géographique correspondant au territoire de l'ex-Yougoslavie, en Hongrie, en Slovaquie et en République Tchèque (Bohême et Moravie).

En ex-Yougoslavie les spondyles sont déjà présents dans des cultures de type mésolithique, à Vlasac comme à Lépenski Vir.

En évoquant la Slovaquie, je me réfère bien entendu à la nécropole de Nitra où, semble-t-il, parmi les 76 sépultures, seules celles d'hommes âgés (de loin les plus riches) associent principalement spondyles, pierres taillées et polies[13]. C'est apparemment aussi le cas en Pologne où, toujours dans le cadre de la Céramique Linéaire et d'après Vladimir Podborsky, « Spondylus generally was normally included in the funerary goods accompanying prestigious male burials »[14].

En Roumanie, les spondyles sont attestés tout au long du Néolithique et de l'Enéolithique, au Sud du territoire, dans les régions danubiennes (cultures de Criş,

[13] Pavuk 1972; Thomas 1987.
[14] Podborsky 2002.

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Dudeşti, Hamangia[15], Boian, Gumelnița, Cernavoda I, Cernavoda II), également dans le Bassin des Carpates, en Transylvanie et dans le Banat.

C'est à Eugen Comşa que l'on doit la première synthèse véritable sur les spondyles de Roumanie et en même temps une première esquisse typologique[16] portant sur 25 sites : spondyles de Limanu, Mangalia, Agigea, Medgidia et Cernavoda (Constanța), de Ceamurlia de Jos et Hârşova (Tulcea), de Brăila, d'Andolina et Vărăşti (Ialomița), d'Oltenița, Cernica, Glina, Vidra, Căscioarele, Pietrele et Tangâru (Giurgiu), de Vădastra (Olt), d'Ostrovul Corbului (Mehedinți), de Liubcova et Răcăşdia (Caraş-Severin), de Parța (Timiş), de Turdaş (Hunedoara), d'Alba Iulia, de Cluj-Gura Baciului. Depuis ces trente dernières année le nombre de sites néolithiques et énéolithiques ayant livré ces coquillages a considérablement augmenté comme d'ailleurs partout en Europe où on les avait pour la première fois rencontrés. Notons cependant, qu'a l'exception du « dépôt » de Cărbuna au Sud de Chişinău[17], les spondyles semblent à ma connaissance absents des régions propres au complexe culturel Cucuteni-Tripolye d'où les interrogations que cette découverte unique suscitent.

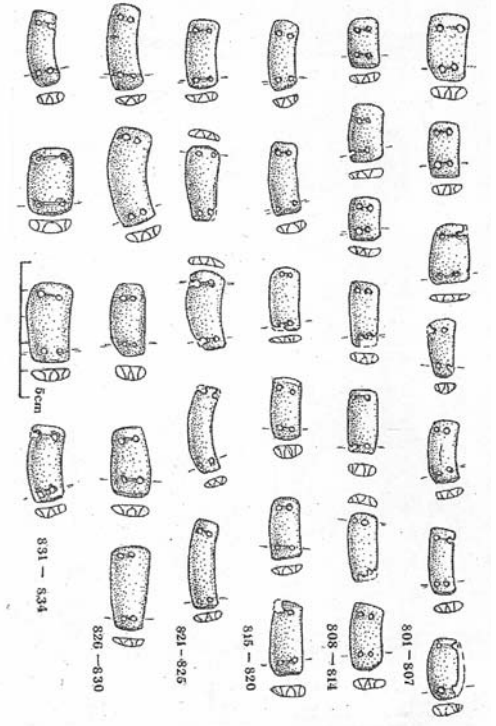

Fig. 2 – Plaquettes perforées en spondyle du « dépôt » de Cărbuna (Moldavie) (d'après V. Dergachev).

[15] Berciu 1966.
[16] Comşa 1973.
[17] Dergachev 1998.

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Au-delà, en Autriche et en Bavière, dans les régions rhénanes, dans le Nord de la France et dans le Sud de la Pologne, les spondyles sont également bien représentés, le spondyle le plus nord-occidental étant une perle cylindrique découverte fortuitement à Epône au Nord-Ouest du Bassin Parisien. Plus à l'Ouest, les terres acides n'ont pas permis la conservation de ce coquillage ce qui laisse à penser ces coquillages ont pu atteindre la Bretagne et donc la côte atlantique.

Des côtes équatoriennes au Pérou

En Amérique du Sud (Equateur et Pérou), les spondyles se rencontrent – en nombre de plus en plus important et sur un éventail de plus en plus large de sites – progressivement de 3000 av. J.-C. à 1500 ap. J.-C.

A l'origine, ils se limitent essentiellement à la côte équatorienne (Valdivia) avec quelques incursions à l'intérieur du pays, le long de la zone côtière péruvienne et en retrait de cette dernière. Comme dans les Balkans et dans une grande partie de l'Europe, les spondyles des époques pré-colombienne et colombienne sont représentés par des ateliers de taille en même temps que par des dépôts à caractère rituel (tertres cérémoniels). On les rencontre fréquemment dans les sépultures, parfois encore, isolés.

Progressivement les spondyles se rencontrent, en direction de l'Atlantique, sur une partie étendue de l'Amérique du Sud comme, par exemple en Argentine.

Complexité de deux processus de diffusion

Plus on s'éloigne des zones de pêche (Adriatique–Egée et littoral de l'Equateur), plus les spondyles abondent (Balkans, Europe centrale, Pérou) : dans les sépultures des nécropoles néolithiques ou énéolithiques de Varna, Durankulak ou Nitra comme dans les tombes péruviennes à partir de la Période Intermédiaire Ancien. Les questions liées à la diffusion des spondyles adriatico-égéens jusqu'aux régions voisines de la Manche, de la Mer du Nord et de la Mer Baltique sont du même ordre que celles relatives à la diffusion des spondyles sur une large partie de l'Amérique du Sud à partir de la côte équatorienne. En effet, les recherches récentes de Mylène Bussy montrent que la diffusion des spondyles n'a pas de frontières : « Non seulement les échanges se seraient étendus vers le Nord avec la Mésoamérique, mais des restes de *spondylus* ont été trouvés beaucoup plus au Sud : sites de Cerro el Plomo en Argentine, Tiahuanaco en Bolivie ou Playa Miller

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au Chili »[18]. Les distances à vol d'oiseau à partir de la côte équatorienne sont de l'ordre de 3000 à 4000 km ; distances de loin plus importantes que celles à partir de la Mer Egée, bien plus importante encore, tout comme en Europe, lorsqu'on met l'accent sur la diversité buissonnante des voies de communication réelles (c'est à dire le plus souvent indirectes) en même temps que sur la complexité des systèmes d'échange.

On a vu que l'intérêt que l'homme porte au spondyle remonte aux temps paléolithiques. Avec le Mésolithique et le Néolithique, les spondyles sont largement présents tant dans les habitats, les grottes à fonction cultuelle que dans les sépultures (isolées ou rassemblées dans des nécropoles). Les spondyles de la Méditerranée occidentale atteignent la côte atlantique (Pays basque). Ceux de la Méditerranée centrale, la Sicile, l'archipel de Malte, la Sardaigne et l'Italie continentale (grotte des Arene Candide). Ceux de l'Adriatique la plaine du Pô[19] d'une part, les régions plus ou moins éloignées des côtes croates[20] et dalmates d'autre part.

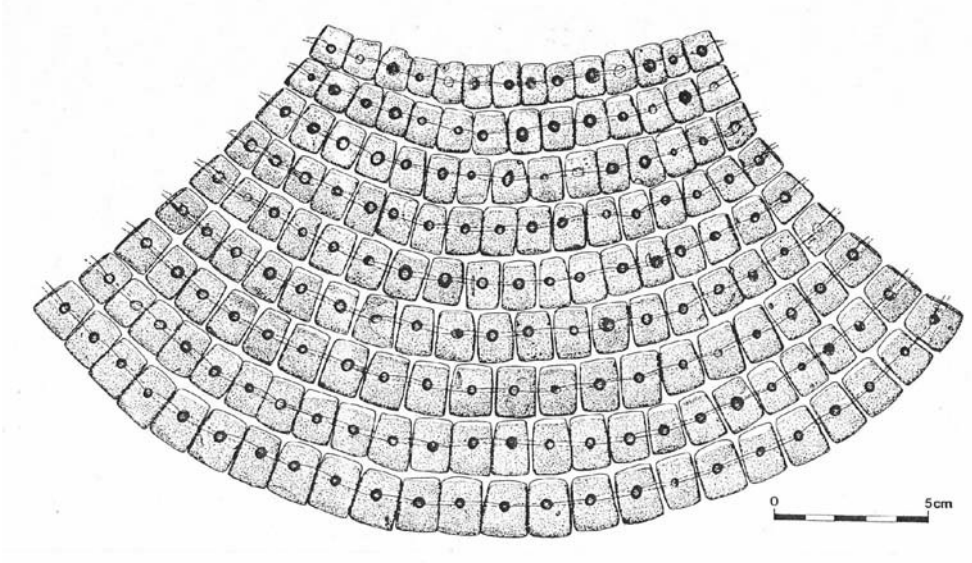

Fig. 3 – Reconstitution du « pectoral »
en spondyle de Vert-la-Gravelle
(Marne) (B. Chertier).

[18] Bussy 1996–1997.
[19] Bracelets d'Isorella, groupe de Vho : *cf.* Perini *et alii*, 1998.
[20] Fouilles de D. Komso en Istrie : pendentif « en V » de Kargadur.

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Fig. 4 – Collier de perles en spondyle (Equateur)
(Musée de l'Homme, photographie M. Séfériadès).

Bien que présents sur quelques sites côtiers du Sud-Est de la France (La Turbie, Grotte Barrière, Les Adrets etc.), ce n'est pas, dans l'état actuel de nos connaissances, depuis la Méditerranée centrale que les spondyles remontent vers le Nord. Ce sont uniquement les spondyles de la Mer Adriatique et/ou de la Mer Egée qui se répandent en Europe : spondyles à l'état brut entiers ou valves brutes séparées.

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Les preuves que seuls les coquillages non travaillés circulent sont de deux ordres :

– En premier lieu, bien que pour l'instant peu nombreux parce que toujours difficiles à identifier sur les surfaces le plus souvent limitées des fouilles d'habitats, on connaît des ateliers de fabrication d'objets dits de parure loin des zones de pêche comme, par exemple, ceux d'Asagi Pinar en Thrace Turque (fabrication de perles)[21], d'Orlovo en Bulgarie du Sud-Est[22], d'Obre (?) en Bosnie, de Sopot sur le Moyen Danube, de Battonya en Hongrie du Sud-Est[23] et bien évidemment de Hârşova[24], cependant qu'un certain nombre d'objets « non finis » en spondyle se rencontrent içi et là : dans le Bassin des Carpates[25], en Bavière[26].

– En second lieu les typologies des objets en spondyle, ou tout du moins les esquisses classificatoires – Comşa ou Beldiman pour la Roumanie, Kalisz et Szenaszky pour la Hongrie, Séfériadès pour l'Europe centrale et les Balkans – révèlent de très nombreux types, de multiples sous-types et variantes suivant les régions, les sites d'habitat et les sépultures au gré de diverses cultures et faciès des phases néolithiques et énéolithiques successives ; plus particulièrement s'agissant des perles et plaquettes, les formes étant pour le moins infinies. Notons que les formes de certaines de ces perles se retrouvent enfilées dans les poteaux de l'architecture traditionnelle roumaine en bois, puis – magnifiées – dans les colonnes sans fin de Constantin Brancuşi que Mircea Eliade comparait à « l'arbre du monde »[27].

Par ailleurs, comme pour les collectionneurs de papillons, pour qui ces derniers n'ont de « valeur » que s'ils sont rares, beaux et entiers, plus encore exotiques, c'est avant tout les spondyles intacts, de grande dimension et – épithète homérique – aux belles couleurs (palette de rouges) et aux belles épines qui, nul doute ont été recherchés. Parallèlement, des valves de spondyles « roulées » ont pu atteindre les régions les plus éloignés des Balkans comme paraît l'indiquer une valve de spondyle trouvée dans un champ labouré de Vădastra[28].

Quant à la circulation, le déferlement, il faut bien le dire, de ces coquillages à travers une grande partie de l'Europe, il n'y a pas lieu de s'appesantir ici sur l'identification des voies empruntées. Les très nombreuses découvertes de spondyles ces dernières années montrent une diffusion tous azimuts, jusqu'à des contrées à première vue marginales, des régions reculées, parfois, comme le milieu

[21] Fouilles de M. Özdogan et H. Parzinger.
[22] Chapman *et alii* à paraître.
[23] Kalicz et Szenasky 2001.
[24] Comşa 1973.
[25] Siklosi 2004.
[26] Nieszery et Breinl 1993, *cf.* Chapman et Gaydarska à paraître.
[27] Séfériadès 2005.
[28] Communication personnelle de Dragoş Gheorghiu.

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montagnard, d'accès difficile (Carpates par exemple). Cependant, on ignore encore comment les Néolithiques et les Enéolithiques ont obtenu ces coquillages qu'ils aient été proches ou éloignés de la mer.

Sur tous ces points, la manière dont circulent les Spondyles de l'Amérique précolombienne et colombienne nous éclaire en partie. Mais c'est surtout l'histoire d'un autre coquillage, le dentale, omniprésent dans un grand nombre de cultures indiennes des régions ouest de l'Amérique du Nord qui nous aide le mieux à comprendre l'histoire des spondyles en Europe[29]. Je vais y revenir dans ma conclusion (associant éléments de synthèse et directions de recherche).

Fig. 5 – Indienne Nisqually (Puget Sound) portant une riche parure de dentales (Thomas Burke Museum, Seattle ; C. Lévi-Strauss1991).

[29] Lévi-Strauss 1991.

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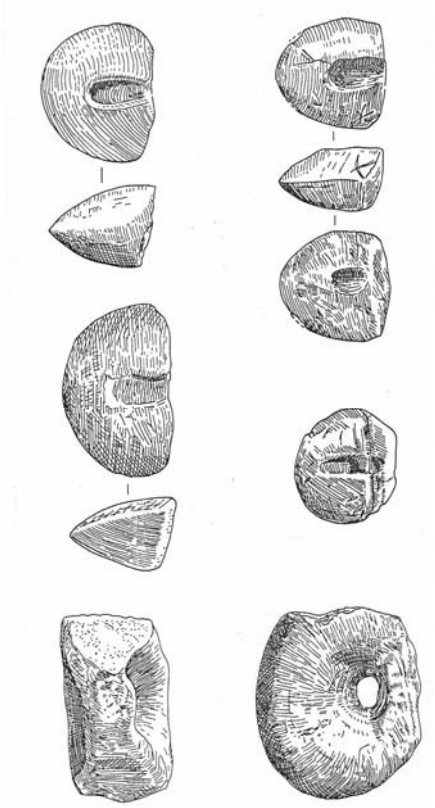

Fig. 6 – Vase en forme de spondyle de la côte nord du Pérou (culture Chimu) (photographie Musée de l'Homme).

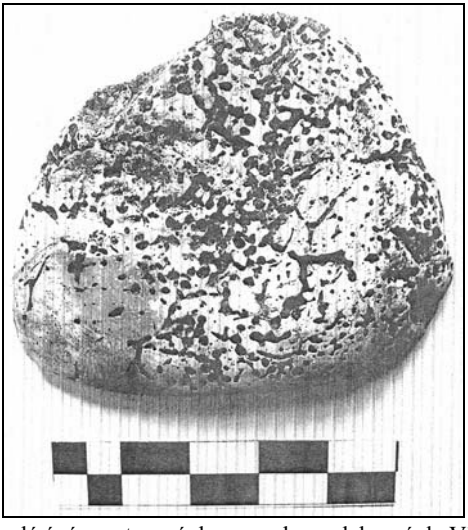

Fig. 7 – Spondyle roulé égéen retrouvé dans un champ labouré de Vădastra (Roumanie) (photographie D. Gheorghiu).

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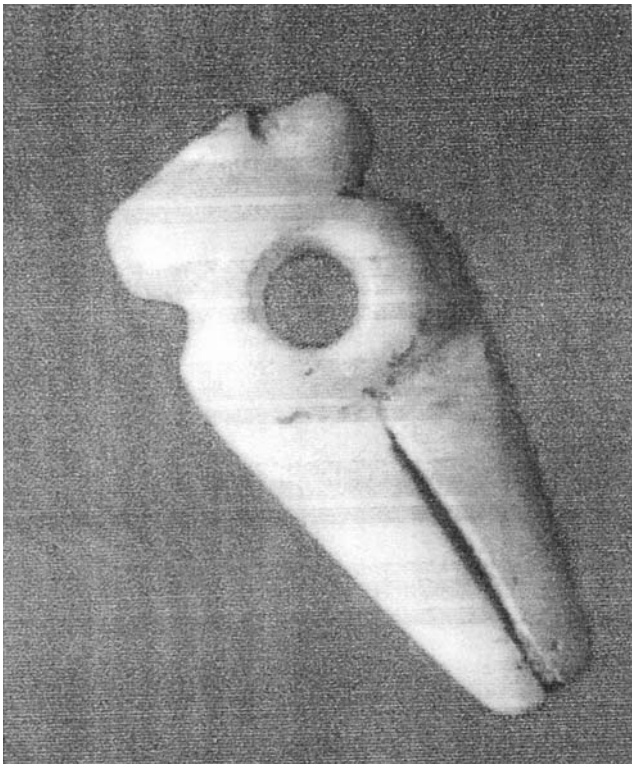

Fig. 8 – Amulette en coquillage (spondyle ?) de Cheia (dép. de Constanța, Roumanie) (d'après V. Voinea *et al.*).

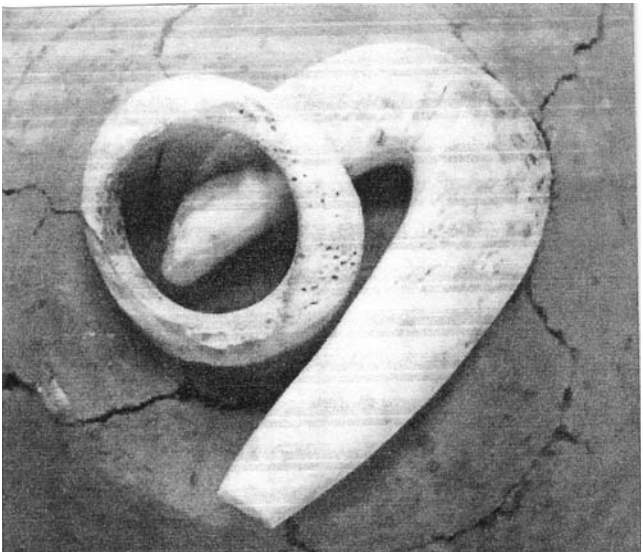

Fig. 9 – Objets en spondyle de Dispilio (Macédoine occidentale grecque) (photographie F. Ifantidis).

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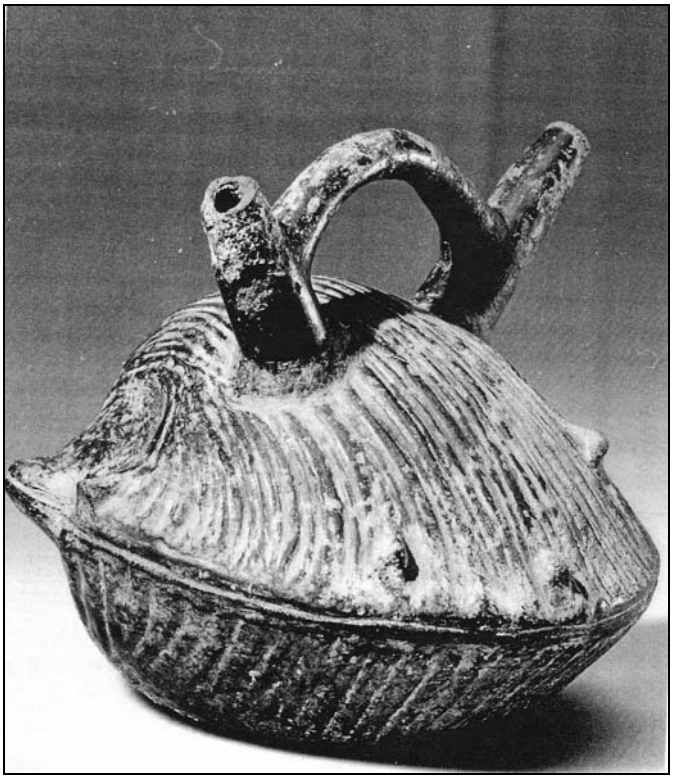

Fig. 10 – Représentations vulvaires en calcaire de Kostienki 1 (d'après P. P. Efimienko).

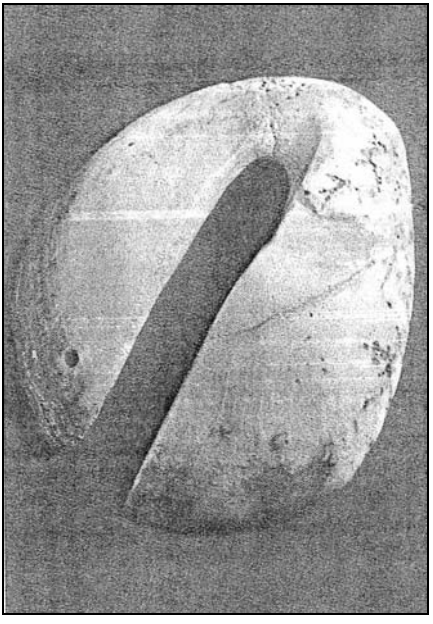

Fig. 11 – Spondyle entaillé de la nécropole de Nitra (Slovaquie) (d'après J. Pavuk).

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L'île La Plata non loin de la côte équatorienne, mais cependant difficilement accessible, était dès 1500 av. J.-C. un important « comptoir » (en même temps qu'un grand atelier de taille) parallèlement à un grand sanctuaire d'où partaient les spondyles. Ce qui n'est pas sans rappeler d'une certaine manière ce que fut en Grèce aux temps antiques Délos, à la fois un centre religieux et commercial. Se référant à Jorge Marcos et Presley Norton, Mylene Bussy suggère que l'île « avait pu avoir un double rôle de place cérémonielle et commerciale où les échanges de *spondylus* seraient aux mains de « shamans-traficants » »[30].

Pourquoi tant d'attentions ?

Le spondyle est un diariste ; il est à lui seul le journal intime d'une société. Gordon Childe l'avait en son temps en partie pressenti[31]. « The Danubian seem to have brought with them from the south a supertitious attachment to the shells of a Mediterranean mussel, Spondylus gaederopus, which they imported even into central Germany and the Rhineland for ornements and amulets » écrivait-il.

A ce titre, le spondyle fonde et agrège une série de mythes de même intensité, de part et d'autre de l'Atlantique, de même force dans une large partie du Pacifique comme de la Méditerranée. Mais tandis que l'origine maritime de ce coquillage est un fait clairement établi chez les Précolombiens, ce n'est sans doute guère le cas en Europe balkanique et plus on s'en éloigne. Loin des côtes adriatiques et égéennes et jusqu'aux rivages de la Manche, de la Mer du Nord et de la Mer Baltique au terme de longs parcours que l'on peut comparer à ceux ailleurs et en partie en d'autres temps de l'ambre nordique, du lapis oriental ou du jade asiatique, il devient de plus en plus quelque chose à la fois d'insolite et d'insondable. Il s'enrichit au travers de ses pérégrinations d'une succession de mystères accumulés. Il est au sens propre – l'origine étant inconnue sinon cachée – l'extraordinaire et il lui faut donc une seconde naissance qui à la fois explique et justifie l'intérêt qu'on lui porte, plus encore l'extrême passion qu'on lui voue. Ce sont les plus beaux spondyles qu'on rencontre plus on s'écarte des endroits où ils vivent.

Récemment, le site de Popina II (Brăila) a livré une « plaquette-pendeloque multiforée » Gumelnița A1. Le fouilleur, Stănică Pandrea, relève l'usure, le lustré intense de l'objet (sans doute fixé sur un textile ou sur du cuir). De fait, il évoque un héritage. J'ai moi-même constaté une usure importante des spondyles (valves perforées et perles massives) de la sépulture de Cys-la-Commune, spondyles associés notamment à un os de grue qui, comme on le sait, est un oiseau

[30] Marcos et Norton 1981.
[31] Childe 1942.

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migrateur[32]. Les spondyles étaient à un moment donné transmis de génération en génération. Ce fait, selon moi bien établi pour l'ensemble de l'Europe, là ou le spondyle est présent, est également à mettre en relation avec la grande question des spondyles et autres objets brisés[33].

Maintenant, je crois que le sens du spondyle ne peut être compris sans référence au shamanisme dans le cadre de tout un ensemble d'expériences mystiques, d'une série de comportements religieux associant, rites, sacralisation du temps et de l'espace humains, au travers des structures les plus profondes et les plus intimes de l'homme : « Le shamane (homme ou femme) occupe une position centrale dans les rituels et les pratiques religieuses, il est le médiateur entre le monde des humains et celui des esprits, entre les vivants et les morts, les animaux et la société humaine »[34].

Le shamanisme est « l'un de grands systèmes imaginé par l'esprit humain, dans diverses régions du monde pour donner un sens aux événements et pour agir sur eux »[35]. L'interprétation (et l'explication) de l'art pariétal paléolithique par le shamanisme a fait récemment l'objet d'analyses fines et de conclusions pertinentes[36]. S'agissant de la protohistoire, mes propres recherches m'ont conduit à des conclusions similaires[37]. Toujours selon Michel Perrin, « la tendance ethnologique actuelle est de considérer le chamanisme comme un fait social qui concerne la totalité de la société et de ses institutions, un fait qui est à la fois religieux, symbolique, économique, politique, esthétique ». Il n'y a pas lieu de croire qu'au Néolithique et à l'Enéolithique il en ait été autrement.

Si l'on prend en considération le shamanisme, les spondyles brisés, fragmentés (comme bien d'autres objets et notamment les figurines) répondent à une inversion des deux Mondes. Il n'y a pas selon moi d'autres explications et ainsi se trouve ainsi largement résolue la problématique si chère à John Chapman[38] : « Je lui ai demandé pourquoi le tambour de la cabane de Mamouche était cassé. Elle m'a expliqué que l'au-delà où vont les hommes après leur mort était l'image inversée de notre monde. Tout ce qui est bon ici est mauvais là-haut, et inversement. Si le tambour de Mamouche n'avait pas été cassé à sa mort, mon oncle n'aurait pu s'en servir dans l'autre Monde »[39].

La « plaquette multiforée » en spondyle de Popina II peut être considérée – de même que les valves multiperforées de Battonya (Tisza) – comme l'un des éléments du costume d'un shaman tout comme le « pectoral » (166 plaquettes en

[32] Séfériadès 1995–1996.
[33] Chapman et Gaydarska, 2007.
[34] Saladin d'Anglure 1997.
[35] Perrin 2001.
[36] Clottes et Lewis-Williams, 2001.
[37] Séfériadès 2002 ; 2005 ; à paraître.
[38] Chapman et Gaydarska, 2007.
[39] Kharitidi 1997.

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spondyle) reconstitué de la sépulture de Vert-la-Gravelle (Marne)[40]. Parallèlement les différents « trésors » (hoards) me semblent être autant d' « accessoires » de shamans, qu'il s'agisse du « dépôt » de Cărbuna ou du « trésor » d'Omurtag. Ce dernier, du fait de la présence aux côtés des spondyles d'un bloc de pierre ponce et d'incisives de porc, de plaques osseuses etc., par son hétérogénéité, conforte cette hypothèse. L'interprétation des objets contenus dans le vase de Csoka-Kremenjak (région de la Tisza) va dans le même sens[41].

Maintenant, quant aux spondyles « en crochet » (« belt-hooks » ou « notched spondylus ») de Dispilio[42], une simple étude typologique montre qu'ils diffèrent des spondyles dits en V ou entaillés particuliers aux régions s'étendant du Nord de l'Europe centrale au Nord-Est de la France. Ces derniers ont suscité bien des interrogations et des « fonctions » pour le moins hypothétiques : en premier lieu une utilisation comme élément (fixation, boucle) de ceinture[43] ou en rapport avec la chevelure[44]. Avec en filigrane, les origines eurasiatiques du shamanisme, une autre explication pourrait cependant être avancée.

Les spondyles entaillés seraient des représentations vulvaires. Celles-ci sont attestées dès le Paléolithique, dans l'art pariétal comme à Arcy-sur-Cure (Yonne), ou aux Combarelles (Dordogne), et dans l'art mobilier comme à l'abri Cellier et à la Ferrassie (Dordogne) ou encore sur une plaquette gravettienne d'Isturitz[45]. De telles représentations se rencontrent également dans le Proto-solutréen d'Europe orientale, à Kostienki I où, comme le fait remarquer André Leroi-Gourhan : « existent de curieux petits « médaillons » de pierre tendre, en forme de demi-cercles dont la convexité serait tournée vers le bas et qui portent gravée en creux une représentation ovale sur la nature de laquelle il est difficile d'avoir des doutes »[46].

C'est également le shamanisme qui, selon moi, rend compte de la figurine (shell amulet) trouvée sur l'habitat de Cheia dans la région de Constanța[47]. Le shamanisme encore qui explique les associations spondyles-métal (cuivre)-craches de cervidé de Cărbuna ; spondyles-pierre taillée et polie-os-incisives de porc-quartz-pierre ponce d'Omurtag ; spondyles-os-craches de cerf-or-cuivre du « trésor » d'Ariuşd[48]. Toutefois, les spondyles sont absents dans le « dépôt de Hăbăşeşti qui associe principalement les craches (et imitations en os) de cervidé[49]

[40] Chertier 1988.
[41] Kalicz et Raczky, 1987.
[42] Ifantidis 2006.
[43] *Cf*. principalement Nieszery et Breinl, 1993.
[44] Chertier 1985 ; 1988.
[45] Leroi-Gourhan 1965.
[46] Kozlowski 1992, p. 59, fig. 58.
[47] Voinea *et alii*, 2006.
[48] Sztancsuj 2005
[49] Beldiman et Sztancs, 2005.

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ce qui est « normal « dans un contexte Cucuteni cependant que, d'une manière générale, la présence fréquente un peu partout des canines de cerf sont à mettre sur le compte du substrat Paléolithique/Mésolithique dans le cadre des processus européens de néolithisation. C'est avec le Néolithique proprement dit que viennent s'ajouter les spondyles, justifiant ainsi d'une lente transition[50] ponctuée par une sorte de nouvelle mise aux normes des anciens mythes.

Les signes gravés sur le pendentif de Mostanga IV[51], le mythogramme difficile à interpréter qui en découle – comme j'en ai rendu compte ailleurs – ne s'expliquent que par référence à des croyances, à une conception extrêmement complexe et très ancienne de la relation culture-nature, plus exactement de l'angoisse propre en principe à l'homme mais qu'il lui faut tempérer. Une angoisse que désormais, avec le Néolithique, il perçoit autrement.

Les documents écrits de la conquête espagnole relatent qu'un haut responsable se devait de « dérouler » un tapis rouge fait de spondyles broyés sur le passage du souverain. Cerro Amaru était l'objet d'un culte de l'eau et par la même de la fertilité : puits associant à l'eau des spondyles et autres offrandes. A Chanchan, centre-étatique chimu (Deuxième Période Intermédiaire, 600–1000 ap. J.-C.), sur la côte nord du Pérou, des spondyles entiers, fragmentés ou broyés accompagnaient le corps à l'occasion de funérailles royales ; à El dragon, (vallée du Moche) des dépôts de spondyles ont été mis au jour. Enfin, le « Grand Seigneur » de Sipan est représenté arborant un spondyle. Les spondyles sont très rarement retrouvés en contexte alimentaire[52] tout comme en domaine égéen : aucun regroupement ou amas de ces coquillages sur les sites néolithiques ou énéolithiques fouillés au voisinage de la mer. Même à Hoca Cesme connu pour ses réserves sélectives de coquillages, les spondyles sont absents[53]. C'est apparemment seulement à partir de l'Age du Bronze comme par exemple à Proskinas ou Mitrou dans le Nord de l'Eubée qu'on les rencontre en relative abondance en tant qu'aliment.

Mylène Bussy note que le spondyle possédait une valeur cérémonielle, qu'il était utilisé dans les rites comme offrande aux dieux et, d'après les sources ethno-historiques, qu'il était souvent associé au culte de la fertilité[54]. Tout comme je le pense à propos de la nécropole de Varna, sa valeur était supérieure à celle de l'or et les Espagnols surent en profiter dans les échanges.

En effet, avec l'arrivée des Espagnols, on dispose désormais de documents écrits rendant compte de l'importance des spondyles (« filles de la mer, elle-même mère des eaux ») dans les cultes agraires, les rituels en rapport avec la fertilité, le

[50] Séfériadès 2007.
[51] Karmanski 1977.
[52] Bussy 1996–1997.
[53] Séfériadès 1995c.
[54] Référence à Norton 1986.

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spondyle étant de fait un « faiseur de pluie ». D'où les spondyles souvent déposés dans les champs cultivés comme c'est peut-être aussi le cas en Europe (spondyle du champ labouré de Hăbăşeşti). Lors de fêtes estivales en rapport avec les cultures, on brûlait des spondyles ; est-ce pour les mêmes raisons que les spondyles trouvés en Europe sont parfois brulés ?

Nul l'ignore l'omniprésence du shamanisme en Amérique centrale et en Amérique du Sud, actuellement encore en terre colombienne et amazonienne. Comme en Eurasie, ce fait social central remonte à la nuit des temps. On sait que, le spondyle (*mullu* en quechua) serait le seul et unique aliment des Dieux si l'on se réfère à la tradition orale de Huarochiri rapportée par le père Avila[55] ; en effet, *Spondylus calcifer* contiendrait une toxine paralysante pouvant entraîner la mort[56]. *Didoflagellate pyrodinium bahamense* est dangereux voire mortel pour l'homme mais non pour les esprits du Monde-autre. Les shamans indiens continuent à recourir à toute une série de plantes hallucinogènes – ou encore enthéogènes – ou à certains champignons aux effets voisins comme, par exemple, ceux appelés « chair des dieux » (teonanacatl) par les Nahuas du Guatemala[57]. Notons que les shamans de la culture néolithique balkanique de Vinča ont pu en faire de même si l'on se reporte aux représentations en pierre peut-être de certaines amanites trouvées sur le site éponyme.

D'autre part, il est fait référence au spondyle dans les traités anciens d'alchimie en tant que récipient pour des préparations de toutes sortes ; une sépulture d'un bébé de 4–6 mois de la nécropole énéolithique de Varna a livré une petite tasse taillée dans la valve droite de ce coquillage[58].

Conclusion

Finalement ce n'est sans doute pas en premier lieu l'aspect esthétique (sauf une attirance certaine pour la couleur rouge en Amérique du Sud mais pas en Europe) ni l'objet prestigieux qui rendent compte de l'intérêt sans commune mesure que nombre de groupes humains anciens ont accordé au spondyle, de part et d'autre de l'Atlantique et en des temps différents. La signification de ce coquillage est en quelque sorte celle d'une pierre philosophale. Elle est celle d'un symbole puissant, une sorte de graal. Que l'on sache ou non d'où il vient, et dans le second cas que l'on pense ou que l'on fasse semblant de ne pas le savoir, le spondyle est le support ou l'élément constitutif essentiel d'une série de mythes ou

[55] Davidson 1981 citée par Bussy 1996–1997.
[56] *Ibid*. ; Mata *et alii* cités par Bussy 1996–1997.
[57] Pour une courte synthèse sur ces questions, *cf*. Joignot F. 2008.
[58] Catalogue de l'exposition de Tokyo : *The first civilization in Europe and the oldest gold in the world. Varna, Bulgaria*, p. 118, fig. 546.

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d'un grand mythe commun qui lient entre eux les individus d'un groupe, qui cimentent entre elles les cultures, qui donne un sens à l'existence au travers d'une cohésion qu'assure tout un système d'échanges, de dons et contre-dons de type maussien.

Contrairement à Claude Lévi-Strauss[59], je crois que l'Amérique précolombienne (et tout au long de la conquête espagnole) évoque la période néolithique européenne (du moins qu'elle lui est comparable) et c'est ce qui fait finalement l'objet de cet article dans lequel on s'aperçoit que les spondyles des deux continents ont finalement un destin commun.

Un texte du XVI[e] siecle du père Barnabé Cobo raconte que « le mullu est un coquillage de la mer et que tous en possédaient des morceaux. Un indien me donna un morceau plus petit qu'un ongle qu'il avait acheté pour quatre reaux. Et les indiens de la côte, et même les Espagnols échangeaient ces coquillages avec les habitants de la Sierra, sans savoir pour quel usage ils les achetaient. Quelquefois ils font des colliers de ce mullu et les déposent dans les huecas »[60]. Les interrogations que suscitent à première vue ces échanges trouvent des réponses à propos d'un autre coquillage, le dentale, toujours en Amérique mais cette fois en Amérique du Nord mais toujours au voisinage de la zone côtière du Pacifique. Réponses que l'on trouve dans quelque-unes des plus belles pages écrites par Claude Lévi-Strauss et que j'ai déjà cité ailleurs[61] mais que je crois nécessaire de résumer ici comme dernières lignes de conclusion à cet article :

Les dentales – notons le au passage, présents en Europe aux côtés des spondyles tout au long du Néolithique et de l'Enéolithique, mais seuls coquillages recherchés et vénérés durant l'Age du Bronze – donnent naissance ou participent à toute une série de mythes tendant pour une part à rendre compte de leur(s) origines(s).

Le mythe Chilcotin de « l'enfant ravi »[62] raconte comment un garçon enlevé puis élevé par un hibou qui le traite bien et lui offre une parure de dentales le quitte à la demande pressante de sa famille, le combat et retourne en héros dans son village où il distribue largement ces coquillages que seul le hibou jusqu'alors possédait : « ainsi les Indiens obtinrent-ils ces coquillages qui constituent pour eux le plus précieux des biens »[63]. Et alors que *Les voleuses de dentales* sont au centre d*'Histoire de lynx*, que les aiguilles de sapins ou les parties cartilagineuses du gibier ou encore les os se transforment en dentales et que le Yurok après une longue attente aperçoit au fond de l'eau un coquillage aussi gros qu'un saumon, Claude Lévi-Strauss se demande « pourquoi ces Indiens éprouvent le besoin

[59] Lévi-Strauss 1973, 390.
[60] Bussy 1996–1997.
[61] Séfériadès 1995–1996 notamment.
[62] Lévi-Strauss 1973, 1983, 1991.
[63] Lévi-Strauss 1983.

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d'expliquer l'origine de ces coquillages dentales, et pourquoi ils le font de manière si bizarre en leur attribuant une provenance terrestre au lieu de maritime. ». Sa réponse est sans ambiguité : « Les tribus de la famille linguistique salish, qui habitaient l'arrière-pays à l'est des Chilcotin, attachaient un très haut prix aux dentales. Elles obtenaient ces coquilles des Chilcotin et appelaient pour cette raison ceux-ci "Gens aux dentales". Pour protéger leur monople et le rendre plus prestigieux encore aux yeux de leurs voisins, les Chilcotin avaient donc un intérêt majeur à faire accroire qu'ils possédaient les dentales en quantité inépuisables, et que ces coquillages provenaient de leur propre territoire en conséquence d'événements surnaturels dont ils avaient eu la faveur spéciale. Ils travestissaient ainsi une réalité fort différente ; car, en fait, les Chilcotin se procuraient les dentales par échanges commerciaux avec les tribus côtières qui, de l'autre coté des montagnes, avaient seules un accès direct aux produits marins. Selon des témoignages anciens, ces tribus côtières entretenaient avec les Chilcotin des rapports amicaux. Elles ne leur faisaient jamais la guerre, "car elles répugnaient à s'éloigner de leur séjour habituel en bord de mer ou sur le cours inférieur des fleuves côtiers, terrifiées qu'elles étaient, semble-t-il, à l'idée de devoir se risquer dans le monde lointain, inconnu et hostile des massifs montagneux". Il est frappant que des Salish de l'intérieur comme les Thompson et Cœurs-d'Alêne, qui, à la différence des Chilcotin, ignoraient l'origine véritable des dentales, eussent, pour expliquer celle-ci, une série de mythes symétriques et inverses de ceux de leurs fournisseurs. Ils racontent que les dentales existaient jadis dans leur pays et qu'à la suite de certains événements ils disparurent de sorte que les Indiens ne peuvent plus aujourd'hui obtenir ces précieux articles que par des échanges commerciaux. Avec les produits de la mer et les produits de la terre, les tribus côtières entretenaient de tout autres rapports. Chez elles, les produits de la mer relevaient de l'activité technique et économique : la pêche, le ramassage des mollusques constituaient une occupation habituelle des Indiens de la côte qui se nourrissaient de ces produits ou les vendaient aux Chilcotin".

On ne peut s'empêcher de penser à des faits semblables à propos des spondyles européens et en partie s'agissant des spondyles amérindiens. Certaines populations furent peut-être appelées « Gens aux spondyles », d'autres ignoraient ou feignaient d'ignorer leur provenance provocant ainsi, par des explications d'origine surnaturelle et tout un ensemble de mythes liés, un intérêt sans cesse croissant, démesuré pour ces coquillages, d'autant plus qu'elles étaient éloignées des lieux véritables où on les recueillait.

Ce texte est, j'en suis définitivement convaincu, une clé pour la compréhension du phénomène spondyle en Europe néolithique et énéolithique (6500–3500 av. J.-C : soit une durée environ trois millénaires) et pour une part en Amérique centrale et du Sud précolombienne et colombienne (3500 av. J.-C. à 1500 et plus ap. J.-C.).

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Avec le Néolithique et l'Enéolithique naît un ensemble nouveau et cohérent de perceptions et d'interrogations pour lesquelles il subsiste, comme chacun le sait, au seuil de l'Histoire, seuls les lambeaux de textes dits présocratiques. En Europe comme en Amérique, un coquillage – catalyseur unique – est au centre de la réflexion. La route des spondyles de la Méditerranée à la Manche reflète – l'un des rares documents archéologiques sinon le seul – une unité certaine de pensée, une cohérence.

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A TALE OF TWO CEMETERIES – CERNICA AND VĂRĂŞTI

POVESTEA A DOUĂ CIMITIRE – CERNICA ŞI VĂRĂŞTI

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Cuvinte-cheie: mortuar, structură socială, neolitic, chalcolitic, Muntenia.
Rezumat: Cernica (Dudeşti şi Boian I) şi Vărăşti (Gumelnița B) sunt două dintre cele mai mari şi mai importante cimitire din perioada neolitică şi a epocii bronzului, din bazinul Dunării de Jos. O cale potrivită de a-l omagia pe Eugen Comşa, care a publicat ambele situri, este aceea de a oferi o analiză categorială comparativă a ambelor cimitire, prin examinarea modalității de înmormântare, distribuția bunurilor şi amplasarea lor în mormânt, ca şi confruntarea categoriilor vârstei/sexului cu aceste categorii menționate. Rezultatul arată o surprinzătoare *lipsă* a diferențierii sociale în ultimul cimitir, comparativ cu primul, în ciuda localizării sale pe intens folosita rută de schimb a Dunării. Posibilul motiv pentru o astfel de diferențiere este discutat în relație cu evoluțiile contemporane din aşezare şi în rețelele de schimb din România de sud-est. Puternicele efecte ale dimensiunii diferite a cimitirelor sunt discutate în ceea ce priveşte variabilitatea în respectivele ansambluri funerare de bunuri şi variațiile în reprezentare ale categoriilor vârstă/sex. Este evidențiată importanța modului diferit de personalizare în cele două cimitire, cu explicații în ceea ce priveşte factori precum importanța unor practici de descendență, rețelele de schimb ale comunităților şi ale indivizilor şi diferitele forme de persoane care au apărut în neolitic şi epoca bronzului.

Key words: mortuary, social structure, Neolithic, Chalcolithic, Muntenia.
Abstract: Cernica (Dudeşti and Boian I) and Vărăşti (Gumelnița B) are two of the largest and most important Neolithic / Copper Age cemeteries in the Lower Danube basin. An appropriate way to honour Eugen Comşa, who has published both sites, is to provide a comparative categorical analysis of both cemeteries by examining the mode of burial, the distribution of grave goods and their placement in the grave as well as confronting age/gender categories with these other categories. The results show a surprising *lack* of social differentiation in the later cemetery in comparison to the earlier, despite its location on the thriving exchange route of the Danube. The possible reasons for such a lack of differentiation are discussed in relation to contemporary developments in the settlement and exchange networks of South East Romania. The strong effects of different cemetery sizes are discussed in terms of the variability in the respective grave good assemblages and the variations in the representations of age/gender categories. The importance of different modes of personhood in the two cemeteries is underlined, with explanations in terms of factors such as the importance of lineage practices, the exchange networks of the communities and the individuals, and the different forms of persons that emerged in the Neolithic and the Copper Age.

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Tribute

It was in 1974, on my second visit to Bucureşti, that I met Eugen Comşa to discuss Neolithic research in Romania. After a discussion of the Vinča sites of Oltenia and the Iron Gates region and their cultural relations with Dudeşti and Vădastra, Mr. Comşa proposed a visit to the Cernica cemetery. We set off on a hot July morning in my battered vintage Morris Minor and visited the Dudeşti – Boian II settlement next to the famous cemetery. It was an excellent field trip, introducing me to the landscape of Muntenia and helping me to get to know one of the most eminent specialists of the Balkan Neolithic. It was most kind of Mr. Comşa to share his knowledge and time with a second-year Ph.D. student; it set up a professional relationship that has lasted over 30 years. For this reason, I am happy to dedicate this essay on the mortuary archaeology of his 'home region'.

Introduction

In stark contrast to the mortuary monument-dominated Neolithic of North West Europe, the Neolithic and Copper Age archaeology of the Balkans in the sixth – fourth millennia BC was dominated by settlement sites. These settlements ranged in monumentality from small homesteads widely dispersed across the landscape to *tells* 5 to 10m in height which dominated their often flat lowland landscapes[1]. The later (late 4th and 3rd millennia BC) mortuary barrows found in regional clusters in Eastern Hungary, the Lower Danube basin and South Bulgaria imitated the pre-existing *tells* in both form and their multi-period mode of construction[2]. But there were relatively few known flat cemeteries – viz., sets of burials in a place separated from any coeval settlement. The preferred place of burial in the Neolithic and Copper Age was within the settlement, with often incomplete burials of adult males and females and children[3]. There are entire regions, such as the Thracian valley in South Bulgaria, which were full of *tell* settlements but in which systematic prospection for cemeteries has yielded none yet for the period 7000–4500 BC.

Thus the adoption of corporate cemeteries across the Balkans and Central Europe was patchy (Fig. 1), with two distinct forms of landscape context. The first context is a landscape of small, dispersed settlements. As yet, only a single, small cemetery is known from the Early Neolithic (Malak Preslavets, Lower Danube basin, North Bulgaria[4]), with a cluster of cemeteries appearing in the early 5th

[1] Chapman 1989.
[2] *Idem* 1994.
[3] Bačvarov 2003; Chapman *in press*; cf. the Iron Gates Mesolithic: Radovanović 1996.
[4] Panayotov *et alii*, 1992.

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millennium BC in Slovakia (Nitra[5]), Serbia (Botoš[6]), the Black Sea Coast (Durankulak[7]) and, last but by no means least, Muntenia (Cernica[8]). In each case, the settlement context of dispersed homesteads associated with the appearance of these early cemeteries indicated that the cemeteries were focal points in their social landscapes, ancestral places providing roots for a group of homesteads, perhaps a breeding network, and characterised by an emergent nucleation of ritual practices. This, then, is the social context for the emergence of the Cernica cemetery in the former Colentina valley, on the next ridge to a coeval Dudeşti homestead.

Fig. 1 – Map of key sites mentioned in the text: C – Cernica; V – Vărăşti.

[5] Pavúk 1982.
[6] Chapman 1981: 54–58.
[7] Todorova 2002; cf. other Hamangia cemeteries: Berciu 1966.
[8] Comşa & Cantacuzino, 2001.

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The Vărăşti cemetery is an example of the appearance of the second landscape context of Balkan cemeteries – a foundation close to a *tell* setttlement. This is typical of the Lower Danube valley (Vărăşti[9]), North East Bulgaria (Vinitsa[10]; Goljamo Delchevo[11]) and parts of the Black Sea coast (the expansion of the Durankulak cemetery coeval with the *tell* settlement of the "Big Island"[12]). However, the exceptions of the Varna cemetery[13] and the Devnja cemetery[14] – with no neighbouring *tells* known – indicate that the Black Sea pattern is complex. The lack of rigorous absolute dating makes it impossible to be certain of the chronological relationship between the *tell* and its adjacent settlement but both Raduncheva and Todorova make the assumption of contemporaneity between both elements. It seems probable that the cemetery contained the dead of the *tell* population but, without absolute dating, this must remain an unproven assumption. A detailed comparison of artifact categories in the Goljamo Delchevo *tell* and cemetery indicated differences at the type level, suggesting either that the identities of different groups of people (? lineages) were materialised in the two places or that there were differences between the costumes of the living and those of the dead[15]. In the case of Vărăşti, the cemetery was established on the island of "Grădiştea Ulmilor" in the former Boian Lake. The island had already been settled in the Dudeşti – Cernica and several Boian phases, as well as in the early Gumelnița period[16]. Near the cemetery was the so-called Boian B *tell* – a 5-m *tell* dated to the Gumelnița period[17].

Thus a comparison between one cemetery associated with each major landscape context may be expected to be informative about the ways in which Boian and Gumelnița communities used material culture, in conjunction with their bodies, to express social messages about themselves and their identities. The two cemeteries were separated by several centuries in time, giving a valuable diachronic perspective to this study. The principal method used in this study is called 'categorical analysis', for which a few words of explanation are in order.

Categorical analysis of mortuary remains

Categorical analysis of mortuary remains[18] makes the basic assumption that the people and objects of everyday life were not just flesh and blood, or fired clay,

[9] Comşa 1995; cf. the newly discovered cemetery at Pietrele: Hansen & Toderaş, 2007, 9.
[10] Raduntcheva 1976.
[11] Todorova 1975.
[12] *Eadem* 2002, Chapman *et alii*, 2006.
[13] Ivanov 1991.
[14] Todorova 1971.
[15] Chapman 1996, 233–235.
[16] Comşa 1995, 190–191.
[17] Cristescu 1925.
[18] In contrast to the categorical analysis of pottery: *e.g.*, Chapman & Gaydarska, 2006, Chapter 2.

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but that each individual example stood for a class, or category, of persons or things that framed past people's understanding of their world. Categorisation implies divisions, hierarchies and boundaries – a point not lost on Munro (1997) who reverses the familiar phrase 'division of labour' to discuss the labour of division – the work required by the divisions we make to see the world from a specific viewpoint, to hold to that position and to eliminate matter seen to be 'out of place'. From that perspective, Munro stresses that divisions are just as much cultural artifacts as tables and chairs – and deserve to be analysed as well. Thus the labour of division produces a stable grid of representation within which we are made visible or not; as Cooper (1993) says, "there is no vision without division". This approach emphasises the key role of those who do the seeing and the categorising. An example of this appears in Welbourn's (1982, 24) study of Endo ceramics and society, where the power of conceptual division is the main **male** power – but this power requires frequent repetition and re-assertion because of the instability of the conceptual division and the visible reproduction of female power on an everyday basis. Two archaeological examples concern the comparison of three Bulgarian Late Copper Age cemeteries[19] and the study of three Hungarian prehistoric sites – the intra-mural burials at Kisköre-Gat and the cemeteries of Tiszapolgár-Basatanya and Budakalász[20].

In practice, the categories that can be established for past peoples and things depend upon the level of available information. A well-preserved human skeletal collection can yield fine divisions of age and good probabilities of gender, while a poorly preserved collection may yield more basic categories (*e.g.*, children, adolescents, adult males and adult females – as is the case with the two cemeteries under study). Categories of things will depend minimally on the form of the object and its raw material, with an overall division into three types of object categories – tools, ornaments and pottery (a fourth type – "weapons" – is not applicable here). Within the overall object category types, there can be a range of individual object categories – "polished stone axes", "*Unio* shell ornaments", "complete vessels", etc. An important aspect of categorical analysis is the confrontation of age/gender categories with the object categories defined from the grave goods. These relations may take the form of exclusive associations – perforated red deer canine pendants were found with only adult male burials – or less specific associations – carinated bowls were found with burials of adolescents, adult males and non-gendered adults. The degree of exclusivity indicates the significance of the object category for the identity of the age/gender category in question. The same is true for relations between age/gender categories and other aspects of mortuary practice, such as the depth of the grave or the mode of body placement. We shall see that

[19] Chapman 1996.
[20] *Idem* 2000.

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this method of analysis is relatively simple to apply but gives powerful insights into the social world of past communities.

The two cemeteries – summary information (Fig. 1)

The Cernica cemetery was discovered in 1961, during the excavation of the Medieval church and settlement of Iezerul, and excavated over a period of 13 years (1961–1974). A total of 378 Neolithic skeletons was excavated belonging to the Dudeşti and Boian I phases; it is believed that the complete cemetery, covering just over 1 ha (130 m × 80 m) was excavated[21]. Extended inhumation on the back was the standard form of burial for Dudeşti burials (n = 306) but there are a number of crouched inhumations probably dating to the Boian I or II period (n = 35 skeletons)[22]. There are 35 graves so disturbed that no mode of burial could be determined; these were omitted from the analysis. In addition, a large number (n = 129) of extended and crouched burials were also disturbed, in the sense of their drawings show that less than 50% of the skeleton has survived. However, since age/sex determinations were made for most of these burials, they were included in the analysed sample. In addition, a further 76 burials – mostly extended inhumations – were judged to have 'poor' preservation, indicated by between 25 and 50% of missing bones on the skeletal drawings. Most of the graves had been disturbed by Medieval graves and constructions. A number of key "rich" graves from Cernica was published in 1963[23], leading Colin Renfrew (1969) to identify the cemetery as one of the key early sites for Balkan Neolithic copper metallurgy. No 14-C dates are available from the Cernica material but, on analogy with the Dudeşti-Vinča occupations at Cârcea-La Viaduct[24], the cemetery is likely to date to the end of the 6th millennium BC and the early centuries of the 5th millennium BC.

The Vărăşti cemetery was discovered in 1955 and excavated over a period of nine years (1957–1965). A total of 126 Neolithic burials – four from the Boian – Gumelniţa transition phase (Spanţov phase: Graves 10, 22, 61 and 121) and 122 from various phases of the Gumelniţa period – was excavated in a 200 m-long strip, 15 m in width, along the North-west shore of the lake. However, some 20 Gumelniţa graves had been seriously disturbed, leaving 106 graves for analysis. In addition, an unknown number of graves has been destroyed by fluvial erosion[25]. Crouched inhumation on the left side was the standard form of burial; the depth of

[21] Comşa & Cantacuzino, 2001.
[22] These figures differ slightly from those of Comşa & Cantacuzino (2001), which is based upon the number of graves.
[23] Cantacuzino & Morintz, 1963.
[24] Nica 1975.
[25] Comşa 1995, 190.

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the graves varied from 0.31 to 1.52m. Comşa (1995:193) admits that the graves did not contain a rich mortuary assemblage. The four graves dating to the Boian-Gumelniţa transition were not analysed separately, since the group was small and because graves cannot be phased according to the internal Gumelniţa chronology. No 14-C dates are available from the Vărăşti material but, on analogy with Căscioarele, the cemetery is likely to date to the middle of the 5th millennium BC.

Age/gender categories

The same physical anthropologist from Iaşi, Dr. Olga Necrasov, completed the reports on the human skeletal remains from both sites. While Necrasov gives much useful detail on skeletal anatomy, her age/gender identifications are unfortuntely rudimentary and lacking in methodological specifications. This limits the age/gender categories at both Cernica and Vărăşti to six categories: children, adolescents, adult males, adult females, non-gendered adults and unknown. The distribution of age/gender categories by number of graves is presented below (Table 1):

Table 1

No. of graves by age/gender categories at Cernica and Vărăşti

	CERNICA		VĂRĂŞTI	
AGE/ GENDER CATEGORIES	NUMBER OF GRAVES	% OF GRAVES	NUMBER OF GRAVES	% OF GRAVES
Child	17	5	27	25.5
Adolescent	24	7	4	3.8
Adult Male	74	21.6	25	23.6
Adult Female	98	28.6	19	17.9
Adult (non-gendered)	110	32.1	30	28.3
???	20	5.8	1	0.9
TOTAL	343	100%	106	100%

The most striking difference between the two cemeteries is the far higher percentage of children preserved at Vărăşti, with somewhat higher frequencies of adult males but lower proportions of adolescents, adult females and non-gendered adults.

Mode of burial (1): depth of grave cut

One of the frequent correlations concerns the depth of the grave pit with other indicators of status or identity. A good example is the Varna cemetery, where the

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deepest graves contained the widest range and largest number of grave goods[26]. Unfortunately, the depth of the grave pit is not recorded for the Cernica cemetery; however, the Vărăşti data present some useful trends.

Table 2

Depths of graves at Vărăşti

VĂRĂŞTI		
GRAVE DEPTH (cm)	NO. OF GRAVES	% OF GRAVES
30 – 39	3	2.8
40 – 49	7	6.5
50 – 59	8	7.4
60 – 69	7	6.5
70 – 79	13	12
80 – 89	13	12
90 – 99	9	8.3
100 – 109	17	15.7
110 – 119	17	15.7
120 – 129	4	3.7
130 – 139	4	3.7
140 – 149	5	4.6
150 – 159	1	0.9

At Vărăşti, the highest proportion of grave depths (over 40%) lies in the upper quartile (90–119 cm), while over 10% of graves are dug to depths of over 120 cm. Minor age/gender differences are discernable in the grave depth data. There is a preponderance in the lower quartile (60–89 cm) for the graves of children and adolescents, while adult males and females show a preponderance in the upper quartile. Nonetheless, the proportion of "children + adolescents" with the deepest graves (over 120 cm) is the same as the proportion of adults!

Mode of burial (2): placement of body

Comşa & Cantacuzino (2001: 151–155) uses the differences in the mode of burials at Cernica to provide a rigid chronological framework for the two main phases of the cemetery – extended burials for the Dudeşti phase, contracted burials for the Early Boian phase. This division is supported by the few examples of grave superposition (2001: 156–159). Each of the three forms of contracted burial – weakly contracted, contracted and strongly contracted – was used to place burials on both the right and left sides, giving considerable variability in mode of burial

[26] Ivanov 1991.

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(Table 3). It is interesting to note that the skeletal remains at Vărăşti indicates a choice of only four of these modes of contracted burial – weakly contracted on the left side, contracted on the left side, strongly contracted on the left side, and contracted on the right side, together with the now minority mode of extended burial.

At Vărăşti, there is a strong preference for either contracted or strongly contracted burials on the left side (Table 3). Only special individuals were buried in contracted position on the right or, in only one case, as an extended inhumation on the back – the preferred mode of body placement at Cernica. It is possible that such individuals had married into the Vărăşti community – a hypothesis to be tested using strontium isotopic analysis[27]. For a total of 27 graves, there is no possibility of a clear classification.

Table 3

Modes of body placement at Cernica and Vărăşti

	CERNICA		VĂRĂŞTI	
Body placement	NO. OF GRAVES	% OF GRAVES	NO. OF GRAVES	% OF GRAVES
Extended	306	81.3	1	0.9
Weakly contracted/left	5	1.4	5	4.8
Weakly contracted/right	5	1.4	0	0
Contracted/left	7	1.9	32	30.5
Contracted/right	8	2.2	5	4.8
Strongly contracted on left	4	1.2	35	33.3
Strongly contracted on right	1	0.4	0	0
??	37	10.2	27	25.7
TOTAL	378	100%	105	100%

There is a slight preference for adult females over adult males for the extended mode of burial but differences in age/gender categories for the contracted burial modes at Cernica are more subtle. To begin with, very few adult males are buried in contracted positions and no adolescents and only four children have had contracted burials preserved. Given small sample sizes, it would appear that adult females and unsexed adults were buried in all (females) or almost all (5/6 for unsexed individuals) possible modes of contraction.

Equally, there is weak differentiation for body placement according to age/gender categories at Vărăşti. For example, while contracted and strongly contracted burials on the left side are used for all age/gender categories, children

[27] Montgomery *et alii*, 2000.

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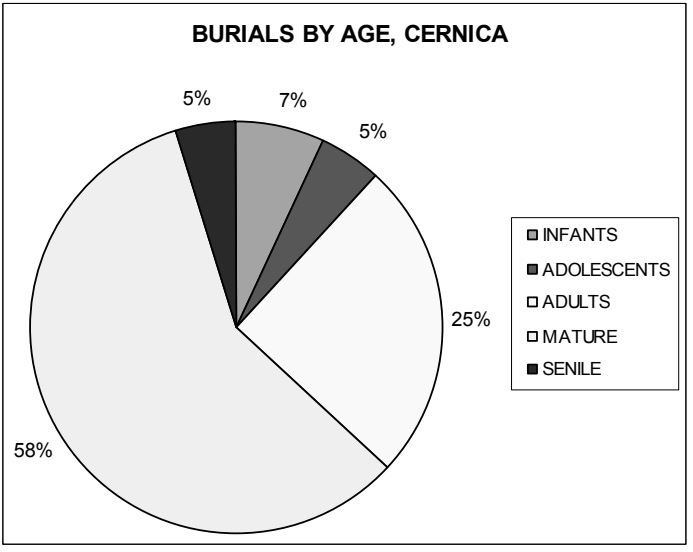
(42%), adolescents (small sample) and adult males (60%) preferred the contracted position, adult females the strongly contracted position (70%). The rare contracted burial on the right side is apparently used only for adults, although there may be an issue of preservation for children's burials. The less common weakly contracted burial on the left side shows no obvious age/gender differences.

Grave goods (1): overall frequencies

The state of burial preservation at Cernica has had a moderate influence on the recovery of grave goods with the skeleton (Fig. 2). This shows that the tendency for graves with better preservation to have a higher proportion of grave goods.

Only a low percentage of graves have any grave goods at Cernica (109 graves or 32%). The grave goods can be divided into tools, ornaments and pottery, with a special category of animal bones suggesting food offerings[28]. According to my analysis, there are 10 categories of tools, 15 of ornaments and two of pottery. By far the commonest of the tool categories were chipped stone (21 graves) and polished stone axes (19 graves), followed by bone points (11 graves) and polished stone chisels (9 graves). The ornaments were dominated by cylindrical shell beads (33 graves or 30% of graves with grave goods), with shell bilobates (19 graves), stone beads (14 graves) and shell barrel beads (14 graves) also prominent. It is interesting to note that pottery was rarely placed in graves, whether whole pots (2 graves) or sherds (8 graves). Only three graves contained copper beads.



a

[28] Comşa & Cantacuzino, 2001, 166–177.

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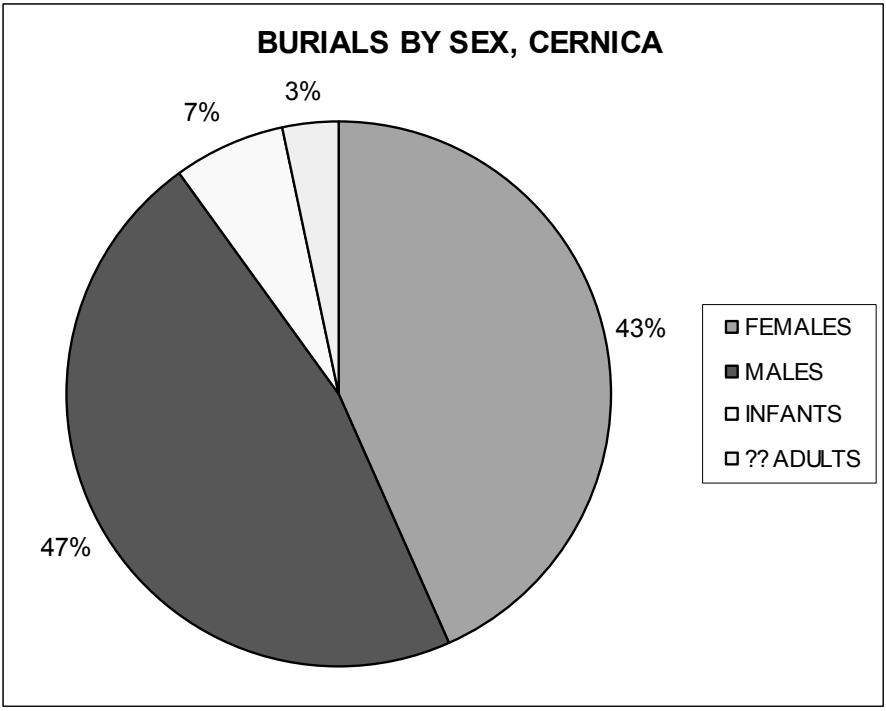

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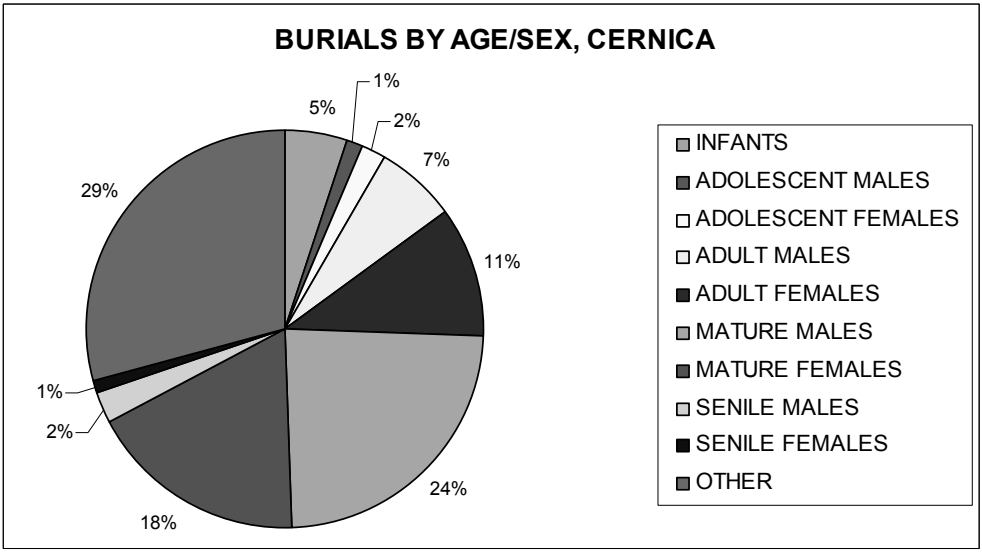

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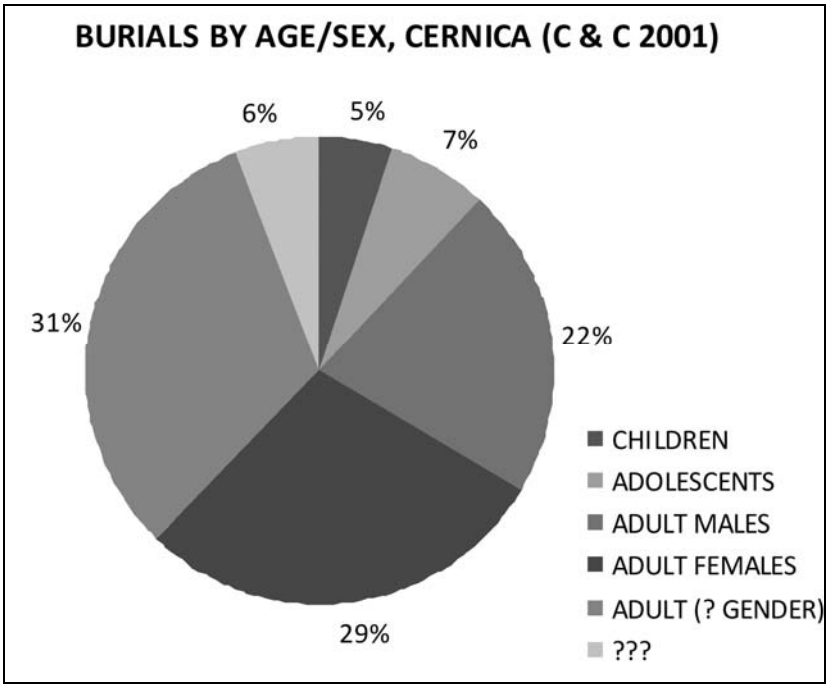

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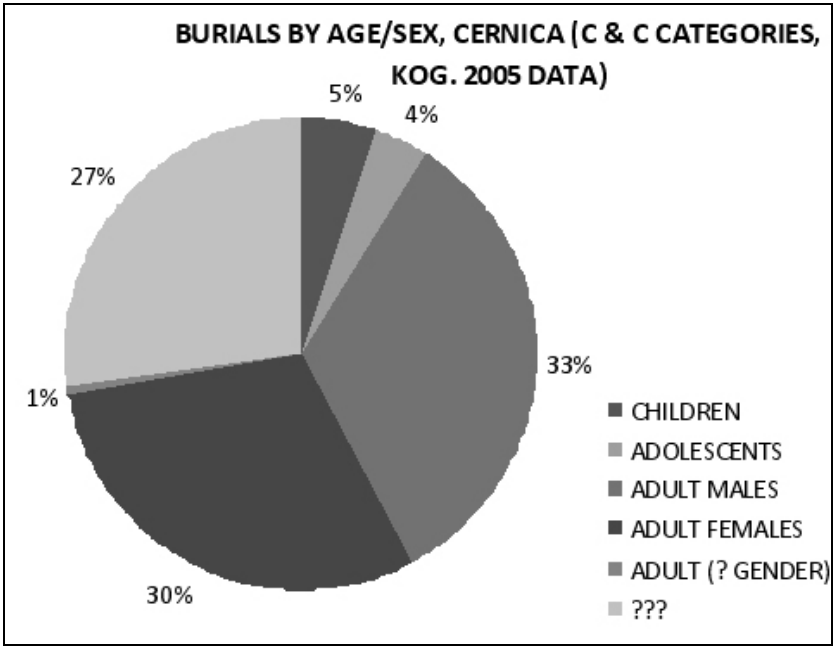

e

Fig. 2 – Frequency of graves according to age and/or sex, Cernica.

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There is a division between local and exotic materials in these grave goods, with local origins for bone, antler and horn tools and pebble burnishers, bone, antler and tooth ornaments and pottery. The chipped and polished stone tools and the marble and greenstone ornaments are all exotic, with some flint deriving from North East Bulgaria (Grave 273[29]). The same is true for the copper beads and the wide variety of shell ornaments, including *Spondylus*/*Glycymeris* from the Aegean and *Ostrea* and *Pectunculus* from the Black Sea or the Aegean.

Table 4

Percentage of object categories in graves with grave goods as a whole, Cernica (n = 115) and Vărăşti (n = 36)

	CERNICA		VĂRĂŞTI	
Object category	NO. OF GRAVES	% OF GRAVES	NO. OF GRAVES	% OF GRAVES
TOOLS				
Lithics	21	19.3	14	38.9
Pebble burnisher	1	0.9	–	
Polished stone axe	19	16.5	–	
Polished stone chisel	9	8.3	–	
Bone point	11	9.6	–	
Bone needle	1	0.9	–	
Bone spatula	4	3.5	1	2.8
Bone plate	3	2.6	–	
Antler tool	4	3.5	–	
Horn tool	2	1.7	–	
Fired clay 'lamps'	–	–	13	36.1
ORNAMENTS				
Bone ring	12	10.5	–	
Bone pendant	5	4.3	–	
Antler pendant	2	1.7	–	
Deer tooth pendant	6	5.2	–	
Ostrea shell	2	1.7	–	
Unio shell	–	–	1	2.8
Dentalium shell	–	–	1	2.8
Shell disc bead	5	4.3	–	
Shell flat bead	1	0.9	–	
Shell cylindrical bead	33	30.3	–	
Shell barrel bead	14	12.2	–	
Ostrea pendant	4	3.5	–	
Shell bilobate	19	16.5	–	

[29] *Ibidem*, 113.

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Shell trilobate	6	5.2	–	
Shell bracelet	8	7	–	
Stone bead	14	12.8	2	5.6
Amber	–	–	1	2.8
Copper	3	2.6	3	8.3
Gold	–	–	4	11.1
POTTERY				
Whole vessel	2	1.7	5	13.9
Sherds	8	7.3	8	22.2
Ochre	–	–	3 or 4	8.3 or 11.1
ANIMAL BONE	5	4.3	1	2.8

Approximately two-thirds of all graves at Vărăşti, have no grave goods at all. The remaining 36 graves contain collectively 12 object categories – three tool categories, six ornament categories and three pottery categories (Table 4). The commonest object categories are lithics, the small fired clay biconical objects interpreted by Comşa (1995: 193) as lamps[30] and sherds – found mostly with the corpse but in one instance in the grave fill (Grave 19). While *Dentalium* ornaments derived from either the Black Sea or the Aegean, the closest source of amber is the Adriatic coast, perhaps obtained via Bosnia (cf. the earliest amber ornament in European prehistory, at Obre I[31]), although a Baltic source cannot be excluded. The source of the lithics and the gold, copper and stone ornaments cannot be defined without scientific analysis but cannot be anything but exotic, since there are no local sources known in the Lower Danube Basin. The bone tools, 'lamps', pottery, ochre and *Unio* ornaments are the only grave goods that can be said, with a high degree of probability, to be of local origin.

The first general result of this study is the comparably high percentages of graves without grave goods at both cemeteries – 70% for the Cernica cemetery and 67% for Vărăşti. For the latter, this is perhaps a surprising result for a so-called 'Climax Copper Age' cemetery[32] and something that requires explanation. Nonetheless, it is an important conclusion that the mourners made the deliberate choice of not placing grave goods in the majority of graves at both cemeteries. There may well be other ways of establishing social identities of the newly-dead without the use of material objects but this was a strong and common choice.

The starting-point for any comparison of the grave good categories at Cernica and Vărăşti must be the large discrepancy in the number of furnished graves (109 cf. 36). This would suggest the *a priori* likelihood that there would be a wider range of grave goods at Cernica – as indeed is the case. The comparisons are

[30] These 'lamps' are markely different from those triangular or rectangular objects often called 'lamps' or 'altars'.

[31] Benać 1973, 356 and Fig. 18.

[32] *Pace* Chapman 2000a.

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striking: 10 tool categories at Cernica, 3 at Vărăşti; 15 ornament categories at Cernica, 6 at Vărăşti; and 2 pottery categories at Cernica, with 3 at Vărăşti. However, the fact that a far wider range of objects and raw materials were available in the Gumelniţa period than were utilised at Vărăşti (*e.g.*, at the Căscioarele or Gumelniţa *tells*[33]), not to mention the more dramatic finds from the Varna cemetery[34], indicates that the restrictions on quantity and variety of grave goods at Vărăşti may well have resulted from a series of actively taken decisions – albeit ones for which an explanation is called.

In addition to the quantitative discrepancies, there are numerous detailed differences at the categorical level between the two cemeteries. While lithics and bone spatulae were found in both, the lithics were proportionately commoner at Vărăşti, while the fired clay lamps so common at Vărăşti were nowhere to be found at Cernica. Two notable absences at Vărăşti, for example, were *Spondylus* shell ornaments and polished stone axes. Both were certainly of widespread use in the Copper Age, with polished stone axes found in the coeval Boian B *tell*[35], and both were especially important exotic objects at Cernica. In fact, only two of the the total of 19 ornament categories are shared between the two cemeteries – stone and copper beads. These differences, typified by a mutually exclusive use of different shells – *Spondylus* / *Pectunculus* and *Ostrea* at Cernica, *Unio* and *Dentalium* at Vărăşti – suggest that social identities were played out using deliberately contrasting sets of ornaments. This point is underlined by the wide variety of bead forms used at Cernica, in strong contrast to the narrow range at Vărăşti. The use of gold at Vărăşti is one of the few cases in which the chronological factor is vital – there are no known examples of Balkan goldworking prior to the Copper Age; another may be the decision to use ochre powdered on skeletons at Vărăşti but not at all in Cernica. One of the major differences between the two cemeteries is the much more intensive use of pottery at Vărăşti to signify difference in the burial of the newly-dead.

In general, the differences between the grave goods selected at Cernica and Vărăşti suggest that rather different strategies for the creation of social identities were in use at the two cemeteries, with bone and stone tools and a wide range of shell ornaments at Cernica, in contrast to pottery, gold and fired clay lamps at Vărăşti.

Object categories *vs.* age/gender categories (1): types of categories

The first question for investigation is whether the proportion of graves with grave goods for any specific age/sex category differs from the overall cemetery mean of 32–33% (Table 5, which presents the number and percentage of graves

[33] Chapman *et alii*, 2006
[34] Ivanov 1991.
[35] Christescu 1925: Pl. XXIV/ 1–2, 5–67.

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with and without grave goods for each cemetery). The only difference from the overall mean at Cernica concerns children's graves, with fewer furnished graves, as is the case at Vărăşti. However, at Vărăşti, fewer graves of adult males had grave goods than the mean, in comparison to more graves of adult females and non-gendered adults. This may indicate a greater degree of age-sex variability in the provision of grave goods at Vărăşti than at Cernica but this question merits further exploration (see below, pp. 293–5).

Table 5

Graves with and without grave goods by age/gender categories, Cernica and Vărăşti

	CERNICA		VĂRĂŞTI	
AGE/GENDER CATEGORY	GRAVES WITH GRAVE GOODS	GRAVES WITHOUT GRAVE GOODS	GRAVES WITH GRAVE GOODS	GRAVES WITHOUT GRAVE GOODS
Child	4 (23.5%)	13 (76.5%)	4 (14.8%)	23 (85.2%)
Adolescent	9 (32%)	19 (68%)	3 (75%)	1 (25%)
Adult male	26 (35%)	48 (65%)	7 (28%)	18 (72%)
Adult female	35 (36%)	62 (64%)	8 (42.1%)	11 (57.9%)
?? adult	30 (36.5%)	94 (73.5%)	14 (46.7%)	16 (53.3%)
???	5 (35.7%)	9 (64.3%)	1 (100%)	0 (0%)
TOTAL	109 (32%)	334 (78%)	37 (34.9%)	69 (65.1%)

The relationship between the number of object categories and age/gender categories can be investigated by using the more general entity of category types – tools, ornaments and pottery – and their combinations (Fig. 3). For the Cernica cemetery, a total of 11 object category types were recognised, including four single category types, five combinations of two category types and two combinations of three category types. Not a single age-sex category has examples of each 11 combinations. The small numbers of children's and adolescents' graves makes it difficult to draw any clear conclusions but the tools and ornaments are found with both age-sex categories, as well as animal bones in one child's grave. The frequency of tools and ornaments is more or less balanced in the adult male graves, with a slight preponderance for the former. While adult male graves have very little pottery, they are also the only ones to include all combinations involving animal bones. Adult female graves show a rather different profile, with far more ornament category types than tools, fewer pottery types than adult males but fewer categorical combinations involving animal bones. However, there are small numbers of both adult male and female graves with three-type combinations – both 'Tools + Ornaments + Pottery' and 'Tools + Ornaments + Animal bones'.

There were only six combinations of object category types at Vărăşti – three single category types and three combinations of two category types. The distribution of object category types at Vărăşti shows some interesting age/gender

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trends (Table 6). Tools occurred very rarely in children's graves, while ornaments were deposited in no adolescents' graves and in only one adult male grave. While no age/gender categories were associated with the full range of object category types represented, the adult female and the non-gendered adult were found with five out of six combinations. This suggests that work-related objects lay outside the world of children at least in the mortuary domain, as an idealised statement of what children did or did not do. The paucity of ornaments in adult male graves makes Vărăşti stand out as a distinctly different sort of cemetery in the Balkan Copper Age, when a profusion of ornament types often characterised adult male graves (*e.g.*, Devnja[36]).

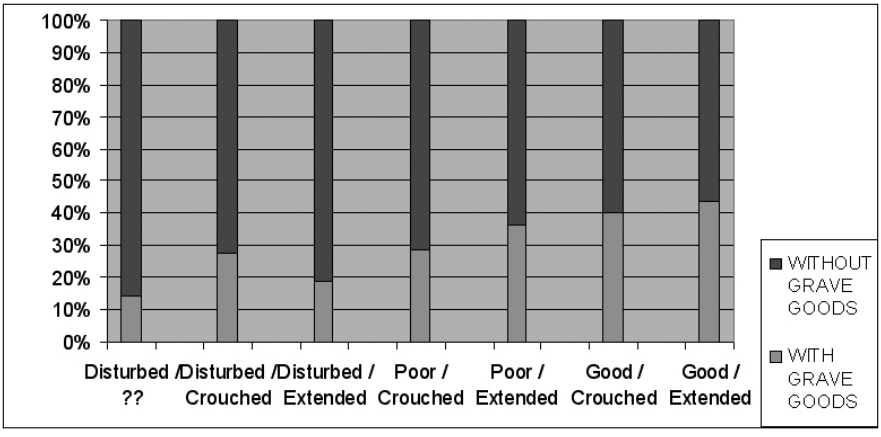

Fig. 3 – No. of object category types in graves vs. age/gender category of burial: (a) Cernica; (b) Vărăşti. Key – T – tools; O – ornaments; P – pottery; A – animal bones.

The comparison of object category types with age-sex categories highlights several similarities and some differences between Cernica and Vărăşti. The cemeteries are similar in the paucity of tools in children's graves, in the importance of ornaments in adult female graves and in the preponderance of tools in adult male graves. However, there are at least some ornaments deposited with adolescents at Cernica in comparison with their absence at Vărăşti. Equally, the adult males of Cernica were furnished with many more, and more varied, ornaments than their Vărăşti counterparts. Lastly, the variety of combinations involving animal bone offerings was far greater at Cernica than at Vărăşti.

A slightly more detailed picture can be created by relating the number of object categories in each grave to the age/gender categories (Fig. 4). The Cernica pattern shows a logarithmic decrease in the frequency of object category types, with the largest number of graves having only one category type and the largest

[36] Chapman 1996.

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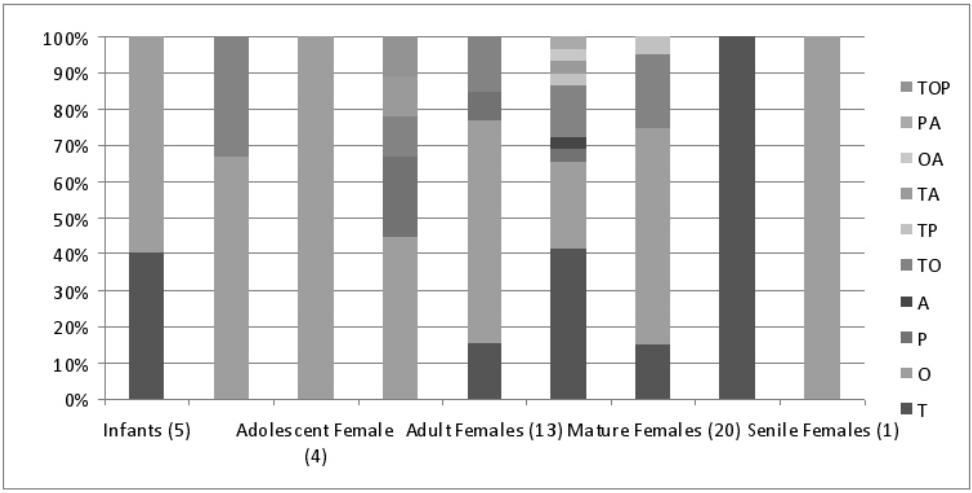
number of types found in only one grave of an adolescent female (Grave 43). There was a major increase in the number of category types in adult burials in comparison with those of children and adolescents. There was a higher number of adult female graves with one category type than with adult males, with a slightly higher mean number of category types found with adult males.



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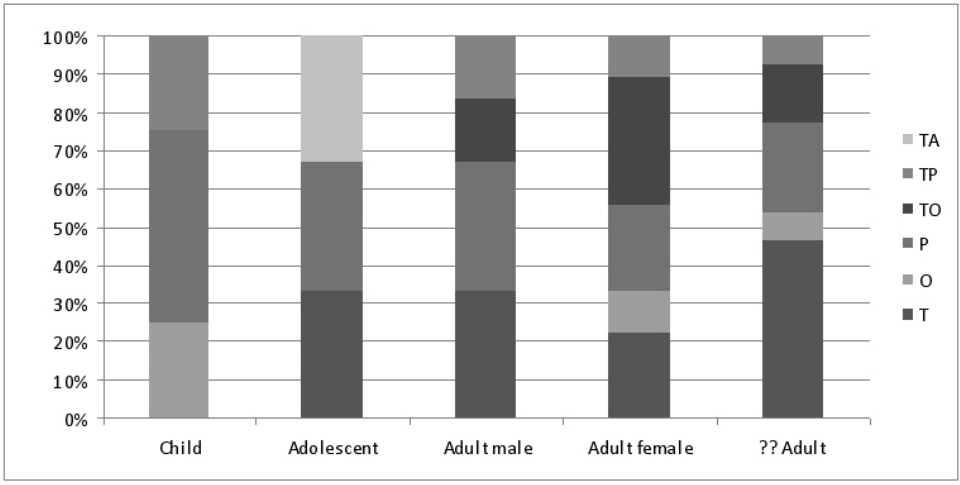

b

Fig. 4 – Object category types *vs*. age/gender categories, Cernica and Vărăşti.

There is a narrower range of object category types at Vărăşti in comparison with Cernica (1–4 compared to 1–9). As in Cernica, there is a contrast at Vărăşti between the number of object categories in children's and adolescents' graves (one or two categories only) and those in adults' graves (one – three in adult males and

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females; one – four in non-gendered adults) (Table 7). This suggests that the more differentiated grave assemblages were created for adults, for whom a variety of objects presenced a more extensive social network than those developed for children and adolescents.

A comparison of the two cemeteries shows a similar pattern of category type distribution up to four types (Fig. 5). However, a complex social network is indicated for the newly-dead in a relatively small percentage of graves at Cernica (n = 7, or 6%), with up to nine category types represented. This indicates, if not another stratum of persons at Cernica, then at least a group of persons whose different enchained relations during life were emphasised in death by the surviving mourners.

The most detailed picture available comes from an investigation of the object categories themselves in relation to the age/gender categories – the central analysis for understanding the relationship between categories of people and things in the mortuary domain (Tables 6–7). The Cernica picture (Table 6) is complex, with no neat division into female identities marked by ornaments and male identities defined by working tools. There is an relatively even spread of object categories across the range of age/sex categories, indicating an overlapping strategy of categorisation at Cernica. There are only four object categories, from a total of 27, found exclusively with one age/sex category: a bone needle is found in a child's grave, a flat shell bead is found in one adult male grave and a pebble burnisher and a whole vessel in different adult female graves. These object categories provide primary identity markers for these age/sex categories. Less clear-cut are the five object categories found with two age/sex categories: antler pendants in an adolescent and an adult male grave, animal bone offerings in both adult male and female graves, horn tools and *Ostrea* shells found in adult male graves and graves of unideintified age/sex, and bone plates found in the graves of an adult female and a unsexed adult.

At the opposite end of the scale, there are four Ornament object categories – bone rings, shell cylindrical and barrel beads and bilobates – which are associated with all of the five age/sex categories, indicating an identity at higher than the age/sex level, perhaps relating to a lineage or indeed the whole community. Equally, there are three object categories from which only one age/sex category – children – is excluded: lithics, bone points and stone beads.

An interesting aspect of the Cernica object categories is the large number (12/27) associated only with adult graves. This comprises six tool categories, three Ornament categories, both Pottery categories and the animal bone group, and illustrates in detail how the social *persona* of newly-dead adults is enriched through material association. Nonetheless, there are several examples of interesting 'absences', in which specific object categories are **not** associated with particular adult age/sex categories. Thus, there are no examples of *Spondylus* / *Pectunculus* shell bracelets or complete vessels in adult male graves, while polished stone axes and *Ostrea* shells are excluded from Adult female graves. These negative associations may well have been important in marking gender-based differences in the mortuary domain.

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Table 6

No. of graves with Object categories in relation to age/gender categories, Cernica

Object categories	Child	Adolescent	Adult Male	Adult Female	?? Adult	??
TOOLS						
Lithics	0	1	8	7	5	0
Pebble burnisher	0	0	0	1	0	0
Polished stone axe	0	2	4	0	7	3
Polished stone chisel	0	0	2	1	4	1
Bone point	0	1	3	2	3	0
Bone needle	1	0	0	0	0	0
Bone spatula	0	0	1	1	2	0
Bone plate	0	0	0	1	1	0
Antler tool	0	0	1	1	1	0
Horn tool	0	0	1	0	0	1
ORNS						
Bone ring	1	1	2	3	5	0
Bone pendant	0	2	1	0	2	0
Antler pendant	0	1	0	1	0	0
Deer tooth pendant	0	1	1	4	0	1
Ostrea shell	0	0	1	0	0	1
Shell disc bead	0	0	1	3	1	0
Shell flat bead	0	0	1	0	0	0
Shell cylindrical bead	2	5	5	12	8	0
Shell barrel bead	1	2	1	5	3	1
Ostrea pendant	0	2	2	0	0	2
Shell bilobate	1	2	4	7	4	1
Shell trilobate	0	1	1	3	0	1
Shell bracelet	2	1	0	4	1	0
Stone bead	0	2	4	5	1	1
Copper bead	0	1	0	1	1	0
POTTERY						
Whole vessel	0	0	0	2	0	0
Sherds	0	0	3	2	2	1
ANIMAL BONE	0	0	4	1	0	0

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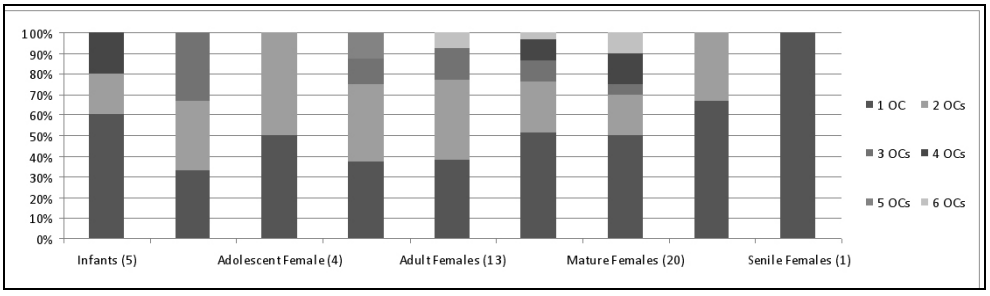

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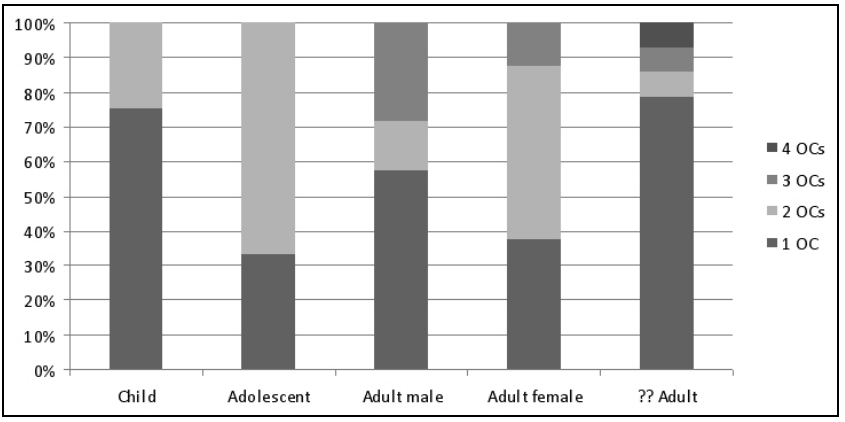

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Fig. 5 – (a) Cernica, (b) Vărăşti.

The confrontation of object categories and age/gender categories provides some stimulating ideas of the use of material culture at Vărăşti (Table 7). Of the 12 object categories, only three – all ornaments – have exclusive associations with a single age/gender category: *Unio* shells with an adult female, amber with an adult male and *Dentalium* ornaments with a non-gendered adult. However, each of these exclusive associations depend on the occurrence of such ornaments in a single grave! While this finding is partly an indication of small sample size, it also suggests a lack of emphasis on individualisation of age/sex categories, perhaps a sign of the greater importance of collective identities. A further four object categories are associated with only two age/gender categories: bone tools with adolescents and adult males; stone beads and copper ornaments with adult females and non-gendered adults; and ochre with adult males and non-gendered adults. These exclusive and binary associations help us to build up a picture of the connections upon which different age/gender groups relied in their everyday social practices. There is a single chronologically distinctive marker – that of ochre. This was preferentially sprinkled upon four skeletons in graves dating to the Boian – Gumelnița transition – potentially the oldest group of graves in the whole cemetery[37] – but never used in the large number of slightly later Gumelnița graves.

[37] Comşa 1995, 190–191.

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Conversely, the least exclusive object categories – lithics and sherds – were found with all five age/gender categories, while the fired clay 'lamp' was found in association with all age/gender categories except that of children. Indeed, the only tool found in children's graves was a lithic object, while the only ornaments found in children's graves were made of gold – the tube and the anthropomorphic pendant found in Grave 100. While sherds were found in association with one adolescent grave, it should be noted that these sherds were found in the fill of the grave, not next to the body. Interestingly, the only kind of pottery found in adult female graves consisted of groups of sherds.

A comparison of object categories associated with the two principal modes of burials – extended (Dudeşti) and crouched (Early Boian) – shows the association of not a single object category with only crouched burials and the continuation of about half of the object categories – four Tool categories, eight Ornament categories and both Pottery categories – into the later phase. This thinning-out of the associational matrix is not surprising in view of the much reduced number of Early Boian graves.

Table 7

No. of graves with object categories in relation to age/gender categories, Vărăşti

Object categories	Child	Adolescent	Adult Male	Adult Female	?? Adult	??
TOOLS						
Lithics	X	X	X	X	X	X
Bone tool		X	X			
FC 'lamp'		X	X	X	X	
ORNAMENTS						
Unio				X		
Dentalium					X	
Stone bead				X	X	
Amber			X			
Copper				X	X	
Gold	X			X	X	
POTTERY						
Whole vessel	X		X		X	
Sherds	X	X	X	X	X	
Ochre			X		X	

Comparison of the results from Cernica and Vărăşti shows an almost complete difference in the pattern of associations between object categories and age/sex categories. This is particularly marked for object categories associated with only one or two age/sex categories – the core identity creators in each cemetery – but is also true for more widely-distributed object categories. This important result indicates that the strategies for the creation and maintenance of social identities in the two cemeteries have changed dramatically from the time of Cernica to the late Boian phase.

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Table 8

Placing of grave goods, Cernica

Object category	Head	Neck	Torso	Ribs	Shoulder	Arms	Hands	Next to Body	Pelvic area	Legs
TOOLS										
Lithics	XX	–	XX	X	XX	XX	XX	XX	–	XX
Pebble burnisher										
Polished stone axe	X	–	–	–	–	X	XX	XXX	–	XX
Polished stone chisel	X	–	X	–	–	X	XX	–	X	XX
Bone point	X	–	X	–	XX	X	X	X	–	–
Bone spatula	–	–	–	–	–	X	–	XX	–	–
Bone plate	–	–	–	–	X	–	–	XX	–	–
Antler tool	X	–	–	–	XX	–	–	–	–	–
Horn tool	–	–	X	–	–	–	–	X	–	–
ORNS										
Bone ring	–	–	–	–	XX	–	XXX	–	–	–
Bone pendant	–	–	–	X	XX	X	–	–	–	–
Antler pendant	–	–	–	–	–	X	–	–	–	X
Deer tooth pendant	XX	XX	–	–	–	–	–	X	–	–
Ostrea shell	–	–	X	–	–	X	–	–	–	–
Shell disc bead	XX	–	–	–	X	–	–	X	–	–
Shell flat bead	–	–	–	–	–	–	–	–	X	–
Shell cylindrical	XXX	XXX	–	–	XX	X	XX	XX	X	–

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bead										
Shell barrel bead	XX	XX	–	–	–	–	–	XX	–	–
Ostrea pendant	–	–	X	–	X	–	–	X	X	–
Shell bilobate	XXX	XXX	–	–	–	–	–	X	X	–
Shell trilobate	XX	XX	–	–	–	–	–	–	–	–
Shell bracelet	–	–	–	–	X	XXX	–	–	–	–
Stone bead	XX	XXX	–	X	XX	–	–	–	–	–
Copper bead	XX	–	–	–	–	–	–	–	–	–
POTTERY										
Whole vessels	X	–	–	–	–	X	X	–	–	–
Sherds	X	–	X	–	X	X	–	X		X
ANIMAL BONES	X	–	X	–	–	–	–	X	–	XX

Table 9

Spearman rank order analysis of frequency of commonest object categories and the frequency of their placings, Cernica

Rank order of frequency of object categories	Object category	Rank order of frequency of placings	Object category	Concentrations (related to order of placings)
1	Cylindrical shell beads	1	Chipped stone	Shoulders & legs
2	Chipped stone	2	Cylindrical shell beads	Head & neck
3=	Polished stone axe	3=	Polished stone chisel	–
3=	Bilobate	3=	Bone point	Shoulder
5	Stone beads	3=	Sherds	Legs

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6	Barrel beads	6=	Stone beads	Head & neck
7	Bone ring	6=	Polished stone axe	Next to body
8=	Polished stone chisel	8	Bilobate	Head & neck
8=	Bone point	9	Barrel beads	Head & neck
10	Sherds	10	Bone ring	Hands

Table 10

Placing of grave goods, Vărăşti

Object category	Head	Neck	Torso	Ribs	Shoulder	Arms	Hands	Back	Legs	Feet
TOOLS										
Lithics	XXXX				XX	XX				XX
Bone tool									X	X
FC 'lamp'	XX	X		X	XX	XX	XXXX			
ORNAMENTS										
Unio						X				
Dentalium	X									
Amber	X									
Stone beads	X									
Copper	X		X			X				
Gold	X	XX				X				
POTTERY										
Whole vessel	XX		X			X		X	XX	XXX
Sherds	XXXX		XX	XX				X	XX	
Ochre	XX			X						

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Grave good locations

The well-recorded placing of grave goods in the graves at Cernica offers a rich picture of cultural symbolism relating body parts to the object categories (Table 8). Of the ten locations favoured with the placing of grave goods, the head attracted the greatest number of object categories (n = 15), closely followed by the area next to the body (14), the shoulders and the arms (12 each). There are two extremes of grave goods placement – generalised placement, as in the case of the two commonest object categories – cylindrical shell beads and chipped stone – found in the widest range of places, and specialised placement, as with bone rings, found in only two places–hands (as Comşa & Cantacuzino observed (2001:172)) and shoulders.

In order to discover the effects of sample size upon the number of locations used to place grave goods, a Spearman rank correlation test was run between the order of frequencies of object categories and their grave locations (data in Tables 4 & 8). A significant difference between the two rank orders would indicate that part of the variations in grave goods location would have been caused by a cultural variable rather than the frequency of object categories. In fact, the test gave a Student's *t* test score of 5.5 at 8 degrees of freedom, indicating no significant difference in the orders (Table 9). This means that the frequency of object categories was the main influence on the number of grave locations.

It is possible to construct a scale of specialised to generalised grave goods in terms of the number of locations used (specialised having a low, generalised having a high number of locations). On this scale, bilobates, polished stone axes and whole vessels were more specialised, polished stone chisels, bone points, sherds and animal bone offerings more generalised.

There is a general contrast in the placing of tools and ornaments, with the former placed more on the shoulder or next to the body and the latter on the upper body, neck and head. Some rarer object categories are deposited in only one or two places: bone spatulae on the arms or next to the body and bone plates on the shoulder, or next to the body.

The contrast in placings between whole vessels and sherds is replicated with antler objects – antler tools on the shoulder and, rarely, the head, antler pendants on the extremities (arms and legs). There is a general paucity of finds near the pelvic area, perhaps a sign that belt ornaments were not common.

There is a suggestive pattern concerning right- and left-sidedness at Cernica. Some object categories are found only on the right side (bone spatulae, antler tools and pendants, bone pendants and stone beads), with only one on the left (disc beads). The majority are found on both sides, with a majority on the right (bone rings, cylindrical beads, shell bracelets and sherds), equal values (polished stone axe, *Ostrea* shells and pendants and whole vessels) or a majority on the left (lithics,

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polished stone chisels and bone points). This pattern suggests a predominance of ornaments over tools on the right side of the body, while more tools than ornaments are placed on the left side.

The excellent detail of Comşa's Vărăşti report allows the identification of a complex pattern of the placement of grave goods in the 36 furnished graves at Vărăşti (Table 10). Ten different parts of the body are emphasised with one or more object category. The head is most strongly emphasised, with 10 different object categories placed there, with the arms and hands next in order. Conversely, the greatest variety of placings is found with the fired clay lamps and the whole vessels – each found in six different body zones, with sherds found in five positions.

Certain concentrations of object categories stand out in the different body zones: lithics are found in four locations but most frequently near or on the head, while fired clay lamps cluster near the hands – perhaps ready for lighting – as well as in five other locations, whole vessels near the feet in preference to five other zones, gold ornaments near the neck (+ 2 other zones) and ochre on the head (+ 1 other location). Conversely, there are some body zones associated exclusively with certain object categories: the ribs with fired clay objects and the back with whole pots and sherds. Equally, all ornaments were placed in the upper half of the body, while all bone tools were placed near the legs or feet.

One may expect some blurring of any patterns of right- or left-sidedness because of the smaller sample size but there is an overall predominance of the right side, with all of the ornaments except one *Unio* shell and all of the pottery placed on this side and more right – than left-sided placings of the two tools with information – lithics and fired clay lamps.

A comparison between the placing of the grave goods at Cernica and Vărăşti shows some communality in the emphasis on the head and the arms for placing grave goods, although the hands were more often selected at Vărăşti in contrast to the shoulder at Cernica. Unlike in Cernica, the greater importance of pottery at Vărăşti is reflected in its generalised placement; the only Cernica object category with a generalised placing also found at Vărăşti is lithics. The most obvious parallel between the two cemeteries is the concentration of ornaments in the upper body, neck and head; the emphasis on the shoulders and the lower body for tools at Cernica is only partially repeated at Vărăşti. Finally, both cemeteries show a marked preference for placing ornaments on the right side, although the Vărăşti choice of right-sided placings for tools was not found at Cernica.

Comparisons and discussion

The analysis of the cemeteries of Cernica and Vărăşti has involved tackling between two contrasting positions – the decisions made at the time for each new

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burial – what the mourners thought, felt and did at the time of burial – and the post-hoc, a historical analysis of the sum total of trends found at the end of cemetery use – the archaeologist's view of patterns and hence processes. Since the biases introduced by each position have been long discussed in mortuary literature[38], the arguments will not be repeated for the value of the conjoint use of both approaches. We may conceptualise them as a local narrative for each burial and meta-narratives of the whole cemetery. To these perspectives has been added a third element of post-depositional events and processes – what has happened to the burials after the end of the use of the cemetery. While the small number of disturbed graves at Vărăşti have simply been eliminated from the analysis, the picture at Cernica is more complicated, since much information has been recovered even from graves where less than half of the skeleton remains. The only graves eliminated from the Cernica analyses were those where the disturbance was so great that the mode of burial could not be identified. The possibility should be noted that there were originally more grave goods than those recovered from the less severely disturbed graves and that they had been destroyed at the time of the (often Medieval) disturbance.

Any comparison between the Cernica and Vărăşti cemeteries must also take into account the biggest discrepancy of all the meta-narratives – that of size, with its attendant consequences for time, space and artifact variability. While it is probable that all or a high proportion of the persons buried at Vărăşti also lived on the adjacent *tell* in perhaps 25 or 30 houses, the Cernica cemetery drew its newly-dead from an unknown number of presumably local homesteads – perhaps as many as 25 or 30 – with their extended families. The greater social and spatial distance between the Dudeşti homesteads in comparison with that between the Vărăşti *tell* houses is likely to have led to the deposition of a wider variety of grave goods placed in different kinds of burials, if only because homestead independence could have been a strong motivation towards distinctive material identities. If, in addition, the Cernica cemetery was in use over a (much) longer period than Vărăşti, this could also have increased the total variability of grave goods and the ways in which the goods were placed because of the slow but cumulative replacement of items by other, similar ones. This notion is supported by the far higher number of object categories found at Cernica (27 compared to 12 at Vărăşti) and the concomitant increase in the number of combinations of object category types (11 compared to six at Vărăşti). It is also conceivable that co-ordination of the structural integrity of the larger cemetery from a large group of homesteads required an élite group (? family) whose status was materialised in a high range of object categories.

[38] Binford 1971; O'Shea 1984; Chapman 2000.

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The analytical focus has been on the categories created for both persons and objects in relation to each other and to other aspects of the mortuary practices. The overall conclusion for both cemeteries is straightforward: there were very few – perhaps surprisingly few – examples of mortuary practices or grave goods exclusively associated with a single age/sex category. These measures of the categorisation of gender division are far weaker here than in cemeteries such as Tiszapolgár-Basatanya[39], or at the Varna cemetery[40]. There does seem to be a tendency at Cernica for emphasis on communal identities just as much as on specific persons and their identities. These variations were perhaps related to wider trends in personhood and also differences in sedentism in the two periods found here (302–3).

This result indicates that both populations made widespread use of cross-cutting modes of categorisation – the combination of associated practices and grave goods for age/sex categories rather than a single form of grave good or a single aspect of burial rite. This mode of categorisation was widely used in later Balkan prehistory, not least in the Bulgarian Copper Age[41] and indicates a way of coping with a complex social structure with much internal variation. The other principal mode of categorisation – the more hierachical binary categorisation using opposing forms of material culture – is not clearly identifiable in either cemetery. This has direct implications for the main framework utilised for the evaluation of the cemeteries – personhood.

The people buried in both cemeteries were linked into two long-term traditions of burial – extended and contracted inhumation. The predominance of extended inhumation at Cernica links the cemetery to antecedents in the Mesolithic of the Iron Gates gorge (*e.g.*, Vlasac[42]) as well as coeval cemeteries of the Hamangia group[43]. However, the presence of a group of contracted inhumations, dated to the Early Boian phase but also related to the first farmers of the Lower Danube Basin, the Criş settlers, indicates a cultural link to the Vărăşti cemetery, with its dominant mode of contracted inhumations and a minimal number of extended inhumations. In each cemetery, personhood and community identity was partly based on the choice of which burial tradition and which coeval links to draw upon. The long-term sequence in the Lower Danube Basin was a series of three responses negating the existing tradition – contracted inhumation in the Criş as a contrast to the Late Mesolithic extended tradition; extended inhumation in the Dudeşti as a contrast to the Criş tradition; contracted inhumation in contrast to the extended inhumations of Dudeşti / Hamangia tradition. A similar way of

[39] Chapman 2000.
[40] Chapman *et alii*, 2006.
[41] Chapman 2004; Chapman & Gaydarska, 2006, Chapter 2.
[42] Srejović & Letica, 1978.
[43] Berciu 1966; Todorova 2002.

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establishing current identity in opposition to previous practice was found in the long-term settlement and mortuary sequence in Eastern Hungary[44].

It is widely accepted that only a small percentage of prehistoric persons were actually accorded formal mortuary treatment in a form which archaeologists could discover[45]. Thus, the choice to bury a higher proportion of adults at Cernica and a higher proportion of children at Vărăşti was part of a large group of local narratives for each burial, comprising a meta-narrative of the living and the dead in which greater emphasis was laid on adults at Cernica and children at Vărăşti. The paucity of children's burials at Cernica may mean that the children were buried in, or near their own homesteads but the key point remains that, in terms of personhood, the preference for burial of adults at Cernica implies their greater importance in a large lineage cemetery. The preference for children at Vărăşti indicates a different form of personhood, with greater significance for the childhood stage than was shown at Cernica.

The decision to provide, or not provide, grave goods for any specific newly-dead was a further example of local narratives about each burial which create a cumulative meta-narrative. Thus, the story about the travels of the only piece of amber found at Vărăşti would have included an epic dimension reflecting the distance travelled, and the number of owners, from its source in the Adriatic zone across the Dinaric Alps into the Middle Danube Basin, through the Iron Gates gorge and down the Danube to the cemetery. Or even further if the source is Baltic! This story would have been more dramatic than the tale told of the sole *Unio* shell at Vărăşti, brought no more than 25 km from the banks of the Danube. Each grave offering in each grave told a story about that person, on which a final summary of that person's personhood (cf. Binford's (1971) 'social persona') was based. Which grave offerings were made, if any, depended upon many aspects of social practice, including the availability to mourners of what was deemed to be "appropriate" grave goods; the issue of whether to keep a particularly fine object for a future exchange rather than "losing" it for ever in a grave deposit (cf. Weiner's (1992) "keeping-while-giving"); and, additionally, the contribution that this object would make to the local narrative of this particular burial.

The similarity between the two cemeteries in terms of the frequency of graves with grave goods has been demonstrated above to have been ca. one in three. At the level of local narratives, this indicates the selection by the families of a modest, if not minimalist, narrative, whatever the actual merits and significance of the newly-dead in the local community. For a cultural meta-narrative, this is a strange result for those believing in 'social evolution' in the Balkan prehistoric sequence, for surely the "expectations" of the social classification would be that the

[44] Chapman 1994.
[45] Chapman 1983; O'Shea 1984; Parker Pearson 1999.

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'mature farmers' of the Dudeşti period would have a less varied and distinctive cemetery than those of the 'Climax Copper Age'. However, the social practices played out in hundreds of different communities did not necessarily produce such cumulative, aggregated results, leaving us to accept that the meta-narratives of these two cemeteries proclaims a large "NO" to social evolutionary principles.

The "reflectionist" view of mortuary customs – that mortuary structure was a direct reflection of the social structure of living communities – was challenged by Gordon Childe (1945), through his comments that dramatic sumptuary behaviour was a sign of dramatic changes in social structure, while stability in burial practices indicated a **lack** of social change – a welcome stability. In like vein, the main differences between the two cemeteries could be explained at the level of meta-narrative by the marked social changes taking place at the time of the use of Cernica, in contrast to the more stable *habitus* of the time when Vărăşti was in use (303–4).

Another key context for the development of both personhood and community relations was the locus of each cemetery in their coeval exchange networks. The Lower Danube valley has been recognised as one of the principal exchange routes in South East Europe, from Childe (1929) onwards. Important exotics passing along the Lower Danube in the Neolithic included *Spondylus*, marble, copper and flint, while there is an assumption that even more materials were exchanged there in the Copper Age (including gold, more *Spondylus* and steppe-derived maceheads). The expectation is that the dispersed homesteads of the Cernica network and the *tells* of the Vărăşti network would have had differential success in procuring key exotics. Not all homesteads in a network would have had direct access to enchained objects such as shell ornaments, or polished stone axes; this advantageous position could have been created through spatial or status difference or through actualised but variable productive potential. In contrast, most *tells* in the lower Danube valley would have had direct access to exchange networks carrying exotic objects, with their own acquired store of prestige goods for offer in exchange (*e.g.*, Gumelniţa *tell* [46]).

However, the impression gained from the two cemeteries is the range of exotic materials is broadly similar – lithics, marble and other semi-precious stone, shell ornaments and copper; moreover, over half of the object categories at each cemetery were formed from exotic materials. The main difference is that the quantities of exotic things deposited at Cernica far outnumbered those found in Vărăşti, indicating the Cernica "mature farming" group's much more dynamic participation in exchange networks in comparison with the less intensive exchange practices of the "Climax Copper Age" Vărăşti people.

[46] Dumitrescu 1966.

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A lack of characterisation analysis of the copper, gold, lithic and stone finds prevents a clear statement of the source of most exotic grave goods from either cemetery. However, the North East Bulgarian flint and both Black Sea and Aegean sources of shell ornaments gives a first impression of the range of the Cernica network, while the Adriatic or Baltic Sea, as well as Black or Aegean Sea sources for ornaments shows the scope of the Vărăşti network. It must be admitted, however, that the absence of "rich" grave goods in the Vărăşti cemetery cannot rule out their possible deposition on the Vărăşti *tell*, as with the concentration of gold pendants on the Sultana *tell*[47]. But this notion does not alter the fact that the Cernica groups made much more active use than the Vărăşti community of the mortuary domain to narrate tales of exotic contacts and élite persons. To this extent, personhood in both cemeteries was partly created through narratives of the exotic, but it was more important at Cernica than in Vărăşti.

Anorther key aspect of the creation of personhood concerns gender. While there are many detailed differences in the material culture utilised at the two cemeteries and the ways in which it was used, there are some communalities at the meta-narrative level which show signs of structural similarities. Thus, adult males show a balance of tool combinations and ornament combinations at both cemeteries, while adult female graves show a preponderance of ornament combinations. Moreover, the tendency to place ornaments in the upper body, neck or head zones was found in both cemeteries, as was the strong patterning of right-side placement of ornaments at both sites. A third shared feature was the importance of head-dresses, and the unimportance of belt-decoration, in adult costumes in both cemeteries. However, it is intriguing that only two of the 19 ornament categories in use at the two cemeteries were utilised at both Cernica and Vărăşti – stone and copper beads. Other non-gender-related differences include the mutually exclusive use of shell species for ornaments, the importance of a variety of bead forms, shell bracelets and polished stone axes at Cernica and the significance of pottery and powdered ochre at Vărăşti. While these material divergences carried messages at the local narrative level, the cumulative story is of contrasting community identities, where the Vărăşti group is making choices over grave goods to distance themselves from the earlier, Cernica group.

Much has been made of the impact of personhood on the similarities and differences in the local narratives and the meta-narratives found at the two cemeteries. But how does personhood fit into the wider context of socio-economic change in the 5th millennium BC in the Balkans? Among the range of important aspects of personhood in the Balkan Neolithic and Copper Age[48], the emergence of new kinds of person has created a dynamic framework for this topic. The basic notion is that, in certain key periods of change, such as the development of agriculture, the utilisation of novel resources, such as domestic plants and animals,

[47] Hălcescu 1995.
[48] Chapman & Gaydarska, 2006.

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polished stone and pottery, creates persons with special embodied skills requisite to make use of these materials (*e.g*, potters, shepherds, new kinds of flint knappers, cowboys, etc.). Since the development of all of these embodied skills cannot occur in each person[49], their repetitive occurrence in certain individuals in effect creates a new kind of person. While the evidence for the adoption of a complete "Neolithic" package at the onset of the Neolithic is plentiful for Greece[50], or Bulgaria[51], the process of sedentism and agricultural intensification may have been more drawn-out in the Lower Danube valley. In Eugen Comşa's[52] book on Boian communities, the key changes in house form, *tell* formation and sedentary agriculture were seen as synchronous and dated to the Boian II – III transition. However, in a joint Anglo-Romanian project, Bailey *et alii* (2002) suggest that sedentism and *tell* formation appeared rather later in the Teleorman valley, viz. in the Gumelniţa period. Thus, the time when Cernica was used was a time of economic and social change, in which new identities – both communal and personal – required materialisation. Thus, the Cernica cemetery as an entity defined a new stage of lineage community not materialised before in the Lower Danube Basin. Cernica is thus reminiscent of the situation in South Scandinavia in the Late Mesolithic, when a sedentary mortuary population defined by Mesolithic cemeteries such as Skateholm and Vedbaek can be dated before the emergence of year-round sedentary living populations, as defined archaeo-zoologically, in the Early Neolithic[53]. Conversely, at Vărăşti, the formation of the *tell* was consistent with more established kinds of dwelling practices, which were reinforced by the creation of the adjacent cemetery.

These changes were both embodied internally as well as materialised externally, in the categories of new persons who emerged in this time of change. The age and gender differentiation may not have been strong but there were indications at Cernica of a big increase in the object categories associated with adult burials – of those individuals closer to the ritualised core of the lineage ancestors. This key element of changing identities through the life-course was, conversely, absent at Vărăşti. The emphasis at Cernica on differences in stages of the life-course may well be related to the importance of adult participation in lineage practices but, at the same time, this points to the way in which personhood is developed in the Dudeşti period. The implications at Vărăşti are that personhood was based upon more stable age/gender characteristics, as has been proposed for Karanovo VI forms of personhood[54].

This interpretation would be nested within a wider change postulated for the Climax Copper Age of the East Balkans based upon the first 14-C dates from the

[49] Chapman&Gayadarska 2011.
[50] Perlès 2001.
[51] E.g., Kreuz *et alii*, 2005; Ninov 2002.
[52] Comşa 1974, 186–191, but whose manuscript was complete in 1958.
[53] Rowley-Conwy 1998.
[54] Chapman & Gaydarska, 2006.

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Varna cemetery[55]. Without 14-C dates from Vărăşti, it is not yet possible to relate the cemetery in time to the Varna cemetery. But the new dates place Varna at 4750–4450 BC – at the very beginning of the Late Copper Age, coeval with the Middle Copper Age in other parts of Bulgaria[56]. There are suggestions from the 14 dates run so far that the greatest mortuary climax at Varna can be dated to the beginning of the period, with more stable, less diverse mortuary accumulations later on. It is tempting to suggest that Vărăşti belongs to this period of post-Varna stability – hence the lack of startling mortuary diversification, even in a "Climax Copper Age" cemetery.

Conclusions

In this tale of two cemeteries, the proposition has been advanced that there were two principal and equally important factors explaining the differences between Cernica and Vărăşti – the differences in the landscape and settlement network contexts of the sites and the discrepancy in the size of the sites. Cernica is one of a number of early cemeteries in the Neolithic of South East Europe and formed the permanent ancestral site for a local network of shorter-lived homesteads. Homestead families and their friends and relatives would come to Cernica to bury their newly-dead, making a statement about their membership of the lineage as much as signalling the social persona of the deceased. The Cernica network made use of their contacts to the wider exchange network through the procurement and mortuary deposition of many exotic materials, including Aegean and Black Sea molluscs, North East Bulgarian flint and copper, marble, greenstone and other lithics from as yet unidentified sources. These exotics were used not only to demonstrate the far-flung contacts of the lineage but also to materialise the enchained relations and identities of specific persons buried at Cernica. The size of the cemetery, as much as the variability of the modes of burial and grave goods, are a reflection of the number of homesteads using the place for burial, as well as the length of its period of use.

As a smaller cemetery in close proximity to a Climax Copper Age *tell*, Vărăşti was grounded in an ancestral settlement form, where people continued to live where their ancestors had lived. This dual form of ancestral enchainment meant that the cemetery was not the only place where people could create and maintain ancestral relations nor underline the importance of the lineage; indeed, in other cases of a pairing of *tell* and cemetery in North East Bulgaria, there were signs of social tension between potentially competing strategies over relations with

[55] Higham *et alii*, 2007; Chapman *et alii*, 2006.
[56] Hansen & Toderaş 2012.

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the ancestors[57]. However, the size of the cemetery and the smaller range of variability in grave goods and modes of burial, in comparison with Cernica, were probably linked to the number of houses on the *tell*, where presumably the majority of those buried in the cemetery had once lived. While exotic objects were important at Vărăşti, betokening network links as far as the Adriatic, their frequency was much lower than at Cernica, with a consequent lack of graves with many object categories, as found at Cernica. The expectation that a Climax Copper Age cemetery should be "richer" than one from the mature farming period is based on unhelpful social evolutionary assumptions and, in the case of Vărăşti, turns out to be quite false. Just as the 5-m-high *tell* betokened a sense of dwelling stability, so the cemetery was a guardian of the *status quo* rather than, as at Cernica, the harbinger of change.

A detailed comparison of the two cemeteries, which were probably separated by 10 or at most 15 human generations, shows a series of similarities and differences that allow an impression of the extent of structural continuity in the 5th millennium BC. The most striking similarity is the rarity of object categories and burial practices which are exclusively associated with a single age/sex category of person. This result indicates that cross-cutting modes of categorisation predominated at both cemeteries. It is also very striking that a relatively high proportion – 2/3 – of graves in each cemetery lacks grave goods. These deliberate choices by generations of mourners at each cemetery suggest that lineage membership rather than personal identity was important at many funeral ceremonies at Cernica, while identities connected to *tell*-dwelling constituted an alternative to mortuary-based identities at Vărăşti. Another significant structural similarity between the two sites is the gendered difference in attitude towards tools (more prevalent for adult males) and ornaments (more common for adult females), further emphasised by the placing of these object category types not only in different zones of the body but on different sides (right more often for ornaments, left more often for tools). These similarities may well indicate long-term aspects of the mortuary *habitus* that are more widespread throughout Muntenia and throughout the 5th millennium BC.

However, structural differences between the two cemeteries are also frequent, not least in the major increase in grave good diversification that comes in adult graves in comparison to children's and adolescents' graves at Cernica – a trend that is missing at Vărăşti. This difference points to two distinct growth trajectories for personhood, as well as the importance of adult roles in lineage practices.

In places where the significance of materiality can hardly be doubted, the lack of overlap in grave goods categories in the two cemeteries is extraordinary. This can be seen at a general level, where only two out of the 19 ornament

[57] Chapman 1996.

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categories are found in both sites, or in many detailed examples, such as the use of ornaments of mutually exclusive molluscan species. Other major differences consist of the minimal significance of pottery at Cernica, and the absence of polished stone axes and *Spondylus* ornaments at Vărăşti. The former may be related to the lack of importance of containers in the Dudeşti object assemblage[58], while the absence of axes and shell rings marks a deliberate decision not to form enchained relations with the dead with these items, which were surely present on the *tell*.

Cernica and Vărăşti – two cemeteries in the Lower Danube valley where communities and persons performed related but different mortuary practices in pursuit of different goals, making active use of a wide range of material culture but in often contrasting ways. If time-travel were permitted between the Middle Neolithic and the Copper Age, would a member of the Cernica community recognise and understand a Vărăşti funeral? Or would that person be like the tribal member reporting on his visit to a neighbouring village: "And in their long-house, they placed the ancestral skulls on the left hand side of the house. I mean – can you believe it – on the left side??". Would categories of persons and things be recognisable across the two ends of the 5th millennium BC?

It is, I suppose, almost inevitable that we underestimate the significance of what appear to be miniscule cultural differences between settlements or graves. It is to the enormous credit of Eugen Comşa that he paid most careful attention to cultural differences and did his utmost to understand its meanings. It is in the spirit of the understanding of cultural difference(s) that I dedicate this essay to Mr. Comşa.

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[58] But NB Nica 1976.

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RESEARCH ON THE ENEOLITHIC *TELL* OF VLĂDICEASCA, CĂLĂRAŞI COUNTY – ROMANIA*

CERCETĂRI ÎN *TELL*-UL ENEOLITIC DE LA VLĂDICEASCA, JUDEŢUL CĂLĂRAŞI – ROMÂNIA

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Cuvinte-cheie: Neolitic, culturile Boian şi Gumelnița, Vlădiceasca, *tell.*
Rezumat: Autorul prezintă principalele date preliminare depre rezultatele cercetărilor întreprinse în *tell*-ul eneolitic de la Vlădiceasca, comuna Valea Argovei, jud. Călăraşi. Situl arheologic cercetat se afla pe un ostrov din mijlocul lacului Frăsinet, iar prin construirea unui baraj pe râul Mostiştea a fost acoperit de ape. Straturile de depuneri arheologice, care aveau grosimea cuprinsă între 3,75 şi 5 m aparțin culturilor Boian, Gumelnița şi La Tène-ului geto-dacic. În timpul săpăturilor au fost studiate mai multe complexe arheologice de locuire, care au aparținut purtătorilor culturilor Boian şi Gumelnița. Au fost ilustrate cele mai reprezentative materiale recoltate.

Key words: Neolithic, Boian and Gumelnița cultures, Vladiceasca, *tell.*
Abstract: The author presents preliminary data regarding the research undertaken at the Eneolithic *tell* at Vlădiceasca, Valea Argovei com., Călăraşi County. The site was situated on an island in the middle of the Frăsinet lake and, following contruction of a dam across the Mostiştea river, it was flooded. The archaeological layers, which were between 3.75 and 5 m thick, belonged to the Boian and Gumelnița cultures and the Getic-Dacian La Téne. During the excavations, several archaeological habitation complexes were investigated, belonging to the Boian and Gumelnița cultures. The most representative finds are illustrated in this paper.

The Vlădiceasca *tell* is represented in the specialist literature by the published results of the rescue excavations undertaken there by George Trohani[1].

* The present paper, with some recent changes, was presented on March 26, 1982, at the 16th National Session of Reports, organized at Vaslui. The manuscript was given for publishing in the volume intitled *Materials and Archaeological Researches*. The 16th anuual session of reports, Vaslui 1982, was corrected by Eugen Comşa, who chaired the respective section of the session and Mircea Matei, declaring it good for publishing. Despite that, the respective paper was excluded from the volume by the representative of the National Commission of Archaeology, who was usually gathering the reports. The manuscript, considered to be lost, was recovered with a lot of difficulties after two years, from the closet of the library belonging to the director of the Museum of Bucharest, the place where the editorial committee had worked.

[1] Trohani 1975, 151–175; 1976, 86–134; 1987, 53–62.

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Before the construction of the dam and creation of the Frăsinet lake for irrigation, in the middle of the lake, immediately to the south of Vlădiceasca village, there were two neigbouring islands, called by the locals "Gherghelăul Mare" and "Gherghelăul Mic". During the surveys carried out on the Mostiştea Valley, in 1971–1972, two *tells* were identified on the aforementioned islands[2], which, as a result of the irrigation project of the area, were subsequently covered by water. After investigations on the island of Gherghelăul Mic[3], the attention of those who had initiated the excavations was then focused upon the *tell* on the Gherghelăul Mare island. Soundings made in 1972 were continued, from 1973, by extended systematic excavations, conducted by George Trohani, who had investigated the upper cultural layer, belonging to the Getic–Dacian population[4]. At the same time, Barbu Ionescu continued his soundings in the eastern side of the *tell*[5] and excavated an area of about 300 m^2 in its southern part[6]. While the results of the research carried out in the upper cultural layer belonging to the Getic–Dacian civilisation were published after each archaeological campaign, the results of the investigations undertaken in the cultural layers belonging to the Eneolithic time have, unfortunately, remained unpublished.

Since by 1978 George Trohani had finished the research on the upper Getic layer, the excavations at the *tell* of Vlădiceasca were taken over by the present author. Because the excavation site was not properly organized and access to the *tell* was difficult for a distance of about 200 m when a muddy swamp had to be crossed, the campaign of that year was shorter and covered a limited area. The excavations were resumed in 1980 and continued until 1983, when the water level rose by 8 m and the *tell* was covered by the waters of the irrigation lake. Together, all five archaeological campaigns totalled 8 months. In order to further investigate the *tell*, the longitudinal sections were abandoned and the technique of large squares with 10 m a side separated by a 1 m baulk was adopted. In its turn, each square comprised other squares with 5 m a side. This is how 18 squares with 10×10 m sides were created, labelled with capital letters, from A1, A2, A3 to F1, F2, F3. Over an area of 1,800 m^2, the upper Eneolithic layer belonging to the Gumelnița

[2] Şerbănescu & Trohani, 1978, 17–42.

[3] In September 1972, a team, formed by Petre Roman (coordinator), Barbu Ionescu and Elena Tâmpeanu (students) dug a cassette of 30 sq m, deepened up to 1–1.20 metres. On that occasion, the La Tène layer could be investigated and a burial belonging to the period of migrations was found, in the Archive of the Museum of the Gumelnița Civilisation-Oltenița (further MCG).

[4] Trohani *op. cit*.

[5] In 1972, on the Gherghelăul Mare island, Barbu Ionescu had done six small soundings, which covered a surface of 100 sm, with a depth reaching up to 1–2.10 m, Archive MCG, *loc. cit*.

[6] Between 1973–1975 Barbu Ionescu dug into the southern part of the *tell* a surface of about 300 sm and made a longitudinal trench with a length of 54 m and a width of over 2, towards the eastern side of the *tell*, with a purpose of creating a profile upon which the stratigraphical observations could be done, cf. Barbu Ionescu, *Raport cu privire la cercetările arheologice efectuate pe şantierul Mostiştea în perioada 4 iunie–28 octombrie 1975*, in the ArchiveMCG, File 1976, page 2.

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Culture (phase B) was investigated, while over an area of 1,100 m^2 the lower layers of the Gumelniţa Culture were researched, reaching down to the layer of the Boian Culture. By means of a longitudinal section, crossing the *tell,* with a length of 65 m and a width of 2 m, the statigraphic succession could be followed. The thickness of the cultural layers from the Gherghelăul Mare *tell* varied between 3.75 and 5 m and its stratigraphy was as follows:

1. above a brown-yellowish horizon, without archaeological remains, which was represented by the prehistoric soil, there followed a deposit of yellow-greyish soil, discolored by small fragments of charcoal. This first habitation level belonged to the Boian Culture;
2. the following layer, of yellow-greyish earth, in the form of a lens, represented the second habitation stage of the Boian Culture;
3. the third habitation level belonging to the bearers of the Boian Culture was represented by a sandy soil of yellowish-brownish colour, without any archaeological complexes;
4. the fourth habitation level belonging to the bearers of the Boian culture consisted of the ruins of some burnt dwellings, whose thickness in the profile varied between 0.40 and 0.85 m. The pottery discovered in the dwellings belonged to the Vidra phase, Vărăşti stage of the Boian Culture. The total thickness of the Boian layer was 1.50–1.80 m;
5. the dwellings which belonged to the bearers of the Boian Culture, Vidra phase, were directly overlapped by a level of dwellings which belonged to the bearers of the Gumelniţa Culture, phase A1;
6. in its turn, the level of the Gumelniţa A1 dwellings was overlaid, by another level of the Gumelniţa Culture, phase A2;
7. the habitation level of the Gumelniţa A2 dwellings was overlaid by a layer of yellowish-grey, clayey soil, with a thickness of 0.70 m, interrupted from place to place by lenses of greyish-yellow earth, without representing a habitation level. In this level, there were no archaeological complexes, but it contained fragmentary archaeological materials. This level resulted from the demolition of some unburnt dwellings, levelling of the ground and isolation with soil brought from elsewhere.
8. the last Eneolithic deposit was represented by a brown, slightly cinder-like, clayey, granular loose soil, in which dwellings belonging to the Jilava–Gumelniţa B1 phase of the Gumelniţa culture were found;
9. this level was overlaid by a layer of brown-blackish, clayey, granular, with structural rounded elements, which a thickness of 0.50 m, which contained traces of Getic habitation;
10. the last deposit was an untilled, vegetal soil, with a thickness of 10 cm, in which materials of the Getic–Dacian La Téne were traced (Fig. 1).

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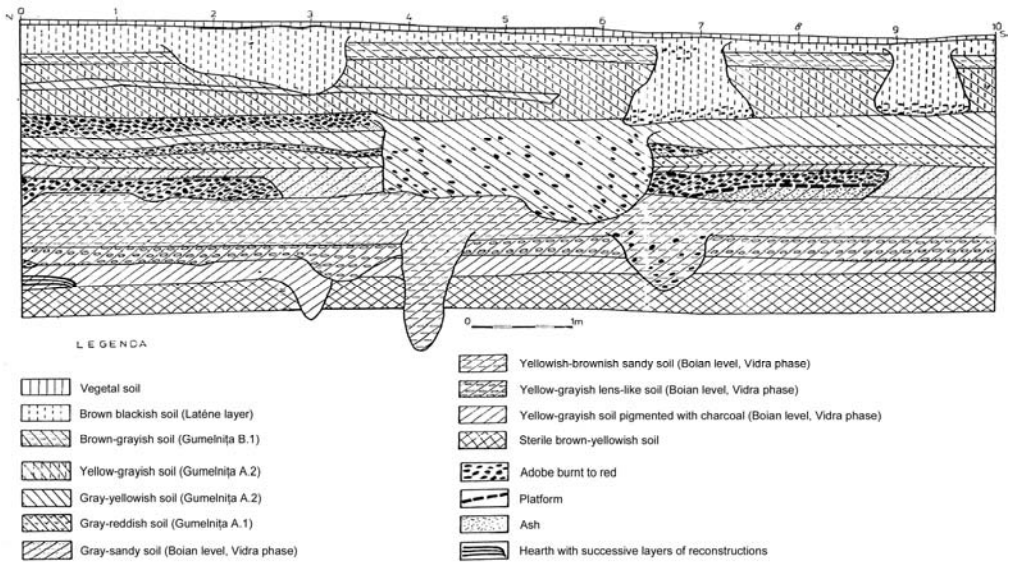

Fig. 1 – Vlădiceasca – "Gherghelăul Mare". Eastern profile of square F3.

The lower levels, which belonged to the Boian culture, as indicated by the scarce materials gathered from the trench, belonged to the early phase of the Vidra phase[7] (Figs. 5/6–7). In this section, in the first habitation levels of the Boian culture, several oval hearths were found, being raised by about 6–10 cm from the basic level and reconstructed several times. No dwelling was found but, in a sequence of the profile, a narrow stripe of burning could be identified, a sign that the edge of a seasonal above ground dwelling was intercepted. The dwellings of the 4th habitation level belonging to the bearers of the Boian culture were above ground ones, with large dimensions. From this level, eight dwellings were identified and partly investigated, of which three were cross-sectioned on their longitudinal axis, over a width of two metres in our section. The dwellings had their long axes north–south. The length of the investigated dwellings were: dwelling no. 1 measured 11.50 m, dwelling no. 4 was 21.40 m, while dwelling no. 5 was 11 metres. All the dwellings of the Boian Culture had platforms. The beam layer upon which the clay floor was placed, seems to have been rather thick, as beneath the floors of dwellings nos. 4 and 5 there was a compact layer of ash, which, in places, reached a thickness of 35 centimetres. The wood upon which the clay of the floors had been applied, as shown by the imprints preserved in the adobe, was placed perpendicular to the long axes of

[7] Marian Neagu had already assigned that level to the Boian-Giulești phase, in its final stage III/2, and a ceramic fragment discovered at Vlădiceasca, Figs. 3/6, was used in his published paper as being discovered at Gălățui-Movila Berzei (sic). See Neagu, 2000, 90, 112 and Pl. XLIX/3.

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the dwellings and had various thicknesses. Besides the stumps with rounded shape and a diameter of 5–9 cm, split beams 18–20 cm in diameter were found. The remaining space between the transverse beams was very small. When the beams were shorter than the width of the dwelling, they were prolonged with another piece of wood. In a floor fragment, the joint between a rounded and a split stump was detected. Above the wood layer, a layer of sticking plaster with a thickness of 8–10 cm existed, consisting of clay, mixed with straw. Above this structure there were 8–9 layers of thin sticking plaster, containing straw, with a total thickness of 8 centimetres. In dwellings nos. 4 and 5, which were cross-sectioned longitudinally, it could be observed in the profile, but also in the section, that a transverse, separating wall existed. The platforms were arched and then interrupted for the separating walls, clear evidence that the dwellings had two rooms. In dwelling no. 1, which was also cross-sectioned longitudinally, owing to the disturbances created by fox burrows, no such observation could be made. Dwelling no. 4 had the northern room with a length of 6 m, while the second room measured 6.15 metres. Dwelling no. 5 had the southern room with a length of 5 m, while the northern one measured 6 metres. The separating walls had a thickness of 25–30 centimeters. The walls of the dwellings were constructed of mud bricks. The thickness of the adobe ruins of the dwellings measured 25–30 centimeters. Owing to the disturbances created by the large number of burrows, the post-holes of the dwellings could not be detected. As concerns the width of the dwellings belonging to the bearers of the Boian civilization, some observations could be made for dwelling no. 6, whose width measured 6.5 metres. Out of the eight partially investigated dwellings, only in dwellings nos. 2 and 5 could a hearth be detected, the one discovered in the dwelling no. 2 being disturbed in antiquity. Pieces of hearth were found on the eastern side of the dwelling, 3 m away from the northern corner. The hearth in dwelling no. 5, settled on the southern side and preserved in good condition, had an oval shape and diameters of 1.30 m and 1 m, respectively. There was no constant distance between the dwellings. Between no. 1 and no. 5 the distance was 3.5 m, while between dwellings no. 4 and no. 5 the distance reached 11 metres. The dwellings were arranged in rows on a north–south direction, each row comprising 4 dwellings. In the southern part of the *tell,* investigated before us by Barbu Ionescu, it is possible that another row of dwellings existed. So that a row must have comprised 5 dwellings. As no transversal profile of the *tell* had been made, we could not establish for certain how many rows of dwellings had originally existed, but it is certain that at least two rows had existed and it is possible that, in the other 12 m remaining between the investigated surfaces, another row of dwellings could have existed.

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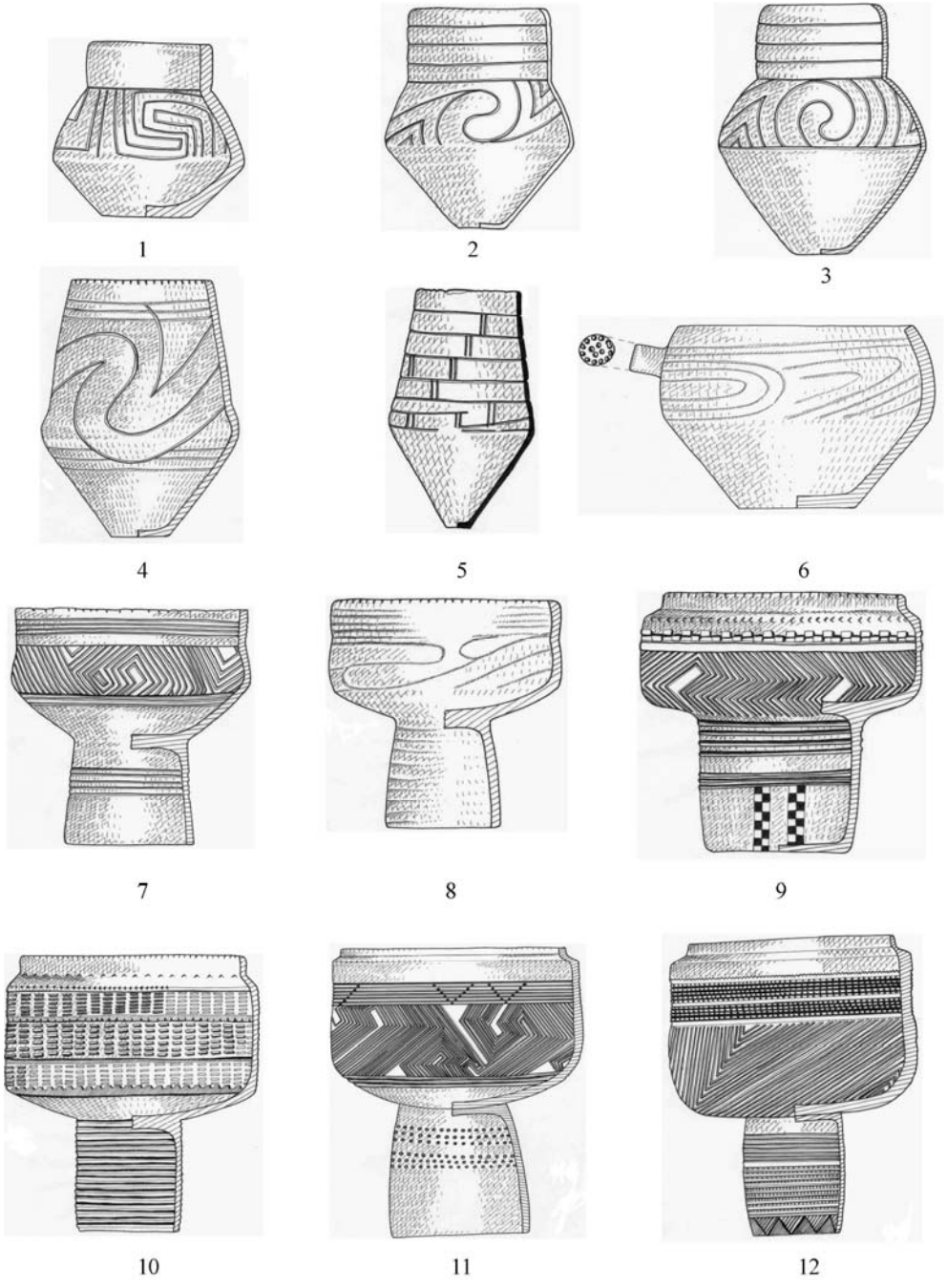

Fig. 2 – Vlădiceasca – "Gherghelăul Mare". Boian Culture, Vidra phase: 1–5 – drinking vessels; 6 – vessel with a beak for pouring; 7–12 – footed vessels, "Steckdose".

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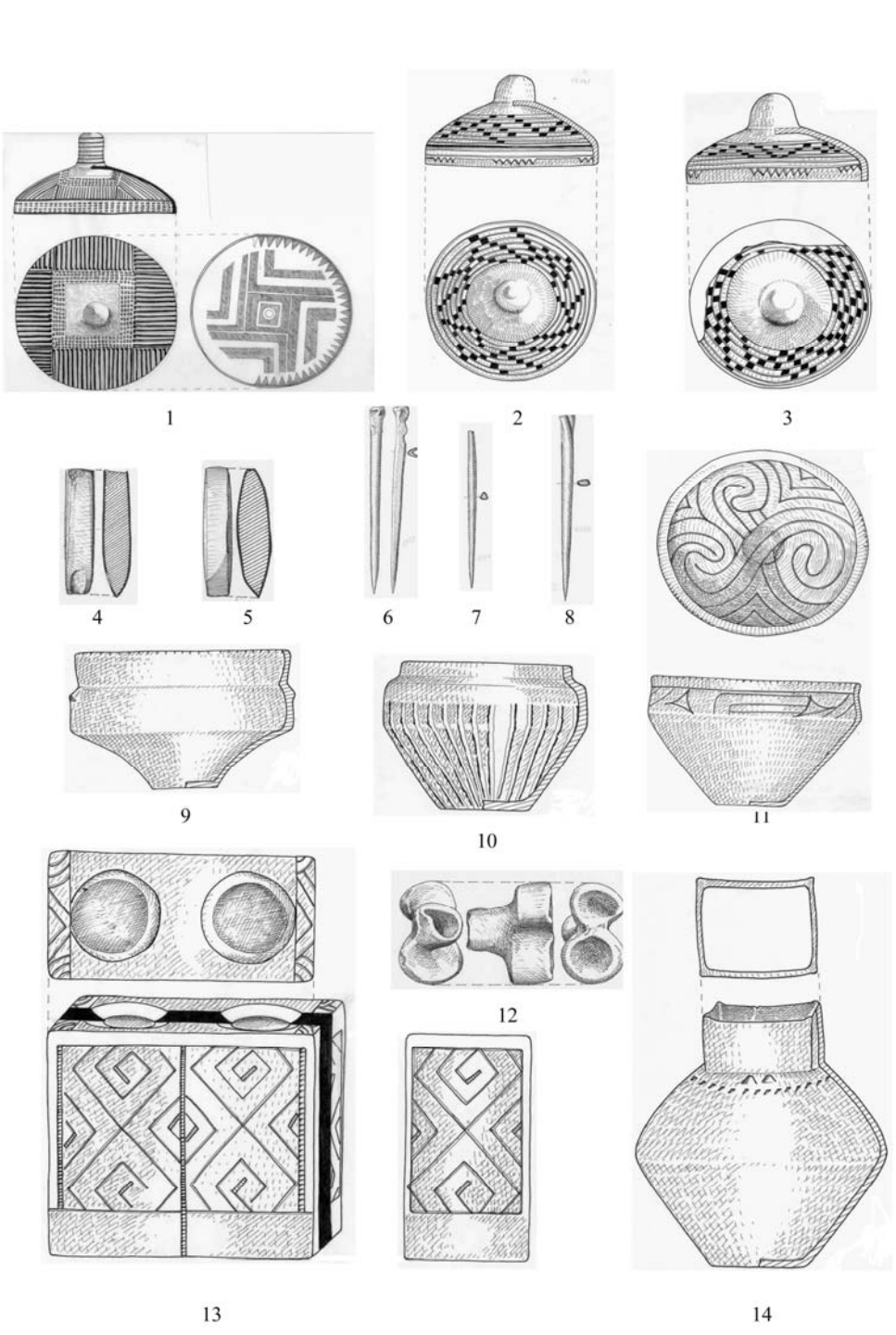

Fig. 3 – Vlădiceasca – "Gherghelăul Mare". Boian Culture, Vidra phase: 1–3 – lids; 4–5 – little chisels made of polished stone; 6–8 – bone awls; 9–11 – bowls; 12 – miniature twin vessel; 13 – parallelipipedic stand; 14 – truncated vessel with square mouth.

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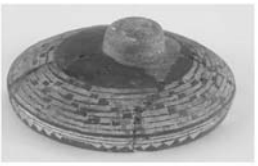

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Fig. 4 – Vlădiceasca – "Gherghelăul Mare". Boian Culture, Vidra phase: 1 – clay weight; 2 – lid; 3 – zoomorphic figurine; 4 – drinking vessel, 5–7 – bowls; 8 – parallelipipedic stand; 9 – box vessel; 10–12 – footed vessel – "Steckdose".

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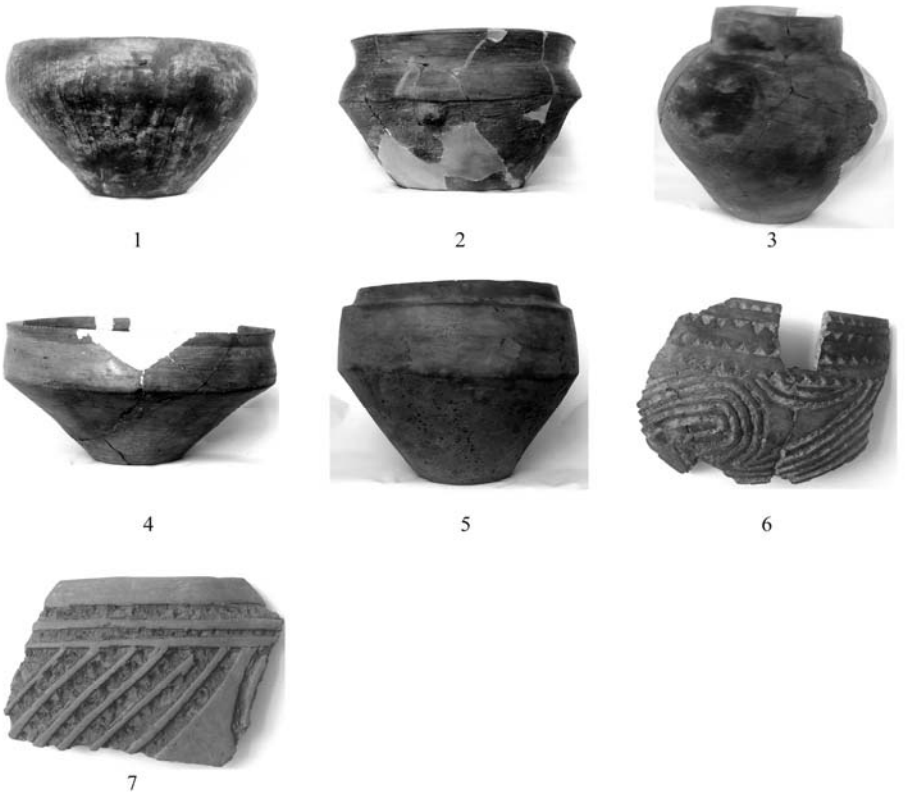

Fig. 5 – Vlădiceasca – "Gherghelăul Mare". Boian Culture, Vidra phase: 1–2, 4–5 – bowls; 3 – bitruncated vessel; 6–7 – ceramic fragments from the lower level.

Of the archaeological materials recovered from inside the dwellings, we can mention the flint implements: blades, truncated blades and scrapers; the polished stone tools: a fragment of a perforated axe, a massif, unperforated axe, made of a hard rock, with an oval cross-section, with a curved cutting edge, with a V-shaped profile in longitudinal section, and several chisels made of limestone or volcanic tufa, some with rectangular shape in a transversal section (Figs. 3/ 4–5). A few stone shallow grinders, together with two antler tools are evidence for the practice of agriculture. In dwellings nos. 2 and 3, some deposits of clay loom weights were found. Most of them were prism-shaped and had a rounded head, but there were also found weights with a less usual form (Fig. 4/1). Bone implements were represented by awls, a hammer made of antler, and polishers made of big cattle bones. Among the adornment items we should mention a pendant of a boar tusk and a fragmentary shell bracelet.

Despite the fact that the *tell* on the island "Gherghelăul Mare" was situated in the middle of the pond, during the investigation very few fishing utensils were

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found in the Eneolithic layers, but some clay weights seem to have been used for fishing nets.

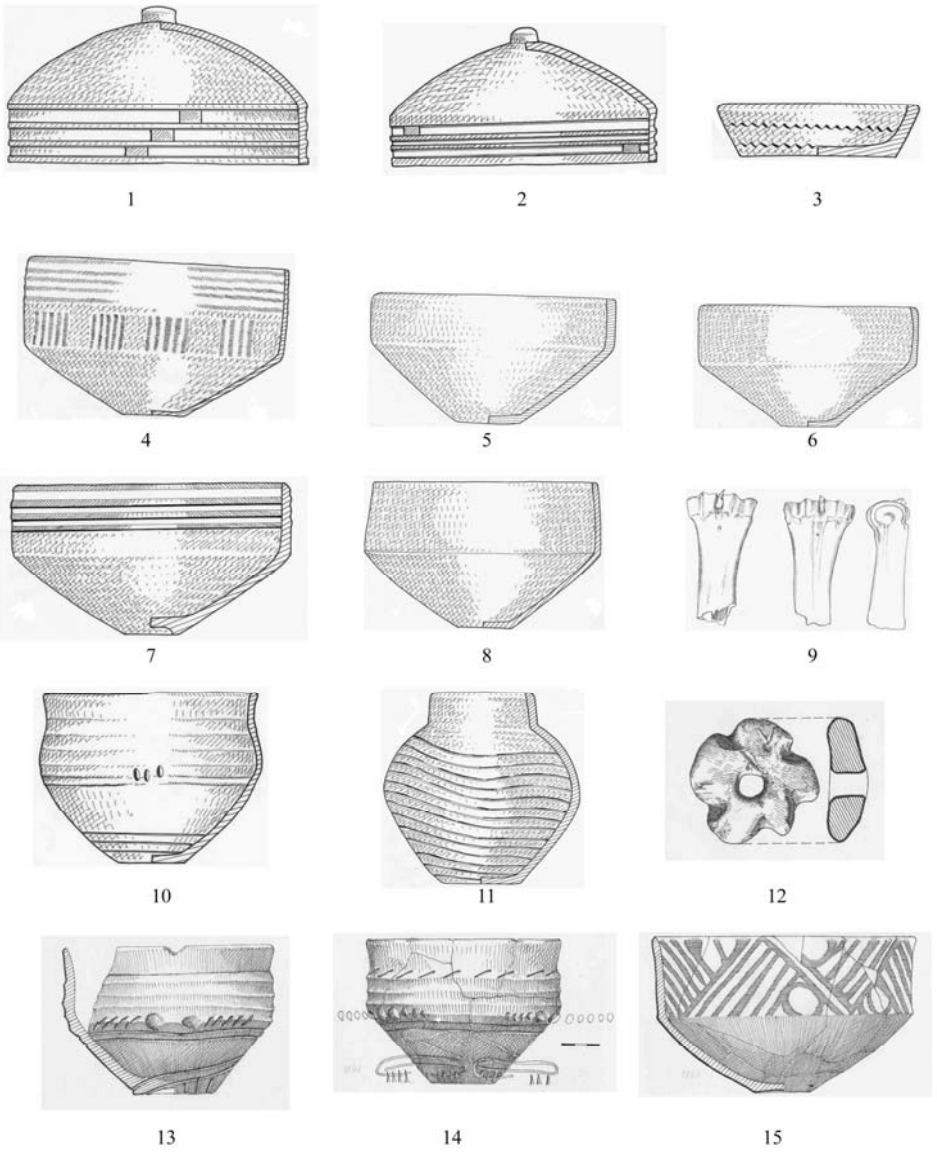

Fig. 6 – Vlădiceasca – "Gherghelăul Mare". Gumelnița culture A1: 1–2 – hemispherical lids; 3 – truncated dish; 4–8 – drinking vessels; 9 – compound utensil; 10, 13–14 – drinking vessels of Precucuteni III "import" ; 12 – clay weight; 15 – drinking vessel painted with graphite.

The customary vessel shapes were: truncated jars, decorated with alveolar bands (appliqué bands/ribs with circular/oval impressions), with prominences or

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barbotine, cylindrical vessels with the lower, truncated part, with a kind of step beneath the rim (Fig. 5/5), or, with the upper cyllindrical part, convex-shaped at the middle of their body, with their bulging, flattened lower part and without any special fitting for the lid; vessels with a foot decorated with excisions and encrusted with white matter (Figs. 2/7–12 and 4/10–12), lids shaped as a calotte, sometimes with a cylindrical upper part, decorated outside with excisions and encrusted with white matter and sometimes painted inside with white, or red (Fig. 2/1–3); fragments of parallelipipedic stands (Fig. 3/14); bitruncated vessels with high neck, sometimes decorated with incisions (Figs. 3/15, 5/3); cylindrical vessels with one foot, decorated with funnels (Fig. 2/8); bitruncated vessels with a special step beneath the rim, for sustaining the lid; vessels with their lower part in a truncated shape and their upper cylindrical one, with arched walls, decorated with funnels or draining tube pierced by orifices for liquid straining (Fig. 2/6); various types of bowls (Figs. 3/10–12, 4/5–6, 5/1–2,4); drinking vessels (Figs. 2/1–5; 4/4); and a rectangular vessel with a step beneath its rim (Fig. 4/9). The analysis of the ceramic material recovered from the dwellings of the last layer belonging to the bearers of the Boian culture, enabled us to assign it to the Vidra phase[8].

The next horizon, which overlapped the Boian layer, was represented by the level of the dwellings belonging to the early phase of the Gumelniţa culture. During the investigations, two dwellings of that layer were encountered. Since, inside the squares on the north-eastern side of the *tell,* where the level of the Vidra phase of the Boian culture had been reached without finding any such dwellings, we were inclined to believe that, during the early phase of the Gumelniţa culture, just the south-western side of the *tell* was inhabited. It should be pointed out here that the investigated dwellings were made of mud bricks, with their long axes north–south, with a floor covered with clay, in three or four successive layers, while on their northern side a platform existed, with a width of 1.60 m and 10 cm higher than the floor. Yet, the platforms were not raised upon beams. Near the platform there were several complete or reconstructible vessels. The lengths of the dwellings reached 9–9.50 metres. The artefacts found in this level were relatively scarce. They were represented by scrapers, blade scrapers, blades made of yellowish flint, a flint axe with curved cutting edge, three chisels made of soft rock, probably limestone, one being of greenish colour, and an antler hoe. In this level, a composite tool was also unearthed, comprising a bovid metatarsal bone, in which a flint drill had been inserted (Fig. 6/9).

The rather fragmentary ceramics found in the dwellings of this layer were represented by the following forms:

Bowls with their lower part truncated, a high, thick shoulder, and slightly everted rim. In most of the cases, the vessels were intensely polished outside and inside and were graphite painted on their neck and shoulder.

[8] Comşa, 1959, 118 and Figs. 2–3 from p. 117 and 119; *Idem*, 1974, 107–114.

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Lids with a hemispherical shape, with their lower part cylindrically-shaped and decorated with large excision, from place to place having relief squares arranged in a ladder-like configuration and filled with white paint. The handles of the lids were represented by short, cylindrical knobs with a conical, or oval head. A variant of those lids had three wide funnels toward the edge, as a decoration (Figs. 6/1–2, 7/2).

Bitruncated jars, with cylindrical neck, of varying dimensions. Some of them were slightly polished inside and out; others had their body covered with barbotine, sometimes organized in stripes. The neck of those vessels was always slightly polished while, sometimes, on the merging line of those two cones, the vessel was decorated with alveoli (Fig. 6/11).

Bowls made of coarse paste, with crushed ceramic fragments in their composition, with a flattened bottom, a truncated lower part and an upper part with a relatively cylindrical shape, sometimes with slightly polished walls. Those bowls had their walls polished inside and out on the edge of the rim. The body of the bowls was covered with barbotine, but there were also examples with a polished body (Fig. 7/8).

The cups are made of fine paste, with a very thick base, slightly concave in shape, with a truncated lower body and the cylindrical upper part reaching a height of 8–10 centimetres. They were intensely polished and fired to a brown-chestnut colour (Figs. 6/4–8). Sometimes the cups were decorated on their upper cone with parallel flutings or were graphite painted (Fig. 6/15).

One-footed vessels were represented by three reconstructible examples. They were shaped as fruit-stands with a diameter of 30 centimetres. The foot was slightly truncated with its smaller base downwards, hollow, with a height of 5–9 centimetres. The walls of the vessels were strongly inclined outwards and slightly arched, while their rim was vertical with a height of 5.5 centimetres. The vessels were strongly polished inside and out and were decorated with flutings and painted with graphite on the rim and foot.

There was a single example of a parallelipipedic vessel (box) with a step beneath the rim and incised decoration.

Dishes, more seldom found, had a straight rim, sometimes with protrusions upon it and decorated outside with incisions that formed a single band, covering almost the entire surface of the vessel (Fig. 6/3).

A feature, specific to the pottery of this level, was the presence of stands. Several types were represented:

– parallelipipedic stands, reminiscent of the stand boxes of the Boian culture. Generally, this kind of stand had large dimensions, with a decoration consisting of cut-out spiral stripes, painted in red, bordered by incised lines, encrusted with white, or in bands comprising hachured rectangles, bordered by flutings.

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– high cylindrical stands, with straight walls, decorated outside with cut-out spirals created by incision, graphite painting or incision and encrusted white matter (Fig. 7/3);

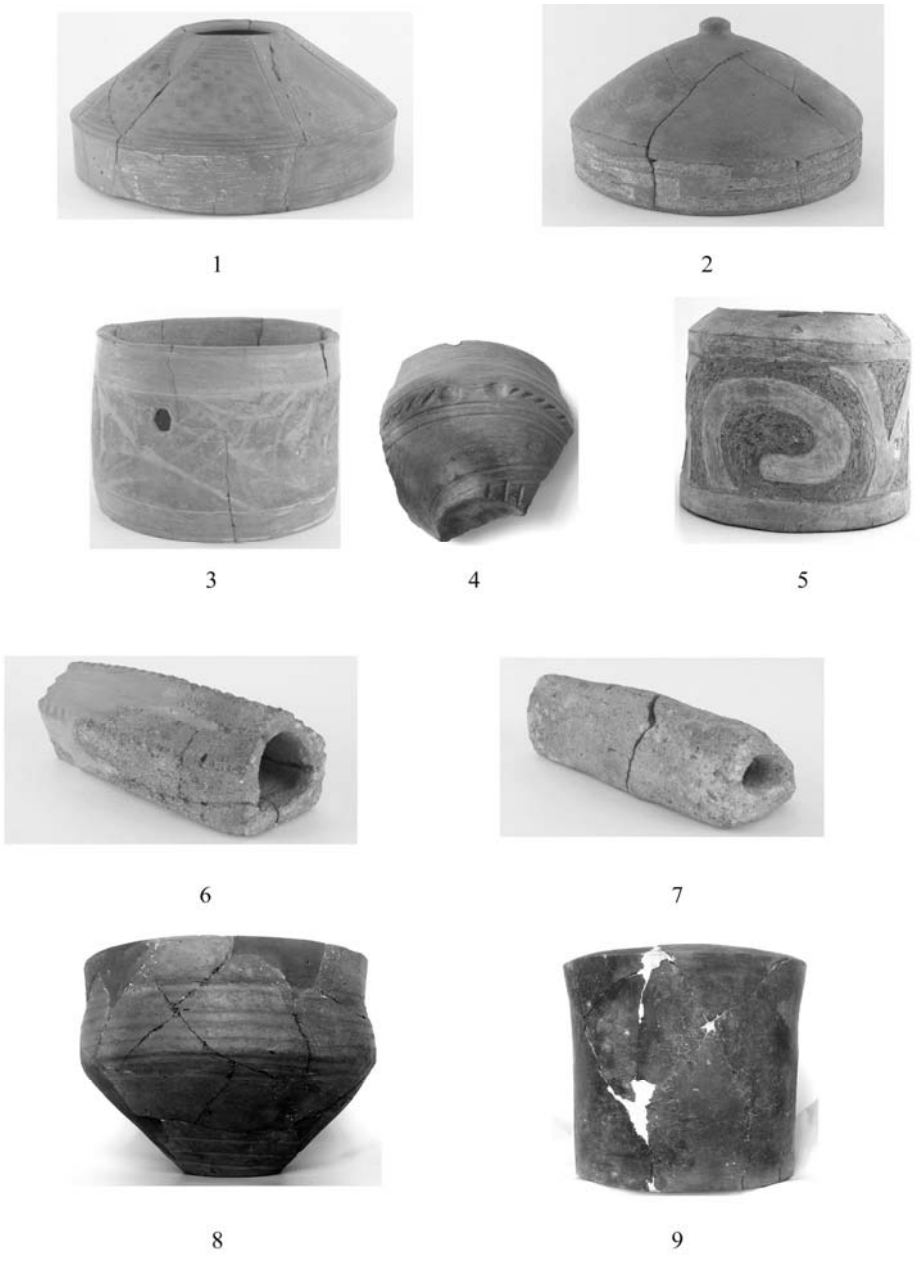

Fig. 7 – Vlădiceasca – "Gherghelăul Mare". Gumelniţa culture A1: 1, 3, 5, 9 – vessel stands; 2 – vessel lid; 6–7 – miniature dwellings; 4 – drinking vessels of Precucuteni III "import".

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High cylindrical stands, with their upper part inverted, decorated with a wide decorative stripe that covered the whole surface of the vessel. The decorative motifs were cut-out spirals, made either by incision and encrusted with white matter, or by wide excision, the decorative motifs left in relief. Another such stand was intensely polished outside and decorated with stripes of horizontal flutings (Fig. 7/5).

Cylindrical stands with a short body, with their upper truncated part developed. On their upper part, these stands were decorated with flutings, or painted with graphite (Fig. 7/1).

Cylindrical table-stands with one, or several perforations. The body is sometimes decorated with wide, vertical stripes painted in red, which alternated with polished stripes, comprising cut-out spirals, grouped in bands (Fig. 7/9).

In this level, a few cups were also found, as well as fragments from other types of vessels, which, considering their shape and decoration, belong to the Precucuteni III culture (Figs. 6/10, 13–14 and 7/4).

The pottery found in this layer, especially some of the stands, by their shape and decoration, finds analogies in that from the levels of dwellings no. 8 and 9 at the *tell* of Hârşova[9], in the excavations since 1961, in the finds from Ulmeni – "Valea lui Soare", Căscioarele – "D-aia Parte" [10], partly in the finds from Chirnogi[11], in level no. 14 at Tangâru[12], in level II A at Vidra[13] and belonging to phase A1 of the Gumelnița culture. From the 1972–1975 excavations came a bowl inside which was found a deposit consisting of beads of burnt clay and processed by punching, others being made of fossilized boar tusks and of *Lithospermum purpureo-coeruleum* (little bead) seeds[14]. In the same level, in the dwellings, two models of miniature dwellings were found[15] (Figs. 7/6–7).

The level of the dwellings A1 was overlapped by another level with habitations, which belonged to phase A2 of the Gumelnița culture. The dwellings from this level, like those in the previous level, were located in the southwestern part of the *tell*, in a single row. From this level, five dwellings were investigated, three of them fully.

According to tradition, the dwellings were made of mud bricks. In this case, the postholes could not be observed, due to the numerous, subsequent interventions (Getae–Dacian domestic pits, animal burrows, etc.). The dwellings had a

[9] Galbenu 1962, 290–292 and Fig. 6.

[10] Unique archaeological materials, discovered at Ulmeni – "Valea lui Soare" and Căscioarele – "D-aia Parte", which can be seen in the windows and repository of the Museum of the Gumelnița Civilization; Voinea, 2005, Pls. 14/ 2, 4, 5; Pl. 29/8; Pl. 77/6.

[11] Morintz & Ionescu, 1968, 105–106 and Fig. 8.

[12] Berciu 1961, 429–445.

[13] Rosetti 1934, 14–21; 34–39.

[14] Şerbănescu 1997, 35–38.

[15] Şerbănescu 1997, 232–251, Figs. 1/1–2; 3/1–2.

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rectangular shape and their floors, made of battered earth, were sometimes covered with clay. Their orientations varied; they were either situated with their long axes North–South or East–West. Opposite to the entrance side there was a hearth, shaped like a rectangular horseshoe, and raised up by 10–15 centimetres. Close to the hearth there were usually found grindstones and, sometimes, anthropomorphic or zoomorphic vessels.

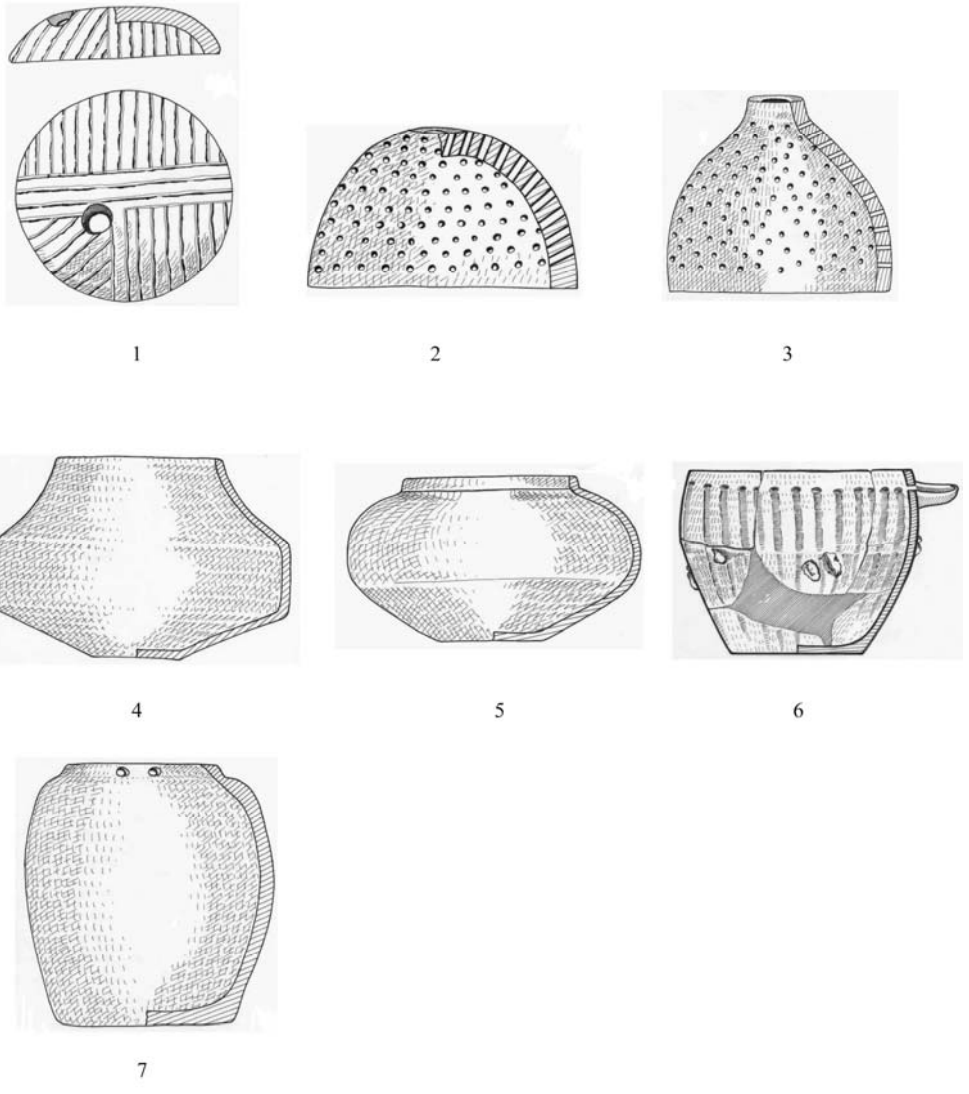

Fig. 8 – Vlădiceasca – "Gherghelăul Mare". Gumelnița Culture A2: 1 – lid;
2–3 – "strainers"; 4–5 – bitruncated, flattened vessels;
6 – bowls with a beak for pouring; 7 – bowl.

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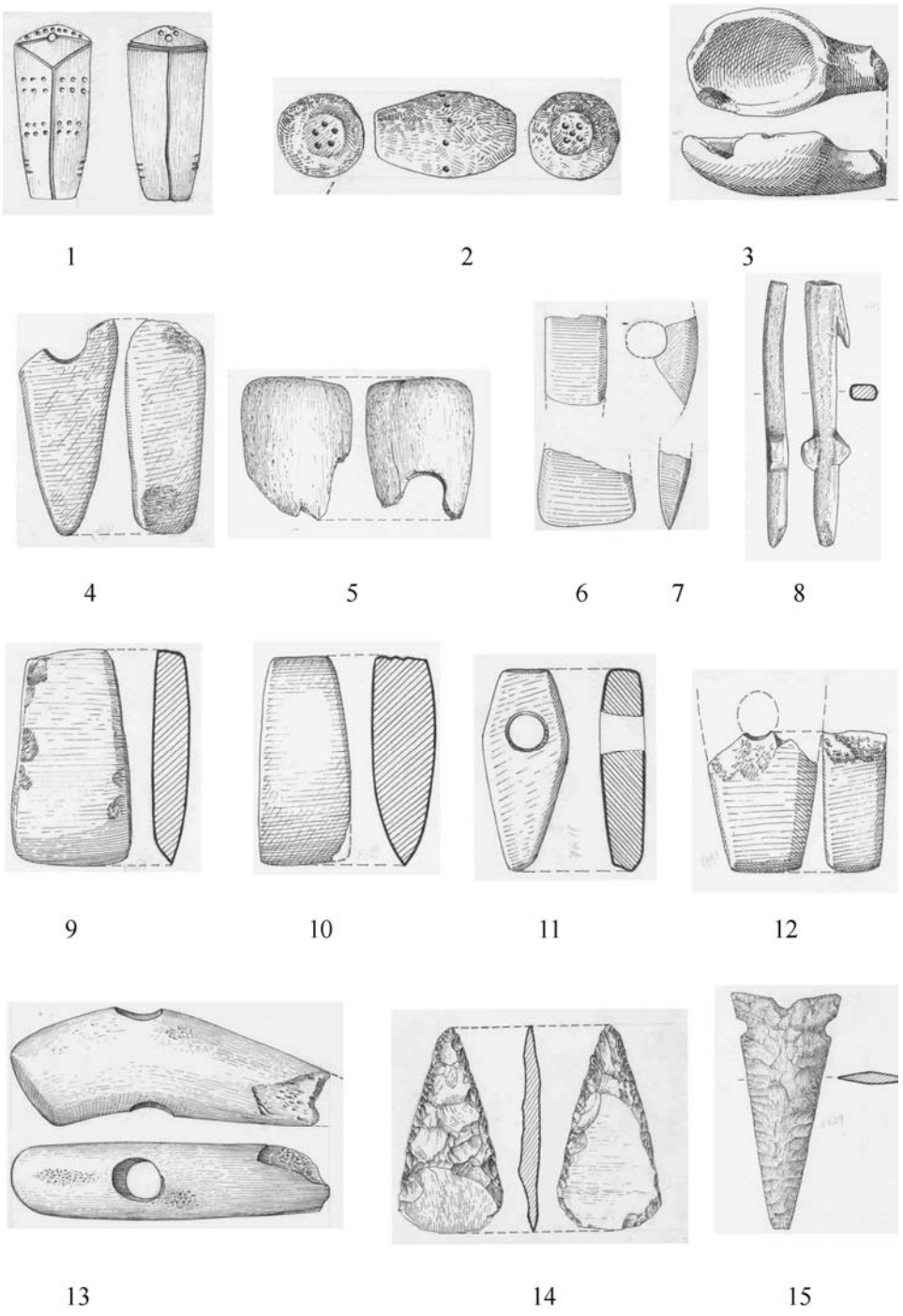

Fig. 9 – Vlădiceasca – "Gherghelăul Mare". Gumelnița Culture A2: 1 – bone idol; 2 – "toy", 3 – clay spoon; 4, 6–7, 12 – stone, fragmentary hammer-axes; 5 – bone hammer; 8 – fragmentary harpoon; 9–10 – little stone chisels; 11 – miniature hammer-axe; 14–15 – flint spear points.

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1

2

3

4

Fig. 10 – Vlădiceasca – "Gherghelăul Mare". Gumelniţa Culture A2: 1 – golden bracelet; 2 – "strainer"; 3 – flint spear point; 4 – deposit of curved flint blades.

The flint artefacts discovered in this layer were represented by: scrapers, blades, truncated blades, spear points (Figs. 9/14–15, 10/3) and flint axes. Also in this level a deposit was found, comprising 35 curved flint blades, which occurred in a shallow depression, near the hearth of a dwelling (Fig. 10/4).

Polished stone tools were represented by little chisels with a trapezium shape and few hammer-axes, almost all of them in a fragmentary condition (Figs. 9/4–7, 9–12).

The majority of the bone items were awls and little chisels, but bone hammer-axes were also found (Figs. 9/8, 13), a few spatulae, a fragmentary harpoon (Fig. 9/8) and several horns of a male goat that bore clear traces of use. Among the adornment objects, were a few pendants made of bone and shells. Also along with these items there was a hammered golden bracelet, with a diameter of 8.5 cm, a height of 2.1 cm, with curved walls resembling a paranthesis, with a thickness of 1 mm and weight of 79.200 g, the purity of the gold surpassing

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23 karats[16] (Fig. 10/1). The bracelet has its closest analogies in the finds from Ruse[17] and Varna[18].

The plastic representations discovered in this layer comprised anthropomorphic and zoomorphic figurines, made of clay or carved in bone Fig. 9/1, or zoomorphic vessels and remains of antropomorphic vessels.

The pottery, which was abundant but in fragmentary condition, was represented by a variety of forms:

Not-too-deep dishes, which differ from one another in the modelling of the rim. There were dishes with a short, vertical or everted rim, dishes with an arched rim, with the rim thickened on the inside, carinated dishes, and dishes with an oval, thickened stripe between the rim and body, the stripe decorated with incised, oblique lines. The dishes were intensely polished inside and out, sometimes being painted with graphite inside and decorated with excisions on the outside.

Bitruncated vessels with the upper cone developed; they were polished, decorated with notches in the area of the junction between the two cones, sometimes being painted on the upper one.

Pyriform vessels with an outlined shoulder, flattened body, and usually polished and painted with graphite.

Vessels with one foot that "communicated" with their inner part, sometimes being decorated with vertical incisions.

Small bowls, with thick and arched walls, polished inside and outside (Fig. 8/7).

Small, bitruncated vessels, with a narrow bottom, the junction area of the two cones often having an extended, cylindrical appearance and the upper cone painted with graphite (Figs. 8/ 4–5).

Pan-bowls with a large diameter, with short and everted walls.

Lids with a hemispherical body, painted with graphite, and a straight, funnelled edge (Fig. 8/1).

Lids with handles shaped as oven-houses.

"Strainers", with spherical or funnel-shaped bodies (Fig. 8/7–8).

The entire archaeological material descovered in this layer had analogies in the finds from the lower levels at Gumelnița[19].

In the last Eneolithic habitation level, almost completely investigated, there were above-ground dwellings, made of mud bricks. Their dimensions were: a length which varied between 9.80–10 m and a width between 5.30–5.50 m. The dwellings of the last level were arranged in three rows, each comprising four

[16] Cojocaru & Şerbănescu, 2002, 85–91.
[17] Georgiev & Angelov, 1948–1949, 167, Fig. 154.
[18] Ivanov 1974, 44–47 and Fig. 1.
[19] Dumitrescu 1966, 51–99.

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dwellings. In total, 12 dwellings of this level were investigated. During the research it could be observed that no perfect allignment of the dwellings existed. Generally, all of them were oriented with their long axis north–south, that being also determined by the shape of the island, and in just one case the dwelling having an east–west orientation. The floors of the dwellings were made of battered earth, but two of them had a partial platform, with a width of 1.80 m, situated on the north side, where the hearth also existed. In one case, the hearth was placed near the east wall, toward the southern one and in the dwelling which had its long axis in an east–west direction, the hearth was situated on the narrow, western side. Some hearths were raised up on a bed of river stones. Generally, around the hearths there were piled up vessels and clay weights and also some of the grinders. The stone grinders discovered in dwellings were quite numerous, about 4–5 in each dwelling. Isolated complete, or broken *in situ* vessels, were also found inside the dwellings. Outside the dwellings, there were also large, complete or reconstructible vessels, some of them partly sunk into the ground.

Inside the dwellings there was a rich inventory, including flint artefacts: axes, piercing tools, cores, scrapers, scrapers on blades, truncated blades with traces of polish, curved blades, and drills. In two dwellings there were deposits consisting of 11 and 15 blades, respectively, some of them reaching a length of 40 cm.

The polished stone artefacts included a few little chisels with a trapezium shape and also a perforated axe.

The bone implements were represented by several types: awls, some of them sharpened at both ends (Fig. 11/14), little chisels (Fig. 11/15), an ornamental pin head (Fig. 11/11), bird bone handles for the awls, spatulae and a spindle-whorl made from the epiphysis of a bone (Fig. 11/9).

In this level, there were also copper objects, namely a few fragmentary pins, with one head having a rectangular shape in cross-section and the other with a rounded shape. In a dwelling was found a complete copper pin, with a length of 15 cm, with a twisted rod having a rectangular cross-section and, while the part towards the point was rounded in section, arched and pointed. The end of the pin ended in a small triangular plaque (Fig. 11/16).

Among the clay objects we could mention the weights for the loom, in very large number in some of the dwellings, spindle-whorls made of rounded ceramic fragments, elongated pearls, with a longitudinal perforation.

The plastic art from this level was represented by clay anthropomorphic and zoomorphic figurines, bone anthropomorphic figurines, zoomorphic and anthropomorphic vessels[20].

[20] All plastic representations were object of the paper entitled "Reprezentări plastice descoperite în *tell*-ul de la Vlădiceasca" ("Plastic representations discovered in the Vladiceasca *tell*"), presented at the coloquium "Plastica neo-eneolitică din România şi rolul ei spiritual" ("The neo-eneolithic

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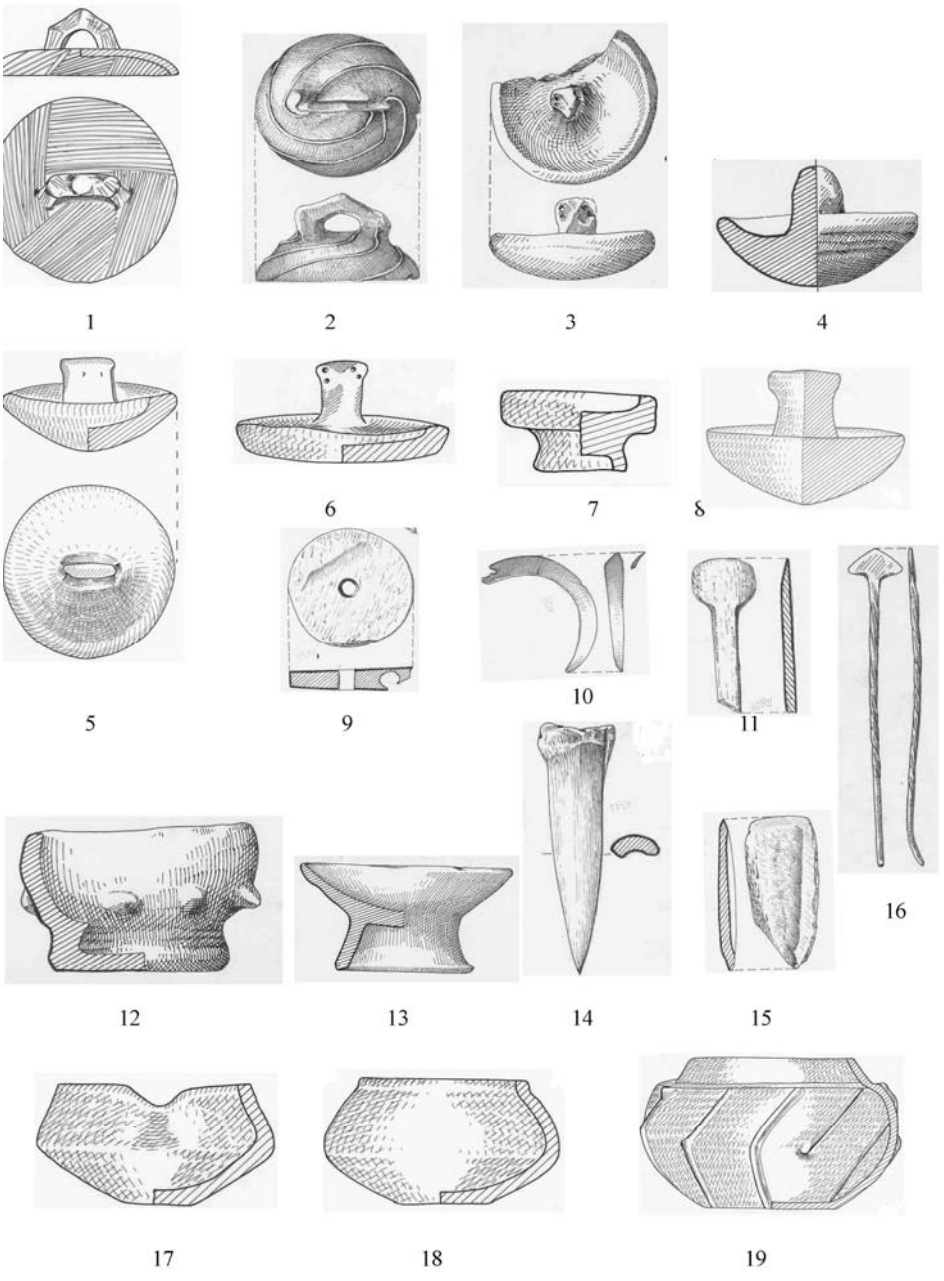

Fig. 11. Vlădiceasca – "Gherghelăul Mare". Gumelnița Culture B: 1–6, 8 – lids; 7– miniature vessel; 9 – bone spindle-whorl; 10 – boar tusk pendant; 11 – fragmentary bone pin; 12 – miniature vessel; 13 – footed cup; 14 – bone awls; 15 – bone chisel; 16 – copper pin; 17–19 – bitruncated vessels.

plastique and its spiritual role") organized by the Complex of County Museums Neamț, between November 13–14, 1981.

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In the dwellings of this level there were a large number of complete and reconstructible vessels, some of them being still in the restoration process. Generally, there were two ceramic categories, namely coarse, domestic pottery and fine, polished ceramics.

The following potttery categories were found: dishes with rare graphite decoration; vessels with an inner step, for supporting a lid, vessels with a foot which "communicated" with their inner part (Figs. 11/ 7, 12), bowls with a beak for pouring, decorated with barbotine organized in vertical stripes; bitruncated vessels with a short rim, outlined shoulder, flattened body, with alveolar bands and small prominences (Figs. 11/17–19); pyriform vessels with a high neck, painted with graphite, with two small handles on their neck, with their flattened body decorated with parantheses, big storage vessels, with a short, vertical rim, an almost horizontal shoulder, polished in their upper part and sometimes painted in white, their lower part being covered with barbotine; small-sized vessels, with a truncated lower part, sometimes decorated with parantheses, the neck being painted with graphite; *askoi;* polished bowls, footed cups (Fig. 11/13). The lids had also several categories: hemispherical ones, painted with graphite, calotte lids, with a handle in the shape of a house roof (Figs. 11/1–2), oven-houses or with a massif tube-shaped handle; convex-concave lids, with their convex part downwards, with handles of various shapes, either as a rounded curved handle, or as a knob (Fig. 11/4). Sometimes, the knob was modelled as a human head, rendered in a very stylized way (Figs. 11/3, 6), sometimes with two faces, sometimes as a flat knob with lateral protrusions, which, by their shape, suggests the body of a Thessalian figurine with mobile head, missing the orifice for the head fitting (Figs. 11/ 5, 8); calotte lids with two pierced knobs, placed close to the margin.

The entire material discovered in the last habitation level of the Eneolithic *tell* from Vlădiceasca finds its analogies in the last habitation level at Gumelnița[21], in the last Gumelnița layer at Căscioarele[22], in the finds from level II C at Vidra[23], in the discoveries from Măgura Jilava belonging to the Jilava phase (= Gumelnița B1), whose content was established by the archaeologist Eugen Comşa[24].

During the investigation of the Gumelnița cultural layer, there were intercepted and investigated archaeological complexes which belonged to the last habitation level on the *tell,* represented by remains of the Getic civilization. Some of the complexes were discovered even outside the trenches excavated by George Trohani[25]. Four pit-houses were fully investigated. Some Getic habitation complexes had the oven-hearth as a heating system. Some of the hearths were

[21] Dumitrescu, *op. cit*.
[22] Dumitrescu, 1965, 2, 215–234.
[23] Rosetti, *op. cit*.
[24] Comşa, 1976, 105–127.
[25] Trohani, 1976, 86–87, see the plan.

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placed upon beds of ceramic fragments. Over the entire excavated area there were cylindrical pits, but mostly truncated pits, specific to the period in question. Their concentration was greater in the centre of the settlement, with 10–15 pits within 100 m^2, while, by their content, it could be established that their majority were domestic pits. One pit was the exception, because, by its inventory, it was a ritual pit. The pit was sealed at the base of its neck, with an impermeable, hard-to-penetrate clay layer. Inside the pit there were placed, in some certain order, 19 complete vessels, some of them being broken on site, the majority of them being used for drinking, or liquids storage, above which a processed cultic antler was placed. Above this ritual assemblage, a jar of about 40 cm in height was placed.

From the research undertaken, we could draw the conclusion that on the Eneolithic *tell* from Vlădiceasca, the density of the habitation varied and we could not state that it was a continuous one. In the first stages of the development of the Boian culture the habitation on the *tell* was seasonal, while in the fourth phase, during the evolution of the Vărăşti stage of the Vidra phase, the entire surface of the *tell* was inhabited, and the above-ground dwellings were made of mud bricks and had floors. In the first two phases of the Gumelnița civilization, namely A1 and A2, the habitation on the *tell* was documented only in its southern part. We could also notice that the evolution of the Gumelnița culture is missing important stages, between the Gumelnița A1 and A2 phases[26] and between the Sultana = Gumelnița A2 phase[27] and the Jilava = Gumelnița B phase [28].

Despite that, the rescue excavations carried out at Vlădiceasca have brought important contributions, not only for enriching the patrimony of the museum, but also for improving the repertoire of objects and ceramic shapes belonging to the Eneolithic period. Precious contributions were also brought for clearing up some issues regarding the beginning of the Gumelnița culture in the area, by new data offered to the researchers, concerning the content and the evolution of the beginning phase of the mentioned culture[29].

From the study of the archaeological inventory of the Getic–Dacian complexes, which were closed archaeological complexes, we hope we can make further contributions to the knowledge of the transitional phase between phases I and II of the Getic–Dacian La Tène, respectively between the Canlia cultural aspect and the Sarmisegetuza–Popeşti–Bâtca Doamnei aspect, a timespan that is placed between 250–50 BC[30].

[26] The thickness of the cultural layers of the phase A1 in the *tell* from Chirnogi, of almost 2 m, had proved that the mentioned phase had a rather extended duration. Cf. Morintz & Ionescu, *op. cit*.
[27] Comşa, see note 24.
[28] Comşa, 1978, 22–23.
[29] For instance, Neagu Marian, *op. cit.*; Valentina Mihaela Voinea, *op. cit.*, Pl. 102.
[30] Moscalu, 1979, 386–390.

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THE ASTRONOMICAL ORIENTATION OF THE SKELETONS FROM THE NEOLITHIC NECROPOLIS OF CERNICA

ORIENTAREA ASTRONOMICĂ A SCHELETELOR DIN NECROPOLA NEOLITICĂ DE LA CERNICA

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Cuvinte-cheie: arheoastronomie, neolitic, necropola de la Cernica.
Rezumat: Articolul prezintă câteva considerații arheoastronomice asupra orientării scheletelor din necropola neolitică de la Cernica, schelete care, în majoritatea cazurilor, se aliniază respectând fenomenul solar. Până în prezent, pe teritoriul Munteniei, aceasta este una dintre cele mai mari necropole din epoca neolitică, descoperită şi cercetată de Gh. Cantacuzino şi ulterior de E. Comşa. Necropola a fost identificată accidental în anul 1961, cu ocazia săpăturilor sistematice efectuate la Cernica, în satul Căldăraru, pe malul de vest al lacului Cernica. În mormintele de la Cernica s-a descoperit şi o perlă din minereu de cupru, cea mai veche din țară și printre cele mai vechi din Europa. Astronomic s-a calculat azimutul Soarelui (pe care l-am măsurat de la N spre E) la 4600–4200 î.Ch., la solstițiul de vară şi la solstițiul de iarnă pentru Cernica (latitudine geografică 44°25'). Rezultatul programului scris în Matlab este că apusul Soarelui descrie un arc într-un an: de la 235° (Solstițiul de iarnă) la 304° (Solstițiul de vară) pentru anul 4400 î.Ch. Pornind de la aceste rezultate matematice, putem constata că, în perioada dată, la Cernica se practica o formă de cult solar: răsăritul şi apusul Soarelui erau observate în cadrul ritualului de înmormântare. Dintr-un număr de 200 schelete măsurate, un procent de 98.5% se încadrează între limitele riguroase de oscilație anuală a apusului Soarelui în azimut. Prin calcule matematice şi astronomice s-a arătat că purtătorii culturilor Dudeşti şi Boian săpau groapa mormântului sau chiar îşi îngropau morții dimineața, în momentul răsăritului Soarelui, orientându-le spre acesta. Astfel, se putea admite la înmormântări practicarea unui ritual special, care consta în orientarea mortului spre răsăritul Soarelui. Scopul ritualului poate fi o ultimă încercare, disperată, de a-l readuce pe cel mort la *viață*, razele solare alimentându-l cu energie în momentul *revenirii*.

Key words: archaeoastronomy, Neolithic, Cernica necropolis.
Abstract: The paper presents some archaeoastronomical considerations on the orientation of skeletons from the Neolithic necropolis Cernica, which are mainly aligned with respect to the solar phenomena. Up to date, on the Muntenia territory, this is the greatest necropolis in the Neolithic age, discovered and investigated by Gh. Cantacuzino and subsequently by E. Comşa. This necropolis was found accidentally in 1961 on the occasion of the systematical excavation from Cernica in the

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Căldăraru village, on the western bank of the Cernica Lake. In the graves from Cernica cemetery was also discovered a pearl made of copper's ore. Astronomically, we calculated the azimuth of the Sun (the angles are measured from the North to East) at the summer and at the winter solstice for Cernica (geographical latitude 44°25'). We know that the points of sunrise and sunset differ from the years 4600–4200 BC, when is dating the Cernica necropolis. The result of the computer program written in Matlab language is that the Sun describes a solar arc in one year: from 235° (Winter Solstice) to 304° (Summer Solstice) for 4400 BC. Using these mathematical results we can say that in the given period in Cernica was practiced a solar-magic form: sunrise and sunset was observed within limits of a burial ritual. From a number of 200 measured skeletons, rates of 98.5% are also comprised in the western area of annual oscillation of the Sun in azimuth. The orientation of skeletons from Neolithic in Cernica (and in Europe) proves the astronomical knowledge in relation with the burial preoccupation. In conclusion, using mathematical and astronomical calculations, we prove that the people from Dudeşti and Boian cultures made the graves in the morning orientated in the Sun rise direction. So, we can admit a special cult for the burial, which consist in the orientation of the dead person to the sunrise position. The purpose of this action can be a last, desperate trial to resurrect the dead person to *life*, the lights of the Sun feeding with energy that specific *resurrection* moment.

1. The Neolithic necropolis from Cernica

An important moment for the Cernica's area is the discovery of the Neolithic necropolis in the neighborhood of the late Iezerul cloister. To date, on the Muntenia territory, this is the greatest necropolis in the Neolitihic time, discovered and investigated by Gh. Cantacuzino and subsequently by E. Comşa. This necropolis was accidentally found in 1961, on the occasion of the systematical excavations from Cernica in the Caldararu village, on the western bank of the Cernica Lake[1].

The earlier necropolis from Cernica belongs to the Dudeşti culture (324 graves) and the later to the Boian culture (32 graves). The graves from both phases are in simple pits, with rectangular shapes. The positions of the corpses were stretched, or flexed. In the last case, when flexing was marked, one considers that the lower and upper extremity of their body were bond. Specialists believe that the flexed position can indicate the fetus position in the uterus, or the mostly common position in sleep, which give as explanation an extensive sleep meaning for death[2]. The funerary inventories are poor for the Neolithic time[3]: dish, flint blade, stone axe, beads or pendants, bracelet from *Spondylus*, meat offering, ochre (dust or lump) on, or beneath the corpses. In one of the burials from Cernica cemetery was also discovered a pearl made of copper's ore.

The small number of burials of the Neolithic age is discordant with the demographic estimations; due to this aspect, some researchers forwarded the hypothesis that just a part of the population was selected for burial.

[1] Comşa 1987.
[2] Maxim *et alii*, 2001, 244.
[3] Maxim 1999.

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2. The skeletons orientation from the astronomical point of view

We know that the points of sunrise and sunset differ from the years 4600–4200 BC, when the Cernica necropolis[4] is dated. The points of sunrise (sunset) describe a solar arc during the year, which is limited by the winter and summer solstice[5].

First, we calculate the azimuth of the Sun (the angles are measured from North to East) at the summer solstice (A_1) and winter solstice (A_2) for the geographical latitude of $\varphi = 44°25' = 44°.416$ (Cernica necropolis)[6].

For the calculation we used the formula:

$$\cos A = -\frac{\sin\delta}{\cos\varphi}, \tag{1}$$

where: δ – is the Sun's declination;

φ – is the geographical latitude of Cernica;

A – azimuth.

During one year, δ changes between the limits $+\varepsilon$ and $-\varepsilon$, where ε is the angle enclosed by the Equator and the Ecliptic; ε varies in time.

Using the Wittmann theory[7] and following the next algorithm, we will obtain the limits of the solar arc:

$$\varepsilon = \varepsilon_0 + \varepsilon_1 \sin[\varepsilon_2 (T + \varepsilon_3)], \tag{2}$$

where:

$\varepsilon_0 = 23°.496932 \pm 0°.001200$;

$\varepsilon_1 = -0°.860 \pm 0°.005$;

$\varepsilon_2 = 0.01532 \pm 0.0009$ (rad/century);

$\varepsilon_3 = 3.40 \pm 0.10$ centuries.

If in the (1) formula we substitute $\delta = +\varepsilon$ and $\delta = -\varepsilon$, then, we find the solstice points. The time T given in Julian Centuries of 36525 day, calculated for 1 January 2000, 0 UT is:

$$T = (JD - 2451544.5)/36525,$$

where JD is the Julian date at 0 UT.

The Cernica necropolis is dating from 4600–4200 BC and for these data we obtain the following results, using a program written in Matlab language:

Date	JD
1 Jan 4200 BC	259692.50000
1 Jan 4400 BC	114323.50000
1 Jan 4600 BC	41273.50000

[4] Barlai *et alii*, 2004, 26–29.
[5] Barlai 1980, 29–32.
[6] Turcu *et alii*, 2004.
[7] Wittmann 1979, 129–131

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From that we obtain:

Date	T	ε
1 Jan 4200 BC.	–60.00963723477071	24°.13561537589396
1 Jan 4400 BC	–63.98962354551677	24°.16836278782125
1 Jan 4600 BC	–65.98962354551676	24°.18391333819735

We substitute $\delta = \pm\varepsilon_{4200\ BC}$ and we obtain the points of sunrise and sunset of summer and winter solstice.

4200 BC	**Summer solstice**	**Winter solstice**
Sunrise azimuth	A_1= 55°04'38''	A_2= 124°55'22''
Sunset azimuth	A_3= 304°55'22''	A_4= 235°04'38''
4400 BC	**Summer solstice**	**Winter solstice**
Sunrise azimuth	A_1= 55°01'35''	A_2= 124°58'25''
Sunset azimuth	A_3= 304°58'25''	A_4= 235°01'35''
4600 BC	**Summer solstice**	**Winter solstice**
Sunrise azimuth	A_1= 55°00'07''	A_2= 124°59'53''
Sunset azimuth	A_3= 304°59'53''	A_4= 235°00'07''

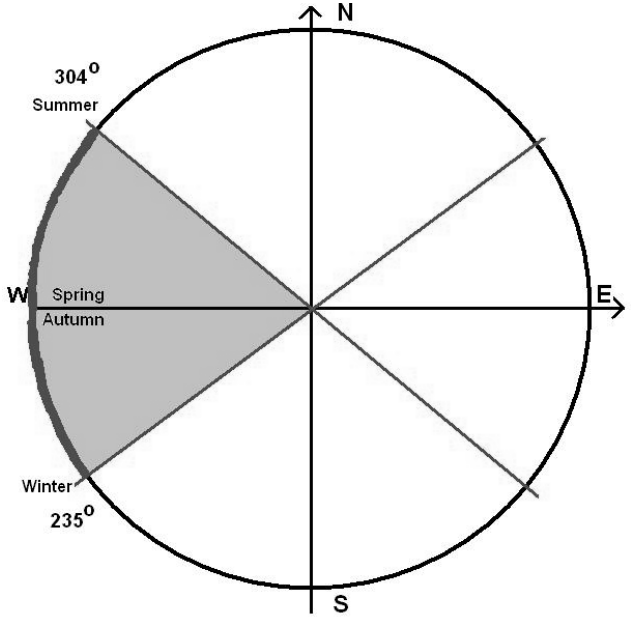

Fig. 1 – The solar arc area from 4600 BC, Cernica.

One can see from the calculation that the sunset describes a solar arc in one year from 235° (Winter Solstice) to 304° (Summer Solstice), for 4600–4200 BC.

Using these mathematical results we can say that, in the given period, in Cernica was practiced a solar-magic form: sunrise and sunset was observed within

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limits of a burial ritual[8]. From a number of 324 measured skeletons, rates of 92.11 % are also comprised in the western area of annual oscillation of the Sun in azimuth. 27 skeletons, namely M30, M49, M54, M61, M70, M83, M85, M88, M89, M93, M94, M98, M133bis, M140, M142, M143, M144, M152, M160, M208, M255, M283, M325, M327, M330, M344 and M349 are out of the solar arc, but they are close to the winter and summer solstice point. The reason can be a miscalculation, or an act of excepting from the community, whose reason we don't know at this moment.

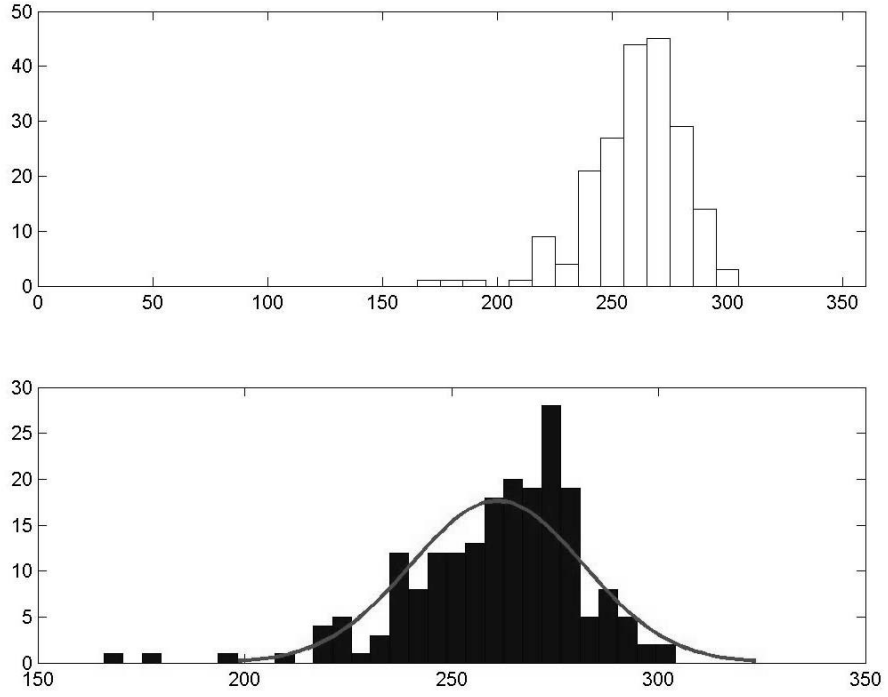

Fig. 2 – Skeleton's azimuth histogram.

The Gaussian distribution of the skeletons from Cernica necropolis shows a west-east orientation with a peak at spring-autumn. This fact shows that the mortality rate grows in spring and autumn[9]. The death-rate can be connected with epidemic (influenza, hepatitis, encephalitis) or food deficit (the end of winter).

Looking at the image of the skeletons from Cernica, one can realize that each of them is unique, as if they would have liked to display something. The skeletons were not thrown in the pit without any rule, but they were placed in a way that would express certain features of the dead person.

[8] Sângeorzan 1981, 1–20.
[9] Vince *et alii*, 1996, 199–202.

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Because many skeletons are orientated in the sunset direction, we take as an initial point of comparison the orientation of the 324 skeletons. Up to this point, we report the position in necropolis, the eyesight direction, the skeleton's position, funerary inventories, uncommon skeletons and anthropological characteristics.

- *The skeleton's position in necropolis*

On the map of the cemetery we can distinguish two graves accumulations; one is in the North and the other in the South. Between these two parts there is a central stripe of about 10 graves. Some graves are far from these groups. The reason can be that in the neighborhood of the necropolis were found some settlement traces from three different cultural layers (Dudeşti, Giuleşti, Bolintineanu). We can see that many skeletons, whose orientation is out of the solar arc, are grouped along a line, at the border of the North agglomeration (M98, M143, M144, M93, M94, M89, M88, M142, M133bis, M152, M160; M54, M30) and of the South agglomeration (M327, M325). The reason can be a miscalculation, or an act of excepting from the community, whose reason we don't know at this moment. Some of the graves are grouped, like [M117, M251], [M148, M140], [M45, M48], these group's members possibly belonging to a family (wife and husband).

- *The eyesight direction*

The orientated skeletons eyesight's were 41 % to the left (North) and 46 % to the right (South). Figs. 3 and 4 show variation of the North and South eyesight direction and orientation of skeletons. Perhaps the eyesight direction was towards the origin of the anthropological type (Mediterranean looking to South, Nordic, Alpine to North), but we cannot prove that. These histograms show the same apex of orientation [260, 280]; out of both categories are skeletons in and out of the solar arc.

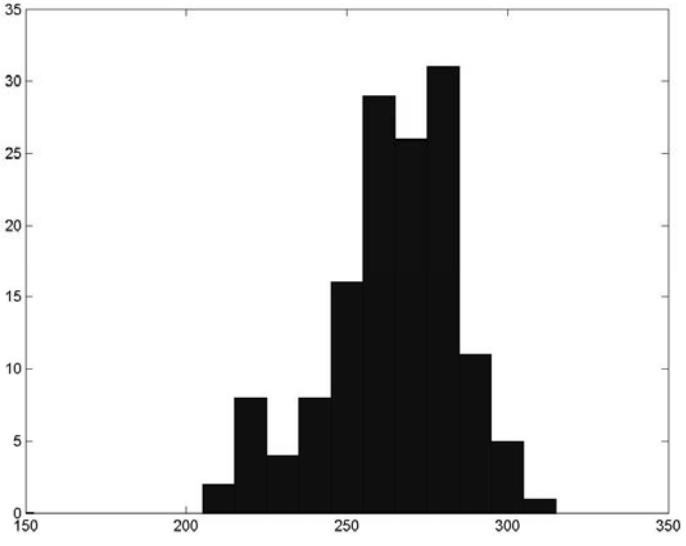

Fig. 3 – North eyesight's skeletons orientation.

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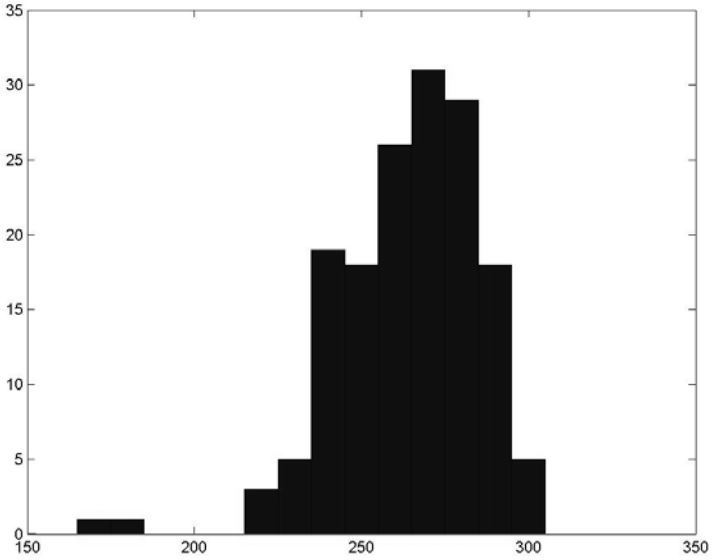

Fig. 4 – South eyesight's skeletons orientation.

- *The skeleton position*

The positions of the skeletons were 91% stretched and 8% flexed. The archeologists emphasizes an important historical conclusion: the burials which contained stretched skeletons were earlier then those with the flexed ones. Figs. 5 and 6 show that for these two skeleton positions, their orientation falls in and out of the solar arc.

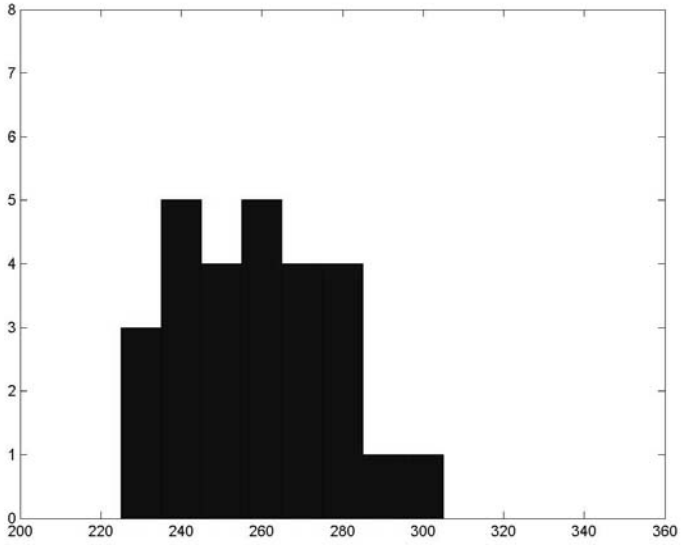

Fig. 5 – Histograms of the orientation for the flexed skeletons.

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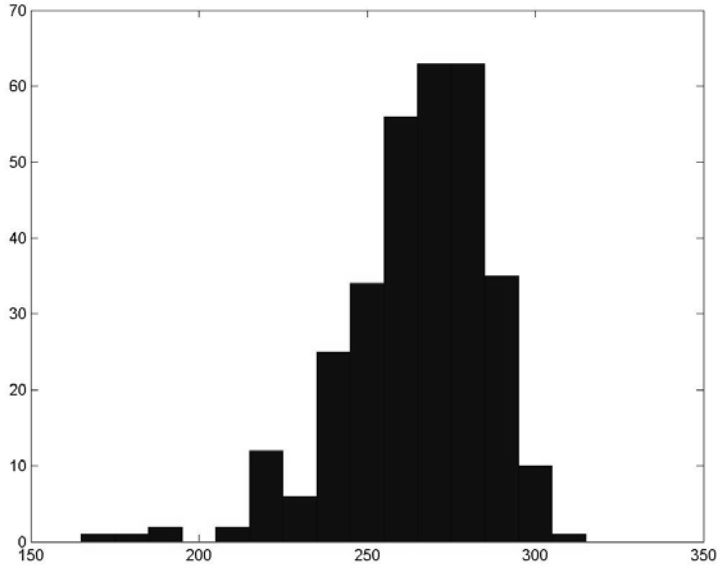

Fig. 6 – Histograms of the orientation for the stretched skeletons.

- *Funerary inventory*

In this case we have studied the skeletons, which are outside the solar arc (27 graves), and we found that 6 burials have "jewels", 4 burials have tools. The others had no funerary inventory. Interesting is that none of the burials outside the solar arc have an offering.

It was found out that the graves from the North, South and central part contained the most rich funerary inventory, and those from West and East have a poor register of funerary objects. This fact can result from a social differentiation inside the Neolithic community.

In the burials, whose skeletons azimuths are inside the solar arc, the archeologists have found three types of funeral inventories:

- The *offering* of food [M169, M225] and a pot probably for water [M116, M265]. These Neolithic people believed in "afterlife – life after death" and gave food and drink for the dead person to have supplies on the way to the other world;
- The different *tools* from smooth stone, flint and bone, which reflect – in part – the householders tools used during the lifetime of that person;
- The "*jewels*": pin (the M101 skeleton has a pin rendering a nude woman), pendant, beads, bracelets, valves of shell (near M43, M47, M48, M14 skeletons), rings of bone on the finger and fangs of wild boar.

- *Uncommon skeletons*

Four *pregnant woman* skeletons [M158 (242°), M251 (264°), M256 (280°), M303 (284°)] were found in the Cernica cemetery. Every skeleton are inside the

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solar arc and are not isolated in the cemetery. M158 was buried in January, or December, M251 in October, or March, M256 in September, or April and M303 in May, or August.

Three skeletons facing [M149 (258°), M237A (260°), M318 (260°)] were discovered in the Cernica necropolis. Every skeleton is inside the solar arc and is not isolated in the necropolis. Very interesting is that none of them has funerary inventory. The Neolithic people buried the dead person facing downwards in order to get her immobilized in the pit, to prevent her spirit from escaping and disturb the living persons, as a consequence of the faith in vampires or ghosts.

Crossed legs skeletons [M18, M28, M119, M129, M132, M150, M179, M188, M221, M255, M275, and M279] are orientated astronomically, and we found that just one, namely the M255 (214°) skeleton is outside from the solar arc, but it is near to the other skeletons in the cemetery.

- *Anthropological features*

The largest admixture to the European Paleolithic-Mesolithic stock was due to the *Neolithic revolution* of the 7th to 5th millennia BC. Three main DNA gene groups have been identified as contributing Neolithic entrants into Europe: J, T1, and U3[10].

The anthropological studies make in the Cernica necropolis shows that the Mediterranean anthropological type was mostly represented as in most of the Neolithic population from Romania, frequently was the Proto-Europid anthropological type, few Alpine and several Nordic individuals were found[11]. We cannot prove that the skeletons outside the solar arc belong to one anthropological type or another, but this must be verified by anthropologists in future.

The orientation of skeletons from the Neolithic time in Cernica (and in Europe) proves the astronomical knowledge in relation with the burial preoccupation.

3. Conclusions

In conclusion, using mathematical and astronomical calculations, we could say that the people of the Dudeşti and Boian Cultures made their graves in the morning, at the sunrise, orientating them towards the Sun direction. The dead person was orientated in graves with her legs in the direction of the sunrise[12]. So, we can admit a special cult used during the burial, which consists in the orientation of the dead person to the sunrise position[13]. The purpose of this action can be a last

[10] Sforza *et alii*, 1994.
[11] Necrasov *et alii*, 1990, 185–189.
[12] Chiş *et alii*, 2000, 12–14.
[13] Csillik *et alii*, 2000, 113–118.

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desperate trial to resurrect the dead, the lights of the Sun providing the energy at that specific moment. The orientation of the skeletons in the Cernica cemetery points out the arhaeoastromical hypothesis: in the Neolithic the skeletons orientation was towards the sunrise, or sunset, of the day when the dead was to be buried[14].

Another important conclusion is that the Neolithic people probably made a social differentiation in the position of the dead in the cemetery (in the middle was the rich, healthy, protected person), and in the orientation of the skeletons (derived from another nation, not native, foreign)[15].

The main occupation of all Boian communities was the agriculture and the animal husbandry, suitable to the geographical environment of the plain, so that they could developed a solar rite calendar. This solar cult was made by a systematical observation of the Sun within the burial rite[16].

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[14] Maxim *et alii*, 2002, 19–29.
[15] Csillik *et alii*, 2004, 157–170.
[16] Lazarovici *et alii*, 2002, 7–18.

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FOUNDATION TRENCHES: A BRIEF APPROACH TO THE TECHNOLOGY OF BUILDING AND DECONSTRUCTION OF SOUTHEASTERN EUROPE CHALCOLITHIC BUILDINGS[1]

ŞANŢURI DE FUNDAŢIE: O SCURTĂ ABORDARE A TEHNOLOGIEI DE CONSTRUCŢIE ŞI DECONSTRUCŢIE A CLĂDIRILOR CHALCOLITICE DIN EUROPA DE SUD-EST

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Cuvinte-cheie: gospodărie chalcolitică, ardere intenţionată, arheologie experimentală.
Rezumat: Atunci când este analizată din perspectiva arheologiei experimentale, arderea unei locuinţe chalcolitice din Europa de Sud-Est apare ca fiind un proces intenţionat, în care şanţurile de fundaţie ale locuinţei au jucat un rol central. Prezenta lucrare discută procesul dual al construcţiei şi deconstrucţiei prin combustie a unei case de chirpici, bazându-se pe date arheologice, etnografice şi experimentale.

Key words: Chalcolithic household, intentional firing, experimental archaeology.
Abstract: When analysed from the perspective of experimental archaeology, the firing of the South European Chalcolithic households reveals to have been an intentional process in which the foundation trenches of the houses played a central role. The present paper discusses the dual process of construction and deconstruction through combustion of the wattle and daub houses using archaeological, ethnographic and experimental data.

Introduction

In prehistoric archaeology, the study of architectural space is often reduced to two components: the projection on the ground of the built space (*i.e.* the architectural plan) and the materials used, which can offer details about the construction technology, and to some extent, evoke the built space.

Although often archaeologists employ ethnographic data to understand the complexity of the architecture of the past (see the now classic example of Bankoff and Winter [1979] who tried to burn down a country house to understand the process of intentional firing in Balkan prehistoric societies), I believe that experimental archaeology can play an important role as a Middle Range Theory by helping the archaeologist to approach the technological and symbolic information that cannot be inferred theoretically.

[1] A shorter version of this paper was published in Romanian in *Anuarul Muzeului Etnografic al Transilvaniei*, Cluj-Napoca 2007.

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The present paper will present some data resulting from the reconstruction and burning of a replica of a Chalcolithic house from the Radovanu site, which was excavated by Dr Eugen Comşa in the 1960s and 1970s[2].

Why Radovanu?

Because the site was exhaustively excavated, it offered an image of the complexity of the Chalcolithic dwelling in the Lower Danube area; this complex site consisted of a *tell* settlement, a flat settlement, a workshop, and a necropolis. After many decades Dr Comşa's excavations at Radovanu still offer interesting data, such as the mechanics of the collapse of the walls during combustion. The Radovanu site clearly illustrates some of the principles of Southeastern Europe Chalcolithic architecture: a) a settlement separated from the rest of the landscape by a perimeter ditch, b) a first phase of the dwelling designed on an orthogonal frame, consisting of a group of *megaron* houses with central pole, c) the use of waterproof plastered wooden platforms, and d) the firing of the settlement after each episode of habitation.

The construction and deconstruction of various architectural features, inspired by the architectural plans from Radovanu, as well as other Chalcolithic sites, conducted at full scale in Vadastra village, permitted the present author to arrive at a nuanced understanding of the materials and symbolism of the living space in the Lower Danube area[3].

Technology in context

In the 6th–5th millennium BC Balkan–Anatolia technocomplex two techniques of building can be identified: the structure with wood, wattle and daub and more rarely, with simple clay, and in the Chalcolithic of Southeastern Europe often both techniques were used in the same building[4].

It is believed that the technique using wooden structures with trellis covered with clay would have been prevalent in the forested zones[5], and, according to Treuil (1983), specific to Neolithic Europe, although it is attested earlier at Çayönü[6].

[2] Comşa 1961, 1969, 1972, 1990.

[3] Gheorghiu 2002, 2003a, b, 2005, 2006, 2007, b, c, Gheorghiu in print a, b; Gheorghiu & Dumitrescu, in print.

[4] See Pandrea e*t alii,* 1999, 147; Marinescu-Bîlcu *et alii*, 1997, 65.

[5] Perlès 2001, 198.

[6] Perlès 2001, 197.

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As a result of a process of diffusion from Southwest Asia into southern Europe, a specific cultural aspect labelled as the First Temperate Neolithic[7] would be created in the Balkans and in the northern Lower Danube area, which was characterized by a predominant architecture of wood and clay, as a result of adaptation to a new climate.

One can assume that the choice of this technique was due primarily to the pluvial climate of the new context and secondarily to the areas subject to cyclical floods chosen for dwelling.

Stages of construction and deconstruction

Ethnographic studies from different geographical areas (Oliver 1998), as well as the results of experiments, undertaken at prehistoric sites in Southeast Europe, led to the conclusion that the technology of construction of Chalcolithic houses would principally contain the following steps:

– the cutting, transport and drying of wood;
– the digging of the foundation trenches;
– the treatment by fire of the buried parts of the posts;
– the thrusting of the wooden posts into the ditches;
– the construction of the wooden structure of the roof with carpentry joints at ½ (as some of the architectural design models show);
– the digging of holes for extracting the clay for building;
– the mix of wet clay with straw, a composite material;
– the making of lumps of clay and straw, and their transport;
– the plaiting of a structure of wood trellis / wattle around the posts;
– the fixing of the composite material on the wood trellis;
– the making (in some cases) of clay plastered wooden floors;
– the covering of the roof with vegetal material;
– the finishing and decoration of the wall surface;
– the deconstruction of the building at the end of its life cycle, a) through the recovery of wood and leaving the building to weathering, or b) by firing it[8].

As one can perceive from the stages described above, the process of construction seems to have been the result of a series of operations that created fullness and emptiness within the materials used.

From the stages of the process of construction mentioned above, I will limit my analysis to that of the foundation trenches and of the structure of the wattle and daub composite material, both probably having a functional and symbolic role, especially in the final stage of the annihilation of the built space by means of the process of combustion.

[7] Nandriş 1970; Nandriş 2005.

[8] Bankoff & Winter, 1979; Tringham 1992, 1994; Tringham & Krstić, 1990; Ştefanović 1997, 2002, Chapman 1999; Gheorghiu 2005.

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Ditches

The digging of the foundation trenches (Fig. 1), as well as the digging of the perimeter that encircled some settlements may be seen as an action that had the meaning of separation from the rest of the built space of the settlement[9], and in this respect some of the texts of classical authors provide good ethnographic information[10]. It can be said that the ritual of separation is part of a technological process and therefore the existence of ritual and symbolic aspects in the technology of building may be inferred.

Fig. 1 – Foundation trenches. Experiments at Vădastra 2003. The reconstruction and combustion of the Chalcolithic house were carried out by the author.

Usually, the foundation ditches[11], had generally a "V"-shaped profile[12] probably due to the technology of digging.

The huge weight of the wattle and daub wall and of the roof, supported directly on the ground, could lead to the fracture of the walls; therefore the ditch dug in the ground had the role to offer an additional rigidity to the pointed posts[13]

[9] Gheorghiu 2008.
[10] See Coulanges 1908.
[11] See Todorova 1982, 81, Fig. 41; Popovici & Railland 1996–1997, 24; Bîlcu-Marinescu *et alii*, 1997, 68; Randoin *et alii*, 1998–2000, 231, Pl. V, Ursulescu *et alii*, 2002,16.
[12] Ursulescu *et alii*, 2002, 16.
[13] See Ursulescu *et alii*, 2003, 16; Todorova 1982, 81, Fig. 42.

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and the wattle. For various reasons, the most important of which is the homogeneity of the pressed filling clay, foundation ditches are often difficult to identify during excavation.

Posts fixed in trenches

Foundation trenches allowed a secure anchor for primary and secondary wood posts[14] fixing the walls' trellis (Fig. 2), and have proved particularly useful in untangling the overlapping of dwellings that form *tells*, when new levels of housing were built over earlier ones (a process that, because the demolition of the fired or unfired houses, created relatively weak ground for construction).

Fig. 2 – Wattle structure. Experiments at Vădastra 2005.

Thrusting large wooden posts in the soil[15]was probably done using a process analogous to that I identified in Dobrogea province, which consists of the rotation of a post in a hole partially filled with water.

[14] See Ursulescu *et alii*, 2002:15 ff.; Todorova 1982, 23–32, Figs. 13–22.
[15] See Todorova 1982, 81, Fig. 42.

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By fixing the vertical columns with horizontal plaited twig structures as support for the daub, the movement of the side of the built structure was annihilated. This was before the first use of a reinforced material in prehistoric architecture, whose functional and symbolic role was not only that of building but perhaps also of deconstruction of the living space, as I will try to show below.

A composite material

The technique to use at the macro-scale a reinforced material was put into practice in parallel with the use at the micro-scale of a plastic composite material (clay mixed with chopped vegetable fibre). It may be noted that most of the wall fragments of prehistoric buildings from the area discussed present a very dense texture of chopped straw.

Some fragments of fired architectural features present a very fine standardized texture of chopped cereal fibre that may have resulted from grain threshing, or from the mixture of clay with cattle dung (which contains plant material chopped very fine) and which acted as micro channels for micro-air-draught which maintained the combustion.

The combustion of the house

Beside the symbolic role played in creating the living space, the principle of "fullness" and "emptiness" played an important functional role in the process of combustion of the wattle and daub buildings.

As I mentioned before, the *megaron* houses at Radovanu were built using a central pole, a solution also employed by Karanovo communities[16]. The use of a central pole and a row of posts positioned inside the buildings[17] could have been a mechanical solution for solving the covering of large openings. To protect this important wooden structure against accidental fires, a simple method would have been to plaster it with a thin layer of clay (Fig. 3), which after the combustion of the house was transformed into a ceramic crust (Fig. 4). For example, the so-called "columns" of Căscioarele *tell* [18] could represent such a kind of fireproofing.

By lighting a fire inside the replica of a prehistoric building containing flammable materials, after a variable period of time, the resulting temperature was high enough to initiate the combustion of the wood structure inside the walls. At this stage, all the dense part of the building would contain empty spaces in the form of tubes burning inside the walls, resulting from the combustion of the wood and

[16] See Todorova 1982.
[17] Comşa 1990, 87, Fig. 46; Neagu 2001, 19.
[18] See Dumitrescu 1970, 1986.

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vegetal material (Fig. 5). These tubes allow a strong air-draught and the raising of the temperature above 1000 °C in these areas. I believe that an additional cause for the rise of the temperature of combustion is due to the burning of vegetal material inside the clay, which will be transformed in time into a ceramic material full of micro voids.

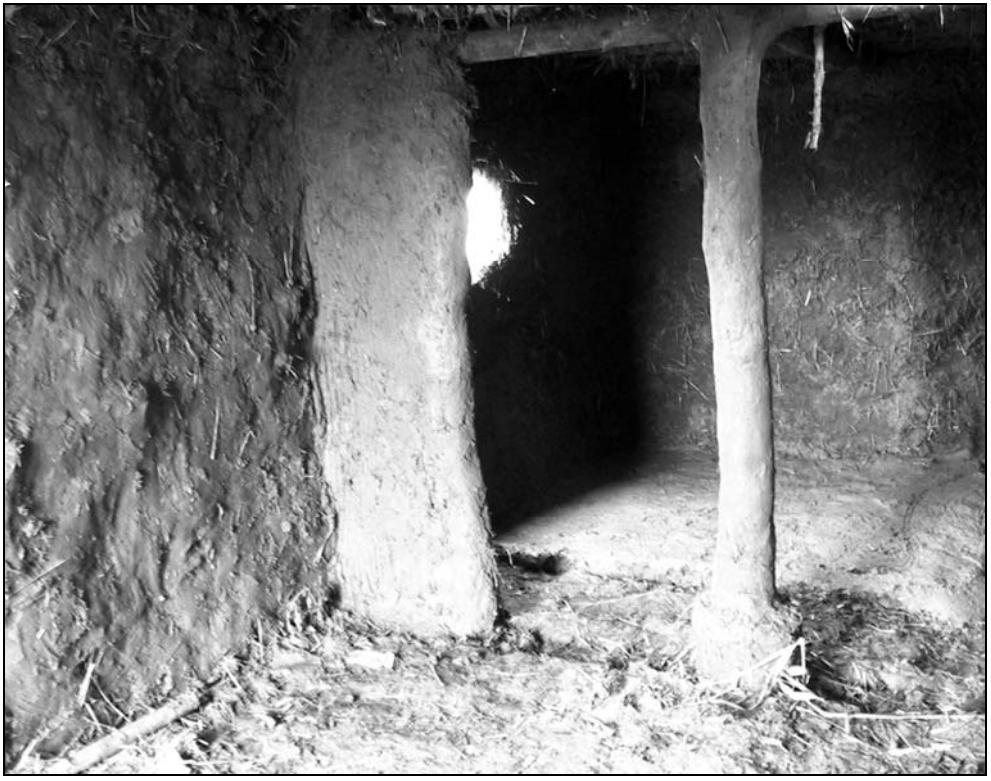

Fig. 3 – Plastered central pole. Experiments at Vădastra 2005.

When analysing the wattle and daub fired and ceramic fragments from the Radovanu site, one can observe that a large majority were fired at temperatures exceeding 900 °C, since they present a large amount of slag. This phenomenon was possible as the result of a strong air turbulence which created a strong air-draught able to raise the temperature to this level, and can be related to the position of the settlement on a hill dominating three valleys. Some of the wattle and daub fragments preserving wood imprints and large quantities of slag at one end are in fact fractured tubes generating air draught, resulting from the consuming of the wooden material within the walls (Fig. 6).

During the process of combustion, the first architectural element to collapse is the wooden roof followed by the ceiling, which receives a large amount of thermal shock from beneath and above. A solid built dwelling can preserve its

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shape following combustion, the walls resisting for weeks if they are not intentionally fragmented.

Fig. 4 – Combustion of the central pole. Experiments at Vădastra 2006.

Experiments demonstrate that the base of the walls (the part inside the foundation trenches up to approx. 40 cm above the ground level) was not affected by combustion and preserved the shape of the building perimeter after the collapse of the wall (Fig. 7). At the corners and at the intersection with the interior walls the fired material conserved well the initial shape, these parts of the building influencing the mechanics of the collapse of the building (Fig. 8).

Additionally, experiments showed that the burning of the vertical wood structure stopped above the ground surface at a distance of approx. 30 cm; the part thrust into the foundation trench was well preserved in most cases.

It is possible that the points of the wooden posts were fired superficially before being thrust into the foundation trenches, this process preserving them in time, as evidenced by some finds together with pieces of coal[19].

[19] See Tomescu 2004, 76.

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A Chalcolithic technique to waterproof the dwelling space was made with split tree trunks[20] (Fig. 9) or plastered layers of reed or twigs[21] with the same mixture of clay and chaff. Although the temperatures recorded on the surface of the platform reached 700 °C, the wood of the platform was not totally transformed into charcoal (Fig. 10).

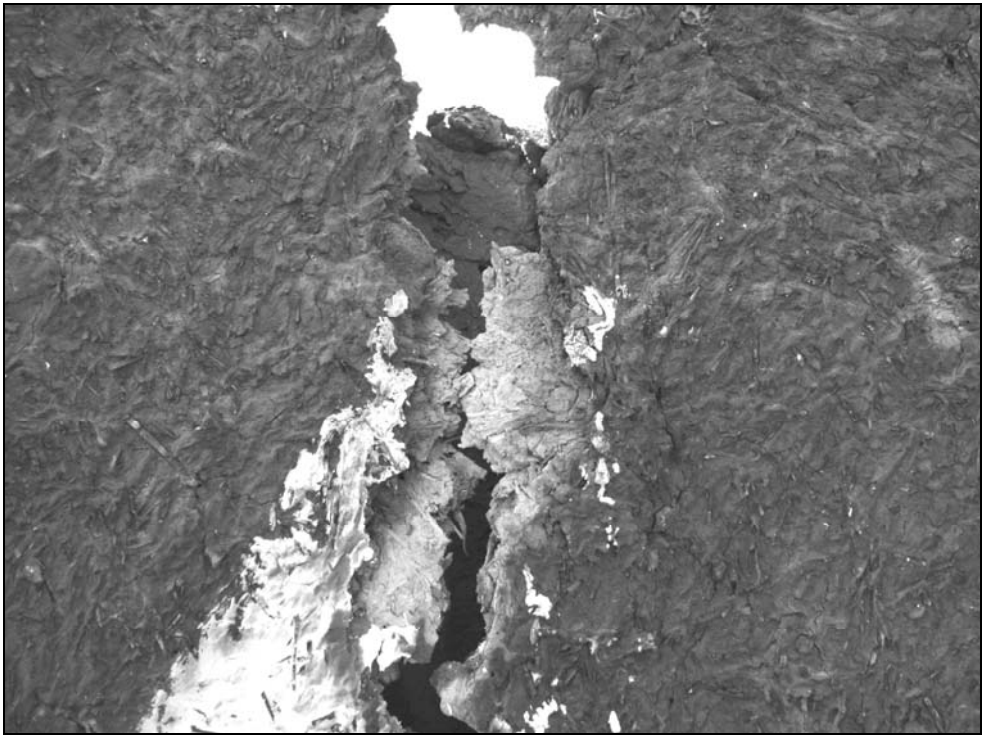

Fig. 5 – Ceramic tube resulted from the combustion of a vertical post.
Experiments at Vădastra 2006.

If the combustion took place only inside the built perimeter, one could observe that after the consuming of the structural wooden posts and beams, and after the formation of ceramic crusts on the inner surface of the perimeter walls, while their outer surface remained unfired, the tensions created in the remaining material could produce a gradual fracture of the ceramic tubes, followed by the collapse of the walls *into* the built perimeter, in the same manner as would result from an intentional action to quench the fire (Fig. 11).

When comparing the plans of the fired houses at Radovanu (Fig. 12) with the results of the experiments (*i.e.* with the results of the dynamics of the collapse after combustion) (Fig. 13), one can find analogies in the way the walls collapsed inside the house.

[20] Comşa 1990, 88, Fig. 47; Todorova 1982, 153, Figs. 96 and 97.
[21] Marinescu-Bîlcu 1974, 25.

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Fig. 6 – Fractured ceramic tubes with slag resulted from the high temperature reached. Radovanu 2008. From Dr. E. Comşa's excavations.

Fig. 7 – Part of the built perimeter preserved by the base of the wall. Note the unfired post on the right. Excavation by Dr. Fabio Cavulli and team. Vădastra 2007.

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Fig. 8 – Inner wall acting as a buttress after the combustion process.
Excavation by Dr. Fabio Cavulli and team. Vădastra 2007.

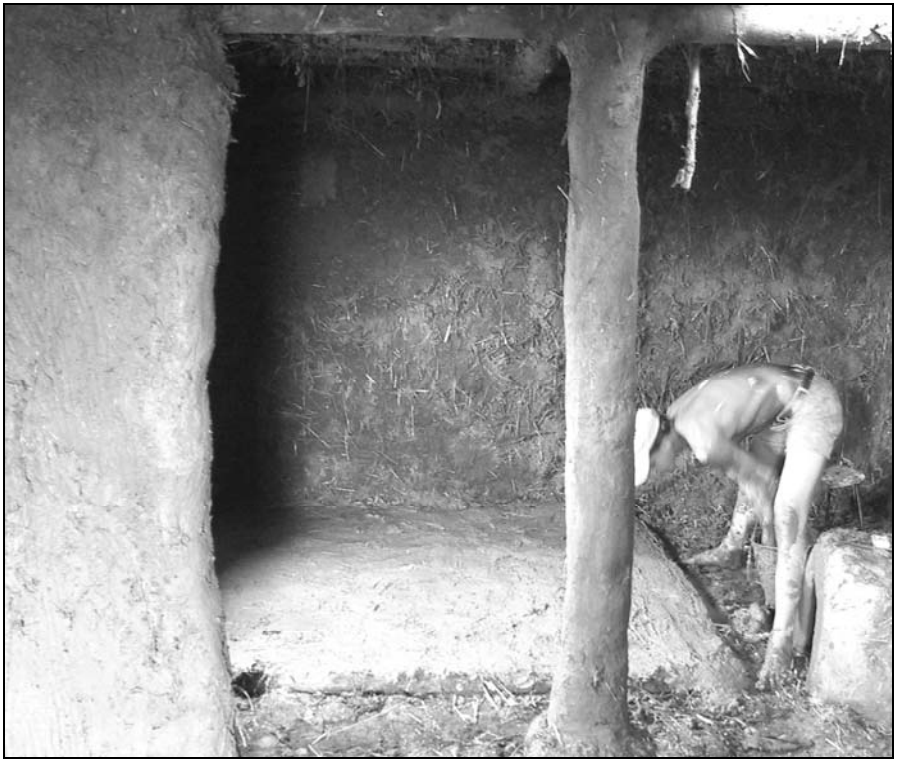

Fig. 9 – Plastering the wooden platform. Experiments at Vădastra 2005.

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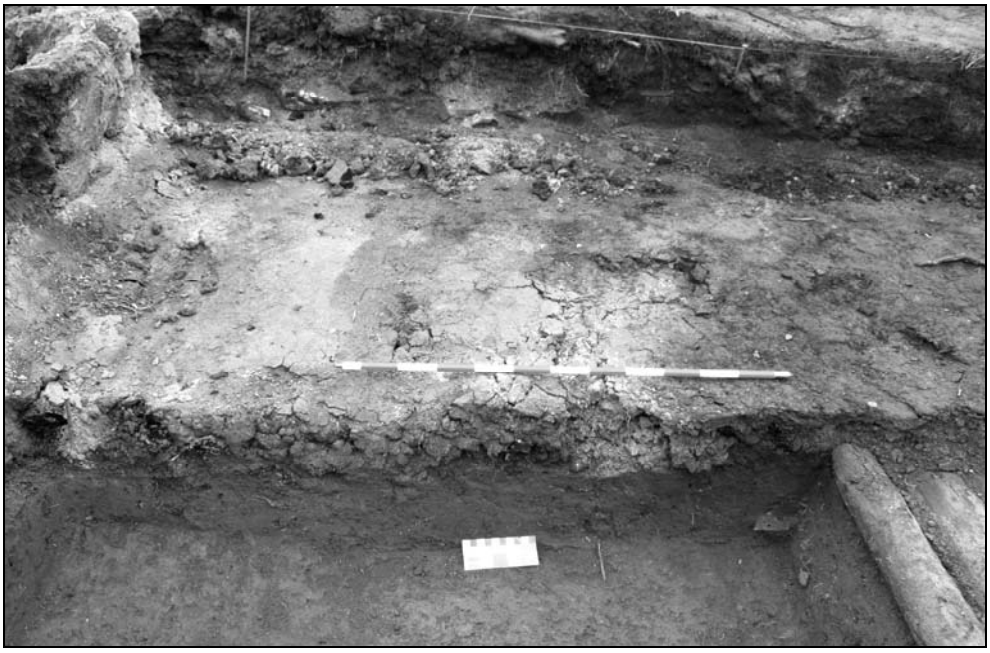

Fig. 10 – Fired plastered wooden platform. Excavation by Dr. Fabio Cavulli and team. Vădastra 2007.

Fig. 11 – Collapse of the northern wall at the end of the process of combustion. Vădastra 2006.

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Fig. 12 – A fired house from Radovanu.
Drawing by Dr. E. Comşa.

Fig. 13 – The collapsed house after combustion.
Vădastra 2007.

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Fig. 14 – The collapsed house after combustion. Vădastra 2007.

Conclusions

When returning after the completion of the experiments to reinterpret the archaeological record, a new understanding of the materiality of the past reveals valuable data to understand the process of building. For instance, now the impressions of the ligneous material left in the fired clay inform us about the path of the collapse. The same imprints become an index of some of the paths of the airflow, because the highest temperatures were produced at the ends of the wooden structures, after the consumption of the ligneous material.

But the most important architectural feature, the role of which can be better understood after the experiments, is the foundation trench. This element of building had a ritual function of separation during the construction and deconstruction processes, the structural function being overlapped with the symbolic. Foundation trenches control the static of the house as well as the dynamics of the collapse, and preserve the shape of the building long ago after its destruction (Fig. 14).

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UNPUBLISHED DATA ABOUT FAUNA EXPLOITED BY PRECUCUTENIAN COMMUNITIES FROM COSTIŞA (NEAMŢ COUNTY)

DATE INEDITE DESPRE FAUNA EXPLOATATĂ DE CĂTRE COMUNITĂŢILE PRECUCUTENIENE DE LA COSTIŞA (JUDEŢUL NEAMŢ)

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Cuvinte-cheie: comunitate precucuteniană, nivel Costişa, Cultura Monteoru, areal de vânătoare, cal sălbatic.

Rezumat: Prin reluarea cercetărilor arheologice la Costişa „Cetăţuie" (judeţul Neamţ), din anul 2001 şi până în prezent s-au prelevat, pe lângă alte materiale arheologice, 2884 resturi faunistice, aparţinând culturilor Precucuteni (faza III), Costişa şi Monteoru. În materialul de faţă, ne vom ocupa de prezentarea datelor oferite doar de analiza oaselor de animale din nivelele precucuteniene, fiind determinate 2093 oase. Conform datelor preliminare, se pare că triburile precucuteniene au exploatat o gamă variată de resurse animaliere, incluzând specii domestice (vita, porcul, oaia, capra şi câinele), sălbatice (cerbul, mistreţul, bourul, castorul, calul sălbatic, ursul şi jderul), moluşte (scoici). Surprinzător, vânătoarea este componenta dominantă în plan alimentar şi utilitar, exploatarea mamiferelor domestice având un rol secundar, în acest sens, edificator fiind raportul specii domestice/sălbatice cu o valoare de 31,7/68,3 %. Comunităţile precucuteniene creşteau bovine, e drept pe scară redusă, aşa cum rezultă din analiza noastră (21,6 %), fiind utilizate mai ales ca furnizoare de lapte şi, în plan secundar, pentru carne. Oile şi caprele contau în mică măsură în economia locală (2,1 %); caprele erau ţinute pentru lapte, ovinele pentru lapte, carne, lână. Porcinele aveau şi ele o importanţă redusă în alimentaţie (7,8 %), deşi erau relativ uşor de gospodărit, în condiţiile unui biotop favorabil lor.

Key words: Precucutenian community, Costişa level, Monteoru Culture, hunting area, wild horse.

Abstract: The resumption of the archaeological research at Costişa "Cetăţuie" (Neamţ County) (from 2001 until now) revealed about 2884 faunal remains among the rich archaeological findings. They belong to Precucuteni (phase III), Costişa and Monteoru cultures. In the present study we handle the data presentation offered by the analysis of animal bones from Precucutenian levels, a total of 2093 bones. According to preliminary data, it appears that Precucutenian tribes exploited a wide range of resources, including species of domestic livestock (cattle, pig, sheep, goat and dog), wildlife (deer, wild boar, aurochs, beaver, wild horse, bear and marten). Surprisingly hunting dominance in the food and utility sectors is telling by domestic / wild ratio (31.7/68.3%), domestic mammals having a secondary role in this respect. Precucutenian communities raised cattle on a small scale, as is shown in our analysis (21.6%), being used mainly as a provider of milk and meat for the secondary. Sheep and goats account for little in the local economy (2.1%), goats were kept for milk, sheep milk, meat, and

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wool. The pig took a limited place in the diet (7.8%), although they were relatively easy to farm in a favorable biotope to them in the site neighboring.

The site lies on a promontory, named "Cetățuia" cut off from the higher terrace of the Bistrița River, at the eastern limit of Costișa village[1]. The locality is settled in the Depression Cracău-Bistrița, belonging to Moldavia Subcarpathian Hills. The faunal assemblage was brought to light during 2001–2006 excavations[2] and includes over 3,500 fragments[3]. The materials belong to phase III of Precucuteni, Costișa and Monteoru cultures[4], the present article dealing with the sample fauna from the Precucutenian level, that one totaling 2,093 bones.

Table 1

Animal bones from Precucutenian level at Costișa

Specie/specii	No. frgm.	%
Bos taurus (cattle)	325	21.6
Sus domesticus (pig)	117	7.8
Ovis/Capra (sheep-goat)	31	2.1
Canis familiaris (dog)	4	0.2
Total domestic species	**477**	**31.7**
Cervus elaphus (red deer)	593	39.3
Sus ferrus (wild boar)	229	15.2
Bos primigenius (aurochs)	69	4.6
Castor fiber (beaver)	51	3.4
Capreolus c. (roe deer)	42	2.8
Equus cf. caballus (wild horse)	36	2.4
Ursus arctos (bear)	8	0.5
Martes martes (badger)	1	0.06
Canis lupus (wolf)	1	0.06
Total wild species	**1030**	**68.3**
Determined species	1507	100
Bos sp.	10	
Bos/Cervus	85	
Sus sp.	6	
Splinters	458	
Mammal remainders	2066	
Mollusks	27	
Total sample	2093	

[1] Vulpe *et alii*, 2002, 77.

[2] Archaeological researches co-coordinated by Acad. Al. Vulpe, together with A. Popescu, R. Băjenaru.

[3] About 2,884 bony remains have been analyzed, by now counting about 80 % from the entire assemblage stored at the Archaeological Institute from Bucharest.

[4] Popescu & Băjenaru, 2004, 293, Vulpe *et alii*, 2006, 141.

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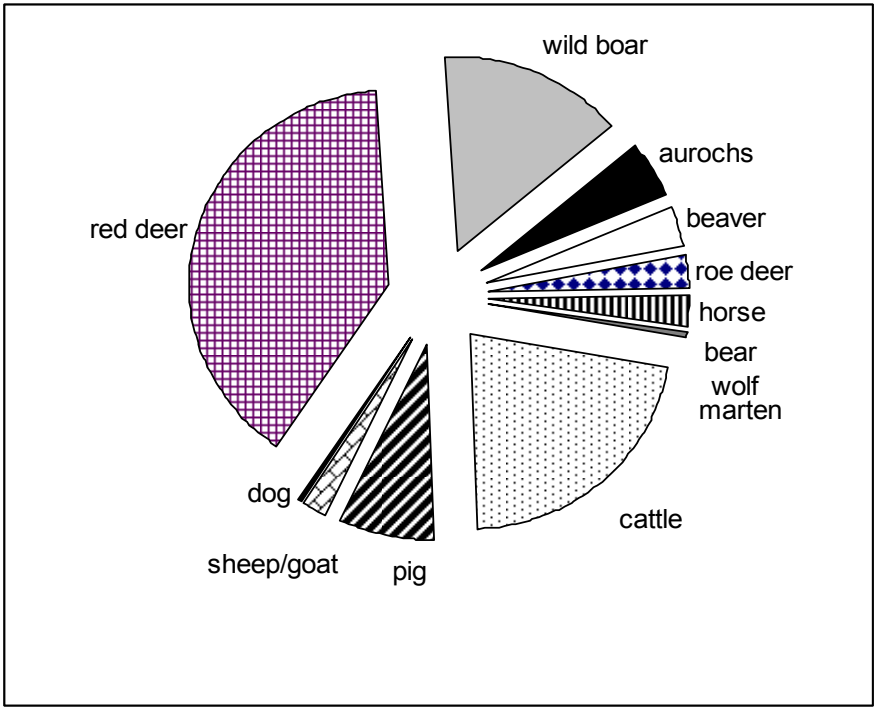

Fig. 1 – Species frequencies at Costişa (as fragments).

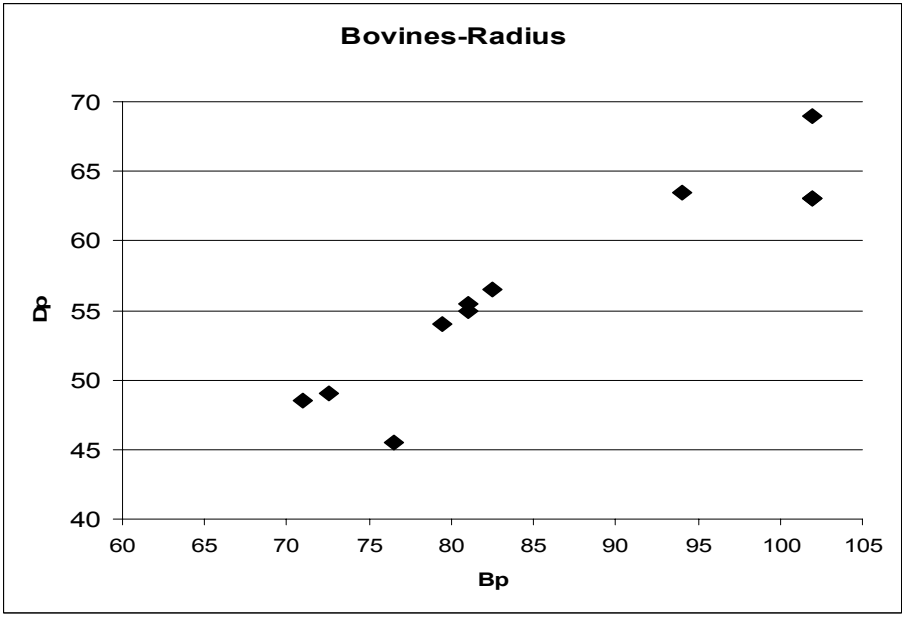

Fig. 2 – Scatter-diagram of cattle radius.

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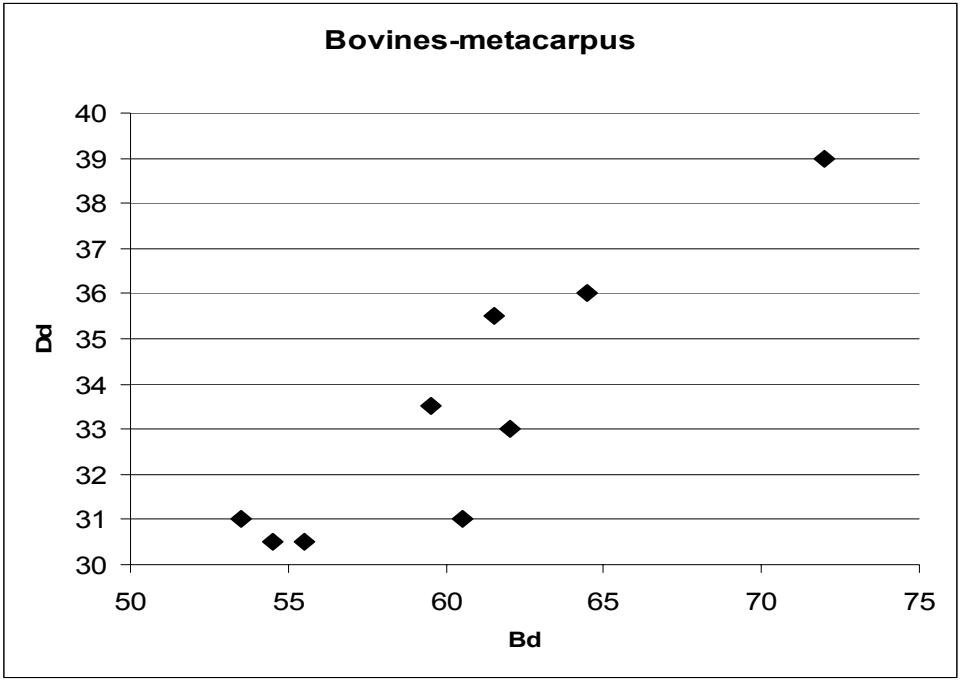

Fig. 3 – Scatter-diagram of cattle metacarpus.

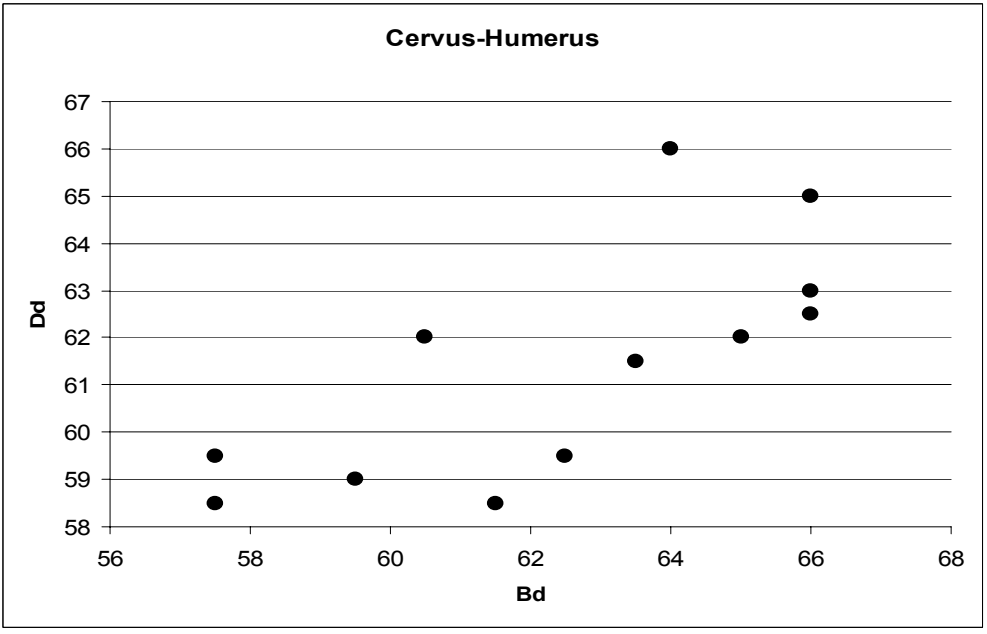

Fig. 4 – Scatter-diagram of red deer humerus.

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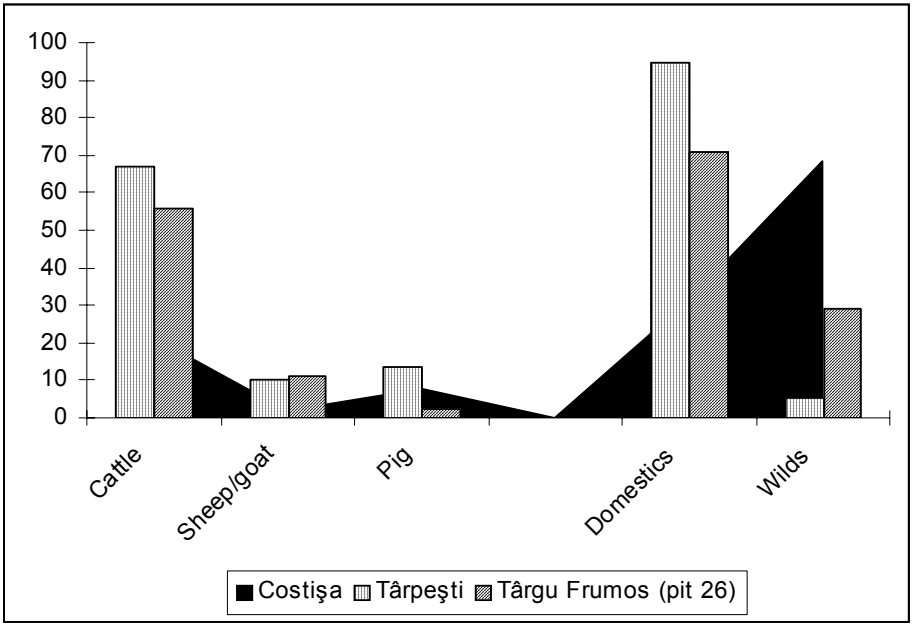

Fig. 5 – Species frequencies in Precucutenian sites (as fragments).

In the present stage of research we offer statistic evaluations just as number of fragments; the assemblage is to complete over time. 27 freshwater mussel remainders were identified besides the 2,093 mammal bones. The main domestic mammals as cattle, sheep/goat, pigs and dog account no more than 31.7 % of the identifiable bones in the Precucutenian assemblage. The wild mammal bones overcome with 68.3 % and derive from nine taxons as red and roe deer, aurochs, wild boar, beaver, bear, wild horse, marten and wolf.

Cattle remains rank the first among domestic species only, talking about 325 fragments (21.6 %). As to the morphological and metrical characteristics some observations could be noted: cows bore horns of "brahyceros" type (a single piece of small proportions was found); complete male horn cores were not found at Costişa, it can be supposed they bore horn of "primigenius" type as the sample from a contemporaneous site confirms it[5]. Some complete metapodii allowed the subsequent estimations of the withers height: 113–115.1 cm for cows and 120.9–134.1 cm for bulls; geld exemplars were not identified, even if this custom seems to have been adopted by precucutenian tribes[6]. The withers height values suggest a pronounced sexual dimorphism; the small values characterize the females' tall by contrast with those of males, a little higher. The data also put forward, a heterogeneous cattle population, with small, medium and big sized individuals, the same variability being emphasized on the wideness of the bones. Many individuals (mostly males) were robust; some of them were very close to aurochs females'

[5] Haimovici & Coroliuc, 2000, 176.
[6] *Ibidem.*

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size. By large, referring to cattle exploitation one appreciates that, almost 67% of the identified bones originate in adult and mature exemplars and just 33% in young and sub-adults. The report suggests cattle exploitation oriented towards diary products and very possible their using as draught power; several phalanges broadened enough could suggest exemplars employment for traction.

Pig ranks the second among domesticated with 117 bones, totaling 7.8%; most part of pig sample originates in immature animals (78%), a reduced number of exemplars (mostly males) reaching the maturity. Two moments of killing were established: below one year, or between 16–18 months. Maybe these ones are connected with a seasonal exploitation of species (intensified towards the end of fall-winter), or the attainment of an optimal body weight suitable for slaughtering. In all probability, the animals were kept for feeding in the adjacent forests during warm season. In this context interbreeding with the boar (numerous in the zone) could have happened; the metric evaluations emphasize bones originating in mongrel individuals. A withers height of 80 cm would characterize an animal of this type.

Sheep/goat have a less significant material, the 31 fragments (2.1 %) originate in a goat no older than 3–4 years and three sheep. The few measurable bones suggest small and gracile exemplars, aged over 2–3 years mostly.

Dog has played a minor role in the community life; the four preserved bones (0.2 %) come from three animals of small to medium size. A single cranium fragment keeps the left orbit, placed a little laterally. Even if all bones are fragmented, signs of butchering for consumptions were not emphasized on bones.

The wild mammals dominate the statistics with 1,030 remainders (68.3 %). The assemblage composition put forward either the diversity in taxa or biotopes exploited by community. Among them the grouping of big artiodactyls individualizes, as meat (chiefly), hide and raw materials sources; we refer at red and roe deer, aurochs, wild swine.

With a frequency of 39.3 % (593 bones) **red deer** ranks the first among mammals. About 62 % of its remainders come from adult and mature exemplars, versus 38 %, quota of young and sub-adult animals. It seems, the species hunting intensified in two moments of the years: end of fall or possibly during winter and in spring towards its end. In summer its hunting was feebly, the mammals migrating to highlands. Consequently, a seasonal hunting, implying a certain strategy adapted to species behavior existed. The bone measurements put forward the males' prevailing, many of them exhibiting a much worn dentition. It seems their capture was more facile owing to their solitary living, many of them being aged or weak after the breeding season at the end of fall[7]. The unexpected high proportion of young/ sub-adult exemplars could suggests, either the preference for a meat of good quality (naturally the capture of young animals being more facile), or point toward certain difficulties appeared at a moment in the community food

[7] Steele 2002, 36–38.

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supplying. Anyway the statistics reflect a higher density of red deer in the hunting area, as an effect of propitious conditions of live. Besides meat, hides, the deer antlers were used in tool manufacturing: implements and waste products were identified. It was a very common element, with increased density throughout prehistory, largely spread both in low and uplands.

Wild boar ranks the second among wild species with 229 fragments (15.2 %). The surroundings rich in moist forests, especially oak forests (acorns are a favorite food), shrub-lands, tall grass lands, and areas where reeds are abundant offered good conditions of living. The proportion of bones coming from matures versus immature exemplars is 76: 24 %, individuals with a much worn dentition, especially males being identified. Based on numerous calcaneii and talii, a 90–108 cm variation of the tall at shoulder is estimated, with an average of 95.8 cm. It seems the percent of females is higher, thus the average of the tall is smaller as compared to material from Târgu Frumos; in that site a value of 99.8 cm was estimated[8].

Auroch has an important sample, of about 69 fragments (4.6 %), originating chiefly in adult and mature individuals. Juvenile and sub-adult exemplars were also hunted, but to establish a real quota of them is impossible, because the osteological distinction between domestic cattle and aurochs is difficult, as much as bones from crossbred animals certainly exist too. Surprisingly, the Eneolithic faunal samples from our country, regardless of cultural area[9] display either increased proportions of aurochs bones, or important quantities of remainders of bovines hard to allot to species (maybe cross-breeds). Reverting to aurochs population exploited by the Costişa community, the metric evaluations suggest the prevalence of females, few males being hunted. A metatarsal of 276 mm length provided a tall at shoulder of 151 cm. By analogy with materials from Pannonian area, one appreciates a female exemplar[10], of 4–5 years in age.

Roe deer is quoted with 2.8 % (42 fragments), fully belonging to fore- and hind limb bones. 80 % of the bones derive from mature exemplars. The few measurements suggest exemplars of medium size.

Another grouping of hunted species encloses wild mammals with role in diet, accidentally hunted, as wild horse and brown bear. **The wild horse** sample totals 36 remainders (2.4 %), of which about 28 % represents meaty regions, the other ones skeleton dry parts as: phalanges, metapodii, and loose teeth. It is noticeable, that most part of phalanges and metapodii are more or less complete as compared to bones from meaty regions. The last ones are broken in the same way like other mammals' bones. A metatarsal of 254 mm in length, suggests a small stature horse (132 cm). The index of diaphysis is 12.8, value characteristic for the lower limit of

[8] Haimovici & Coroliuc, 2000, 179.

[9] The same remark has been ascertained in the last few years on Eneolithic faunal samples from the Banat.

[10] Bökönyi 1972, 17–56.

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"half-masive" class. Accordingly, that individual had semi-massive extremities and a small stature, common to horses from that time. At least, one third from horse bones comes from immature exemplars. Undoubtedly, the horse hunted by inhabitants of that epoch was wild; the archaeo-zoological bibliography of the latest years enlightened this question[11].

Table 2

Wild horse measurements

Mandible		**Radius**		**Metacarpus**	**Pelvis**	
M3		BFp	Dp	Bd	LA	
30		75.5	43.5	51	63.5	
Metatarsus						
GL	Ll	Bp	Dp	Sd	Bd	Dd
254	247.5	50.5	44.5	32.5	49.5	35.5
PH I			**PH II**			
BFp	Bp	Dp	GL	BFp	Bp	Dp
41.5	53.5	33	51.5	46.5	53.5	32.5

The **bear** bones account for 0.5 % of the identified fragments, originating in three mature animals. Bear had a negative impact on domestic stocks; its occasionally hunting was practiced to protect them. Also, is worth mentioning the presence of this forest mammal at a certain distance of its habitat, at a lower altitude. Nowadays the brown bear area has been restrained to the forested area from the eastern parts of the county Neam .

The rodents grouping includes **beaver** only, whence 51 bones remains were preserved accounting for 3.4 % of the identified fragments. This percentage places him in the fourth positions among wild mammals, an astonishing score. That could mean higher density of species on Bistrița river banks, in consequence of propitious living conditions. The mammal was hunted mostly for fur and to limit its actions on biotope, concretized in alterations of the flow, riparian flora and fauna. Though some effects are benefits[12] for local ecosystem, their perception was negative for communities. Maybe its meat was consumed, though its bones are lesser fragmented, most part of them being unbroken. In our times the mammal disappeared from the Romania fauna.

The carnivorous grouping includes two species, **the wolf** and **marten**, occasionally hunted for fur.

[11] Levine 2005; Levine & Kislenko, 2002.
[12] Baker *et alii*, 2003, 298–299.

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Table 3

Beaver measurements

Mandible		**Scapula**			**Tibia**	
Lg. teeth		SLC	GLP	LG	Bd	Dd
36		12			21.5	18.5
38			16,5	23.5	24.5	20.5
38.5		21		22.5	23.5	21.5
40.5				23.5	24	21.5
					24.5	19.5
Humerus						
GL	Bp	Dp	Sd	BT	Bd	Dd
97.5	26.5	29.5	12.5	22,5	35.5	11.5
96.5	28	24	13	23,5	34.5	11.5
				22.5	36	12.5
				22	34.5	11
				23	35	13
Femur					**Pelvis**	
GL	Bp	Bd	Dd		LA	
	51.5				22	
127.5		40.5	27.5		22	
					25.5	

Summarizing, the inhabitants exploited a large scale of animal resources, including domestic mammals as cattle, sheep, goat, pig, big and small game and freshwater shell. Is is supposed that fishing was occasionally practiced, accounting; the placement of the settlement in the river proximity; unfortunately fish remains were not preserved in the sample to prove it. Astonishingly, hunting is the dominant component in feeding, the exploitation of domestic segment being secondary; self-evident is the domestic/wild ratio – 31.7/68.3 %, in this respect. The precucutenian community at Costişa exploited cattle, in fact on a small scale as our analysis established. They total up to 21.6 %, being used chiefly for diary products and secondary for meat, hide. The employment as draught power animals couldn't be excluded. The small ruminants had also a reduced contribution (2.1 %) in the local economy, used for by-products. Relatively facile of keeping up, despite all good feeding condition from the surroundings the pig density scarcely reaches 7.8 %. Rather, the domestic mammals were kept for by-products, a good part of the meat quantity being provided by game. Red deer with a participation of 40 %

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seems to serve as a substitute for cattle in meat provisioning. Excepting the wild swine with a major contribution in diet (15.2 %), the aurochs, roe deer, wild horse, and bear do not go beyond 5 %. It is worth carry forth the substantial contribution of badger in the community needs satisfying.

Hereinafter we try to set against our result with those from two other precucutenian sites with well-set faunal analysis. We talk about two settlements placed in dissimilar biotopes: Tîrpeşti, located in a hilly region alike Costişa (in the Moldavian Subcarpathians, getting beyond 200 m altitude) and Târgu Frumos, settled in the south-west of the Moldavian Plain, in a lowland biotope; the last one is said to be "the vastest habitat known until now in the area of the Precucuteni Culture"[13]. Drawing a parallel between the three settlements[14], congruent with the faunal data some outcomes were highlighted.

1. Domestic/ wild rapport points toward a very highest rate of hunting at Costişa only (68.3 %). This rate accounts for 5.3 % at Târpeşti, settlement located in the same type of biotope as our site[15]. A value of 29 % is registered at Târgu Frumos, in the pit no 26 and 17 % in the pit no 25. Admittedly, it sets forth the hunting rate is a little increased up to 43.1 %[16] reckoning the MNI. Predictably the hunting percent doesn't exclusively reflect a certain type of biotope, but rather an obvious occupational structure of the community. Hereto, it seems that a specialized hunters' group individualizes within the Costişa' community.

2. Relating to domestic segment, cattle reach a large ratio both at Târgu Frumos (55 %) and Târpeşti (49 %), being exploited on a reduced scale at Costişa (21.6 %). Then communities mainly specialized in cattle breeding were attested at Târgu Frumos and Târpeşti.

3. The pig rate differs from site to site, concrete, it is higher at Târpeşti (19.6 %), reaching 7 % only at Costişa and insignificant at Târgu Frumos (2 %).

4. The exploitation of small ruminants also differs from site to site, with a certain importance at Târpeşti (16.3 %) and Târgu Frumos (11 %) and a minor one at Costişa (2.1 %).

5. Referring to animals' size any discrepancies between sites was not recorded.

At last, these preliminary data of the faunal analysis at Costişa sketch a new type of animal economy for the precucutenian communities, modulated to exploit the natural resources in a profitable way: it is based on a high contribution of hunting to meet the needs, substituting the domestic stocks, kept for secondary

[13] Ursulescu *et alii*, 2002, 29.
[14] Unfortunately other detailed faunal analyses for this subject are missing.
[15] Necrasov & Ştirbu, 1981, 182.
[16] Haimovici & Coroliuc, 2000, 180.

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purposes mainly. Forasmuch the archaeological investigations at Costişa get going, for sure the new campaigns of excavations complete our data base with other interesting information.

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TOWARDS THE MEANING OF FLINT GRAVE GOODS: A CASE STUDY FROM BULGARIA

CU PRIVIRE LA SEMNIFICAŢIA INVENTARULUI FUNERAR DIN SILEX: UN STUDIU DE CAZ DIN BULGARIA

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Cuvinte-cheie: cimitirul Durankulak, culturile Hamangia şi Varna, inventar funerar din silex, conotaţii funcţionale.

Rezumat: Analiza obiectelor funerare poate conduce la o mai bună înţelegere a conceptului larg, explorat, dar încă enigmatic, de sacru, faţă de profan. Artefactele din cremene includ un rol funcţional primordial şi conotaţii în cadrul vieţii de zi cu zi a predecesorilor noştri preistorici, dar şi un rol secundar (simbolic). Pentru a releva şi descifra corect aceste două nivele cognitive în biografia obiectelor de cremene este o sarcină provocatoare, dar şi promiţătoare, care va contribui la interpretarea la nivel înalt a practicilor rituale, necesitând abordările ştiinţifice combinate ale arheologilor, antropologilor, specialiştilor în religie etc. Această lucrare prezintă şi pune în discuţie rezultatul analizei funcţionale a obiectelor de cremene din mormintele din cimitirul de la Durankulak, din nord-estul Bulgariei, în relaţie cu vârsta, sexul şi elementele distinctive ale statutului social al celor decedaţi, pe o perioadă largă, care se desfăşoară între neoliticul târziu (Cultura Hamangia) şi chalcolithic (Cultura Varna). Durankulak este un cimitir unic, care a fost complet săpat şi publicat. Astfel, el reprezintă o sursă abundentă, care oferă scopul pentru o analiză ulterioară şi o interpretare a problemelor enumerate mai sus.

Key words: Durankulak cemetery, Hamangia and Varna cultures, flint grave goods, functional connotation.

Abstract: The analysis of funerary objects can lead to a better understanding of the large, explored, but still enigmatic epistemological concept of sacred *versus* profane. Flint grave goods embody a primary functional role and connotation within the everyday life of our prehistoric predecessors, but also a secondary symbolic (ritual) meaning. To reveal and correctly read these two cognitive levels in the grave goods' biography is a challenging yet promising task, which will contribute to a higher-level interpretation of ritual practices, requiring the combined scientific approaches of archaeologists, anthropologists, specialists in religion, etc. This paper presents and discusses the results of the functional analysis of flint grave goods from the Durankulak cemetery, in north-eastern Bulgaria, in relation to the age, gender and status distinctions between the deceased, across a broad time range from the Late Neolithic (Hamangia culture) to the Late Chalcolithic (Varna culture). Durankulak is a unique cemetery that has been completely excavated and published. It thus represents an abundant source which offers scope for further analysis and interpretation of the problems highlighted above.

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Durankulak cemetery and its cognitive importance

Bulgaria is renowned for its 11 prehistoric (mainly Chalcolithic) cemeteries, situated in the north-eastern part of the country. Of these, Varna is the most famous and is usually regarded as eclipsing the others. On the other hand, the Durankulak necropolis is unique, because all its archaeological remains have been completely investigated and published[1] (Fig. 1). In the Durankulak cemetery, the presence of gold and copper objects is much more modest and the differentiation of grave goods deposition among individual burials is less striking, compared to Varna. At Durakulak there are, however, very interesting features to be observed and discussed, in its abundant and exceptionally rich database. Durankulak provides an excellent opportunity to trace and reveal, diachronically, the mortuary practices characteristic of the Late Neolithic and Chalcolithic communities for four principal reasons:

1 – the cemetery is associated with a *tell* settlement located about 200 m to the north;

2 – the excavation of 1204 burials;

3 – the one millennium time span;

4 – all stages of both the Hamangia and Varna cultures are represented in the cemetery; C^{14} dates combined with the well-documented chronological sequence from another settlements belonging to the same culture provide the following chronological framework[2]:

Early Hamangia (phases I, II) – *Late Neolithic*; 5250/5200–4950/4900 cal BC;
Hamangia III – *beginning of the Chalcolithic*; 4950/4900–4650/4600 cal BC;
Hamangia IV – *Middle Chalcolithic*; 4650/4600–4550/4500 cal BC;
Varna I–III – *Late Chalcolithic*; Varna I 4550/4500–4450/4400 cal BC;
Varna II-III 4450/4400–4250/4150 cal BC.

Fig. 1 – Map of Bulgaria with localisation of Durankulak cemetery.

[1] Todorova 2002.
[2] Boyadžiev 2002, 67.

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It is worth mentioning that the new AMS dates from the Varna cemetery suggest an overall span of cemetery use of 83–178 years: from ~ 4560 to ~ 4450 cal BC. As the promoters of this new radiocarbon dating approach underline: "This is a period coeval with the Middle Copper Age on other sites and in other regions, as defined by Boyadzhiev. The Varna dates advance by one or two centuries the beginning of the Late Copper Age in the Black Sea zone"[3]. This discrepancy in radiocarbon determinations certainly needs to be resolved, but the chronological problems and discussions about the Chalcolithic period are beyond of the scope of this article.

According to the most recent study of the Durankulak phenomenon, all changes originating in the Hamangia IV culture (*e.g.* arrangement of the funerary features, vertical stratigraphy by sex-and-age criteria, strictly fixed body positions for men and women, contents and layout patterns of the grave goods) were fully established and generally accepted at the beginning of the Varna culture. Mortuary practices became highly standardized with a few, minor exceptions[4].

At the outset of this presentation of the Durankulak flint assemblages, a point needs to be made that may seem self-evident if not bordering on the banal; it is that multi-aspect analysis of the grave goods (including the flint artefacts) facilitates a better understanding of the challenging, epistemological problem of the sacred versus the secular/profane in our reading and understanding of the past. The presence of flints among prestige grave goods is significant for both the question of symbolism and the adequate discerning of their relevance to other votive offerings and ritual deposits. In comparison with other grave goods, the flint implements possess a pronouncedly dualistic semantic position, because of their profound and inherent role, also in everyday life.

Functional connotation of the flint grave goods

A techno-typological study of the flint assemblages from the Durankulak cemetery was carried out by N. Sirakov[5], while the present author has investigated the flint artefacts from a functional point of view[6].

Concerning the composition of the flint assemblages, it should be stressed that there are very few cores and flakes. In contrast, blades are quite numerous – blanks with various morphologies and dimensions, used as funerary gifts. Among the typological repertoire retouched blades, truncations, endscrapers, burins and geometric microliths constitute the most prominent types (Figs. 2 and 3).

[3] Higham *et alii*, 2007, 652.
[4] Boyadžiev 2008, 85–94.
[5] Sirakov 2002, 213–247.
[6] Gurova 2002, 247–256.

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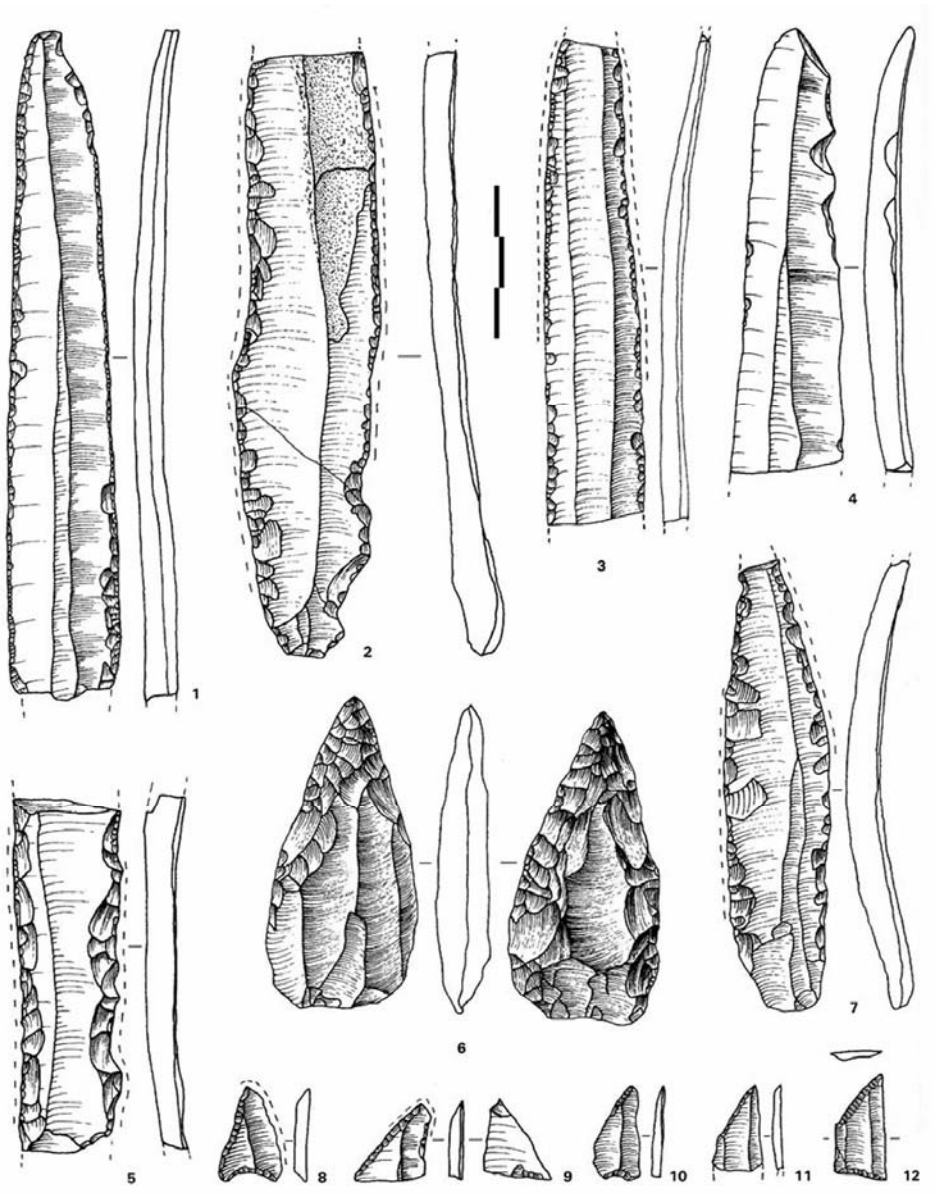

Fig. 2 – Flint artefacts as grave-goods (after Sirakov 2002, Fig. 15, p. 245).

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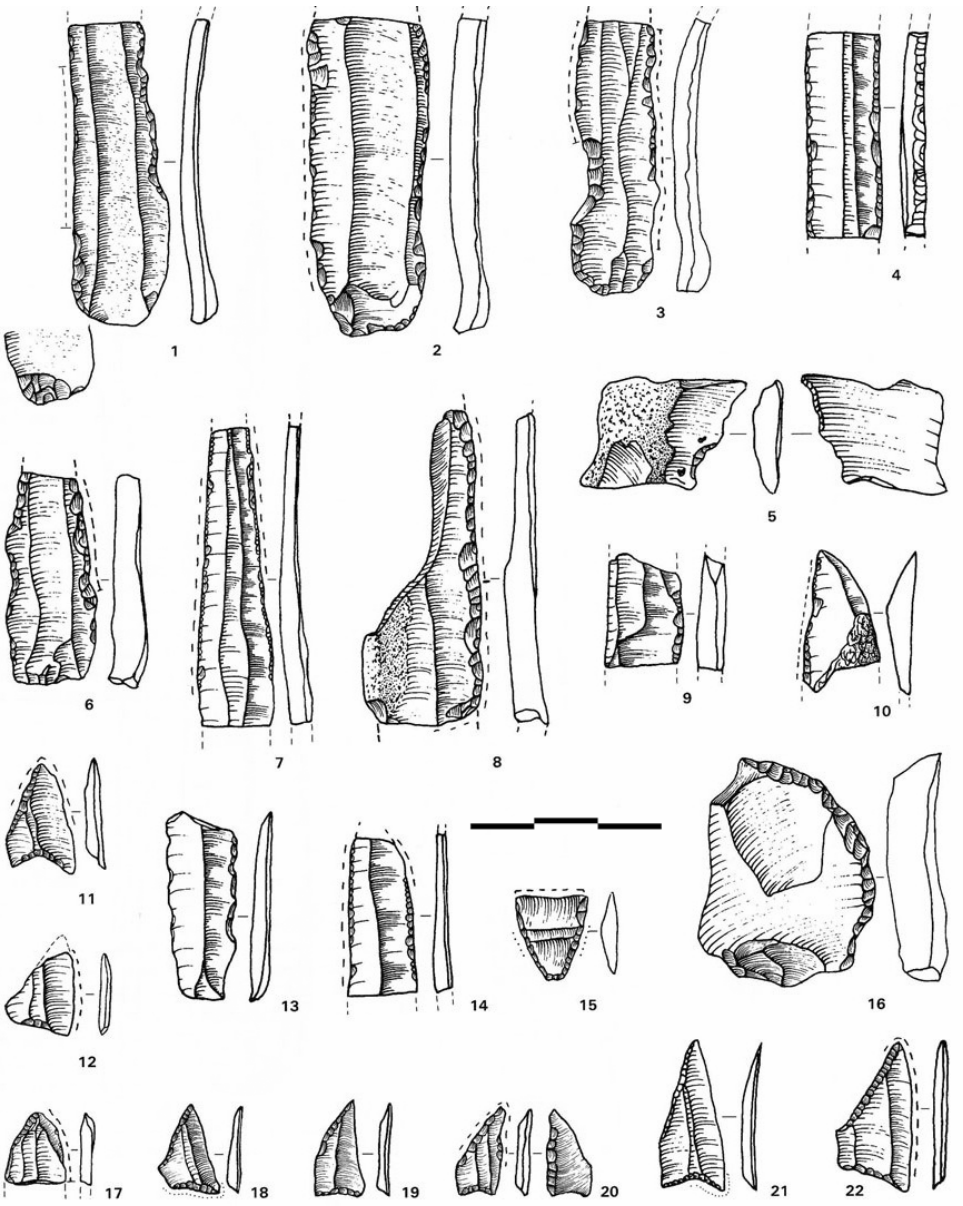

Fig. 3 – Flint artefacts as grave-goods (after Sirakov 2002, Fig. 14, p. 244).

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Fig. 4 – Superblades as grave-goods: 1 – ♂ burial 597; 2 – ♀ burial 1162; 3 – ♂ burial 977 (after Sirakov 2002, Fig. 16, p. 246).

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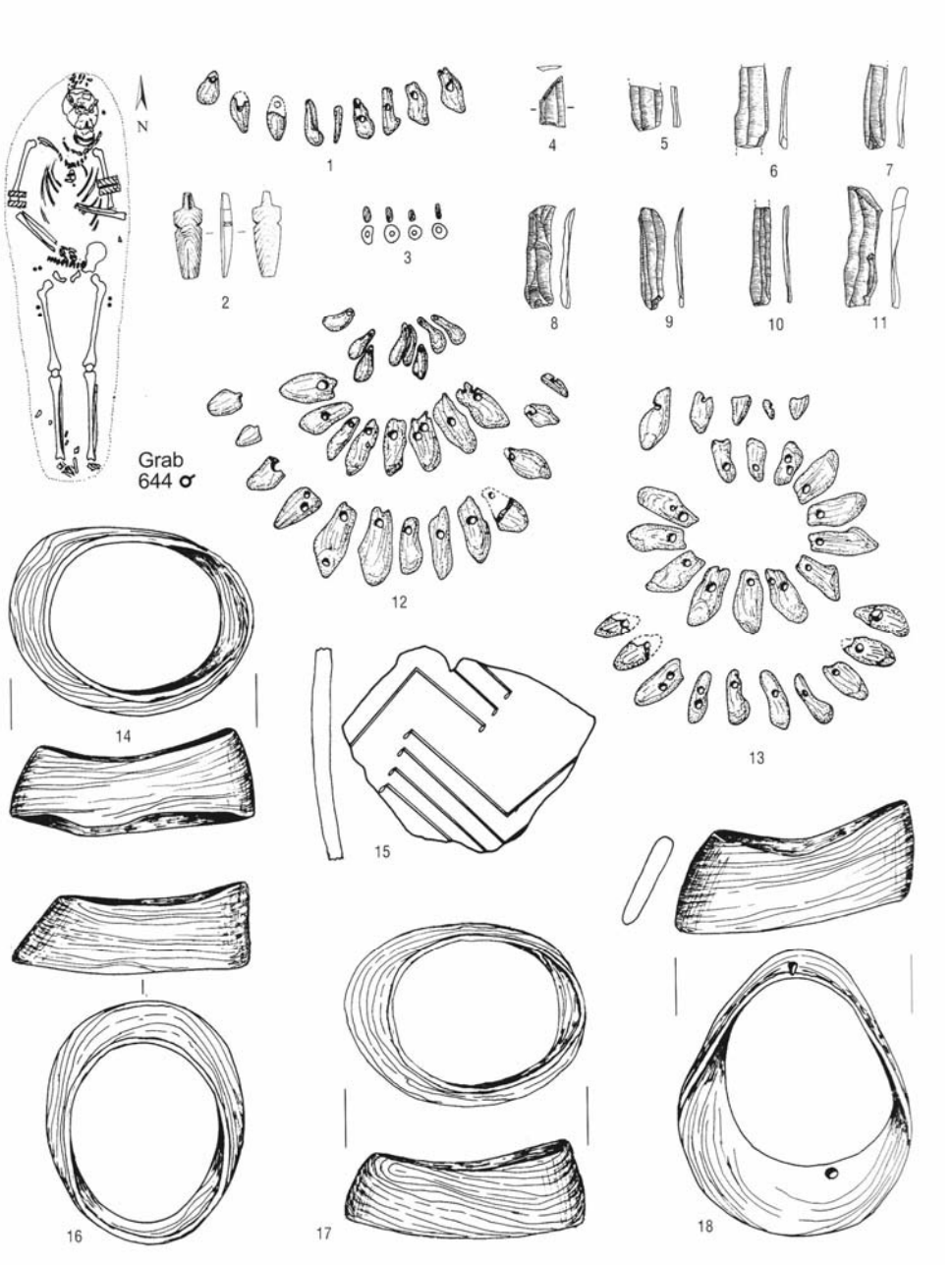

Fig. 5 – Burial 644 with flint grave-goods (after Todorova (ed.), 2002, Teil 2, Table 99).

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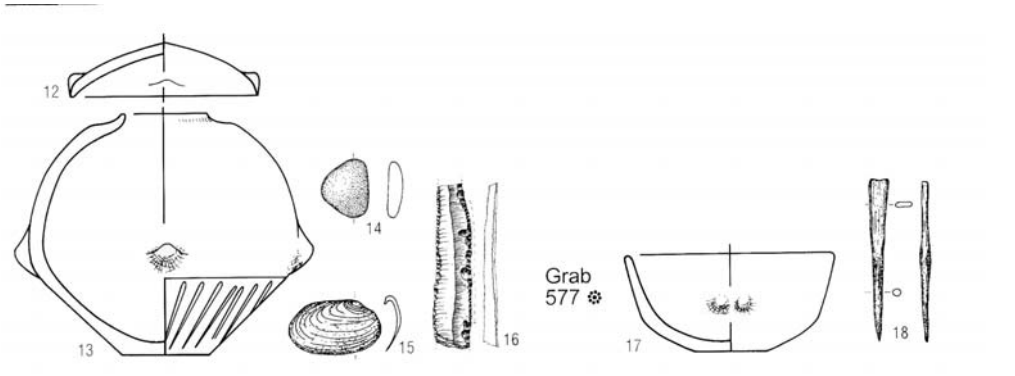

Fig. 6 – "Sewing kit" from burial 577 (after Todorova (ed.), 2002, Teil 2, Table 111).

Micro-wear analysis was undertaken with MBS – 10 (×100) and METAM P 1 (×400) microscopes. Unfortunately, lack of time precluded the making of microphotographs before publication[7]. The results of this analysis may be considered and used as additional information for the selection (conscious, or random) of those flint implements, which were taken out of their normal settlement context (and hence, also removed from their normal life-span) and transformed into the votive and symbolic meaning of grave goods.

The assemblage that was available for use-wear analysis consisted of 184 artefacts from 133 burials (the *neonatus* and *infans (I and II)* burials are presented under the rubric 'child') (Table 1).

Table 1

Distribution of flint grave goods by burial type and period

Burials	Hamangia I-II	Hamangia III	Hamangia IV	Varna	Total
Male	13	14	11	23	61
Female	3	3	3	31	40
Child	2	3	4	10	19
Cenotaph	–	1	1	11	13
Total	18	21	19	75	133
Flints	31	32	24	97	184
Used	12	13	17	70	112

The data from the use-wear analysis are presented in Tables 2–5, according to the chrono-cultural context of the flint material. In order to facilitate the reading of the tabulated data, the gender/age affiliation and functional determination of the flint grave goods are presented using the following symbols:

[7] Unfortunately, the material is no longer available for analysis.

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♀ – female burial; ♂ – male burial; ☺ – *neonatus, infans (I and II)*; ◘ – cenotaph

* – presumed function; ◊ – unidentified worked material; Δ – undetermined function because of natural alteration.

Table 2

Flint grave goods from the Hamangia I–II complex

Burial N	Gender	Flint artefacts	Used	Function
94	♂	1	1	scraping hide
134	♂	4	–	projectile point*
149	♂	2	1	projectile point (arrowhead)
155	♂	1	–	–
156	♂	5	2	scraping wood; cutting plants (reeds)
161	♂	1	–	–
189	♂	2	2	combined tool (cutting plants, scraping wood); cutting meat/hide
195	♂	1	–	Δ
602	♂	2	1	projectile point (arrowhead)
604	♂	2	1	cutting meat/hide
725	♂	1	1	cutting fresh hide
794	♂	2	1	projectile point (arrowhead)
1056	♂	1	–	–
167	♀	1	–	–
208	♀	1	–	Δ
938	♀	2	1	sawing wood
76	☺	1	–	–
154	☺	1	1	scraping wood
total		**31**	**12**	

Table 3

Flint grave goods from the Hamangia III complex

Burial N	Gender	Flint artefacts	Used	Function
45	♂	2	–	–
60	♂	1	1	cutting meat/hide
106	♂	1	1	cutting meat/hide
145	♂	1	1	piercing hide
173	♂	2	1	projectile point (arrowhead)
600	♂	1	1	projectile point (arrowhead)
615	♂	1	–	–
644	♂	8	–	projectile point (arrowhead)
676	♂	1	–	–

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783	♂	1	1	sickle insert
802	♂	1	1	sawing hard material ◊
818	♂	1	1	combined tool (scraping wood; cutting meat/hide)
994	♂	3	1	projectile point (arrowhead); 2 projectile points (arrowhead) *
1068	♂	1	–	–
100	♀	1	1	scraping and cutting hide
898	♀	1	1	combined tool (scraping wood; cutting meat/hide)
1040	♀	1	–	Δ
649	☺	1	–	Δ
716	☺	1	–	Δ
782	☺	1	1	sickle insert
239	◘	1	1	cutting meat/hide
total		**32**	**13**	

Table 4

Flint grave goods from the Hamangia IV complex

Burial N	Gender	Flint artefacts	Used	Function
17	♂	1	–	–
66	♂	1	1	scraping wood
215	♂	2	1	combined tool (pottery polisher; scraping wood)
315	♂	1	1	cutting meat/hide
372	♂	1	1	cutting plants (reeds)
397	♂	1	1	projectile point (arrowhead)
426	♂	1	1	cutting meat/hide
434	♂	1	–	–
439	♂	1	1	cutting soft material ◊
732	♂	1	1	scraping fresh hide
846	♂	2	1	projectile point (arrowhead)
299	♀	3	1	sickle insert
545	♀	1	1	cutting meat/hide
864	♀	2	2	cutting cereals; scraping pottery
234	☺	1	1	cutting meat/hide
415	☺	1	–	–
423	☺	1	1	sawing wood
701	☺	1	1	combined tool (cutting plants; cutting meat/hide)
440	◘	1	1	sawing bone
total		**24**	**17**	

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Table 5

Flint grave goods from the Varna complex

Burial N	Gender	Flint artefacts	Used	Function
1	♂	3	2	scraping hide; cutting meat/hide; Δ
211	♂	1	1	projectile point (arrowhead)
221	♂	2	2	combined tools (scraping wood and hide); (piercing and cutting hide)
231	♂	3	3	combined tool (scraping wood and hide); cutting hard material ◊; cutting soft material ◊
276	♂	1	1	sawing and scraping wood
298	♂	1	–	–
320	♂	1	1	cutting meat/hide
327	♂	1	–	–
347	♂	1	1	cutting cereals
417	♂	1	1	cutting hide
524	♂	1	1	scraping hard material ◊
576	♂	1	1	combined tool (scraping wood and cutting cereals)
593	♂	2	2	sickle insert; cutting soft material ◊
597	♂	2	–	projectile point *; Δ
601	♂	3	3	sawing bone; scraping hide; sickle insert
623	♂	1	1	scraping hard material ◊
655	♂	1	1	sickle insert
665	♂	1	–	–
674	♂	1	1	cutting plants (herb)
800	♂	2	1	cutting meat/hide
867	♂	2	1	grinding minerals
977	♂	1	–	Δ
1202	♂	1	1	cutting meat/hide
50	♀	1	1	cutting cereals
230	♀	2	2	scraping wood; cutting meat/hide
249	♀	1	1	sawing wood
257	♀	1	1	cutting plants (herb)
261	♀	1	–	–
270	♀	3	3	sickle insert; cutting meat/hide (x2)
271	♀	1	–	–
286	♀	1	1	cutting meat/hide
348	♀	1	–	–
393	♀	1	–	–
395	♀	1	–	–
455	♀	1	1	cutting cereals
495	♀	2	2	piercing hide; cutting hide
496	♀	1	–	–
514	♀	1	1	scraping wood

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515	♀	1	1	cutting meat/hide
541	♀	1	1	combined tool (cutting plants; cutting hide)
558	♀	2	–	–
587	♀	1	1	sawing bone
656	♀	1	1	scraping wood
666	♀	1	1	drilling wood
669	♀	1	1	scraping hide
694	♀	1	–	–
699	♀	1	1	sickle insert
795	♀	1	1	scraping wood
826	♀	1	1	sickle insert
993	♀	1	1	sickle insert
1113	♀	1	1	scraping hide
1162	♀	2	2	combined tool (cutting plants; cutting meat/hide); cutting soft material ◊
1168	♀	2	1	cutting plants (reeds)
1175	♀	1	1	cutting hard material ◊
2A	☺	2	2	scraping wood; sickle insert
217	☺	1	–	–
218	☺	1	–	–
236	☺	1	1	scraping wood
358	☺	1	1	combined tool (cutting plants; softening hide)
433	☺	2	1	cutting plants (herb)
559	☺	1	1	cutting meat/hide
566	☺	1	–	Δ
573	☺	1	–	Δ
700	☺	1	1	scraping hide
232	◘	1	1	cutting meat/hide
452	◘	1	–	–
453	◘	1	1	cutting meat/hide
534	◘	1	1	cutting meat/hide
539	◘	2	1	cutting meat/hide
560	◘	1	1	combined tool (scraping wood; cutting hide)
577	◘	1	1	scraping bone
653	◘	1	1	scraping wood
1057	◘	1	1	cutting plants (reeds)
1069	◘	2	1	cutting plants (reeds)
1114	◘	1	1	combined tool (cutting plant; scraping hide)
total		**97**	**70**	

The results of the functional determination of the used implements can be briefly summarized as follows:

– The number of the flints used as funerary gifts and the number of artefacts with use-wear traces of the Hamangia I–II and Hamangia III periods are comparable. During Hamangia IV there was a decrease in flint offerings, but an

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increasing number of implements showing evidence of use. The late Chalcolithic Varna culture is characterised by both an increase in burials with flint offerings, as well as an increase of flint artefacts with evidence of use – in total 4x more than the preceding Hamangia IV culture.

– It is noteworthy that flint offerings are attested among all the categories of deceased, throughout the entire sequence in the cemetery. It is also interesting to point out that from the beginning of Hamangia I–II to the end of Hamangia IV, the ratio of male:female burials containing flints is around 4:1. During the Varna culture, surprisingly, female burials with flint offerings slightly prevail over male burials (ratio 33:26).

– It is possible to distinguish three main functions among the flint items: knives for cutting meat and/or trimming fresh hides predominate (23), followed by sickle blades (15) and projectile points/arrowheads (14). There is only one artefact category that both typologically and functionally could be determined as a male offering component – arrowheads, represented by geometric microliths (some of which were termed by Sirakov 'Vielle-type points'. It is noteworthy that the majority of this last-mentioned type is associated with Hamangia phases I–III. There is no other category of flint artefacts and toolkits showing gender determination. Sickle blades are attested in male and female burials, belonging both to the Varna and Hamangia IV cultures, in a ratio of 11:4. The so-called 'sewing kit' (which is discussed in more detail below), attributed by Todorova to tailoring (*i.e.* female) activities, appears in every type of burial – male, female, cenotaph, and child. They are also chiefly attested in the graves of the Varna culture (Varna: Hamangia IV = 42:8).

– One cannot omit the super-blades from Durankulak (Fig. 4). They are not as long as the best specimens from the Varna cemetery; nevertheless, they are among the biggest flint blades found in Bulgaria, a fact that indicates some significant features linked firstly with the manufacture of the blades and secondly with their role in the burial context. In total, among the grave goods, there are seven blades with a length of c. 20 cm or longer. Most of them are massive fragments, over 12 cm in length, the intact specimens measuring respectively 25 and 29.4 cm long. The longest blade (29.6 cm) has a distal fracture; the original length was probably more than 30 cm (Fig. 4–1). Six of the big blades come from male burials, and only one had been deposited in a female burial. Only one specimen has diagnostic use-wear traces; the rest cannot be ascribed a functional purpose, because of the post-depositional polish and edge damage. If one may presume on the basis of the Varna evidence, that the presence of a super-blade represents a sign of power, high social status and wealth – attributes of men as traditionally understood within prehistoric communities – such blades ought to be associated with male burials and male grave goods. In this respect, the association

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of the biggest complete blade with the female burial N 1162 at Durankulak is difficult to understand (Fig. 4–3).

– There is only one burial (644) with eight flint artefacts among the grave goods, which comprise one microlith, (part of a composite arrow) and seven unretouched blades with no traces of use (Fig. 5).

'Sewing-kits' as particular grave goods

Recently, the present author has put forward a new functional interpretation of this special category of grave goods from the Durankulak cemetery that were named by their discoverer, H. Todorova, 'sewing-kits' or 'nécessaires'. It was suggested that these toolkits represented particular 'hoards', and this aspect will not be discussed further here[8]. Typically, these toolkits comprise four elements: a flint artefact, a bone awl, a pebble polisher and a shell, all of which were normally deposited in a carinated jar, or bowl with a lid[9] (Fig. 6). Todorova's idea is based on a presumption that this is a toolkit that could be linked with some form tailoring activity. In this sense, one can assume that this category of grave goods was associated with females. In fact, these sewing-kits are attested in every main type of burial, but they predominate in female graves – 27 cases. Their frequency in male, cenotaph and child burials is respectively 13:7:3.

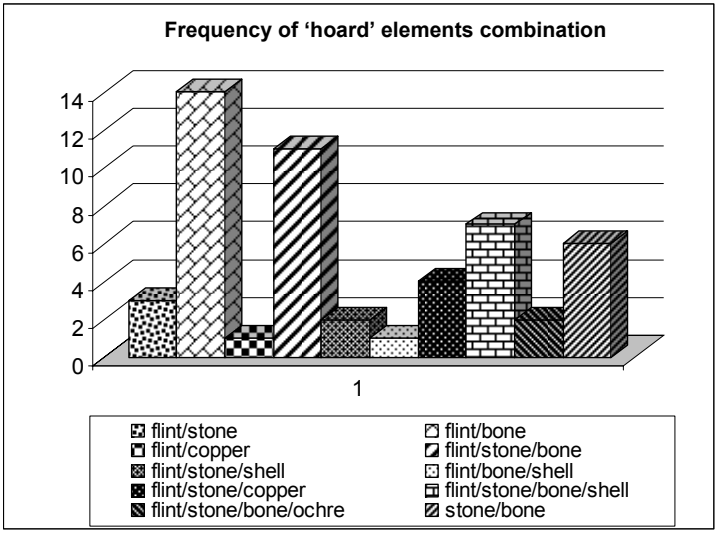

Diagram 1 – Frequency of the combinations of the 'hoard' elements.

[8] Gurova 2006, 1–14.

[9] It should be stressed that all pottery was made for the specific purpose of deposition in the graves, as models of real vessels.

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In the cemetery, there were 51 of these particular 'hoards', 32 of which were available for use-wear analysis. The statistical data presented here are based on the published catalogue, but data on the flint functions are derived from personal analysis. The generalized statistical data give the following results:

– 51 sewing kits come from 50 burials; one cenotaph (518) contains two toolkits;
– the cultural determination is as follows: Hamangia IV culture – 8; Varna culture – 42.
– the sexual determination is as follows[10]:

♂ male – 13 ☺ child – 3
♀ female – 27 ◘ cenotaph – 7

The most concentrated occurrence of these particular 'hoards' is in the southern part of the cemetery which is the main area of the Hamangia IV and Varna graves. A few isolated toolkits are found in Varna culture graves, located in the north-eastern and northern parts of the cemetery.

Despite the persuasive interpretation of these sewing-kits as coherent complexes, there is a variation in the frequency of the different components. This diversity is shown on Diagram 1. It seems that the combination of flint artefacts and bone awl is the most common; followed by the combination of flint/stone/bone and the largest one, that is flint/stone/bone/shell. It is obvious, from the diagram, that two components, flint artefact and bone tool (usually an awl), are presented in the three highest columns: positions 2, 4 and 8. Apparently this is the most frequent and stable combination of items. Whatever the function of this toolkit, a blade of flint can easily be a multifunctional tool, the usefulness of which is completed by a bone-piercing tool. The remaining components may be viewed as supplementary attributes to a basic toolkit.

It is challenging to try to determine the precise functions of the flint artefacts in the 'hoards'. The flint assemblage subjected to use-wear analysis consisted of 39 items; of these 33 specimens were found to have traces of utilization. The results of the functional examination are presented in Table 6.

Table 6

Results of use-wear analysis of the flint artefacts from the toolkits studied

Burial No	Flint artefacts	Used	Function	Gender	Context
249	1	1	sawing wood	♀	Varna II–III
257	1	1	cutting plants	♀	Varna I

[10] It should be noted that I have taken into consideration the biological identification of sex: in only two cases was there a contradiction with the archaeological determination (according to the grave goods); in three other cases, the archaeological determination was used because of the absence of anthropological data.

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261	1	–	–	♀	Varna II–III
270	3	3	sickle insert; cutting meat/hide (×2)	♀	Varna I
271	1	–	–	♀	Varna
276	1	1	sawing and scraping wood	♂	Varna I
286	1	1	cutting meat/hide	♀	Varna I
347	1	1	cutting cereals	♂	Varna II–III
348	1	–	–	♀	Varna I
393	1	–	–	♀	Varna
423	1	1	sawing wood	☺	Hamangia IV
452	1	–	–	◘	Varna I
453	1	1	cutting meat/hide	◘	Varna I
495	2	2	piercing hide; cutting hide	♀	Varna I
496	1	–	–	♀	Varna I
514	1	1	scraping wood	♀	Varna II–III
515	1	1	cutting meat/hide	♀	Varna II
524	1	1	scraping wood /bone?	♂	Varna I
534	1	1	cutting meat/hide	◘	Hamangia IV
539	2	2	cutting meat/hide (x2)	◘	Varna I
545	1	1	cutting meat/hide	♀	Hamangia IV
577	1	1	scraping bone	◘	Varna I
601	3	3	sawing bone; scraping hide; cutting meat/ hide	♂	Varna III
653	1	1	scraping wood	◘	Varna II
656	1	1	scraping wood	♀	Varna
674	1	1	cutting plants	♂	Varna III
699	1	1	sickle insert	♂	Varna II–III
732	1	1	scraping fresh hide	♂	Hamangia IV /Varna I
826	1	1	sickle insert	♀	Varna II–III
864	2	2	cutting cereals; scraping pottery	♀	Hamangia IV
993	1	1	sickle insert	♀	Varna III
1113	1	1	scraping hide	♀	Varna II–III
32	**39**	**33**	**Total burials**		

♂ – male ♀ – female ☺ – child ◘ – cenotaph

The most frequent manual operations seem to have been longitudinal – cutting and sawing – followed by scraping and (rarely) piercing. The material whose treatment is most often attested is meat/fresh hide, which suggests large-scale working of animal products. In equal quantity are tools for wood processing and harvesting implements – sickle blades. These heterogeneous functions of the flint components of the hoards do not indicate any special or precise purpose for

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the 'sewing-kits'. Rather, they comprise flint tools extracted from different everyday household activities and from subsistence farming practices such as harvesting.

Discussion

One of the most important observations of the Durankulak funerary evidence is that the flint grave goods in general do not vary greatly according to the sex and age of the deceased with whom they were associated. There are two exceptions: geometric microliths (found only in male burials) and big blades that are not found in *neonatus/infans* burials, for example. It is noteworthy, however, that the children were obviously subjected to the same rituals and ceremonies as the adults, suggesting that, despite of their premature death, they were respected and considered as normal individuals and social group members[11].

The present paper does not claim to offer solutions to the epistemological problems formulated in the Introduction. It offers additional data, which could be useful in the wider contextual consideration of mortuary practices. It is useful to recall the reasoning of one leading specialist on the Balkan Chalcolithic, John Chapman. On the basis '…of the most power-full social arena of the Copper Age – the Varna cemetery…' it is argued that the mortuary assemblages from north-east Bulgarian cemeteries represent the most elaborate sets of objects – the main significance of the term of hoard – transmitting the complex of social relations and conditions[12]. Later syntheses by the same scholar led him to generalize that, depending on the social context and evolutionary stage of the farming period, the sets of objects, being a materialized form of the society's relations, emerge as depositions in the domestic domain, extra-mural cemetery context, or as hoards, located at some distance from the settlements[13]. In any case, the more complex and differentiated the social community, the more complex are the objects' biographies in the depositions. Without doubt, during the Chalcolithic in north-east Bulgaria, the most complex social arena for hierarchy/status legitimization was the mortuary domain. In this respect, the most complex and sophisticated sets of objects become the grave goods and 'ritual paraphernalia'.

In spite of the richness of the debate on the 'Varna problem', there is still a huge field of phenomena to be investigated and explained, and problems to be resolved. A good case study has already been provided for advancing the hoard/grave goods research and discussion – this is the meticulous description and

[11] Boyadžiev & Gurova, 2008, 87–94.
[12] Chapman 1991, 152–171.
[13] Chapman 2000, 226–228.

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interpretation of the hoard from *Tell* Omurtag in north-east Bulgaria[14]. Further studies and debates of the issues concerned will be warmly welcomed.

It is tempting to cite as a final remark a quotation from D. Bailey's review of the Durankulak volumes: 'The potential for re-thinking established sex and gender trends in mortuary treatment in the Neolithic Balkans is huge'[15].

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REGARDING THE PROCUREMENT OF LITHIC MATERIALS AT THE NEOLITHIC SITE AT LIMBA (ALBA COUNTY, ROMANIA): SOURCES OF LOCAL AND IMPORTED MATERIALS

DESPRE PROCURAREA UNOR MATERIALE LITICE DIN SITUL NEOLITIC DE LA LIMBA (JUDEŢUL ALBA, ROMÂNIA): SURSE LOCALE ŞI DE IMPORT

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Cuvinte-cheie: materiale litice, comerţ, proveniență, cuarț microcristalin, obsidian, procurare.

Rezumat: În ultimul deceniu, cercetarea din situl aşezării neolitice de la Limba, județul Alba, din vestul României, a scos la iveală numeroase artefacte litice. Scopul acestui studiu este de a compara materialul din care s-au confecționat artefactele din piatră, cu surse geologice sunoscute de material litic similar. În cadrul unei arii determinate de câteva zile de mers pe jos, sau o zi cu barca, există încă noi alte surse, unele cu material de foarte bună calitate. Acest studiu a arătat că, deşi există numeroase surse de material litic locale sau apropiate celor locale, un mare procentaj al artefactelor par a nu fi facute din material local, inclusiv din surse situate la mare distanță, ca râul Prut (în zona județului Botoşani), aria dintre Carpați şi Dunăre şi din Carpații Occidentali (în zona Ungariei şi Slovaciei). Observațiile acestui studiu sugerează că aşezarea de la Limba făcea parte dintr-o rețea comercială extinsă, aşa cum se reflectă în procentajul ridicat al materialelor care nu sunt locale.

Key words: lithics, trade, provenance, microcrystalline quartz, obsidian, procurement.

Abstract: Over the past decade, research at the site of the Neolithic settlement at Limba, Alba County, western Romania, has uncovered numerous lithic artefacts. The focus of this study is to compare the material from which the chipped stone artefacts were made to known geological sources of similar lithic material. Within a day's walking distance of the settlement there are numerous sources of lithic material suitable for producing artefacts. Within an area of several days' walk or a day by boat, there are even more sources, some of very good quality material. This study has shown that although there are numerous local and near-local sources of lithic material, a large percentage of the artefacts appear to have been made from non-local materials, including sources as far away as the Prut river (in the Botoşani County area), the area between the Carpathians and the Danube, and from the Western Carpathians (in the area of Hungary and Slovakia). The observations of this study suggest that the Limba settlement was part of an extensive trade network as reflected by the high percentage of non-local materials.

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1. Introduction

1.1. Location of Limba site and archaeological context

The Limba archaeological site is located in the western part of Romania, in Alba County, outside of the modern day village of Limba (from which the site derives its name), across the Mureş River from Alba Iulia (Figs. 1, 2). During the Neolithic period, the site was situated on the bank of the Mureş River, which has since then shifted position several hundred metres away. Throughout history the Mureş River has been used as a major route for transporting people and materials. Limba's close proximity to the river would have given the occupants of the settlements easier access to sources of materials further away and to other settlements along the Mureş River and its tributaries (with whom they may have traded materials to which they had easy access). As well, the settlement would have had easy contact with traders/merchants travelling along the Mureş River. The Mureş valley often floods in the spring time, making it a very fertile area. This would also have lead to the prosperity of the settlements at Limba, and thus, higher probability of surplus agricultural products to trade with other settlements and spare time to travel to procure raw mineral resources.

Fig. 1 – Satellite image showing the Limba site and surrounding area.

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Three main cultures were identified at the Limba site: Starčevo-Criş phase 3B (early Neolithic, cca. 5700–5500 B.C.[1]), Vinča phase A (middle Neolithic, cca. 5500–5200 B.C.) and Vinča phase B (middle Neolithic, cca. 5200–4900 B.C.)[2]. There is a continuous evolution between the Starčevo-Criş and Vinča layers, as well as between the Vinča layers. The site appears to have been continually in use, with no signs of it being abandoned and re-established[3].

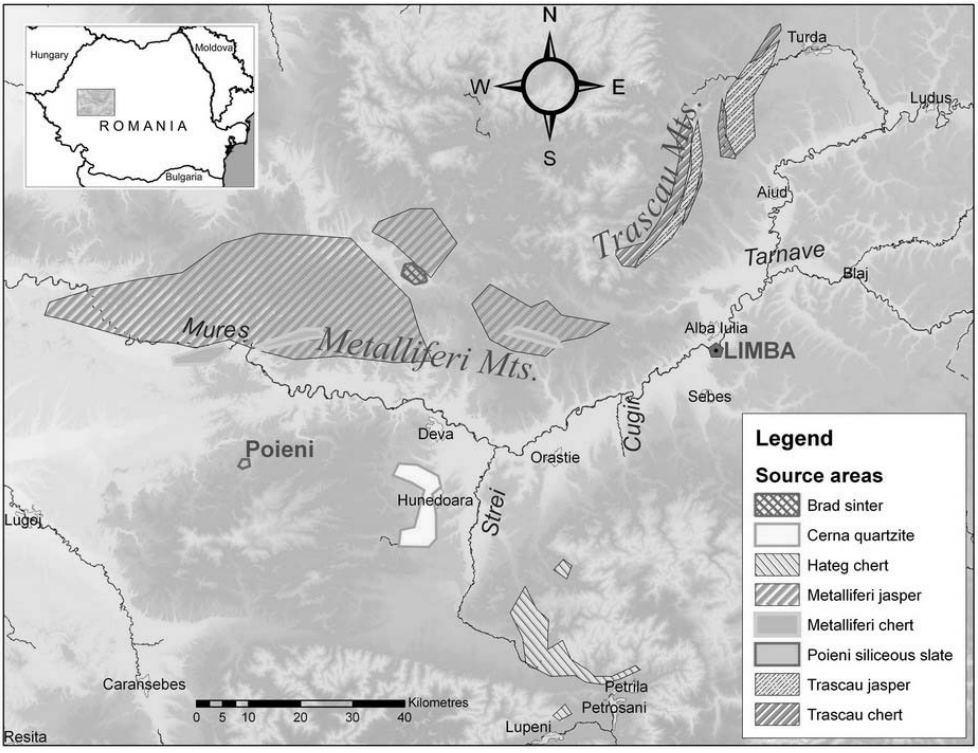

Fig. 2 – Map of main local and medium-distance geological sources.
The insert represents the location of the area on the map of Romania.

Although the precise cultural associations of most of the lithic artefacts have not yet been determined, all of them are from pre-Copper Age cultures. With the exception of very small quantities of native copper, gold and silver found at some contemporary settlements, the economy of the settlement at Limba was not yet

[1] Dates given are carbon 14 calibrated. (Based on personal communications with Cristian Florescu, 2008).

[2] Based on personal communication with Cristian Florescu (2008), Institute of Systemic Archaeology, Alba Iulia. Florescu is currently the principal researcher at the Limba archaeological site.

[3] Florescu 2007, 15.

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influenced by metal. In fact, at Limba, no metal artefacts have yet been found[4]. This allows us to study a pre-metal economy, where lithic materials had a relatively high value among traded commodities. Thus, there is a higher chance of finding materials and artefacts imported from long distances. Similar studies at Bronze Age sites in the same region have shown a decrease in the percentage of high quality imported chipped stone materials compared to locally available materials[5].

2. Samples and methods

In this study, 440 artefacts from excavations at Limba were analysed macroscopically. These artefacts were all produced by knapping. They include finished tools such as blades, scrapers, burins and possibly drill bits, as well as nuclei and debitage. Some of the artefacts (particularly the blades) show signs of usage (*e.g.* use-wear polish, and retouch) and breakage. The collection does not include microlithic debitage. Each artefact was individually analysed macroscopically. Some were also analysed with a Nikon stereomicroscope. Descriptions were recorded in a spreadsheet in Microsoft Excel. Descriptions were based on an objective system, with a finite number of predefined terms. For details of the system used to describe the artefacts, see Crandell (2005)[6].

The geological samples used in this study came from the author's personal lithotheque and the collection of the Mineralogy Museum of Babeş-Bolyai University. Sources of lithic materials (in particular from sources not available in the museum collection) were sought by researching geological references (papers, maps). Locations with a high potential to contain sources of lithic materials were visited and samples were collected. Geological materials were analysed macroscopically. Some samples were also analysed with a Nikon stereomicroscope and optical microscopy in plan-polarised light on petrographic thin sections was carried out on a Nikon microscope at the Babeş-Bolyai University geology department. Descriptions were recorded in a similar spreadsheet to that used for descriptions of artefacts. Based on similar macroscopic and microscopic characteristics, geological sources were grouped into source areas (e.g. southern Trascău chert, northern Trascău chert, Trascău and Metalliferi jasper, Techereu green jasper, Rachiş red agate). Artefacts were visually compared to geological samples. For most of the artefacts, their geological source groups were predicted based on similarity with those geological groups.

[4] Based on personal communications with Cristian Florescu (2008).

[5] Unpublished studies by the author regarding Bronze Age sites at Piatra Cetea and Ghirbom (Alba County).

[6] Crandell 2005.

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As part of a pilot study, sixteen of the geological samples from Trascău and Metalliferi jasper sources, one sample of Poieni siliceous shale and one sample of Brad sinter were analysed by Prompt Gamma Activation Analysis for comparison with each other as well as with five jasper artefacts which were also analysed[7].

3. Results

3.1. Artefacts from Limba

The materials used to make the chipped stone artefacts at Limba vary widely in the visual characteristics, as well as in their petrographic nature. The most commonly used materials are microcrystalline quartz (MCQ) varieties, such as chert, jasper, and flint. As well, the local inhabitants used tools made from obsidian, rhyolite quartzitic sandstone, siliceous shale and microgranite. The cherts vary in colour from shades of yellowish-brown to dark brown to grey. They range from highly translucent to sub-translucent and their surface texture ranges from fine to coarse grained. The jaspers are often yellow, red or a mixture of both and vary from very intense colour to a medium intensity, a few being black or dark grey. They are opaque to sub-translucent and their surface texture ranges from fine to coarse grained. The rhyolites are light and dark grey, grey-green and bluish grey. They are usually opaque with a few being sub-translucent. The surface texture of geological samples varies from fine to extremely coarse (to the point of being useless for knapping). Of the artefacts, most are medium grained. The quartzitic sandstones are light shades of brown, yellow and grey, with coarse to medium grained surfaces. They are generally opaque, to sub-translucent. The microgranite artefacts are coarse grained, opaque and vary in colour, being comprised primarily of speckles of black, white and browns.

The following is a general list with descriptions of materials, which appear to have been used at Limba. Where not indicated otherwise, these descriptions are based on geological samples in the author's personal lithotheque and at the Mineralogy Museum of Babeş-Bolyai University. For a detailed explanation of the terminology used in the following descriptions, see Crandell (2005)[8].

3.2. Geological occurrences of siliceous Sources of Lithic Materials

Based on personal investigations for possible geological sources of chipped stone artefacts found at Limba, sources were separated into three categories:

[7] Crandell & Kasztovszky, 2008.
[8] Crandell 2005.

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a) nearby sources (the Trascău Mts.), b) adjacent areas (Metalliferi Mts, Hațeg and Poiana Ruscă Mts.) and c) remote areas. The rocks found in these areas will be presented in detail, in the following.

3.2.1. The Trascău Mountains

There are numerous sources of lithic material in the middle course of the Mureş River, suitable for producing chipped stone artefacts. Most of the sources are spread over large areas (often over 50 km long), but some are localised to very small areas (as small as a valley, a few hundred metres long). Within the large sources, the materials at various locations look similar, but the chemical ratios at locations within each source area likely vary[9]. The rocks are: chert (Trascău), jasper, rhyolite, quartzitic sandstone, siliceous shale and microgranite.

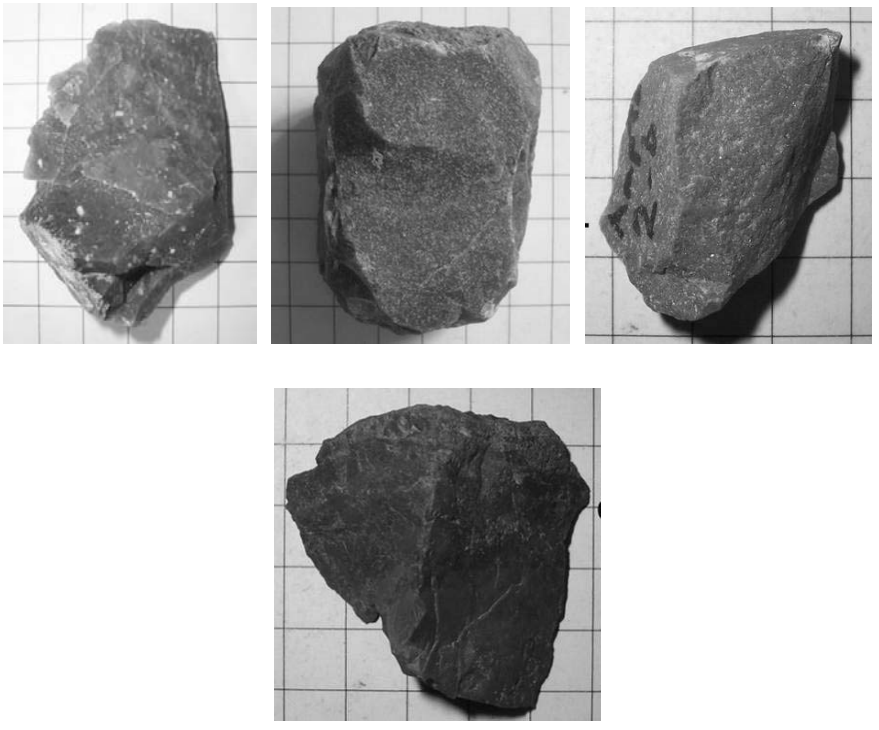

Fig. 3 – (left to right) Trascău chert (Piatra Tomii, Ampoita) & Trascău jasper (Ampoița, Ighiel).

a. Trascău chert:

This material is brown-grey (sometimes orangish-brown), sub-translucent to translucent, with medium to medium-fine grained surfaces, dull or satiny lustre,

[9] Luedtke & Meyers, 1984.

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and often contains relics of its parent rock (limestone). The darkness and intensity of the colour varies from source to source (Fig. 3). Weathering may cause a white, opaque patina on the surface, as well as pitting. This material occurs throughout the Trascău Mountains (particularly in the south) in or near to Late Jurassic limestone outcrops (Fig. 2). The same material (or a material of similar appearance) also occurs in the Late Jurassic limestone outcrops, in the Metalliferi Mountains. Chert from the northern part of the Trascău Mountains (compared to material from more southern sources) is often darker, more opaque, slightly waxy, and with a fine grained surface. Some of this northern Trascău chert has a greenish or bluish grey colour[10].

b. Trascău jasper

This material is brownish yellow or dark red colour (sometimes a mixture of both colours), opaque to sub-translucent, with medium to fine grained surfaces, dull, satiny or waxy lustre, and may contain dendritic inclusions of manganese. (Fig. 3) It may appear brecciated filled in with a cement of a different colour or opacity. In petrographic thin sections one can see a large quantity of hematite (which causes the yellow and red colour)[11].

Macroscopically and microscopically, Trascău jasper appears to be the same as jasper from the Metalliferi Mountains, and in fact is likely a continuation of the same geological formations there that contain jasper (Fig. 2). Recent research, utilising Prompt Gamma Activation Analysis has shown that chemical analysis can distinguish between Trascău and Metalliferi jaspers (and possibly within each mountain range)[12]. Jasper exists in much lower quantity in the Trascău Mountains, than it does in the Metalliferi Mountains and often seems to be of a lower quality for knapping. Based on macroscopic analysis, both Trascău and Metalliferi jaspers may be easily confused with yellow-red jaspers from the Maramureş area.

Due to the higher quality and quantity of jasper in the Metalliferi Mountains, it is suspected that more jasper at Limba came from the Metalliferi sources than from Trascău sources. Preliminary chemical analyses show that sources in both locations were used. As yet though, only a few artefacts and geological samples have been chemically analysed, so it is still difficult to determine the exact origin of most of the yellow-red jaspers and the extent to which each was used remains unknown.

c. Trascău rhyolite:

Rhyolite is found throughout the Trascău Mountains but material suitable for knapping is particularly abundant in the Geoagiu and Rimetea area. It is a dark

[10] See also observations made by previous researchers. Ciupagea *et alii,* 1970, 48-49; Gandrabura 1981, 29; Ilie 1932, 361-364; Ilie 1950, 130; Ilie 1952a, 24-25; Ilie 1952b, 314; Ilie 1952c, 314; Mészáros & Nicorici, 1962, 10; Ghiurcă 1997a; Ghiurcă 1997b.

[11] For examples see Russo-Săndulescu *et alii*, 1976, Ilie 1952b and Ghiurcă 1997a and 1997b.

[12] Crandell & Kasztovszky, 2008.

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colour (often grey or green), opaque, with medium to medium-fine grained surfaces, and a dull lustre (Fig. 4). It may contain small particles of mica. The fineness (or coarseness) of the surface grain may vary a lot. Materials from some sources in the Trascău Mountains produce a good conchoidal fracture, but most do not. Some materials produce small flaking and cracking on the surface, when fractured.

d. Trascău siliceous shale:

This material varies a lot between sources, depending on what it contains. One known source between Zlatna and Feneş (at Cremenea Peak, overlooking the Valley of Paul) is shades of pink, opaque, coarse grained, and has a dull lustre (Fig. 4). Microscopic analysis shows that it contains particles of clay, silica, hematite and occasional microfossils (one gastropod was observed). It may produce a good conchoidal fracture and is suitable for knapping[13].

e. Trascău quartzitic sandstone:

This material varies between sources. It generally has very small, but visible quartz grains and breaks with a conchoidal fracture. It is usually a light colour, often grey, brown or yellow (Fig. 4). It may contain other materials, such as clay, limestone or mica[14].

f. Other materials in the Trascău Mountains:

Various other lithic materials are present in the Trascău Mountains, at small localised sources. They include microgranite, chalcedony, silicified wood and agate[15]. Microgranite occurs in the Arieş valley and may be the source of artefacts found at Limba. Silicified wood and agate do not appear to have been used to make the artefacts from Limba, so they will not be discussed in this article. There are also numerous large sources of andesite and basalt, near to Limba. Large quantities in fact are to be found in the Mureş River. At Limba, there have not yet been found any chipped stone artefacts that appear to have been made from andesite or basalt. Although they are very low quality for making chipped stone tools, they were occasionally used for this purpose at other sites. They were frequently used though to make polished stone tools found at Limba. As this article focuses on chipped stone artefacts, andesite and basalt artefacts and sources will not be discussed.

3.2.2. Matalliferi Mts., Haţeg and Poiana Ruscă Mts.

a. Metalliferi jasper

Metalliferi jasper is macroscopically similar to the Trascău jasper (Fig. 5). This material occurs throughout the Metalliferi Mts. (Fig. 2). Although the

[13] See also the observations of Ilie (1940, 88 and 93; 1952b, 28; 1953, 48-50).
[14] See also Ilie 1932, 344-348.
[15] See for example Mârza *et alii*, 1997.

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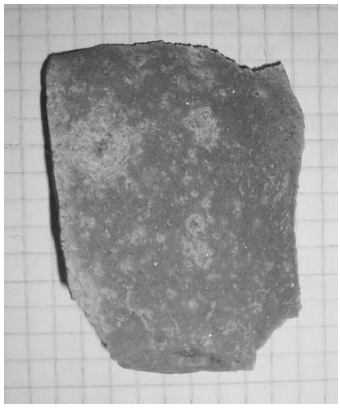
materials from most sources look the same and there is variation in the visual characteristics at individual locations, chemical analysis may help in distinguishing between general areas within the Metalliferi Mts[16]. The jasper from the Metalliferi Mts. appears to be slightly better quality for knapping than the materials from nearer sources in the Trascău Mountains. It should be noted though that this is a general observation and some jasper from the Trascău Mountains is of very good quality. In the area near Techereu there is a green variety of jasper (Fig. 5). It was also described by Ghiurcă[17].

b. Brad sinter

North-east of Brad (Hunedoara County) (Figs. 2, 6), located in the Neogene andestic pyroclastics, there is a large occurrence of this material[18]. This material has various colours, from white to yellow, red, brown or orange. It is opaque, glassy, with a very fine grained surface. At the source, most rocks have a very poor conchoidal fracture, but some have a very good conchoidal fracture. A few hours of searching can reveal a large quantity of material suitable for knapping. The material is not as sharp as chert or jasper.

c. Cerna Valley quartzitic sandstone

There are several sources of quartzitic sandstone in the northern part of the Cerna valley[19] (Fig. 2). This material is medium to fine grained, the grains being barely visible to the naked eye, in some samples. They are opaque, light coloured (usually a shade of very light whitish brown, or light yellowish brown) and have a dull lustre. They usually break with a conchoidal fracture. Some samples contain fossil gastropods (or casts of them) over 1 cm in thickness.



[16] Luedtke & Meyers, 1984.
[17] Ghiurcă 1999; Ghiurcă 2000.
[18] Ghițulescu et *alii*, 1968; Ghergari & Ionescu, 1999; Ghergari *et alii*, 1999.
[19] Based on the author's personal observations while doing fieldwork.

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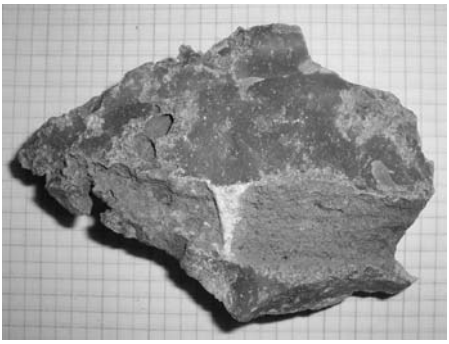

Fig. 4 – (left to right) Rameț rhyolite,
Cremenea Peak siliceous shale, Craiva sandstone.

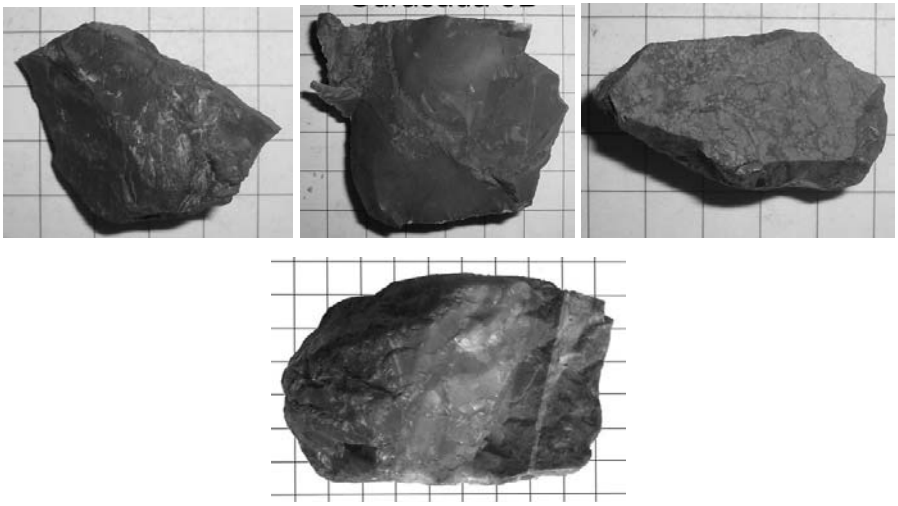

Fig. 5 – Metalliferi jaspers (left to right – Bulz, Gurasada, Almaşu de Mijloc, Techereu).

d. Hateg chert

This material is whitish yellow, porcelain-like in appearance, translucent in the centre, and produces a conchoidal fracture. It is found in the area between Cioclovina and Barul Mare (Hunedoara County) in the Late Jurassic limestone formations[20] (Fig. 2).

e. Poieni siliceous shale (a.k.a. "Banat Chert")

This material out crop is in the western part of the Poiana Ruscă Mts. near the town of Poieni, Timiş County (Figs. 2, 7). In 1971, E. Comşa identified this material out crop and named it "Banat Chert" ("Silex de Banat")[21]. This material

[20] Mamulea 1953, 226-227; Boldur & Stilla, 1967, 307-308.
[21] Comşa 1971; Comşa 1976.

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presents a mixture of various colours, such as light brown-grey to light whitish yellow. Some samples show frequently dendritic black inclusions. The material is brecciated. Microscopic thin sections show that it contains particles of clay, silica and hematite. Note that contrary to it's commonly used name, from a geological point of view this material is referred to as siliceous shale (Romanian "gresia silicioasa"), not chert (Romanian "silex").

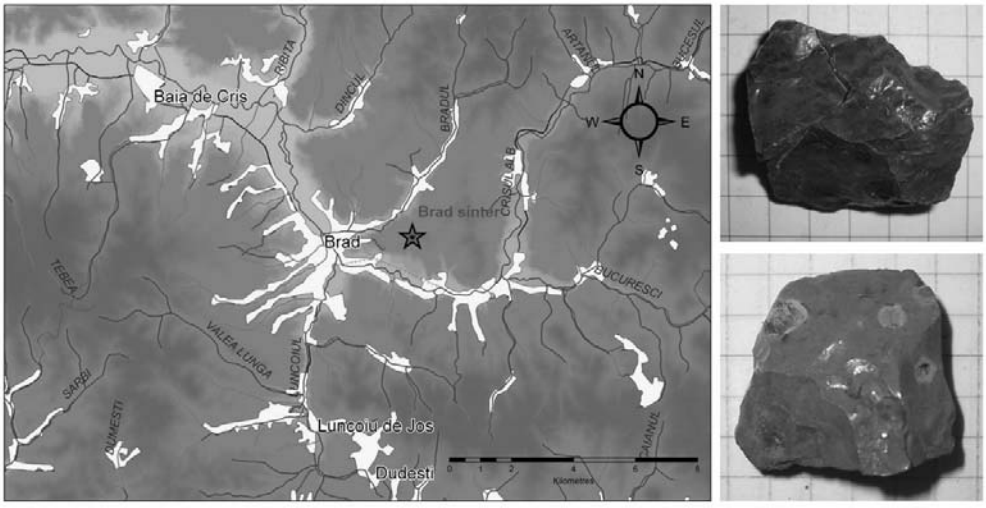

Fig. 6 – Brad sinter. Map showing source and surrounding area.
Two samples.

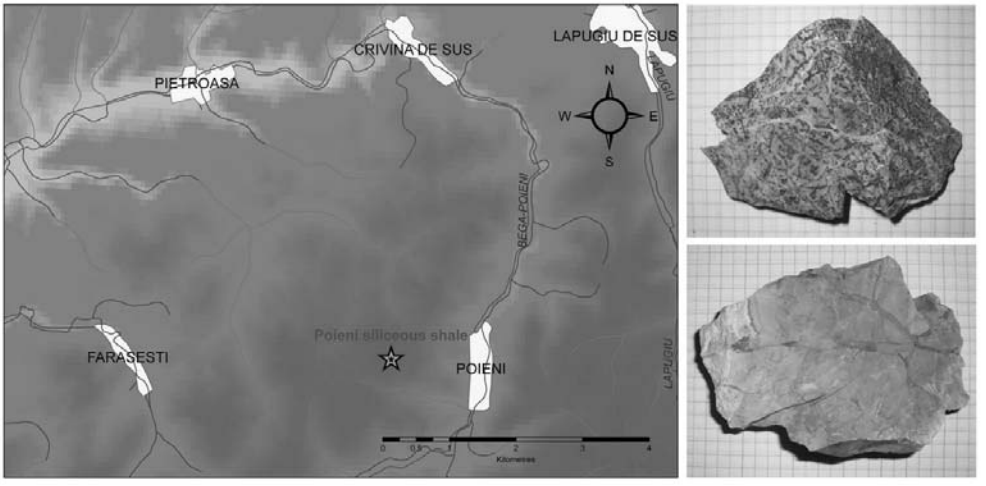

Fig. 7 – Poieni siliceous shale.
Map showing source and surrounding area. Two samples.

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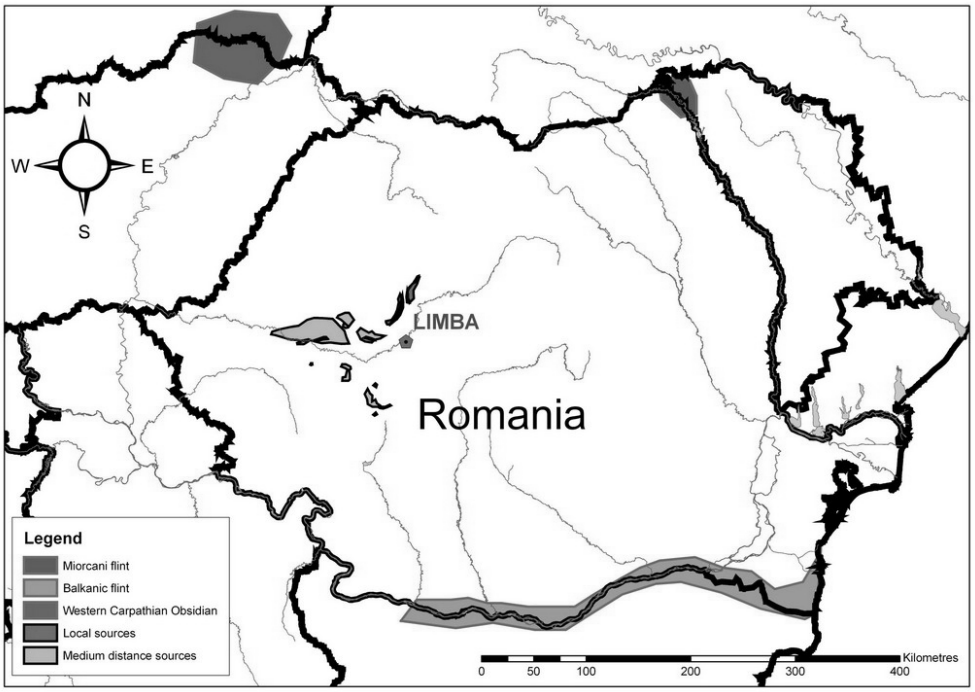

Fig. 8 – Map showing main long distance (remote) geological sources.

3.2.3. Sources in remote areas

The materials imported from the following areas (Fig. 8) seem to be very good quality for making stone tools. This probably explains why materials came from such a long distance – *i.e.* they were traded further because of their good quality.

a. Miorcani (Prut River) flint

This material is a true flint (being found in chalk formations). It is light brown to black, translucent to highly translucent, dull to satiny, with a very fine grained surface, and often contains relics of its parent rock (chalk). This material occurs along the Prut River near the border between Romania and the Republic of Moldova. It is particularly abundant near the modern village of Miorcani[22]. It is also found at other locations along the Prut in that region[23] as well as in the

[22] Based on personal communications with Irina Mihăelescu, Geology Department, "A.I. Cuza" University, Iași. Mihăelescu has previously studied Miorcani flint, both in the lab and *in situ*. She has collected and studied *in situ* samples from the Prut river and the flint mine in Miorcani village.

[23] Based on personal communications with Virgil Ghiurcă, Geology Department, Babeș-Bolyai University, Cluj-Napoca. Dr. Ghiurcă has studied and written numerous repertories regarding silicate sources throughout Romania.

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Republic of Moldova, at locations away from the river. This material breaks with a very good conchoidal fracture. This material is well known and various researchers have written about this source of flint[24].

b. Balkanic chert

This material is a light yellowish brown (with different hues ranging from yellow to grey-brown), subtranslucent to opaque, with occasional small round white spots and fractures nicely. It is found as cobbles along the banks of the Danube River from Oltenia to the Black Sea[25]. Its geological origin is generally the Dobrouja region (Romania and Bulgaria) in chalk formations[26].

c. Hungarian and Slovakian (Western Carpathian) obsidian

This is a black, highly translucent to transparent, variety of obsidian found in the Western Carpathian Mountains, mainly in Hungary and Slovakia. Although the materials from Hungary and Slovakia generally have some slight macroscopic differences, since these sources are very near to each other (and far from Limba) these differences will not be discussed in this article. The source of obsidian extends also into Ukraine (near the Hungarian and Slovakian sources) but there it is of lower quality for knapping. Some researchers have suggested the possibility of a source of obsidian in Romania in the Maramureş area, near to the Hungarian and Ukrainian sources[27]. Since the distance and direction would only be slightly different, this problem will not be addressed in this article either.

It is possible that obsidian from other areas (*e.g.* the Agean) might have arrived at Limba. The sources of workable obsidian in the Aegean, which have been reported and studied so far are located on the Cycladic islands of Melos, Antiparos and Yali. The relevant sources in Anatolia are at Acigöl and Ciftlik. Chemical analysis of the artefacts from Limba would be able to distinguish between various sources of obsidian[28], but macroscopically it would be difficult. Since those sources are significantly further away and previous obsidian studies in this region have indicated a vast majority of pieces coming from Western Carpathian sources[29], it is presumed that most obsidian artefacts found at Limba are from the Hungarian-Slovakian source area. To date, no geological source of obsidian has been found in the Apuseni Mountains[30], therefore all obsidian (regardless of whether it came from the Western Carpathians or elsewhere) can be considered a long distance imported material.

[24] See for example, Alba *et alii*, 1960.
[25] Comşa 1976.
[26] Ghiurca 2003.
[27] For examples, Comşa 1976, 246-248 and Păunescu 2001, 76-77.
[28] Biró 2006, 271; Kasztovszki & Biró, 2006, 303.
[29] See for example, Cârciumaru *et alii*, 1985 and Sălăgean *et alii*, 1988, 73-86.
[30] Nandris 1975; Williams Thorpe *et alii*, 1984, Fig. 9.

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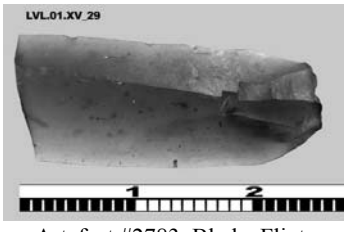
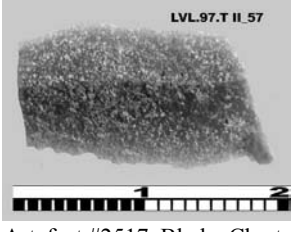
4. Discussions

4.1. The Artefacts

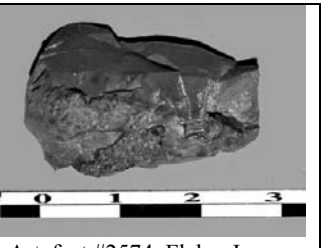
From the excavations of the Neolithic site at Limba, 440 chipped stone artefacts have been recovered and catalogued (Fig. 9). See the following section gives an overview of the provenance of the artefacts found at Limba (Diagram 1). Some of the artefacts (particularly those made from local and medium distance materials) are difficult to assign to a specific location, due to variation within sources and overlap between sources. For this reason, the numbers of artefacts listed here should be considered approximations. It should also be noted that not all of the obsidian artefacts have been catalogued yet. Perhaps half of the obsidian artefacts are at present uncatalogued.

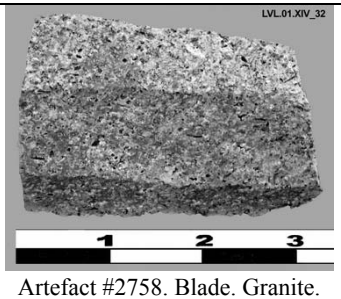


Artefact #2783. Blade. Flint.

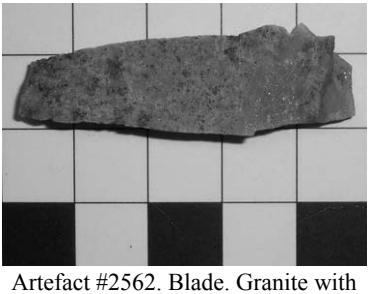


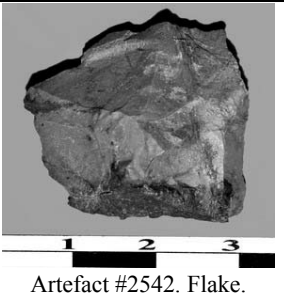
Artefact #2517. Blade. Chert.

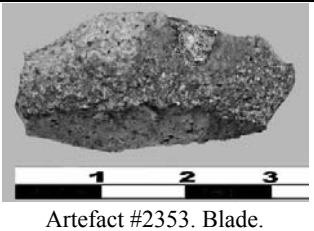

Artefact #2574. Flake. Jasper.

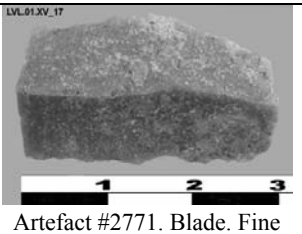


Artefact #2758. Blade. Granite.


Artefact #2562. Blade. Granite with quartzite band.


Artefact #2542. Flake. Jasper.


Artefact #2353. Blade. Sedimentary sandstone.



Artefact #2771. Blade. Fine grained quartzitic sandstone.

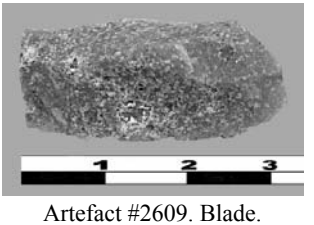

Artefact #2609. Blade. Quartzitic sandstone or coarse chert.

Fig. 9 – Examples of artefacts.

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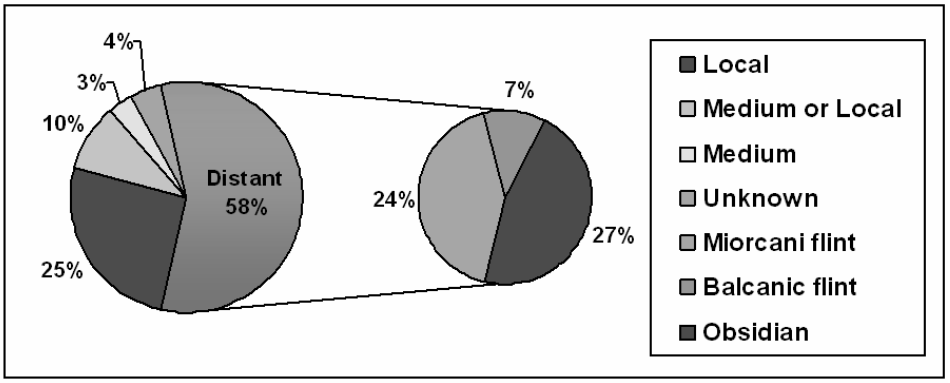

Diagram 1 – Percentages of materials from local, medium and distant sources.

Table 1

Presumed sources for 440 chipped stone artefacts from Limba

		Quantities (# of artefacts)	Percentages (of total)
Distant sources:	Miorcani flint	107	24%
	Balkanic chert?	29	7%
	Obsidian	116	26%
	Total	**252**	**57%**
Local sources:	Not differentiated	112	25%
Medium or local sources:	Not differentiated	42	10%
Medium distance sources:	Not differentiated	15	3%
Unknown provenance:	Not differentiated	19	4%

Although many sources of lithic materials far from the site may have the same appearance as local materials, artefacts of low quality are assumed to have been locally acquired and not imported. There was no reason for people to import low quality materials, when they already had similar materials available nearby. It is therefore unlikely that poor quality materials would have been imported from far away. For this reason, artefacts made of low quality materials, which have a match with a local material, have been classified as local. Fortunately, the high quality imported materials are macroscopically distinct from materials of any known local sources.

4.1.1. Local materials

There are approximately 102 artefacts made from local materials (possibly 10 more artefacts made of poor to medium quality) (Diagram 2). The following table lists them.

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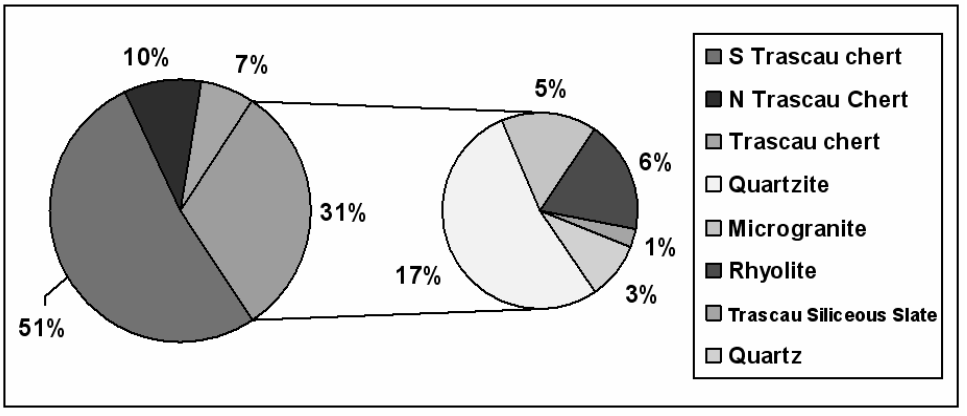

Diagram 2 – Percentages of materials from local sources.

Table 2

Quantities of artefacts made from local materials

Source	Quantity		Artefacts
Trascău chert	84	Southern Trascău chert	67
		Northern Trascău chert	10
		unknown if northern or southern	7
Quartzitic sandstone	5 to 18	(13 artefacts might be a coarse chert)	
Microgranite (probably Arieş Valley)	5	(Artefact #2562 contains both granite & quartzite) (Fig. 9)	
Rhyolite	6		
Siliceous shale	1		
Quartz or quartzite	3		

Silicified wood and agate do not appear to have been used to make the artefacts from Limba. Microgranite is presumed to be from the Arieş Valley, as this is the closest abundant source of this material.

4.1.2. Medium distance materials

There are approximately 42 jasper artefacts which may come from either the Trascău or Metalliferi mountains.

From medium distance sources, there are approximately 15 artefacts (not including the Trascău-Metalliferi jaspers already mentioned). Out of these artefacts, there are 9 made from Metalliferi jasper (these appear to be specifically Metalliferi jaspers), 1 made from Brad sinter, 4 made from Cerna Valley quartzitic sandstone, and 1–3 made from Poieni siliceous shale (Diagram 3).

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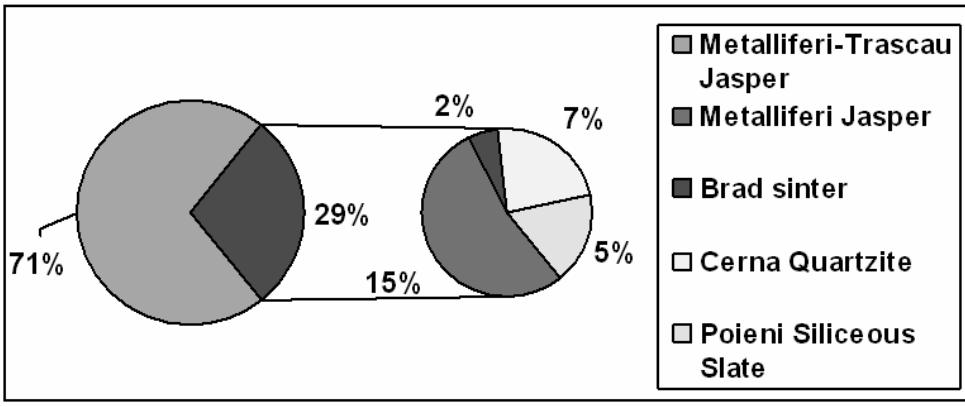

Diagram 3 – Percentages of materials from medium sources (including Metalliferi-Trascău jasper).

At the time of writing, the author had very few samples of chert from the Hațeg Basin area. Based on these artefacts and written descriptions by other researchers, it does not appear that many (if any) artefacts at Limba were made from this material. Future research in the Hațeg Basin area may reveal otherwise.

4.1.3. Long distance materials

There are about 223 artefacts made from imported materials. They appear to be from three general sources. There are 107 artefacts made from Miorcani flint[31], more than 116 made from obsidian, and 29 possibly made from Balkanic chert (Diagram 1).

As with Hațeg Basin chert, the author had access to very few geological samples of Balkanic chert. Based on these samples and artefacts from Neolithic sites in the south of Romania, it seems likely that some of the artefacts from Limba were made from this material. More geological samples of Balkanic chert for comparison may confirm this.

As north-eastern Hungary is the nearest known source of obsidian, the fact that obsidian artefacts are found at Limba in such high quantity supports the theory of well established long distance trade routes, during the Neolithic.

[31] Based on personal communications with Virgil Ghiurcă and Corina Ionescu (both professors at the Geology Department of Babeş-Bolyai University, Cluj-Napoca, with extensive experience regarding Romanian silicates). Drs. Ghiurcă and Ionescu both confirmed the classification of most of these pieces as likely being Miorcani flint.

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4.1.4. Artefacts of unknown provenance

There are about 58 artefacts, which are of unknown provenance. Of these 10 are of poor to medium quality, and therefore, are likely of local origin. Another 29 may be Balkanic chert. Most of the remaining 19 artefacts were unique in appearance and could not easily be matched to known geological sources (Diagram 1). These artefacts may be made from materials from geographically small sources, found within the study area, which have not yet been catalogued, or they may be from sources further away and brought to the site through trade.

5. Conclusions

The chipped stone artefacts at Limba show signs of both local and long distance procurement. It appears that more than half of the artefacts were either imported from distant sources, or made from imported materials. Of the long distance chipped stone materials, half are obsidian. A quarter of all artefacts appear to have been made of local materials, in particular from the southern and middle part of the Trascău Mts. A small amount of the artefacts are of medium distance materials (in particular jasper). The rest are from unknown sources. Based on these artefacts it would seem that imported materials were preferred and used much more than locally available materials, in particular materials from sources to the north.

As Limba was located on the bank of a major waterway, it is very likely that they had relatively easy access to and contact with other settlements, thereby facilitating trade of raw materials and finished products. What the residents of Limba traded in exchange for lithic materials remains unknown. Other researchers have proposed that they may have exported salt (a relatively abundant material in the area) [32]. It is also possible that such settlements along the banks of major rivers may have served as a sort of market place, where traders met to exchange goods[33].

It is possible that people did travel long distances in search of materials and fabricated the tools or produced nuclei near the material source and then brought them back. This is unlikely, however, because it would involve a detailed knowledge of the locations of different material sources over an enormous geographical area. It is possible though that direct procurement occurred within a

[32] Based on personal communications with Horea Ciugudean, Muzeul Unirii, Alba Iulia. Dr. Ciugudean has studied the prehistory of salt mining in the Mureş Valley area and believes that salt was likely collected and exported throughout prehistory.

[33] Based on personal communications with Horea Ciugudean. Dr. Ciugudean has worked on various excavations at prehistoric sites in Alba county, including Neolithic settlements along the Mureş River. It is his opinion that some of the Neolithic settlements along the Mureş River may have also functioned as trading posts.

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limited area, around each settlement, in combination with trade with neighbouring groups, or at occasional large group gatherings. Through exchange it is possible for materials to have moved large distances by changing ownership several times. Thereby, the materials and artefacts may move much longer distances than any individual owner ever would.

Some of the Neolithic cultural phases at Limba are contemporary with other sites from the region and may have had contact with them, *i.e.* Alba Iulia – Lumea Noua, Aiud – Cetaţuie, Tărtăria, Sebeş – Râpa Roşie (all four in Alba County), Turdaş (Hunedoara County) and Gligoreşti (Cluj County). Future provenance studies at these sites will help to clarify the level of contact between these and other contemporary sites.

As yet, no microlithic debitage has been recovered at Limba. It is suspected that this is due to the recovery methods commonly used at excavations. In fact, the site probably contains microlithic debitage but it was probably not recovered during excavations. Without the complete assemblage of lithic artefacts, it is more difficult to determine to what degree artefacts were being brought to the site ready made, or being produced at the site from nuclei acquired at the sources (or acquired through trade). The amount of local processing and production of artefacts would help reveal whether the local population was acquiring the long distance material though trade or direct procurement. Hopefully, future excavations at Limba and other sites in the area will help to determine whether artefacts made from distant materials were produced locally from blanks, or nuclei, or imported ready made.

As more sources of lithic materials are discovered and the size of the geological database of raw material sources increases, it will likely be possible to identify the provenance of more artefacts which are currently of unknown provenance. If these artefacts have been imported from medium to long distance, determination of their provenance may be aided by collaboration with other researchers in neighbouring regions and comparison with artefacts and geological samples in their regions.

Acknowledgments. The Techereu jasper sample in Fig. 5 is part of the collection of the Mineralogy Museum of Babeş-Bolyai University, Cluj-Napoca. It was photographed by the author with permission of the museum. All other geological samples are from the personal lithotheque of the author and were photographed by the author. All of the artefacts from this study are part of the Limba collection, housed in the artefact repository of the Institute of Systemic Archaeology ("1 Decembrie 1918" University of Alba Iulia). They were studied with the permission of Dr. Iuliu Paul, director of the Institute of Systemic Archaeology and Head of Research for the Limba excavations. The photographs of artefacts # 2758, 2353, 2771, 2561 and 2609 were made by Doru Szabo, photographer at the institute. Artefact #2562 was photographed by the author, with permission of the institute. All of the maps were produced by the author. The satellite image, in Fig. 1, was produced with GoogleEarth.

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PREHISTORIC *PINTADERAS* – STUDY QUESTIONS OR A QUESTION OF STUDIES

PINTADERE PREISTORICE – PROBLEME ALE STUDIULUI SAU STUDIUL PROBLEMELOR

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Cuvinte-cheie: ştampile, ştampile-sigiliu, pintadere, Neolitic, Chalcolitic.
Rezumat: Cu toate că este bine cunoscută, categoria *pintaderas* cuprinde o ambiguitate considerabilă, rezultată din interpretările diferite ale acestor descoperiri şi din numărul mare de întrebări fără răspuns. Bazându-se pe exemplarele neolitice şi chalcolitice publicate, descoperite pe teritoriul Bulgariei, prezenta lucrare se ocupă de unele aspecte generale, mergând de la caracteristicile proprii ale descoperirilor, până la specificul informaţiei arheologice disponibile. Unele dintre întrebări privesc diferite ştampile aparţinând unei categorii comune, specificul terminologiei şi „graniţele" vagi ale acestei categorii, gradul de disponibilitate a datelor (contextul spaţial şi temporal şi distribuţia, tipologia) şi altele. Se oferă exemple de comparaţii între acele observaţii şi anumite supoziţii referitoare la scopul acelor descoperiri, astfel subliniindu-se necesitatea de a se aplica studii speciale.

Key words: stamps, stamp-seals, pintaderas, Neolithic, Chalcolitic.
Abstract: Although well-known, the so-called *pintaderas* category comprises considerable ambiguity, resulting in various interpretations of these finds and a great number of unanswered questions. Based on Neolithic and Chalcolithic published specimens found in Bulgarian lands, the present work deals with some general issues ranging from the characteristics of the finds themselves to the specifics of the available archaeological information. Some of the questions concern various stamps belonging to a common category, the terminology specifics and vague "boundaries" of that category, the degree of data availability (spatial and temporal context and distribution, typology) and others. Examples of comparisons between those observations and certain assumptions about the purpose of the finds are offered, thus underlining the need of application of special studies.

Although well known, the category of so-called *pintaderas*, stamp-seals, seals or stamps[1] comprises considerable ambiguity, resulting in various

[1] The term *pintadera* is used provisionally, without acceptance of the original function, implied in the definition as a single possibility (see below) and because of its "stable" use in Italian, as well as in Balkan languages. In the latter it is offered mostly in combination with corresponding variants of *seal*,

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interpretations of these finds and a great number of unanswered questions. On these grounds, the present work also starts and ends with questions. It is based upon the published Bulgarian finds[2] – research frameworks, which have their advantages but also disadvantages.

The interest to this category goes back a long way – some of the early publications are dated back to 1884[3]. However, the most thorough researches so far are those of the stamps from Italy (1956, 1978) and Southeastern Europe (1984).[4] Nevertheless, the analysis of the literature reveals that there is often lack of detailed information about and lasting interest in the finds, which was also the reason to emphasize their probable role in various spheres – a summary based on the published assumptions[5]. It is beyond dispute that we cannot expect the publications to represent a most favourable variant of the information, necessary for a *pintaderas* research (for instance, in the details suggested as components of a database)[6]. The nature, quantity and quality of the literature, however, call for an emphasis of some peculiarities, connected with the interpretation of these finds.

Here the attention is drawn towards the correlation between data "objectivity" and interpretation of isolated facts. What are (or could be) the questions that arise in the course of such a research, and whether the level achieved allows the answers to be found? What impression is formed about the artifacts according to the existent information, and is it a result of study questions, or it is a question of studies? What is the foundation of the artifacts' interpretation and what degree of freedom does the data that we use permit? In this sense, the present work attempts to identify the extent to which it is possible to correlate certain opinions (for instance, about these finds' use, in the most "practical" sense) with the observations made until the present moment, even for a limited area and limited percentage of artifacts found. However, a provision shall be made that for each

stamp, stamp-seal, small find, etc. The terminology, as a part of the problem, is examined in detail in previous publications of the author (Dzhanfezova 2003a, 2003b, 2005). Here, to avoid repetitive quotation of the large number of titles used in the review of the studies, in such cases, the reference shall be understood as "and the reference literature cited there". The conclusions, based on versatile observations on the published material, are made by the author.

[2] Neolithic and Chalcolithic *pintaderas* found in modern Bulgaria were examined in BA and MA theses of the author (2002 and 2003, unpublished). The present work consists of previously published conclusions (footnote 1), unpublished observations represented at conferences (Dzhanfezova and Ivanov 2005, Humboldt Kolleg, Sofia), and is supplemented by recently published Bulgarian finds. A list of the finds has been included in Dzhanfezova 2003a (part Typology, Neolithic sites) and in Dzhanfezova, 2005 (Annexe, Neolithic and Chalcolithic sites). Here all the conventions, published in more details in Dzhanfezova, 2003b, shall be taken into account. Due to an interruption of the research for a certain period, the author does not claim to have thoroughly listed the most recent reference materials related to the subject.

[3] Issel, 1884.

[4] Cornaggia Castiglioni, 1956; Cornaggia Castiglioni & G. Calegari, 1978; Makkay, 1984.

[5] Dzhanfezova, 2003b, 49; Dzhanfezova, 2005, 311.

[6] Dzhanfezova 2003b, 61–66, Fig. 5.

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observation both the diversity of possible explanations and their limitations shall be taken into account.

Assuming that we shall move from particular to universal, and not vice versa[7], the basic conception here is that *pintaderas* should be examined from at least two major points of view: one is according to their archaeological record, and the other – as a specific category (with certain, but not necessarily one single[8], function).

Regarding **the finds themselves and their primary descriptions**, notwithstanding the limitations, the observations lead to certain conclusions: normally, the similarities among different *pintaderas* are found in the material used – usually clay, and also in the application of the motif – mainly incised. The remainder of the characteristic features mostly represents differences: the size has wide ranges; then, from the clay purity to the final shaping and smoothing of the objects, their manufacture varies between very precise and perfunctory. The relief of the ornament varies from deeply incised to superficially cut to lightly scratched lines. The surfaces of the bases are smoothed to a different extent, and the curve of the bases varies between convex, flat, and concave. Other differences between specimens refer to the perforation of the handles, which has not been applied in all cases, and the presence of color traces, which have been registered on a small number of artifacts[9] (Fig. 1).

The correlation between such conclusions and the definitions, offered for the use of the *typical pintaderas,* shows a lack of some components in some of the specimens, which could be indicative of the diversity within the category, as well as, theoretically, of the different function of the various artifacts[10].

The presence of a perforation in the handle could lead to suppositions concerning the application, keeping or "carrying" of *pintaderas* and not necessarily

[7] In other words, the situation is not that we know a given community that had used stamps with a definite purpose and we have added new artifacts to enrich the collection; it is rather that on account of the existence of these finds, we start to explore their characteristics, to search for the possible reasons and ways of their usage, the various connections which can be ascertained in respect to time and space between them and the stamping practice, between them and other artifacts, and the most important but also the most complex connection – between them and the individual/the people.

[8] An assumption that the specimens did not necessarily have a single and uniform function in all periods and territories of their distribution (Dzhanfezova 2003a, 105; Dzhanfezova, 2003b, 57; Dzhanfezova, 2005, 311).

[9] Dzhanfezova, 2003b, 59, 64, notes 96–97; Dzhanfezova, 2005, 311, footnotes 10–14. C. Perlès mentions that this category is again probably artificial, speaking of Greek "true 'seals', the motif being created by the negative imprint on a soft material. Most, however, can be considered as 'stamps'" with high relief motifs (Perlès, 2001, 252). At this stage it seems that the differences between Bulgarian specimens are considerably greater – a conclusion based on numerous elements of these finds' characteristics.

[10] *Pintaderas* use demands a coloring agent – liquid (Issel, 1884, 372) or dry (Cornaggia Castiglioni & Calegari, 1978, 10) greasy substance – and comparatively wide and deep incisions (Cornaggia Castiglioni & Calegari, 1978, 10). See also footnote 8.

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characterizing them as a sign of authority. Here it will be interesting to point out one case in which the perforation of the handle had been started from both sides, but the seal had remained imperforated[11].

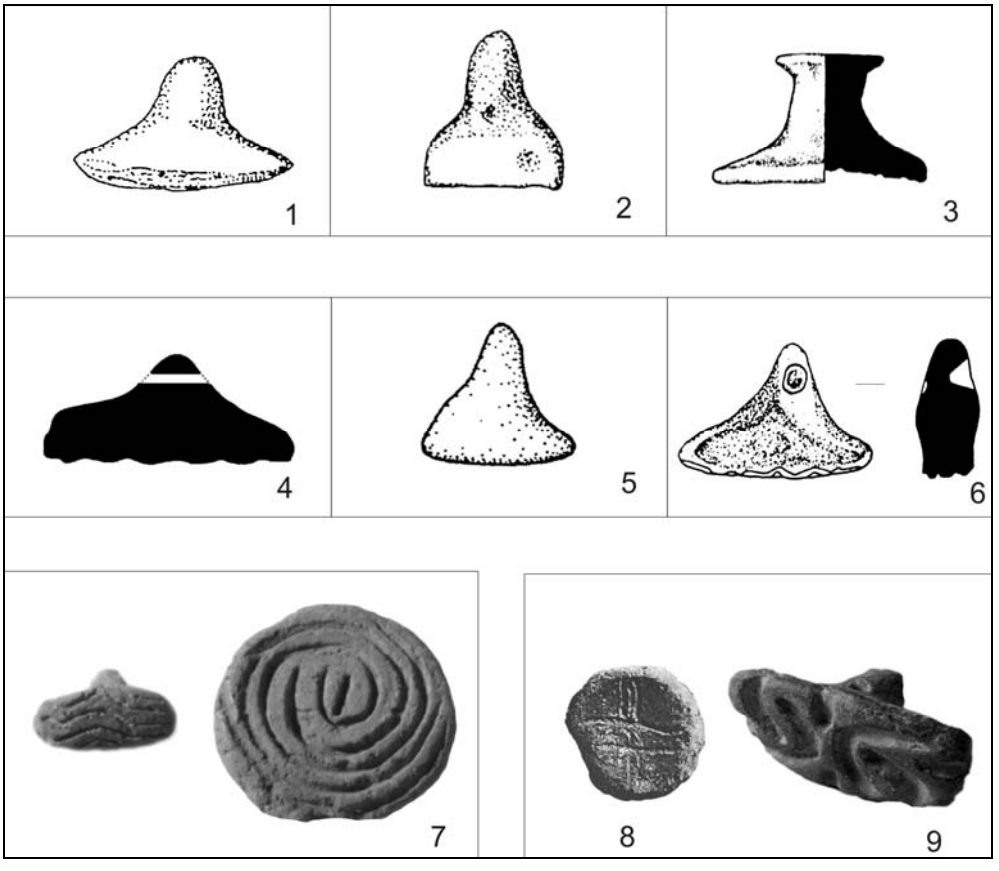

Fig. 1 – Technological characteristics: concave, flat and convex bases (**1** – M. Lichardus-Itten *et alii*, 2002, Pl.21-28; **2** – M. Lichardus-Itten *et alii*, 2002, Pl. 21-18; **3** – T. Kancheva-Russeva, 2003, Fig. 1-3); presence, absence and half-perforations (**4** – Matsanova 1996, Tab. 12–4, **5** – M. Lichardus-Itten *et alii*, 2002, Pl. 21-19; **6** – Vandova 2002, Abb. 3-1); variability in size (**7** – П. Калчев 2005, p. 57); ornament relief (**8** – Николов 1974, обр. 8; **9** – Katalogue 2007, p. 113).

The absence of a specific research on the clay that was used to produce *pintaderas* prevents the formulation of conclusions whether a given find was locally made (or was, for instance, a result of exchange, or was imported from a distant/close territory and so on – elements that are important particularly on account of the suggestions that the finds could be a result of long distance connections).

[11] Vandova, 2004, 27, Abb. 3–1.

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Often, the published information does not offer details about the **specific context**. Data about seals from this territory include mainly descriptions as *dwellings* or *among ruins of houses*, and a very small part of them presents more detailed information – for instance, near *fireplaces* or *in situ near ovens*[12]. One of the published Bulgarian items has been found also in a grave registered in an area between houses, and the individual was defined as 19–20 years old male[13]. In addition, the find is more particular – it is among the rare specimens with two bases[14]. Only one *pintadera* is reported, which has been found in a secondary context – the waste area (*a rubbish zone*) of the site, where all vessels that have gone out of use had been disposed of[15].

The absence of data about the specific context of the artifacts renders it difficult to trace the possibilities for indication of the place where the seal was used or stored, its particular place in the house, and in general – the part of the settlement space to which it belonged. It would also be interesting to specify the number of the seals that have been found in a particular dwelling, and, if possible, to specify more precisely the duration[16] of their usage (additionally – according to stratigraphy and typological sequences). Besides that, to what extent can the information be referred to the existence of seals in grave contexts as well? And even more, if possible to answer, who used them[17]?

In a broader context, *pintaderas* have been found in mounds as well as in open settlements. The abovementioned grave was intramural as well (footnote 13). Both Neolithic and Chalcolithic artifacts have been found in few sites, but naturally this depends on the duration for which a particular site has been inhabited. At this stage, the information from Bulgarian lands indicates concentration in some of the settlements[18]. It is difficult to determine whether this is a usual occurrence or it is a question of research methodology or quality of the publication. Nevertheless, it is a fact that the early Neolithic Kovachevo presents the richest Bulgarian *pintaderas* collection[19], and furthermore, up until 2004 it contained 39 % of the Neolithic and 24 % of the total number Neolithic and Chalcolithic published Bulgarian finds[20]. On the other hand, in considerably large sites that have been subject to many years of excavations, *pintaderas* have not been found (or published).

[12] Some *pintaderas* found in dwellings – in Николов, 1974, no pages; Радунчева, 1976, 16; Лихардус *et alii*, 2001, 74; destructions of dwellings – in Николов, 2004, 13; near a hearth – in Попов, 1914, 218; near an oven – in Миков, 1969, 7.

[13] Николов *et alii*, 1991, 14.

[14] Dzhanfezova, 2003 a, 99, chart 1.

[15] Leshtakov *et alii*, 2007, 199, Fig. 27–9.

[16] See Chapman, 2000.

[17] More detailed questions and "open issues" are presented in Dzhanfezova 2003b, 59–60.

[18] An observation on possible concentrations in Nea Nikomedeia offers Bailey, 2000, 110.

[19] Lichardus-Itten *et alii*, 2002, 126.

[20] Dzhanfezova, 2005, 313, Table 3, footnote 18.

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The importance of such an observation is due to the fact that the majority of ethnographic examples and archaeological assumptions about the use of *pintaderas* suggest the possibility of their more frequent use and considerably greater distribution[21] (if we assume that they have not been used only by certain individuals or groups).

Given the present state of the data and, furthermore, bearing in mind the specifics of these finds typology and distribution, we could hardly define precise "microregional" or "macroregional" connections based on an assumption that namely pintaderas would have been a sign of a kind of intersettlement relations.

The context of time also presents some specifics. In some cases, the dating is determined for periods that are too general – sometimes even as "Neolithic" or "Chalcolithic" age. *Pintaderas* dating is by no means aimed at tracing out the development of a certain shape or ornament in time and space. On the one hand, its significance is determined by the emergence of these finds even in the early Neolithic period, together with the early ceramic vessels and artifacts. On the other hand, particularly for *pintaderas*, dating is important also because of the suggested "periods of standstill"[22]. It is again unclear whether with the progress of research the situation a) will remain the same, b) the relation will remain stable despite the new finds added from the "intermediate" periods, or c) the percentages for the periods will be balanced. Even if it is assumed that wooden seals were used, it is interesting that the ceramic ones were known as of the early Neolithic settlements – a phenomenon due to which they are also related to the processes of Neolithisation[23].

The presence, context, distribution, and interpretation of such or similar finds, known also in later periods of pre- and protohistory (in conditional terms), offers even more points of view. Here it is useful to introduce to the prehistoric stamps topic (apart from the widely used ethnographic examples) some archaeological evidences from later periods.

There is definite data about the use of seals for decoration of pottery from the early Iron Age[24]. The difference lays in the fact that imprints on prehistoric vessels have not been found on this territory, despite the obvious similarity between *pintaderas'* patterns with drawn(!) ornamental motifs.

On the other hand, a comparison between seals that have often been found in *Scythian* graves[25] and the prehistoric ones, including Bulgarian specimens, shows

[21] A review in Dzhanfezova, 2003a, 2003b, 2005.
[22] Makkay, 1984, 100–101.
[23] Budja, 1998.
[24] Some examples are not similar to the prehistoric ones (Hänsel, 1976, Taf. 43), others present good parallels even for the two-based stamps (Нехризов, 2006, Tabs. 1, 2).
[25] As an example, a very detailed work on *Skythian* seals (the German term used is *der Tonstempel*), found on the territory of Hungary, written by J. Kisflaudi (Kisflaudi, 1997) is used here.

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some differences but also particular similarities. Their grave context and interpretations[26] enrich the *pintaderas* topic despite the underlining that the analogies concern mostly the popular motifs (Fig. 2). According to the similarities in shape, it is also interesting that parallels could be found even for the stamps with two bases, both having different[27] or similar motifs on each side[28].

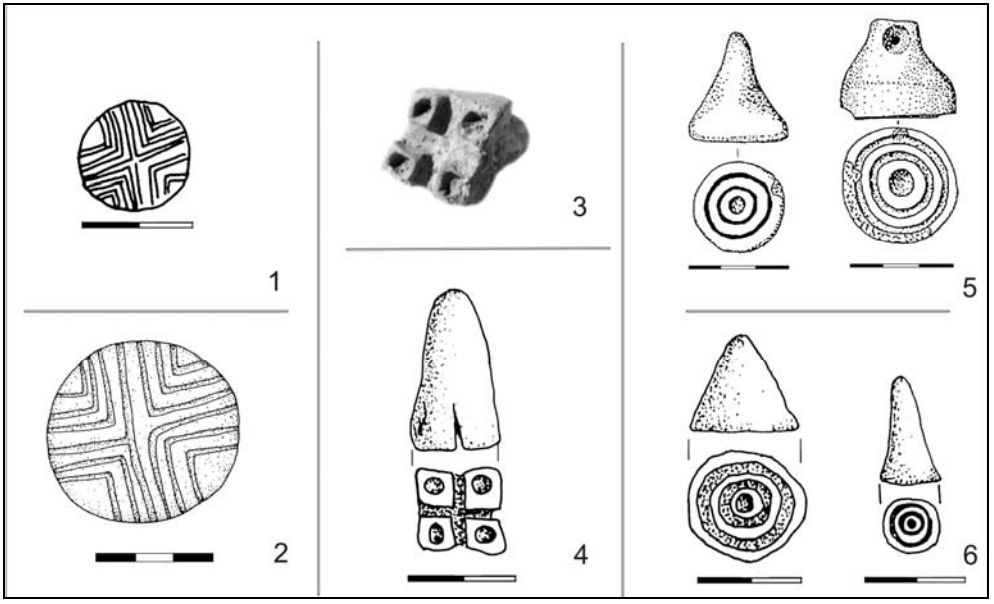

Fig. 2 – Finding similarities or differences: some similar prehistoric and *Skythian* stamps of different sizes (1 – J. Kisflaudi, 1997, Abb. 12-6; 2 – S. Hiller, V. Nikolov, 1995, Abb. 14; 3 – П. Калчев, 1995, p. 57); 4 – J. Kisflaudi, 1997, Abb. 11-8; 5 – M. Lichardus-Itten *et alii*, 2002, Pl. 21–19, 20; 6 – J. Kisflaudi, 1997, Abb. 7–7, 9).

Throughout the categories (Fig. 3), the definition of the finds as specimens of a specific category and their relation to other categories is again problematic. The conditional connection between the term *pintadera* and a specific function was already mentioned – not only stamping but stamping in colour on a human body. The question remains whether the term should be accepted with this denotation, or "seal"/"stamp" should be used arbitrarily, as a more "liberal" term (despite some

[26] Kisflaudi, 1997, 78. The author divides these finds in two major groups (Kisflaudi, 1997, 78). A find with an unornamented base is included too (Kisflaudi, 1997, Abb. 8–17). According to Makkay's catalogue, the author enumerates the established prehistoric similarities (Kisflaudi, 1997, 78). Later and distanced, but also very interesting, aspect presents the use of the written sources (see Kisflaudi, 1997). Considering Bulgarian finds in particular, the main difference lies in *Skithian* stamps' variety and in the fact that many of them represent also compositions of repeating motifs in a manner that is not characteristic of the prehistoric stamps from Bulgaria.

[27] Kisflaudi, 1997, Abb. 7–10.

[28] The observation is based on an illustration in Chochorowski, 1998, Abb. 5–15.

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early "objections"[29]). In this sense, the determination of the **"boundaries"** of a category and its "purity" raises a number of questions. If possible to pinpoint, where exactly is the line between the "typical" *pintaderas* and other artifacts, which, even though bearing different characteristics, could have been used for similar purposes? Can we assume that the cylindrical seals are *pintaderas* too – with the provision that stamping is done by rotating (Fig. 3/10)? For the sake of mere formality, here is the place to emphasize the similarity between *pintaderas* and, for instance, some spindle whorls with decorated base (Fig. 3/3), which theoretically could make a print. On the other hand, is there a connection between *pintaderas* and the extremely similar ceramic cones (Fig. 3/11), which are distinguished by the key difference that they lack an ornament[30]?

What is also important is the connection with certain figurines, and this is not only due to the possibility to prove a specific function – for instance, through anthropomorphic figurines decorated with motifs, which are interpreted as tattoos[31]. The comparison is important also because there is a "blending" of certain characteristics of *pintaderas* with characteristics of figurines, or vice versa (Fig. 3/5). Until the present moment *pintaderas* with anthropomorphic handles, in the form known from the Macedonian ones[32], have not been encountered in Bulgaria. A possibility for an analogue provides an artifact[33] with a similarly shaped head, but the lower part of which is absent (Fig. 3/4). The question remains, what does this find represent – is it a *pintadera*, or is it rather a figurine? How should it be defined – as a *pintadera* shaped as a figurine; a figurine with an ability to stamp (*pintadera*); figurine with a more distinctive sign; just a coincidence, and so on?

The comparison between *pintaderas* and other finds is interesting also because of the diversity of motifs. According to the widely spread, popular motifs, as well as more rare, less distributed ornaments of observed *pintaderas*, their relation with other artifacts again demonstrates the existence of common/similar signs and others, not so widespread motifs[34]. A provisional review of the motifs from certain author's "symbolic" point of view also leads to the same conclusion – it appears, that these general signs could be related to a number of "ideas," while other, not so popular motifs, remained "unexplained" by these means[35].

[29] Mosso, 1912, 189.
[30] So-called tokens, considered by Schmandt-Besserat, 1999; Budja, 1998.
[31] Kuncheva-Russeva, 2003.
[32] See Наумов, 2006.
[33] Николов, 2004, фиг. 3–5.
[34] Dzhanfezova, 2003a.
[35] Described in Dzhanfezova, 2005, 317.

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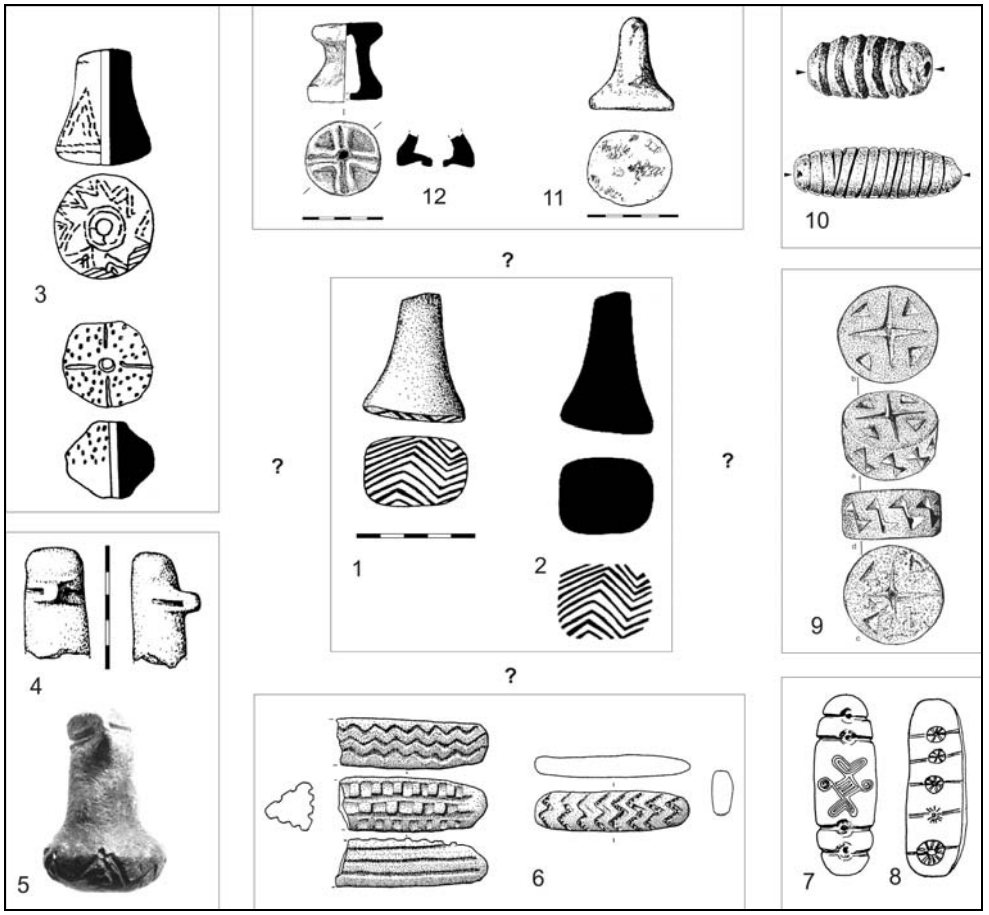

Fig. 3 – Around the categories – in or in-between: finds, sometimes included in the category of pintaderas/seals without having their specific characteristics; and objects with different characteristics, which could eventually print ornaments (some examples with figurines, spindle-whorls, ceramic cones, three-based finds, cylinders, seals, and even the so-called "Brotleibidole"). Various dates and sizes. **1** – a pintadera, G. Georgiev, 1981, Abb. 54-c; **2** –main components, T. Dzhanfezova, 2003,a,b; **3** – Kr. Leshtakov, T. Kancheva-Russeva, St. Stoyanov, 2001, Fig. 37–f, h; **4** – В. Николов, 2004, обр. 3–5; **5** – Г. Наумов 2006, front page; **6** – A. Pedrotti, 1990, Figs. 3–9,12; **7** – G. Bandi, 1974, Abb. 6; **8** – G. Trnka, 1982, Abb. 9; **9** – O. Cornaggia Castiglioni, G. Calegari, 1978, Tav. VII; **10** – O. Cornaggia Castiglioni, G. Calegari, 1978, Tav. X; **11** – Георгиев, Ангелов, 1957, обр. 48-2; **12** – T. Kancheva-Russeva, 2003, Fig. 1-3.

Bearing in mind all of the above, the questions remain whether each find with a decorated part (base) and a part meant for holding (handle) is by all means a *pintadera* (and we use all conventions of the terminology), or whether other printing finds, despite their different characteristic features (Fig. 3), should be positioned closely to the examined category. It is necessary to clarify the confusions coming from the combination between complicated terminology (bound in its origin to specific function), unclear boundaries, presence of various

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categories of finds (defined as *pintaderas),* and a variety of characteristics in the category(even when it is confined to "typical" specimens).

The typology here does not include cylindrical seals and represents the following observations: with regard to the profiles, there are a large number of popular and a few specific shapes. With regard to the bases, the situation is the same – a large number of popular, averagely used, and very few specific shapes. The shapes do not vary according to their chronological reference – the predominant types of profiles and bases remain stable for both *pintaderas'* concentration periods. It is interesting to point out that among the more particular specimens with two bases, some have the same print on both faces, while on others the prints are different.[36] The analysis of the finds' components shows an interdependence between only two of them – so far the relation is between the shape of the base and the type of the motif[37] (Fig. 4).

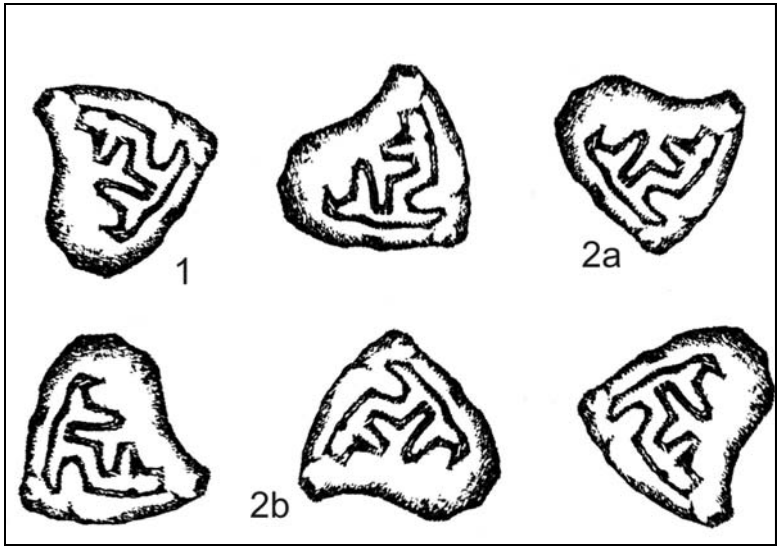

Fig. 4 – An example of base-ornament interdependence and some "positions" of the ornament: 1) published orientation, T. Kancheva-Russeva, 2003, Figs. 1–4 and 2) probable orientation, according to motif analogues, included in compositions (2a, 2b).

***Pintaderas*' ornamentation.** Questions remain about the type of some prints, orientations, probable reliefs, and the use of a colour mediator[38]. The distribution of the finds, their concentration in particular chronological periods, and the single specimens by which certain types are represented serve as an indication of the arbitrary nature of the typology. Nevertheless, at this stage clearly many of the

[36] Details in Dzhanfezova 2003a; 2003b, 63; 2005, 313, 315, Figs. 1–2, Tabs. 1–2.
[37] Dzhanfezova 2003a, 102.
[38] They are described in detail in the three cited publications of the author.

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motifs are characteristic of the two main periods (for example, the spiral and the concentric circles and some cross-shaped motifs), while others can be observed only in one of them (for instance, the zigzag lines and the wavy and straight parallel lines are characteristic only of the Early Neolithic period)[39].

Notwithstanding the large number and diversity of opinions predominant between the **different theories about the purpose** of the stamps is the assumption that these finds are intended (1) as stamps on: a) human body, b) ceramics, c) baked goods, d) textiles, e) leather, f) interior, g) animals/hides, h) gates of granaries, and i) "community fortresses", and the materials and items connected to them, they are for (2) "*treatment*" of leather, (3) use as *amulets*, or (4) "*brushes*"[40].

The possible surfaces provide a great variety of applications in practice, as well as a number of purposes, according to which this has been done. The questions remain, whether all artifacts of this category served the same function, whether all of them were meant to make prints on one and the same surface, and whether they had different functions in different time and space. In other words, we came to the most complex question: What is the nature of the relation between the specific category and the human activity, and even the specific individual? Furthermore, how could we interpret in these terms the *pintadera* as a possession of an individual (see footnote 17)?

Some general **experimental**[41] observations were made in two stages. The first aim (1) was to make copies – some of them were made absolutely freely, others were supposed to be as close as possible to the original finds – of published Neolithic and Chalcolithic stamps from Bulgaria (Fig. 5/1). The sizes of these objects were calculated in accordance with the shrinking patterns of the clay, and as a result, the similarity with the sizes of the published finds was considerable. In the process of stamps-making two types of clay taken from local deposits were used, as well as bone and wooden tools, and finally, the objects themselves were baked in an open fire. It was ascertained that the making of *pintaderas* is comparatively easy, even for an amateur.

The second part (2) of producing prints was motivated by the large number of suppositions about the use of *pintaderas*. Since they have been mostly offered according to ethnographic data, *i.e.* since it is clear that the stamps can be used in the indicated ways and on the indicated surfaces, it was assumed that it was not necessary to establish and prove again these examples (Fig. 5/2). On account of the

[39] Dzhanfezova, 2005, 315.

[40] All are published assumptions and are summarized in a similar way, with a long list of quotations, in Dzhanfezova 2003a, b and Dzhanfezova 2005, 310.

[41] The experiment was presented on October 16, 2005 at the section "Presentations of Young Scientists" (Chairperson Prof. Speranța Stănescu) at the Humboldt Kolleg "Challenges to the Science in South-East European Countries before their Membership in European Union", held in Sofia, October 14-16, 2005. The experiment was a collaboration between the professional ceramist Vladislav Ivanov (who provided the tools and materials used) and the author (who provided information about prehistoric *pintaderas* characteristics and ethnographic examples). Thanks to Mr. Ivanov's professional skills, it took a very short time to make accurate copies of the finds.

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primary definition of *pintadera*, the attention in the first "step" was directed at stamping in color. By using two colors (white and red), the main conclusion was that it was actually easy to print the motif on different surfaces, including some textiles, but prints on human skin were easiest to make (Fig. 5/3). After several attempts, the desired consistency of the coloring agent was reached, as a result of which the conclusion was made that it was not necessary to follow that very practice for application of a coloured agent in the incised lines, which has been established in the literature. It is enough to just dip the *pintadera* and then to print, even though the first print is not that precise. This conclusion does not discard the method used with the typical *pintaderas* but indicates an easier approach for stamping, and therefore, quite theoretically, a possibility for clearer terminological formulations.

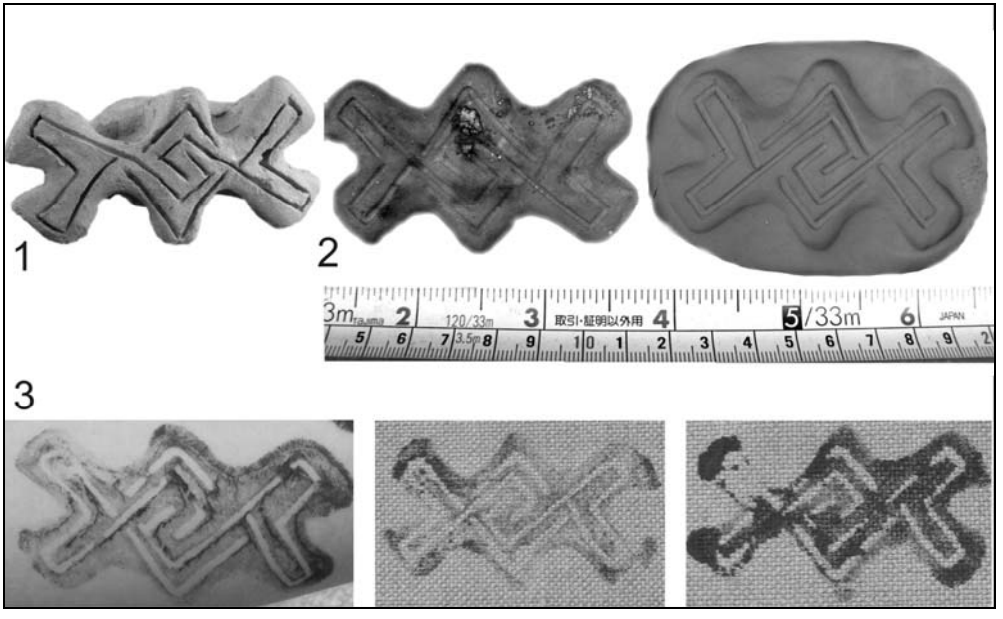

Fig. 5 – "A play": an original (1 – Catalogue, 2007, p. 21), a copy (2), and some red color imprints (3) on skin and modern rough textile.

In view of all of the above mentioned, we can assume the following theoretical questions, questions-probable answers relations, and some "contradictions". The possibilities have not been rejected, but they have been referred to the data available from the published finds from the given territory.

Should we review the category as a diverse but nevertheless united entirety, or is it necessary to dedicate more attention to the differences? Furthermore, do all *pintaderas* have one common function in the context of their various characteristics?

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Are *pintaderas* really objects with a "special status" – in the context of a single fact – except for the burial and house contexts, or some special groupings, one fragmented *pintadera* has been discarded together with broken, unusable vessels, while, for instance, a leg of a deliberately broken tripod remained in the borders of the same settlement[42]?

Are *pintaderas* a result of an import? Despite such possibility, it is more probable that they are of local make. *Pintaderas* are extremely easy to produce. They are distributed on large territories, in synchronous settlements, and despite the presence of common motifs, there are also specific ornaments known as characteristic for certain regions.

Do some *pintaderas* bear traces of long and/or heavy use, indicating continuity in ritual or economic use for more than an individual human lifespan[43]? At this stage, no data from Bulgarian seals can support or reject such an assumption. Still, there are published specimens, which are completely preserved and as good as new[44].

How to "separate" the fragmentation conclusions[45]? In certain cases fragmentation could be a result of long or heavy use, but also bases and handles could be found fragmented as a result of the quality of the make and not necessarily of the duration of use.

Is their use concentrated in particular periods, was the tradition interrupted and to what extent is it a result of the researches? These questions are posed in the context that specimens, also lately, have been found from the intermediate periods, although not in such great numbers.

Are the seals concentrated in particular sites? It is still not clear whether this is a matter of research or reflection of the prehistoric processes. Another question is the interpretation of their general distribution, which covers only certain regions.

What does the diversity of motifs mean, and in what way does it influence the theories? It was established that seals bear very common signs (a term "signs out of time and space"[46] is a suitable one), as well as not so general motifs[47]. The observation should be compared to theories about using signs for "identification", "property marking," and so on. It doesn't reject but makes difficult to interpret so many zigzag signs or spirals, for example, in this single context. Still, we can only guess on which level (from individual to group/community) it could be used.

Have they been used mainly by application of colour in the incisions when it is possible to do this without following the said technique? Furthermore, were *pintaderas* used for applying prints on human bodies – in the context of their

[42] Leshtakov *et alii* 2007, footnote 12.
[43] A suggestion by Chapman 2000, 90.
[44] An example is a published seal from Sadievo, latest publication of Kancheva-Russeva, 2003, Fig. 1–3.
[45] See footnote 43.
[46] Leshtakov, 2003.
[47] See the text above.

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extremely uneven distribution, both on the territory of the country's regions as well as in the sites.

The same question may be referred to dough stamping, etc. – it is a fact that we can only guess the "frequency" of these practices. Nevertheless, theoretically, it seems logical to expect, based on these assumptions, that *pintaderas* could have been more frequently used and have had wider distribution.

Is the basis for interpretations satisfactory and to what extend should we follow the ethnographic parallels when in most cases they offer an use that could not be archaeologically supported or doesn't seem to be the most convenient technique? With regard to prehistory, stamping on ceramics (vessels) cannot be proven. With regard to dough stamping, not all stamps have a prominent relief ornament. On the other hand, despite the many and repeatedly underlined ethnographic examples of bread stamping, there are still a number of stamps with color traces. Stamping on animals/hides is also possible, but Bulgarian finds lack traces of "aggressive" heating. With regard to stamping in color, not many examples have been preserved bearing traces of paint[48] and so on. In summary, arguments "for" and "against" can be given for each of the suppositions.

The provided data and observations unambiguously indicate the need of quality documentation of the finds and of a more detailed representation of the "primary" data, followed by systematic research. There are too many questions, but given the lack of key archaeological information, the hope of finding their answers is too feeble, and the assumptions – even more theoretical. It is difficult to accept explanations based only on ethnographic parallels as feasible (also because of their variety), as well as to accept an explanation of a group of enigmatic finds by means of other enigmatic categories. A new stage would be reached by combining the observations of the key characteristics of the finds and their chronological and spatial context with special studies – for instance of the surface of the stamps, the composition of the clay, the nature of the preserved coloring agents, etc.[49] By finding solutions of at least some of these "future objectives", it would be possible to approach both the basic and the merely curious aspects of the problem.

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[48] The conventionality of this element and the presence of color traces was repeatedly underlined – see Dzhanfezova, 2003, 2005.

[49] Dzhanfezova, 2003b, 60, section "Future objectives".

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À PROPOS DE L'ÉNÉOLITHIQUE SUR LE TERRITOIRE DU DÉPARTEMENT DE MEHEDINŢI (ROUMANIE)

DESPRE ENEOLITICUL DE PE TERITORIUL JUDEŢULUI MEHEDINŢI (ROMÂNIA)

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Cuvinte-cheie: Eneolitic, Bistreţ, Ostrovul Corbului, Valea Anilor, Oltenia.
Rezumat: Articolul se referă, în primul rând, la descoperirile rezultate din cercetarea realizată la Ostrovul Corbului, într-o necropolă care cuprindea 63 de schelete, chircite pe o parte.
De asemenea, cercetările de la Valea Anilor au scos la iveală câteva locuinţe care conţineau un inventar, alcatuit din ustensile din aramă, plastică, ceramică antropomorfă şi zoomorfă.
La Bistreţ au fost descoperite trei locuinţe distruse de un incendiu, fiecare conţinând un număr mai mult sau mai puţin redus de vase, în funcţie de poziţia locuinţei faţă de direcţia de propagare a focului.
Inventarul descoperit prin săpăturile în aceste situri, au scos la lumină aspecte ale eneoliticului din regiunea de sud-vest a României.

Mots-clé: Enéolithique, Bistreţ, Ostrovul Corbului, Valea Anilor, Oltenie.
Resumés: L'article se rattache premièrement aux découvertes résultant des recherches réalisées à Ostrovul Corbului, dans une nécropole contenant 63 squellettes, accroupis sur un côté.
De même, les recherches de Valea Anilor ont mis au jour plusieurs habitations contenant un riche inventaire, composé d'outils de cuivre, de plastique et de céramique anthropomorphes et zoomorphes.
A Bistreţ trois habitations détruites par un incendie avaient été découvertes, contenant chacune un nombre plus ou moins réduit de vases, occasioné par la position des habitations devant la direction de propagation du feu.
L'inventaire découvert lors des fouilles dans ces localités met en lumière des aspects de l'énéolithique du Sud-Ouest de la Roumanie.

Les recherches des dernières années ont permis l'élargissement du champ connu des éléments de culture materielle propres à l'énéolithique du Sud-Ouest d'Olténie. Là-dessus nous mentionnons les découvertes d'Ostrovul Corbului[1], Valea Anilor[2] et Bistreţ, toutes les trois dans le département de Mehedinţi.

[1] Roman 1987, 4, 335–365.
[2] Stîngă 1988, 36–40.

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Les fouilles d'Ostrovul Corbului ont mis au jour une nécropole d'inhumation contenant 63 squelettes repliés, dont la plupart sur le côté droit[3].

À Valea Anilor (commune de Corlățel) a été recherché un établissement de la culture Sălcuța. Ont été découvertes plusieurs habitations contenant un riche inventaire céramique et des outils en cuivre. Nous signalons également la découverte d'une plastique zoomorphe et des vases portant des représentations anthropomorphes et zoomorphes.

Une situation pareille à celle d'Ostrovul Corbului se rencontre dans le site de Bistreț (commune de Devesel), où les influences occidentales sont aisément saisissables. La station archéologique se trouve dans la partie est du village, à l'endroit nommé „La punți" (Aux ponts), au bord du ruisseau de Mutu, petit affluent de la rivière Blahnița, ayant un débit annuel permanent. Les recherches de 1985 ont permis la découverte de trois habitations ainsi que l'encoignure d'une quatrième, malheureusement pas fouillée, faute de moyens. Les quatre habitations, situées à courte distance l'une de l'autre, ont été détruites par un incendie.

Les sections ouvertes ont permis la découverte de trois habitations sur lesquelles la couche de torchis bien calciné se faisait voir à une profondeur de 0,30 m (Fig. 1). Les dimensions des trois habitations étaient les suivantes: 4,70 × 3,10 m (no.1), 4,90 × 3,40 (no. 2), 5,35 × 3,50 (no. 3). Sur le côté sud-ouest de l'habitation no. 1, à l'intérieur de la casette tracée pour la découverte complète, sont apparus les restes calcinés d'une quatrième habitation. L'habitation no. 1 a été sectionnée par la fosse d'une hutte du début du féodalisme, dont le niveau du plancher, par rapport aux habitations qui avaient ce niveau à 0,30 m, se trouvait à une profondeur de 1,30 m. Aucune des trois habitations n'avait un plancher aménagé, on n'a pas trouvé les fosses des piliers, non plus la place des âtres. Excepté les fragments céramiques nous avons trouvé deux poids d'argile, deux outils de silex, un d'obsidienne et plusieurs meules. À cause de l'incendie qui avait détruit les habitations, presque toutes les meules étaient brisées mais les fragments ne s'étaient pas dispersés. Une meule trouvée à l'extérieur de l'habitation no. 1 s'est conservée entièrement et avait les dimensions 0,63 × 0,30 m.

Il est possible que l'incendie ait agi du côté ouest, du moment que nous avons trouvé 10 vases cassés et groupés dans l'habitation no. 3, située à l'extrémité ouest, et trois autres, dont les fragments se trouvaient épars. L'habitation no. 1, la suivante, contenait trois vases groupés, auquels s'ajoutaient encore six vases, approximativement ressemblés. L'habitation no. 2, de l'extrémité est, contenait un seul vase.

La présentation du matériel céramique, par habitations, suit le tracé de l'incendie, c'est-à-dire en sens ouest-est.

Habitation no. 3

1. Vase bitronconique (Fig. 2/1), à gorge tronconique et quatre pieds. Sur le ventre se trouvent quatre anses verticales. Dimensions: hauteur (H):

[3] Roman et Dodd-Oprițescu, 1989, 24.

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15,5 cm; diamètre de la bouche (DB): 7,5 cm; diamètre maximal (DM): 18 cm.

2. Vase bitronconique (Fig. 2/2), à gorge finement évasée et fond plat. Deux anses descendent du bord jusqu' à l'épaule du vase, chacune est encadrée par quatre pastilles appliquées, tandis qu'à la base une ligne les unit, réalisée par l'impression d'une pointe de forme ovale. Sur le ventre, entre les anses, se trouve une pastille, entourée en disposition radiaire, de creux pareils à ceux qui forment la ligne circulaire mentionnée. Dimensions: H: 12,5 cm; DB: 13 cm; DM: 16,5 cm; diametre du fond (DF): 8 cm.

3. Vase bitronconique (Fig. 2/3), à gorge finement tronconique. Le vase porte sous le bord une bande alvéolée; entre les deux anses verticales il y a deux pastilles appliquées équidistantement. Le fond est plat. Dimensions: H: 20 cm; DB: 22 cm; DM:25; DF: 10,5 cm.

4. Vase de section rectangulaire, aux angles arrondis (Fig. 5/3). Le corps a la forme bi tronconique, le bord alvéolé, deux anses horizontales et un décor composé de quatre bandes verticales fortement alvéolées. Dimensions: H: 12 cm; D: 31 cm.

5. Vase sphérique (Fig. 3/1) à fond plat et gorge courte, tronconique. Le corps est entièrement couvert d'un décor imprimé, formé de lignes pointillées combinées avec cannelures obliques. Vu le manque de certains fragments du corps, nous n'avons pas une image exacte du décor initial. Dimensions: H: 12 cm; DB: 8 cm; DM: 17; DF: 7 cm.

6. Coupe dont le pied manque (Fig. 3I/2), de forme bitronconique, ayant la partie supérieure légèrement tirée vers l'intérieur et deux proéminences à saisir verticalement. Le bord est légèrement tiré vers l'intérieur. Dimensions: H: 16 cm; DB: 24 cm.

7. Vase sphérique à fond plat (Fig. 4/3), qui manque de bouche. Dimensions: H: 13 cm; DM: 18cm; DF: 7 cm.

8. Vase tronconique (Fig. 4/2) à fond plat, décoré verticalement sur le ventre d'une bande alvéolée en relief prononcé. Le bord de ce type de vase est d'habitude retroussé vers l'extérieur en angle droit.

9. Vase tronconique, semblable au précédent. Dimensions: H: 12; DB: 16; DF: 8,5.

10. Vase tronconique, semblable au précédent. Dimensions: H: 11,5; DB: 15,5; DF: 8,5.

11. Vase tronconique, semblable au précédent, qui manque de fond. Dimensions: H: 11 cm; DB: 15,5

12. Vase tronconique de forme semblable aux précédents, portant un décor excisé. Dimensions: H: 11,5; DB: 15 cm; DF: 9 cm.

13. Vase de haute taille, qu'on n'a pas pu reconstituer. Il avait le bord alvéolé dans la partie supérieure, doublé en dessous d'une ligne ceignant la gorge, travaillée à l'aide de la pointe semi-ronde d'un outil (Fig. 10/1). À la moitié de la gorge se distinguent deux autres lignes, identiques à la première.

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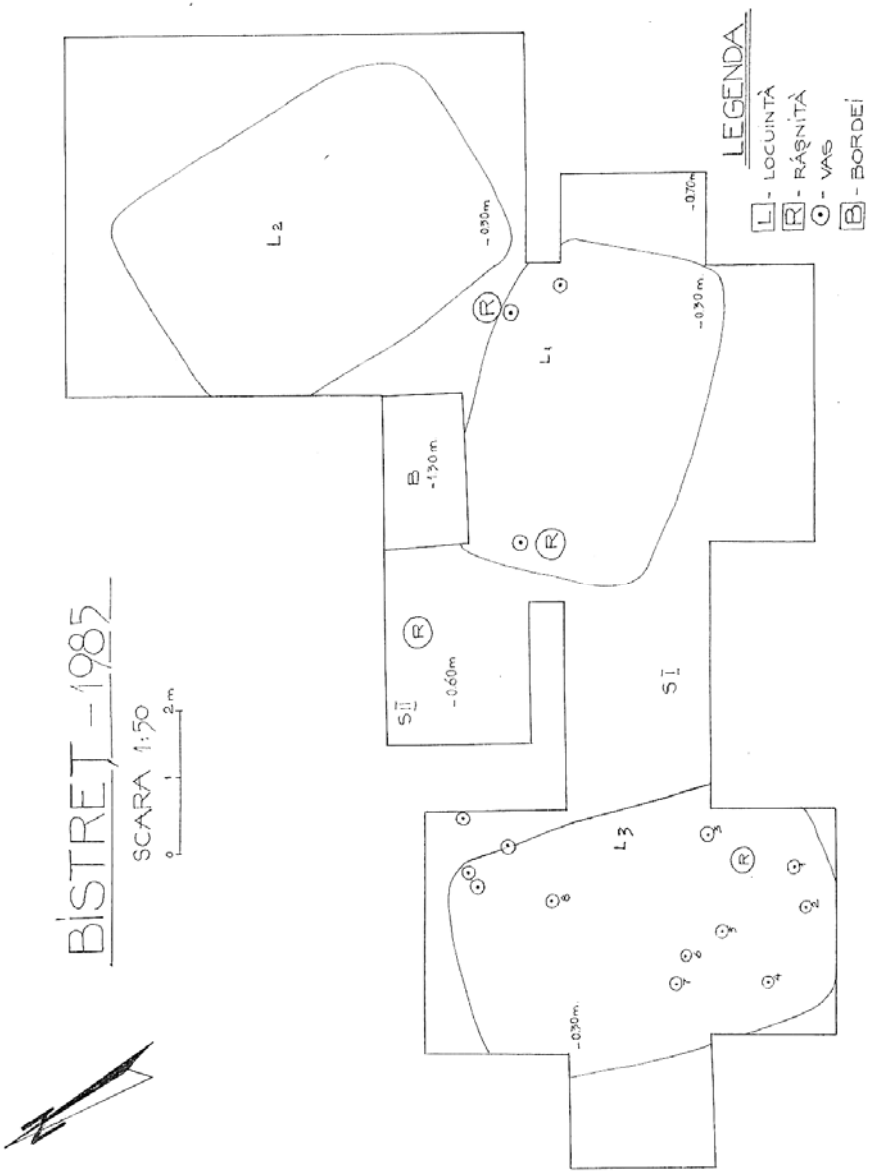

Fig. 1 – Plan général des fouilles.

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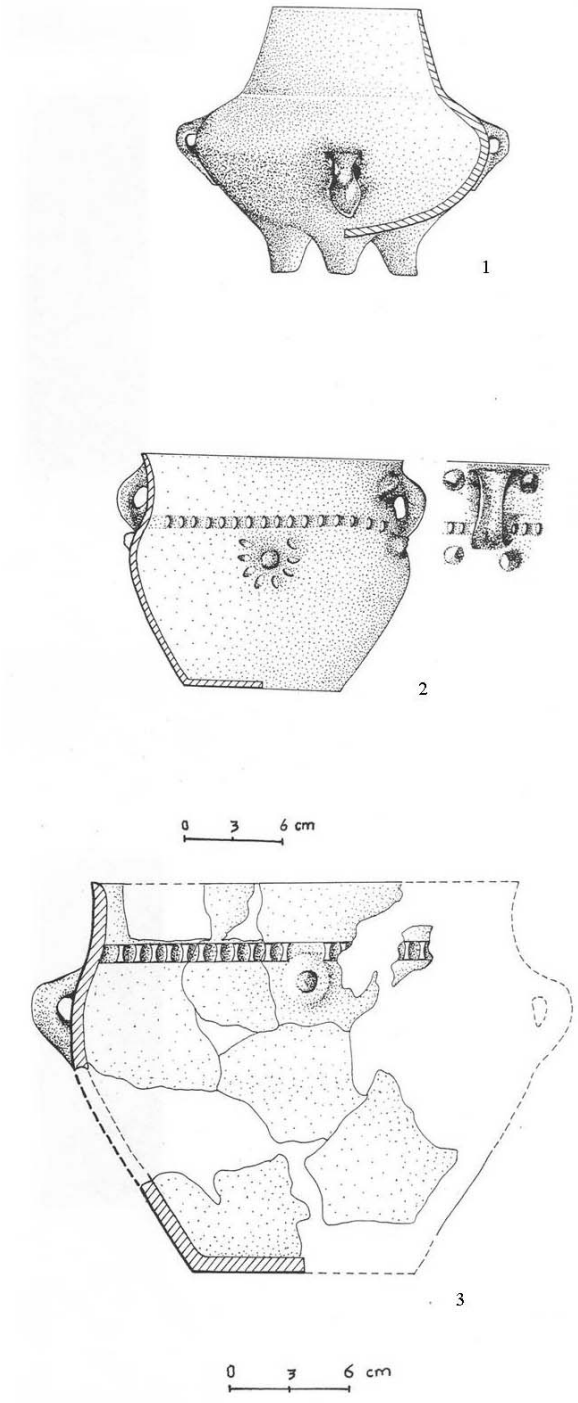

Fig. 2 – 1-3 céramique de l'habitation no. 3.

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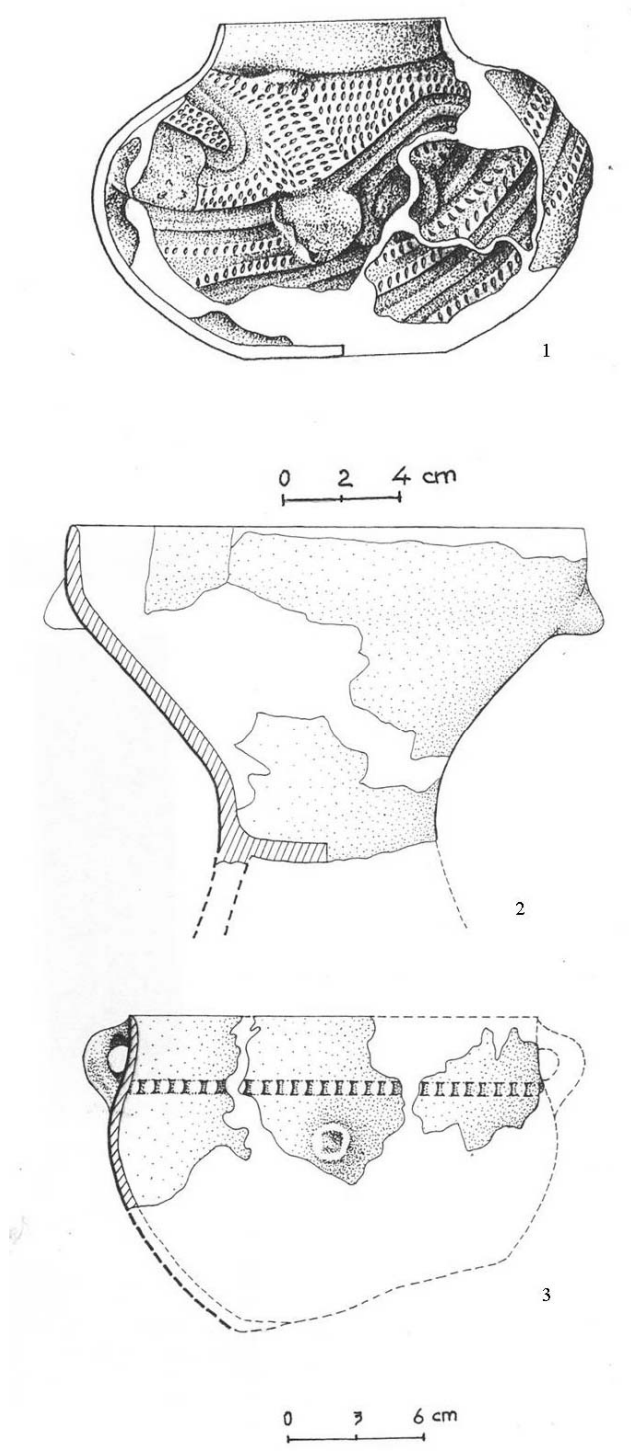

Fig. 3 – 1, 2 céramique de l'habitation no. 3; 3 céramique de l'habitation no. 1.

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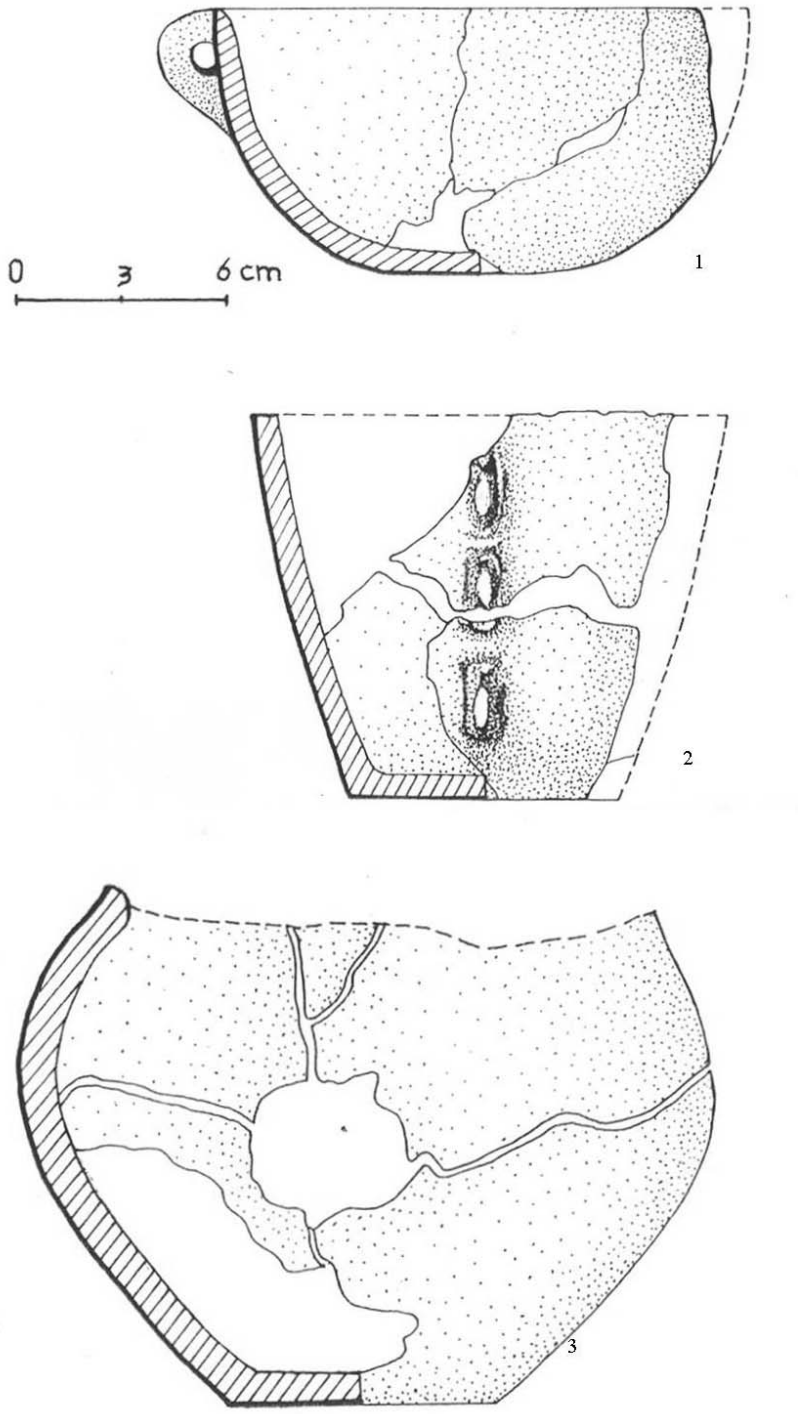

Fig. 4 – 1 céramique de l'habitation no. 2; 2,3 céramique de l'habitation no. 3.

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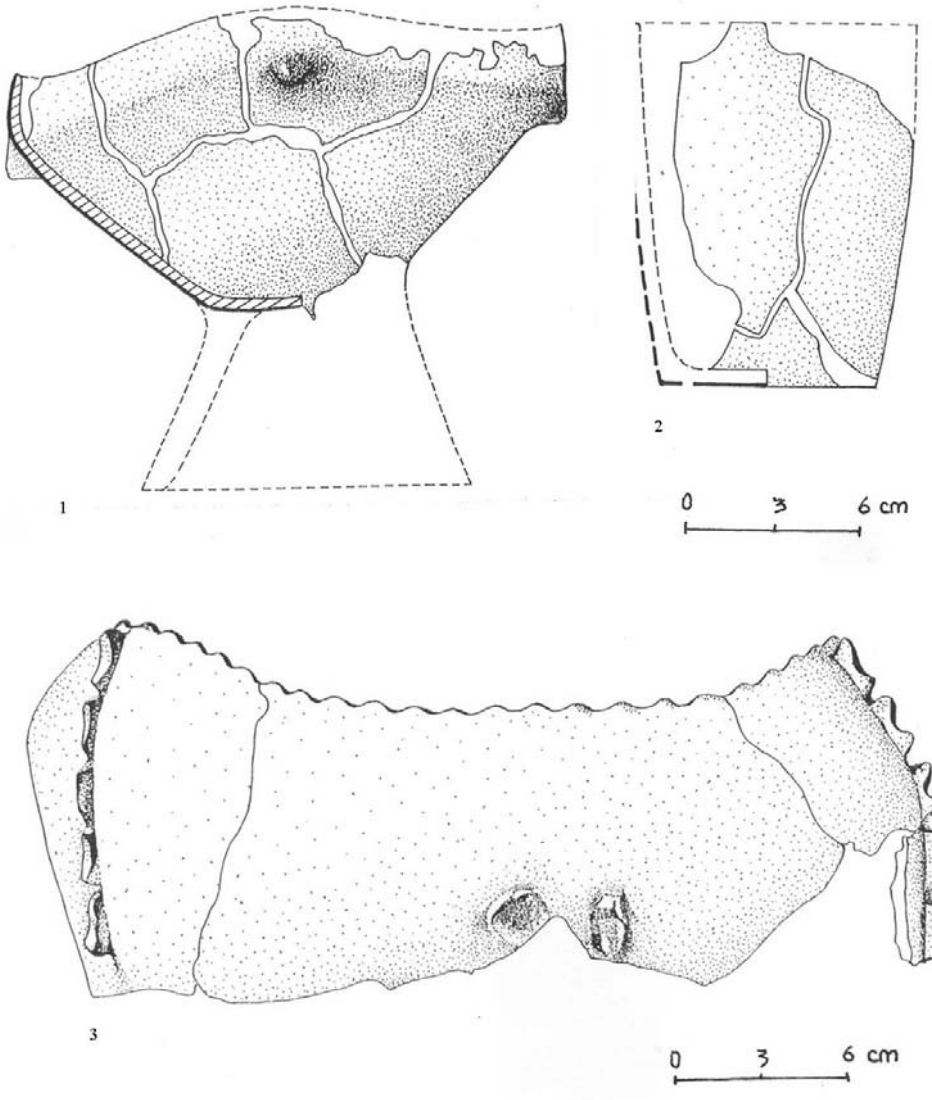

Fig. 5 – 1-3 céramique de l'habitation no. 1.

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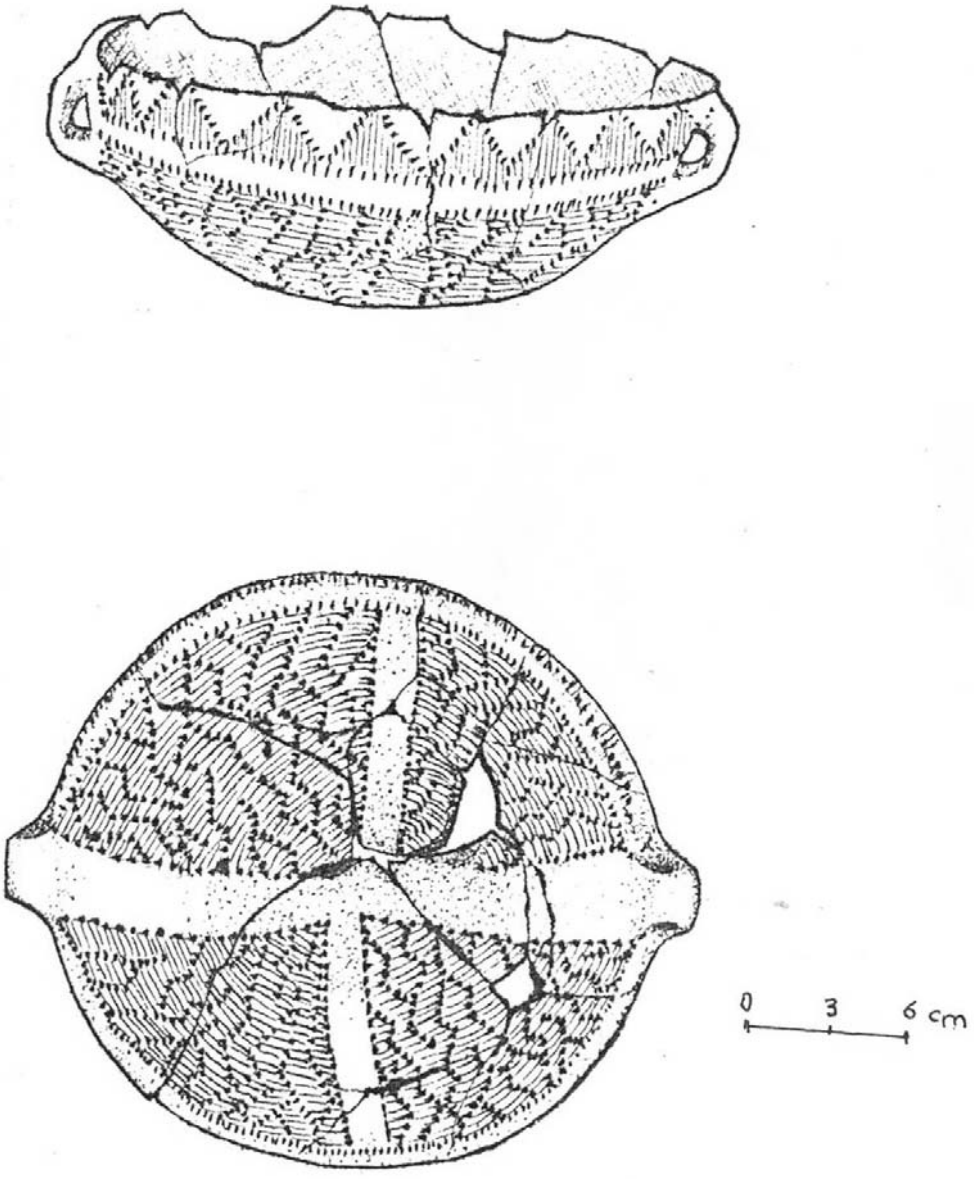

Fig. 6 – Céramique de l'habitation no. 1.

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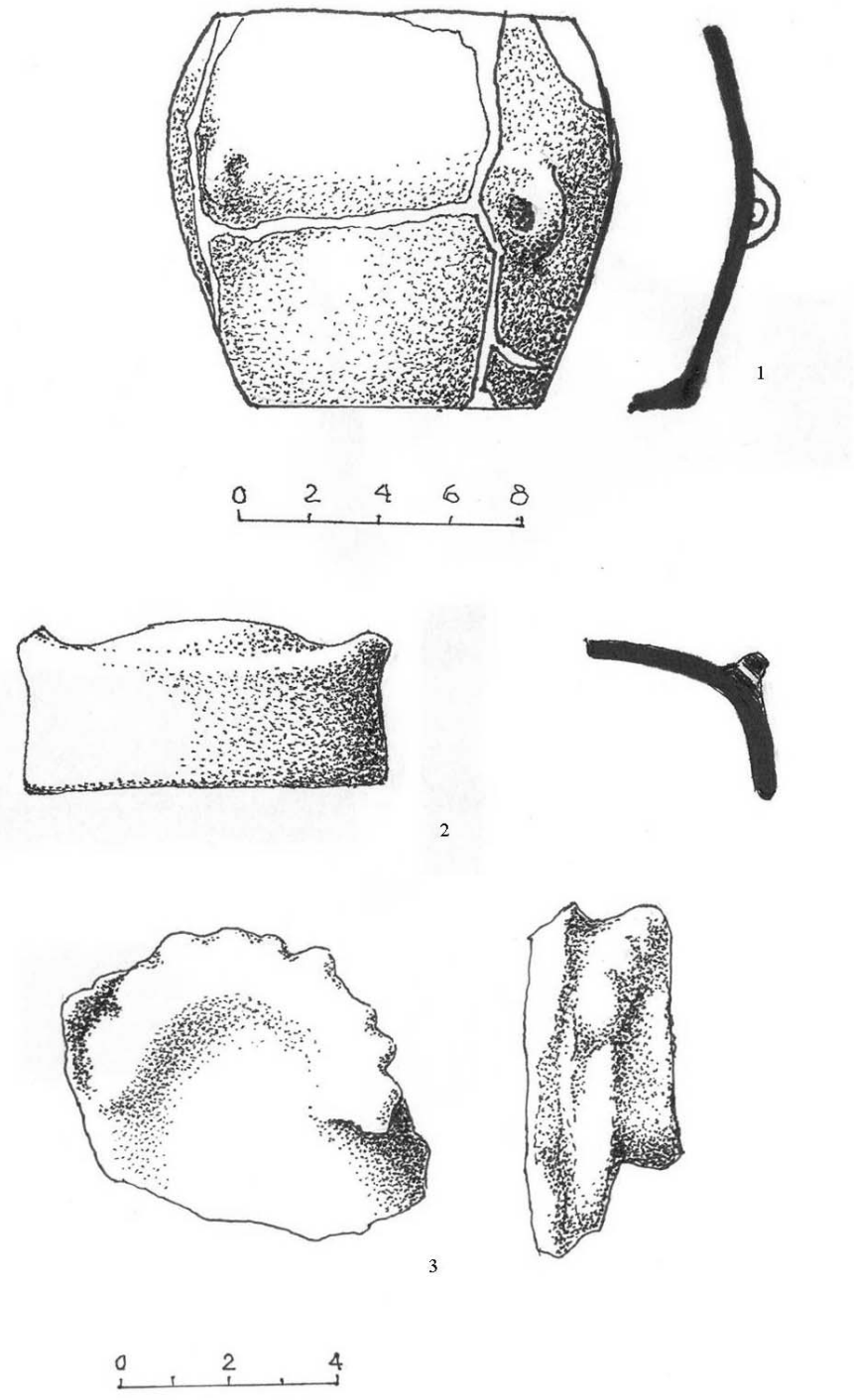

Fig. 7 – 1, 2 céramique de l'habitation no. 1; 3 céramique de l'habitation no. 3.

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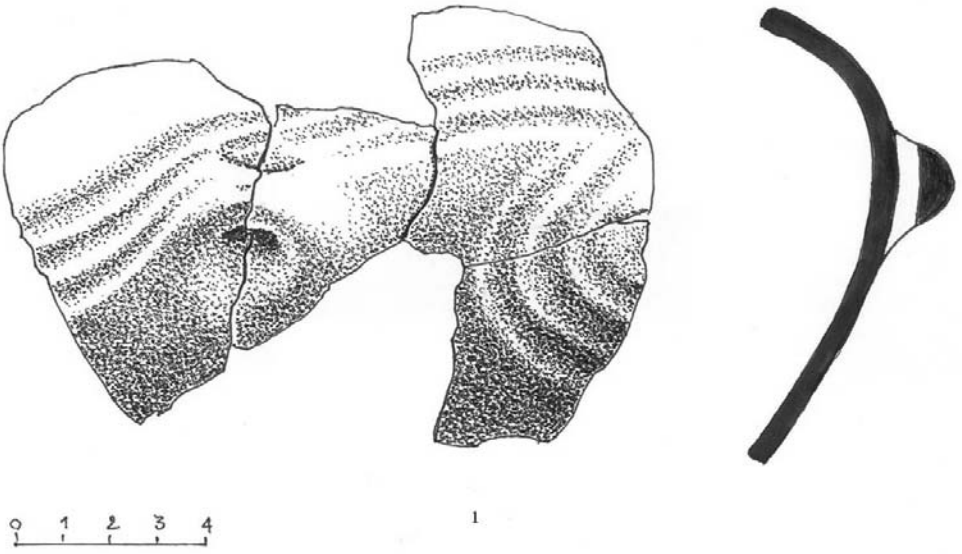

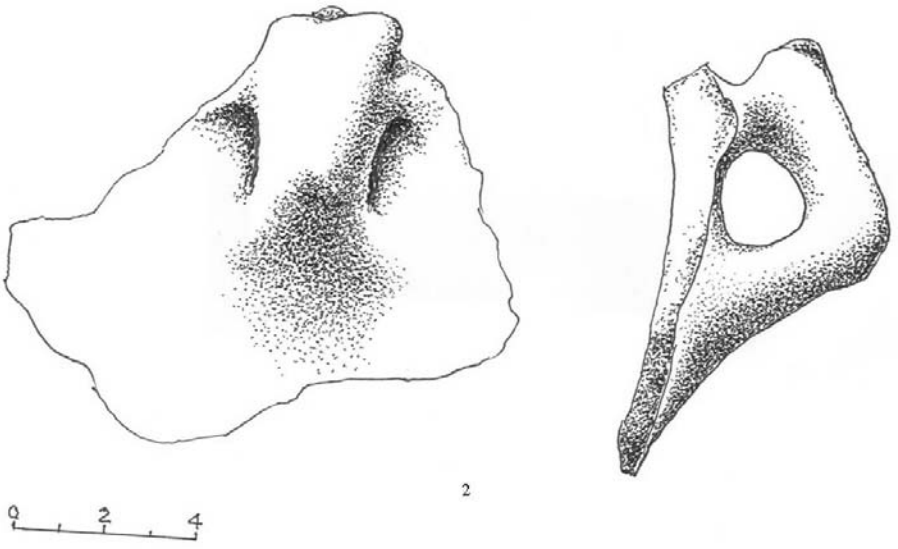

Fig. 8 – 1 céramique de l'habitation no. 1; 2 céramique de l'habitation no. 3.

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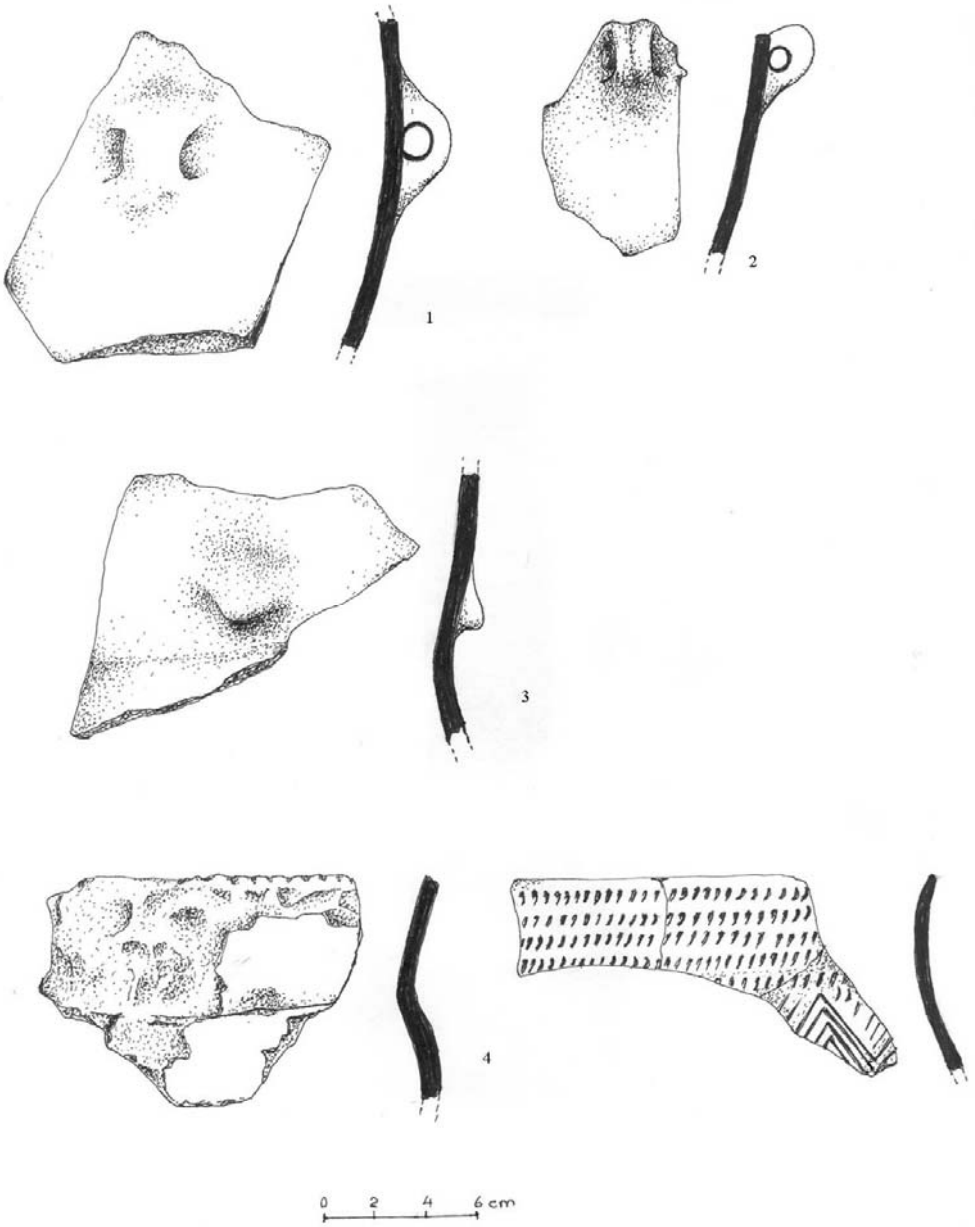

Fig. 9 – 1, 3 céramique de l'habitation no. 3; 2, 4, 5 céramique de l'habitation no. 1.

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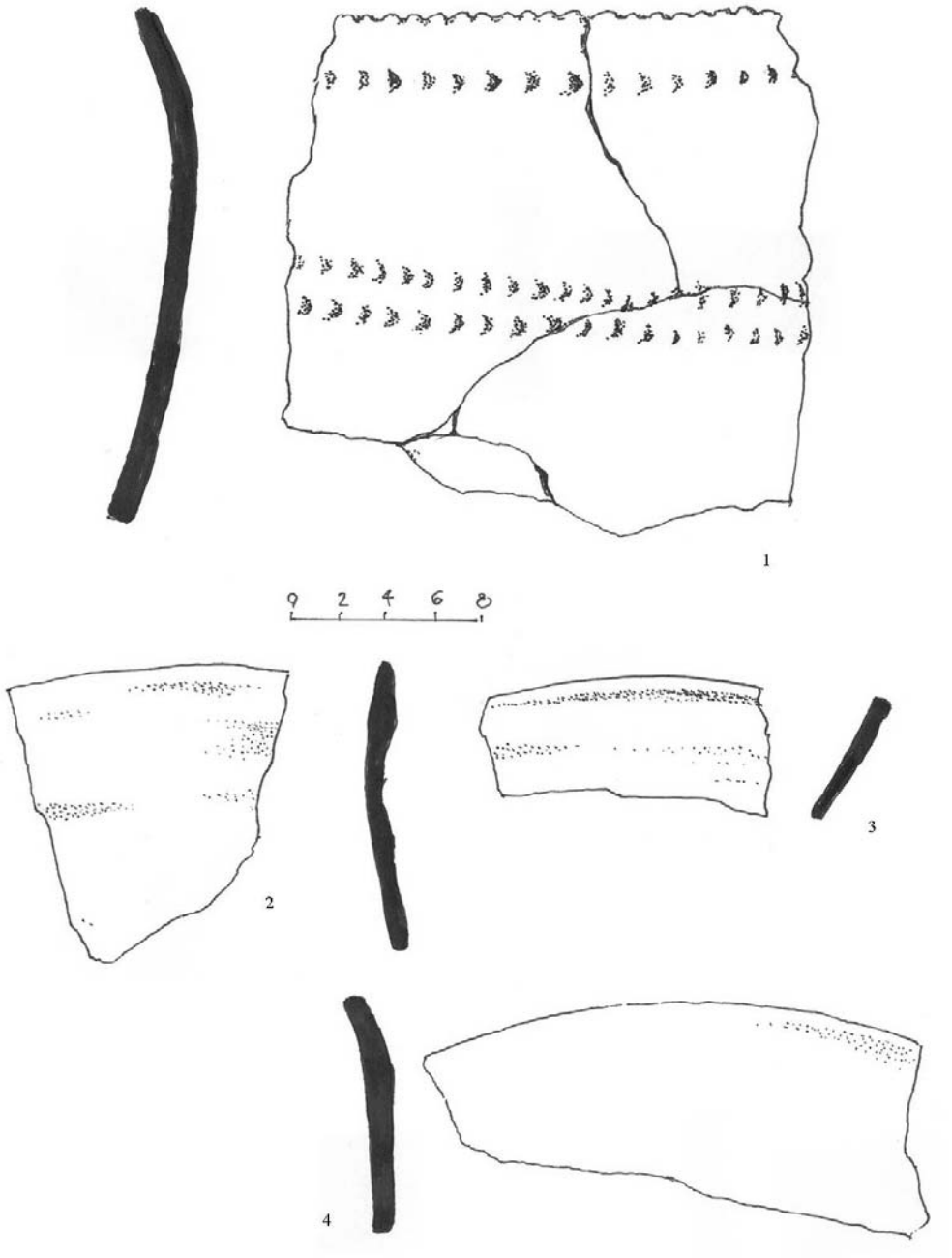

Fig. 10 – 1-4 céramique de l'habitation no. 3.

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L'habitation no. 3 contenait également des bords et des gorges fragmentaires, plus ou moins retroussés. (Fig. 10/2-4). De dimensions appréciables, les vases avaient été travaillés dans une pâte mêlée de sable ou même de menu gravier. Parmi ceux-ci il y en avait deux travaillés dans une pâte plus fine (Fig. 10/2, 3). Tous les fragments sont de couleur rouge, probablement à cause de l'oxidation produite durant l'incendie des habitations.

Habitation no. 1

1. Coupe tronconique (Fig. 5/1) à pied vide à l'intérieur. Son corps porte quatre proéminences avec une pointe en bas. Dimensions: H: 11 cm; DB: 20 cm.

2. Vase tronconique à fond plat (Fig. 5V/2), semblable aux vases de ce genre découverts dans l'habitation no. 1. Dimensions: 12,5 cm; DF: 8,5

3. Jatte à deux anses verticales (Fig. 6/3a, 3b). Depuis le dessous du bord jusqu'à la base des anses se distingue un décor formé de triangles à la pointe en bas, dont le contour est realisé par la forte impression d'un instrument à l'extrémité aproximativement triangulaire. L'intérieur des triangles est couvert de lignes hachurées incisées. Le reste du vase est couvert de fines incisions, en disposition circulaire, ayant epargné une bande qui rattache les deux anses et deux autres segments qui partent d'endroits différents de cette bande, et qui se terminent en dessous des deux anses. Ce décor est couvert d'autres éléments – lignes zig-zaguées entrecroisées, réalisées à l'aide d'un instrument pointu, produisant des incisions pareilles aux triangles mentionnés.

4. Vase à corps sphérique (Fig. 3/3), avec deux anses verticales descendant de sous le bord jusqu'à l'épaule. Il est décoré d'une ligne qui le ceigne au niveau de la partie inférieure des anses, réalisée par la pression d'une large pointe dans la pâte molle. Sous cette ligne, dans la partie de maximale convexité, il y a deux pastilles appliquées à mi chemin entre les anses. Dimensions: H: 14 cm; DB: 19 cm; DM: 22,5.

5. Vase bitronconique (Fig. 7/1) à fond plat et bord coupé droit, muni dans la zone médiane de quatre anses verticales dont deux diamétrales, perforées. Dimensions: H:11,5 cm; DB: 12,5 cm; DM: 15 cm; DF: 9 cm.

6. Vase tronconique dont on conserve seulement la moitié inférieure. Dimensions: H: 16 cm; DF: 10,5 cm.

7. Couvercle (Fig. 7/2), bien conservé, avec deux anses sur la partie supérieure. Dimensions: H: 3 cm; DB: 9,5 cm.

8. Coupe fragmentaire dont on conserve seulement la partie médiane.

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9. Vase bitronconique fragmentaire (Fig. 8/1), dont le corps était décoré de cannelures à tracés alternants, oblique et horizontal. Certaines cannelures avaient une forme circulaire. Le vase avait de petites anses perforées verticalement.

L'habitation no. 2

Dans l'habitation no. 2 a été découvert un seul vase qu'on a pu reconstituer (Fig. 4/1). Dimensions: H: 8 cm; DB: 15,8; DM: 17 cm; DF: 6 cm.

En dehors des pièces présentées, plusieurs groupes de fragments céramiques attirent l'attention, même si la reconstitution d'au moins un vase s'avère impossible.

Dans l'habitation no. 3, parmi divers fragments céramiques, nous avons trouvé une anse en forme de fer à cheval (Fig. 7/3), alvéolée a l'extérieur. Pareilles anses aparaissent plus tard, dans les découvertes des cultures Coţofeni[4] et Verbicioara[5]. Sur les pièces de la culture Cernavoda III ces applications en forme de fer à cheval, ayant surtout un rôle décoratif[6], sont disposées avec l'ouverture en position verticale ou horizontale. D'un vase de haute taille s'est conservé une anse pliée en angle droit à son milieu (Fig. 8/2), qui se terminait, à la partie supérieure avec deux prolongements pointus, lesquels, ultérieurement, se sont cassés. Un autre type d'anse est celui de dimensions réduites, à section demi circulaire (Fig. 9/1), avec des proéminences coniques à saisir verticalement (Fig. 9/3).

De l'habitation no. 1 provient le seul vase travaillé en pâte de bonne qualité, couvert de vernis rouge. On n'a trouvé que deux fragments de sa gorge courte, laquelle se continuait avec un corps probablement sphérique. La gorge était couverte de cinq lignes parallèles au bord, travaillées par l'impression d'un instrument à l'extrémité allongée. Sur le corps se distingue un décor angulaire incisé (Fig. 9/5). Cette disposition du décor sur le corps des vases se rencontre aussi dans la culture Cernavoda III[7]. Dans la culture Coţofeni l'usage d'un vernis rouge à l'intérieur des vases est presque général et le décor semblable à celui mentionné par nous est fréquent sur la céramique de cette culture[8]. Pour le vase à décor cannelé de cette habitation (Fig. 8/1) il y a des analogies avec les matériels de la culture Sălcuţa du Banat[9], à cette différence que notre pièce porte une anse située en dessus de la convexité maximale du vase. Certains vases ont été insuffisament travaillés, par endroits leur surface s'exfolie. C'est le cas d'un vase dont on conserve la gorge tronconique, laquelle se continuait avec un corps bombé (Fig. 9/4). Dans un autre cas, celui d'un fragment de vase, la partie sur laquelle se trouvait l'anse de dimensions réduites, s'élevait justement du niveau du bord (Fig. 9/2).

[4] Roman 2002, Fig. XII/1; XXII/2.
[5] Crăciunescu 2004, Fig. XXI/3; LXXII/4; LXXIV/3.
[6] Tasić 1995, Fig. 5; XIV/2.
[7] *Ibidem*, Fig. XIV/2, 4.
[8] Roman 1976, Fig. 54/2; 77/6; 95/6; 103/1.
[9] Radu 2002, Fig. 57/10.

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Les coupes à pied (Fig. 3/2; 5/1), bien que peu nombreuses, se rencontrent aussi dans la culture Sălcuța[10].

Le décor composé de lignes incisées rappelle le répertoire des motifs propre à la culture Coțofeni. Nous rappelons que les vases à pied, pareils à celui découvert dans l'habitation no. 3 (Fig. 2/1), se retrouvent pour cette même période dans les découvertes du Nord-Ouest de Roumanie[11]. Ils sont présents dans la culture Sălcuța, aussi bien que dans les cultures Coțofeni[12] et Verbicioara[13]. L'usage décoratif des pastilles sur le corps des vases (Fig. 2/2,3) se rencontre dans les cultures Coțofeni, Glina et Verbicioara, pour nous limiter à une assez courte période.

Comme nous venons de mentionner, des découvertes pareilles sont connues à Ostrovul Corbului[14], à une distance d'environ 11 km de notre station, mais aussi en Banat à Beba Veche, Cenad, Corneşti et Sânpetru German[15]. Le Sud-Ouest de Roumanie, le Nord-Ouest de Bulgarie, le Nord-Est de Serbie, l'Hongrie orientale et le sud-est de Slovaquie livrent des découvertes de la même facture. Le fond de base pour les trois premières zones est celui de Sălcuța[16].

Cette présentation se propose d'attirer l'attention sur le fait qu'en dehors de la nécropole d'Ostrovul Corbului, au moins deux établissements de cette population ont existé à Ostrovul Corbului et Bistreț. L'auteur des recheches à Ostrovul Corbului n'exclue pas la possibilité que l'établissement de l'île ait été détruite par les eaux du Danube[17]. Ceci dit, les découvertes de Bistreț s'avèrent d'autant plus importantes, du moment que les données concernant l'établissement d'Ostrovul Corbului nous manquent. Qu'il s'agisse de la nécropole ou de l'établissement, le matériel céramique trouvé est similaire, mettant en évidence une manifestation culturelle bien définie pour cette zone sud-occidentale de Roumanie et à l'intérieur de laquelle les éléments Bodrogkeresztur constituent une realité.

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[14] Roman 1996, 30.
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THE ARCHAEOLOGICAL RESEARCH CARRIED OUT BY THE NATIONAL MUSEUM OF EASTERN CARPATHIANS REGARDING THE CUCUTENI-ARIUŞD-TRIPOLIE CULTURAL COMPLEX. THE ARCHAEOLOGICAL SITE FROM ŞOIMENI, PĂULENI CIUC – CIOMORTAN, HARGHITA COUNTY, ROMANIA

CERCETAREA ARHEOLOGICĂ EFECTUATĂ DE CĂTRE MUZEUL NAŢIONAL AL CARPAŢILOR RĂSĂRITENI PRIVIND COMPLEXUL CULTURAL CUCUTENI-ARIUŞD-TRIPOLIE. SITUL ARHEOLOGIC DE LA ŞOIMENI, PĂULENI CIUC – CIOMORTAN, JUDEŢUL HARGHITA, ROMÂNIA

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Cuvinte-cheie: Cucuteni-Ariuşd-Tripolie, sit arheologic, locuință, vatră, cultură materială.
Rezumat: În acest studiu sunt prezentate cele 10 campanii de cercetare arheologică sistematică. Prin cercetarea sitului arheologic Păuleni Ciuc – Ciomortan au fost aduse noi informații cu privire la arealul vestic al complexului cultural Cucuteni – Ariuşd-Tripolie.

Key words: Cucuteni-Ariuşd-Tripolie, archaeological site, dwelling; hearth, material culture.
Abstract: In this study we present results of 10 campaigns of systematic archaeological research of the Păuleni Ciuc – Ciomortan archaeological site that brought new information regarding the western area of the Cucuteni-Ariuşd-Tripolie Cultural Complex.

Short history of the National Museum of Eastern Carpathians

Major shifts appeared in the museum policy in Covasna and Harghita counties shortly after 1989, when the political regime was changed in Romania. The Museum of Eastern Carpathians was founded through an Order issued by the Romanian Government on the 27th of November 1996, which began to run just in January 1999. Until 2003, the museum used rented spaces since it did not have its own buildings. Another governmental Order, no. 40, issued on the 17th of January 2006, named the museum the National Museum of Eastern Carpathians.

Among all the archaeological research projects initiated by the National Museum of Eastern Carpathians, an important place is occupied by the prehistoric

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settlement from Şoimeni / Păuleni Ciuc – Ciomortan "Dâmbul Cetății", found in the Şoimeni/Csikcsomortán village, Păuleni Ciuc commune, Harghita County.

The description of the Şoimeni/Csikcsomortán "Dâmbul Cetății" site

The archaeological researches in the Păuleni Ciuc settlement (also known in the archaeological literature as Şoimeni or Ciomortan), found nearby Şoimeni village (Csikcsomortán), Păuleni-Ciuc commune, Harghita County, were carried out between the years 1999–2008 (Fig. 1/3).

The archaeological station is found at about 8 km north-east of Miercurea-Ciuc city and at about 1 km north-east of *Şoimeni (Csikcsomortán*) village, Păuleni Ciuc Commune, Harghita County, on the place called by natives *Várdomb – Dâmbul Cetății* (Fig. 1/5). The site is placed in a safe area, with an absolute altitude of 882 m, at the western feet of the Ciucului Mountains (Fig. 2/1–3). This place offers a good visibility over the Cicului Valley and a very good control of all communication points with the extra-mountain areas. It is found in a line with the Vlăhița Pass that crosses the Harghita Mountains, which are the natural border between the Ciucului Valley and central Transylvania and the upper course of the Olt River and the Trotuş source, also connecting the Ciucului Valley with Moldova.

At first, a natural spur was found on this spot; it had oval shape, a surface of about 60 m north – south × 90 m east – west, and it was about 3 m high (Fig. 1/6). Its southern side was marked by a high and quite pronounced slope of the Remetea Brook valley, which is a tributary of the Olt River. Right nearby its northern side there is another brook, a tributary of the Remetea Brook. This place offered good security conditions: the access into the settlement was easily controlled, since it was limited at the south by a slope of the Remetea valley, at the north by the Nyirpataka brook and by the high edge of the spur. The only access point from the west crossed through a 15 m narrow saddle. At the same time, the settlement had an important position as it regards the connection with other territories: following the course of any of the two nearby brooks, one could easily get to the main hydrographical artery of the area – the Olt River.

The settlement was discovered in the inter-war period by Al. Ferenczi, who included it into the Repertoire of Dacian Fortresses from Transylvania. In years 1956, 1960 and 1967 Székely Zoltán did some archaeological researches here. At that point it was concluded that the settlement was inhabited in the *Eneolithic* (the *Cucuteni-Ariuşd* Culture), in the *period of transition between the Eneolithic and the Bronze Age* (*Coţofeni* Culture) and in the *Bronze Age* (the *Ciomortan* and *Wietenberg* Cultures).

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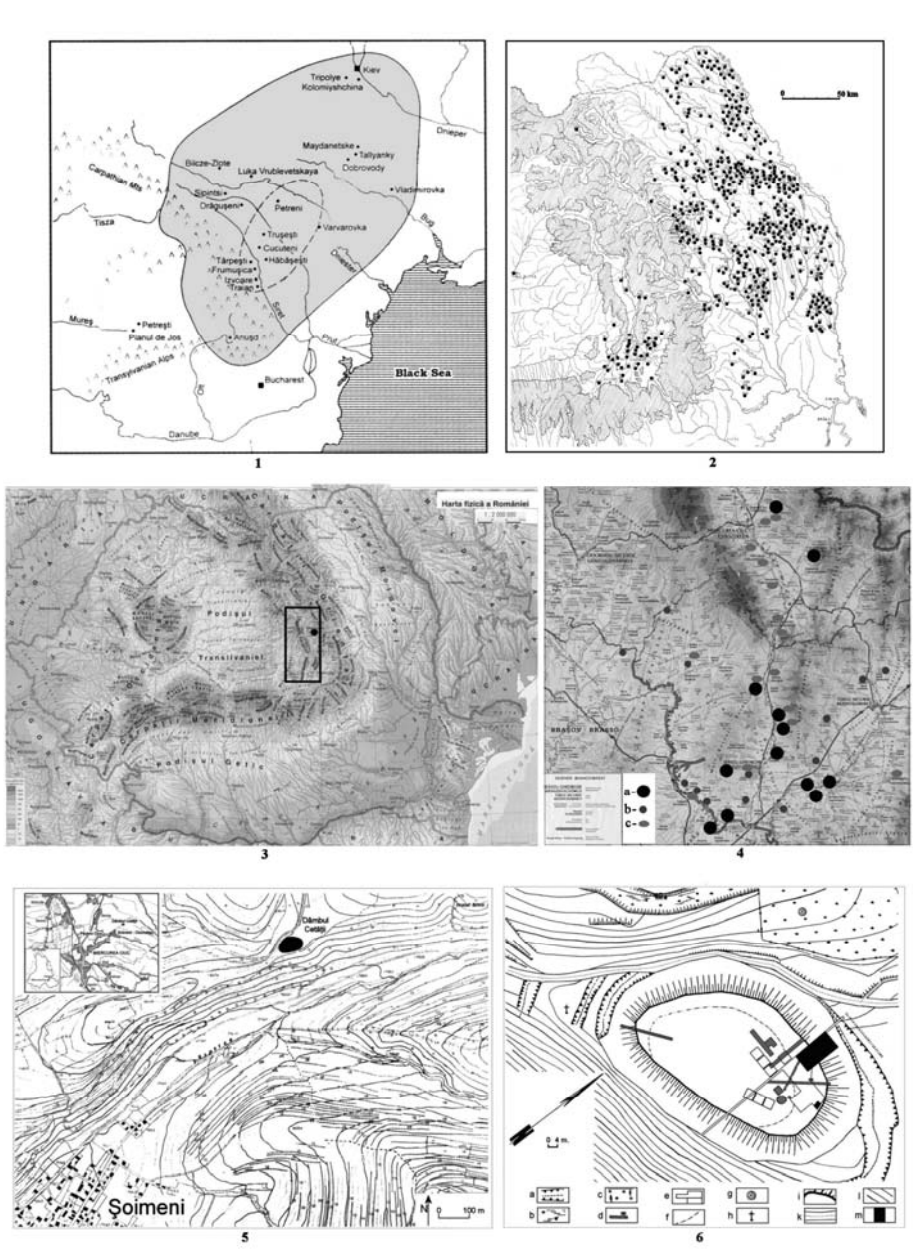

Plate 1 – Păuleni Ciuc – Ciomortan "*Dâmbul Cetăţii*", Harghita County
1. The area on which the Cucuteni-Ariuşd-Tripolie Cultural Complex is spread (after Magda-Mantu 1999); 2. The area on which the settlements belonging to the Cucuteni-Ariuşd, Phase A are found (after Monah-Cucoş 1986); 3. The physical map of Romania – southeastern Transylvania; 4. The main settlements belonging to the Cucuteni-Ariuşd Culture from south-eastern Transylvania: a – settlements, b – isolated discoveries, c – mineral waters; 5. The geographical position of the archaeological site; 6. The topographic measurements of the archaeological site: legend: a – defence ditches; b – marshy land; c – coniferous wood; d – the sections made by Zoltán Székely; e – the sections made between 1999 – 2002; f – the inner limitation of the rampart; g – a well – Păuleni commune's drinking water supply; i – the hill's ridge; k – field road; l – level curves; m – the Cucuteni-Ariuşd habitation under the rampart.

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Plate 2 – Păuleni Ciuc – Ciomortan "*Dâmbul Cetății*", Harghita County
1. General view upon the site from the northeast; 2. General view upon the site from the northwest; 3. General view upon the site from the west; 4. Surface I, 1999 campaign – northern view; 5. Archaeological surfaces researched in the 1999 campaign; 6. Section through the rampart – eastern view; 7. Dwelling that belongs to the Cucuteni-Ariușd Culture, found under the rampart; 8. Dwelling that belongs to the Cucuteni-Ariușd Culture investigated in the 2001 campaign.

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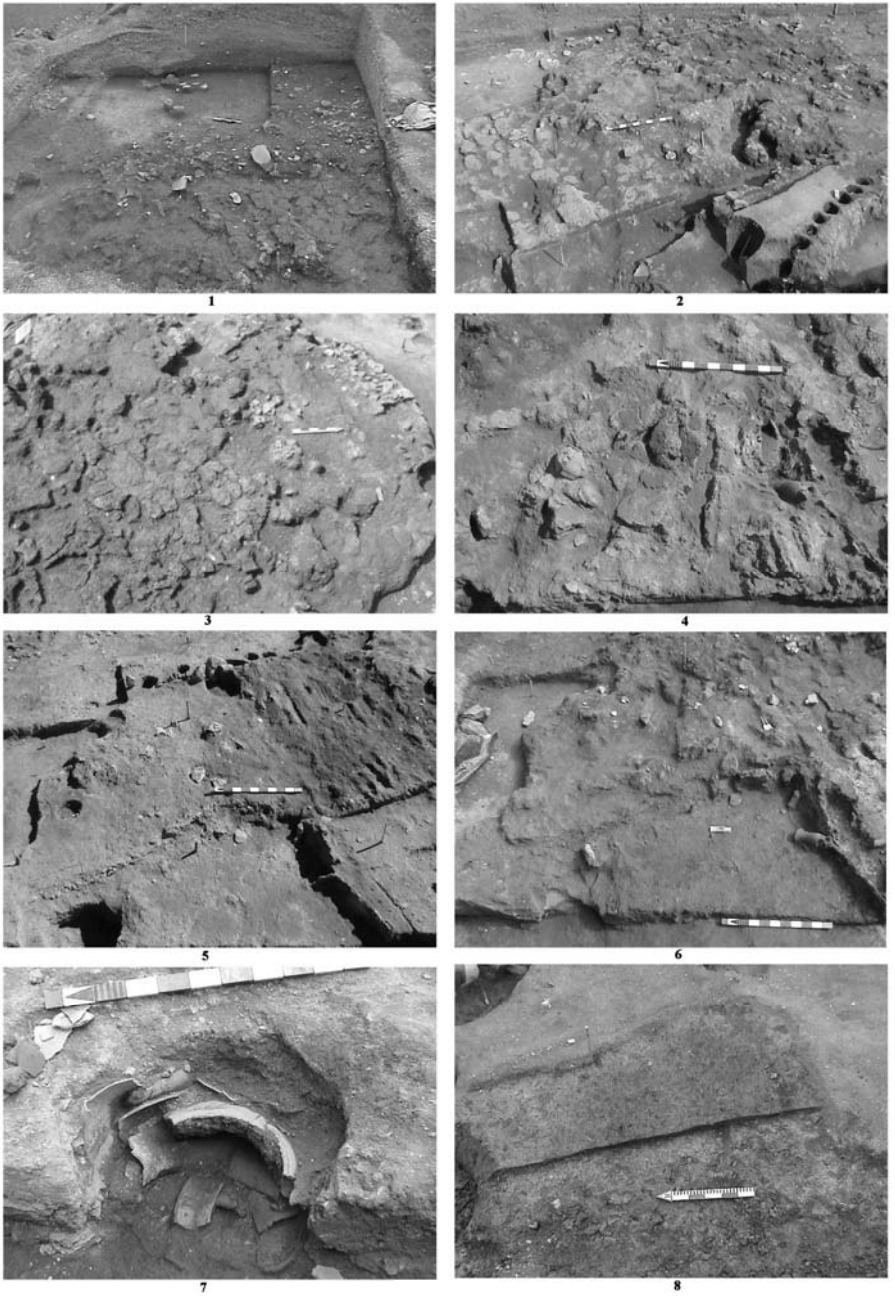

Plate 3 – Păuleni Ciuc – Ciomortan "*Dâmbul Cetății*", Harghita County
1. Dwelling 5 – 2003 campaign, western view; 2. Dwelling 5 – 2004 campaign, view of the burnt floor; 3. Dwelling 5 – 2005 campaign, detail with the burnt floor; 4. The upper level of the ruins found in the area of Dwelling 21; 5. Dwellings 5 and 21 – view after the burnt clay floor was demolished; 6. The floor of Dwelling 21; 7. Dwelling 21 – the storage pit; 8. A section through the floor of dwelling 21.

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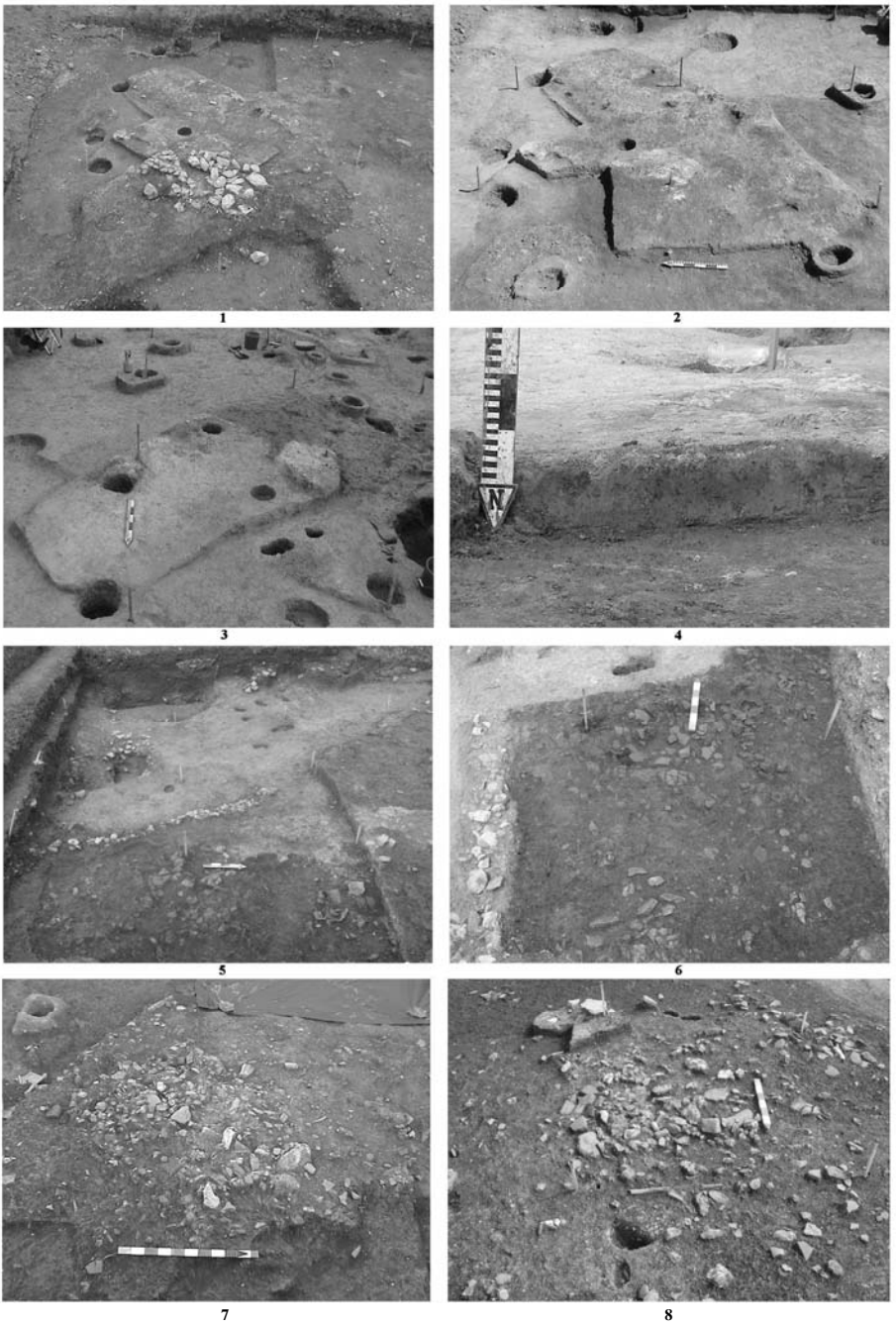

Plate 4 – Păuleni Ciuc – Ciomortan "*Dâmbul Cetății*", Harghita County
1. Dwelling 24 – 2006 campaign, western view; 2. Dwelling 24, the floor – general view; 3. Dwelling 24 – the floor and the post holes; 4. Dwelling 24 – section through the floor; 5. Dwelling 31 – 2007 campaign, general view from the east; 6. Dwelling 31, southern view; 7. Hearth 16 – view of the stones that formed the hearth's pavement; 8. Hearth 30 – view of the stones that formed the hearth's pavement.

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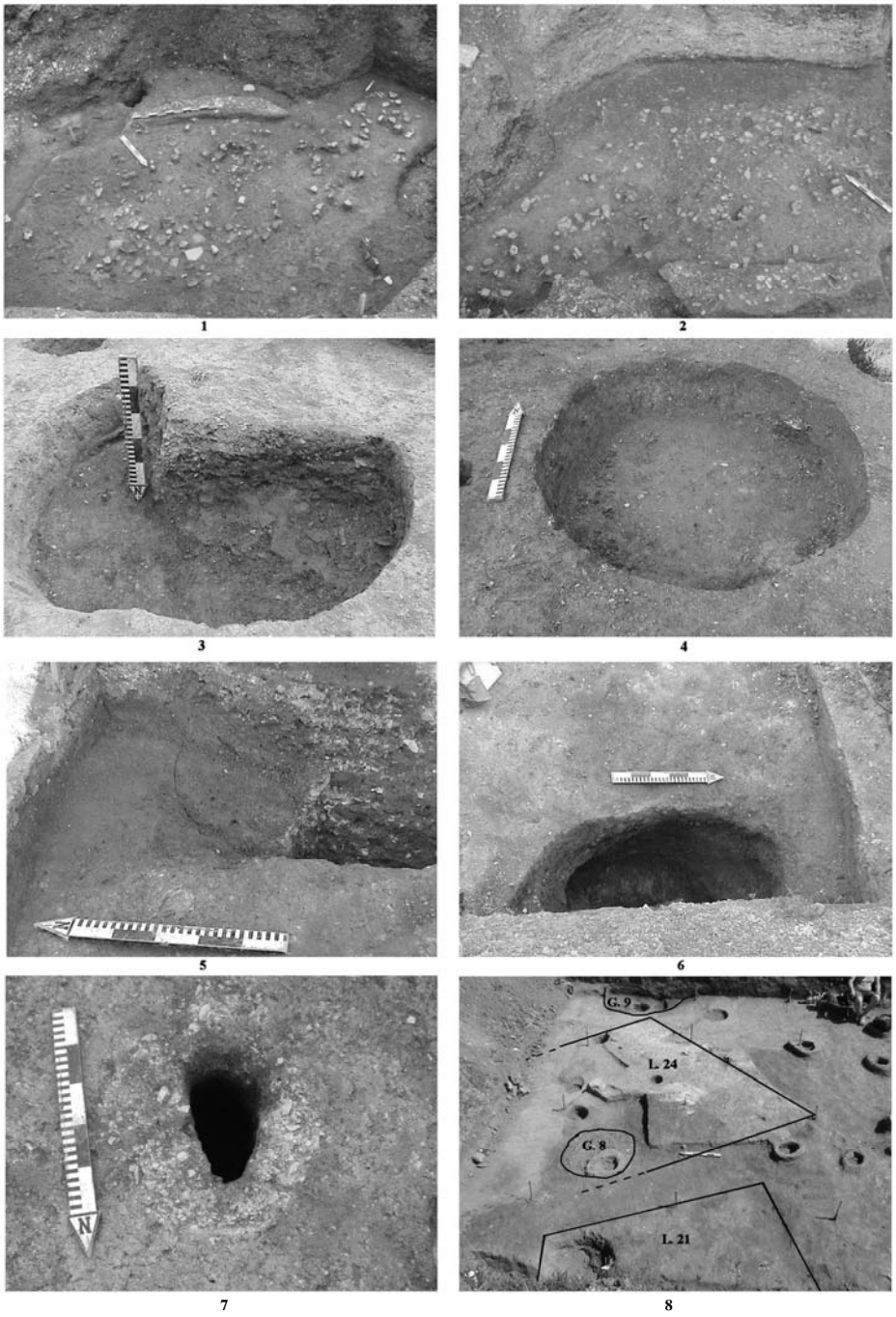

Plate 5 – Păuleni Ciuc – Ciomortan "Waste" pit no. 9 – view from above; 7 – Post hole – detail; 8. The arrangement of the archaeological complexes (Dwellings 21 and 24) and of the "waste" pits (Pits 8 and 9).

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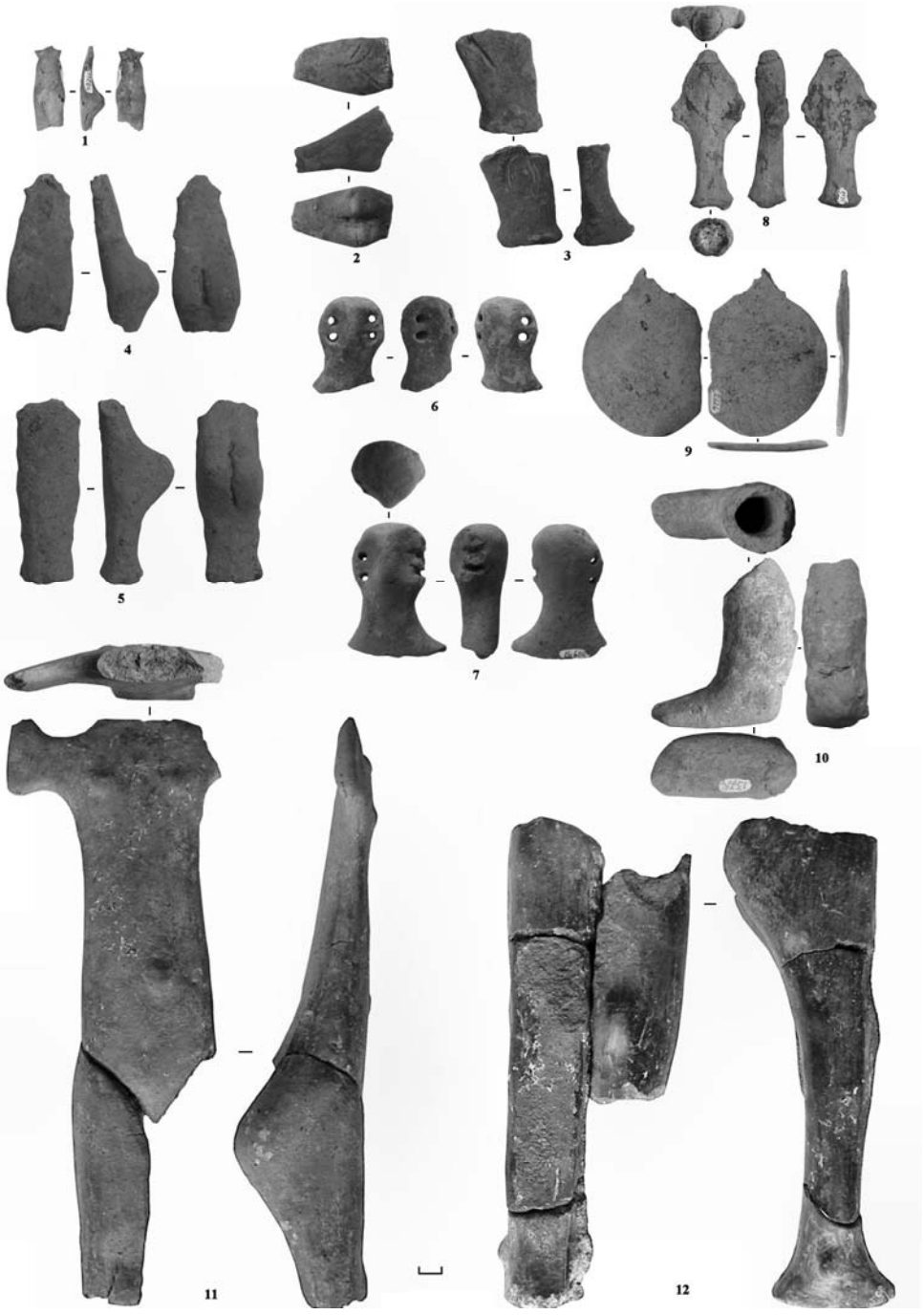

Plate 6 – Păuleni Ciuc – Ciomortan "*Dâmbul Cetății*", Harghita County
Dwelling 5: 1, 5, 8–12; Dwelling 12: 3, 4, 6, 7; Complex 30: 2
Anthropomorphic figurines: 1–7; 10–12, burnt clay; 8–9, bone.

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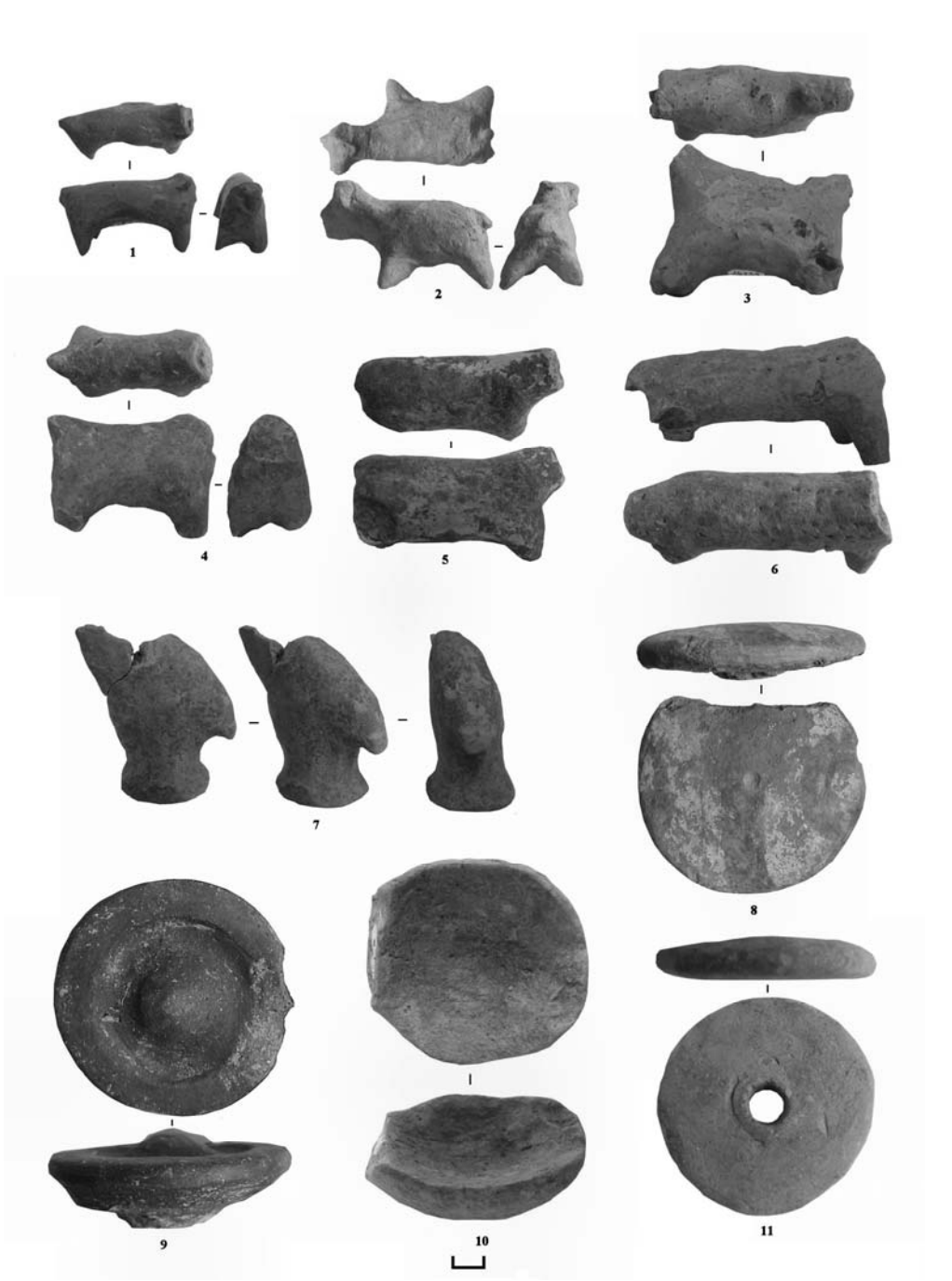

Plate 7 – Păuleni Ciuc – Ciomortan "*Dâmbul Cetății*", Harghita County
Dwelling 5: 2, 8; Dwelling 12: 3, 4, 6; Complex 15: 1; Dwelling 24: 9; Dwelling 31: 11; Complex 30: 5, 7; Post holes: 10 Zoomorphic figurines: 1–6; Ornithomorphic figurines: 7; Objects made of burnt clay: 8–11.

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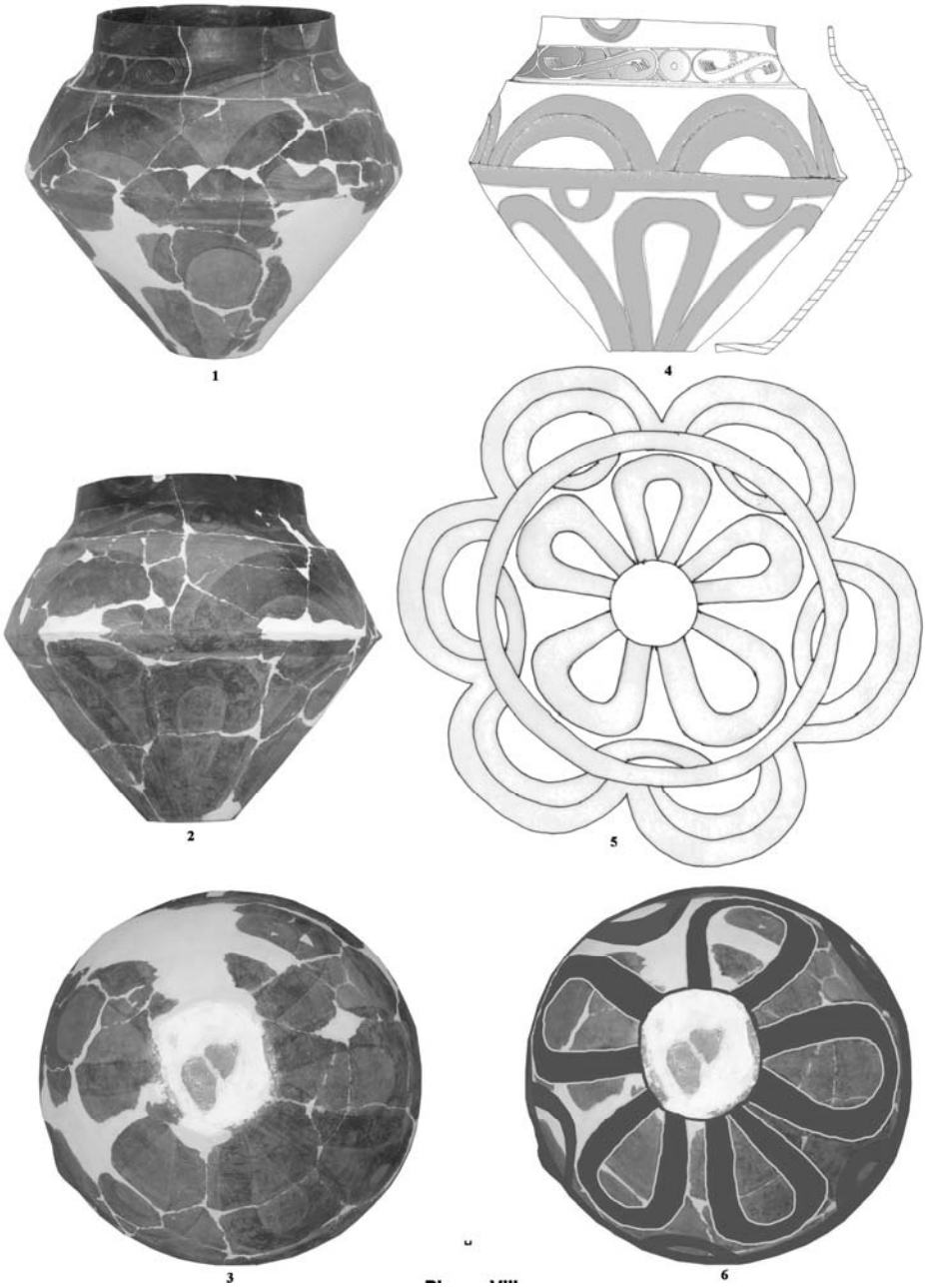

Plate 8 – Păuleni Ciuc – Ciomortan "*Dâmbul Cetății*", Harghita County
1–3. The bi-truncated cone shaped vessel with floral decoration found in Dwelling 21;
4. Drawing – profile; 5. Graphic reconstruction of the floral decoration; 6. The reconstruction of the floral decoration – view from the bottom upwards.

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A new archaeological culture was discovered, as a result of Székely Zoltán's researches, called in the archaeological literature the *Ciomortan Culture*. The fortifications, with the ditch and the rampart, belong to the *Middle Bronze Age*.

The settlement got again the attention of researches once it began to be poached by relic hunters. By chance, some of the archaeological materials belonging to this site got to the National Museum of Eastern Carpathians through donations and acquisitions.

Since the first researches done here by Székely Zoltán did not establish a stratigraphic relation between the cultures of the Middle Bronze Age – the *Ciomortan* and *Wietenberg* cultures – nor the genealogy of the *Ciomortan* Group, a team of archaeologists decided to reopen the archaeological site from Păuleni Ciuc – Ciomortan, in order to research larger areas (Fig. 2/5).

With the aim to study thoroughly the site, in 1999 (Fig. 2/4, 5) the researches were resumed by a team whose members came from different institutions: the Museum of Eastern Carpathians (Valerii Kavruk – coordinator, Dan Buzea, Galina Kavruk), the National History Museum of Transylvania (Gheorghe Lazarovici and Mihai Rotea), the Romanian Thracology Institute (Székely Zsolt) and the Neamț History Museum (Gheorghe Dumitroaia)[1].

Adela Mateş (the National Museum of Eastern Carpathians), Roxana-Elena Munteanu and Daniel Garvăn (the Neamț County Museum Complex) expanded the team in the latest archaeological research campaigns as its new members.

The description of the archaeological researches

In this study we will present the archaeological findings belonging to the Cucuteni-Ariuşd Culture. The findings belonging to the Middle Bronze Age, the Ciomortan/Costişa and Wietenberg Cultures were subjects of several papers published in specialized journals in the country[2].

The archaeological complexes from Păuleni Ciuc – Ciomortan found and researched until now were numbered in the order they were discovered, starting with No. 1.

[1] Székely 1959, 231–245; Székely 1970, 71; Zaharia 1995, 151–152; Székely Zs. 1998, 12; Janovits 1999, 121–150; Cavruc 2000, 99; Cavruc 2000a, 173–176; Cavruc 2002, 89–95; Cavruc 2003, 129; Cavruc 2003a, 43; Cavruc 2003b, 43; Cavruc 2003c, 28–29; Cavruc 2005, 81–123; Cavruc *el alii*, 2000, 103–104; Cavruc *et alii*, 2001, 245–247; Cavruc *et alii*, 2002, 306–309; Cavruc *et alii*, 2005, 374–375; Cavruc & Buzea, 2006, 68–70.

[2] Cavruc & Dumitroaia, 2000, 131–154; Cavruc & Rotea, 2000, 155–172; Comşa A. 2000, 173–176; Cavruc 2001, 55–71, Fig. 12–17; 64–78; Cavruc & Buzea, 2002, 41–88; Cavruc 2004, 265–275; Cavruc & Buzea, 2003, 314–316.

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The complexes belonging to the Cucuteni-Ariuşd Culture

The dwellings

Dwelling 5. It was discovered in Surface 1 (S.1 – opened in the 1999 campaign), in the northern / north-eastern part of the site. The burnt traces of this complex were found at the depth of 2.4 m from the modern surface, under the rampart that fortified the settlement in the Middle Bronze Age (Fig. 2/6, 7). Due to the rampart that was built on the burnt ruins of the dwelling, they were well preserved.

The dwelling had probably rectangular shape and it was researched over an area of 12 × 4.5 m (Fig. 3/2). It was placed on a north-west/south-east direction, with its long sides positioned towards east and west. Since there was a difference in height due to the natural slope of the ground the dwelling was split into two rooms, conventionally called Room A and Room B.

Room A was planned towards the natural slope of the hill (Fig. 3/1). To obtain a flat surface the natives built the floor on a wooden structure, made of split beams, placed parallel to each other, on which they arranged a 10–20 cm thick layer of clay. The difference in height between Room A and B was about 0.8–1 m.

The surface of the floor was flat, but most of the clay pieces had on their inferior side (the one that faced downwards) impressions of thick wooden beams, with rectangular or semicircular sections, that were 10–30 cm wide (practically they used mature trees that had trunks of 30–40 cm in diameter). Most of the clay fragments that were researched had no visible traces or impressions of organic substances, but they contained small fragments of gravel that was detached from the local rock.

After the suspended floor found towards the slope of the land burnt down and collapsed, the clay fragments were highly destroyed. But in the area where the difference of height between the floor and the ground was smaller, the impressions of the beams were preserved both in the ground (Fig. 3/5) and in the clay layer.

Room B was placed in the southern part of the complex and it was made of a compact agglomeration of strongly burnt clay (Fig. 3/3). The structure of this floor resembled the one found in Room A, but the distance between the wooden floor and the ground was small, due to the fact that the land was flat.

The ruins of the walls were less present than those of the floor. The wall fragments found in the complex didn't form a compact structure of a clay wall. They were only daub remains that probably filled the space between the beams and wattle. The eastern wall of the dwelling was made of clay mixed with sand and pebbles (quartz). But this structure is different from that of the suspended floor, which had many pebbles in its composition. Along the eastern wall, one could see

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rock groupings, placed in different positions, towards the exterior of the wall, between the pillar and the traces of collapsed wall.

On the floor, in the central area of the dwelling, the traces of a fire installation were found – a hearth with a "bed" made of flat rocks. Most of it was destroyed in the past.

After the floor was taken down, several post holes emerged underneath it; the posts were probably part of the dwelling's infrastructure.

Initially a pit was dug into the natural rock layer of the hill, deep of about 0.8 m, of round shape, with a diameter of 0.6 m, vertical walls and spherical bottom. After this pit was dug, a wooden post (with a triangular or semicircular transversal section) was placed into it, being then fixed in vertical position. The rocky soil removed by digging out the pit was placed back into it and settled around the post for better fastening.

Three post-holes were found and researched on the southern side of Dwelling 5, five on the northeastern side and one in its southeastern corner. The rocky soil that fastened the pillar had yellow-green colour (Fig. 5/7).

These vertical pillars were probably the main prop for the horizontal beams that were placed along the walls of the dwelling. The walls were probably made of poles and wattle.

Since a part of this dwelling is found under the western witness of S.1, a part of the western wall, of the floor and the post-holes couldn't be researched. Future investigations that will take place in this area of S.1 will bring new data, related to the dimensions of this dwelling and its construction system.

The inventory of the dwelling consisted of a large quantity of ceramic fragments and of about 40 ceramic vessels that can be restored. A large number of objects made of other materials were also found: copper (needles, weapons); bone (pierces, needles); horn (hoes, pierces), stone (axes, chisels, grinders, pounders); flint (blades, arrows, razors) and burnt clay (anthropomorphic and zoomorphic figurines, miniature votive altars).

Based on the analysis of the ceramic material found in this dwelling, we concluded that it belonged to the *Eneolithic II Level* from Păuleni Ciuc that corresponds to the *Cucuteni Culture*, phase A2.

Dwelling 5A. It was found at the depth of 2.4 m, near Dwelling 5; its northeastern wall is shared by the two dwellings in the area of Room B[3]. The dwelling was partially researched over an area of 6.5 × 3.5 m and it was placed in the same direction as Dwelling 5 (Fig. 2/8). We do not exclude the possibility that this might have been just another room of Dwelling 5. In this case, as well, we have a part of the dwelling that hasn't been researched yet, being placed in the

[3] Lazarovici *et alii*, 2002, 19–40.

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western part of S.1. Future researches that will take place in this area of S.1 will bring new data, related to the dimensions of this dwelling and its construction system.

Its floor was partially suspended in the area of the northeastern wall and it was built on a structure made of thick beams, which leaned at one end upon the wall. The combustion of the beams made the floor and the wall that supported it burn as well. While the beams were burning the floor collapsed.

The clay floor fragments found in the southern area are well burnt. Their upper surface is flat, but most of them bear on the inferior side impressions of thick beams with rectangular section. The clay floor wasn't preserved in the centre of the dwelling, but we did find ceramic fragments here, that probably fit trough the open spaces of the floor.

Rectangular beams were used to make the floor; these were about 0.8 m long, 0.2–0.3 m wide and 0.15–0.2 m thick. They were placed parallel to each other, perpendicularly on the long sides of the dwelling. The well smoothened floor was then arranged upon them, made of clay mixed with pebbles and vegetal remains. The beams were placed directly on the ground, after a levelling was done.

The inventory of the dwelling consisted of a very large quantity of ceramic fragments, of ceramic vessels that can be restored and a large number of objects made of copper, bone, horn, stone, flint and burnt clay.

Based on the analysis of the ceramic material found in this dwelling, we concluded that it belongs to the *Eneolithic II Level* from Păuleni Ciuc that corresponds to the *Cucuteni Culture*, phase A2.

Dwelling 6. It was found in the central – northern sector of the site, at about 1 m south of Dwelling 5 and Dwelling 5A, at the depth of –2.4–2.6 m. It had rectangular shape, with the dimensions of 4.30–4.90 × 3.70–4.10 m, being placed on a north-west/south-east direction.

The way the archaeological material was disposed rather marks the moment when the dwelling was abandoned; all materials are mixed and the pottery renders a process of involution. The inventory lacks the painted pottery in the Cucuteni A2 style.

Several post-holes were also researched. Some of them belonged to the basic structure of the dwelling, while others belonged to the interior arrangements (for example: to the benches, table, bed etc.).

The inventory of this dwelling consisted of a very large quantity of ceramic fragments, of ceramic vessels that can be restored and a large number of objects made of bone, stone, flint and burnt clay. Among these, we found stones of different dimensions, daub remains and small cremated wood fragments.

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Based on the analysis of the ceramic material found in this dwelling, we concluded that it belongs to the *Eneolithic III Level* from Păuleni Ciuc, that corresponds to the *Cucuteni Culture*, the late A2 phase.

Dwelling 12. It was found under the settlement's rampart, at the depth of –2.5–2.6 m. Its perimeter was marked by an agglomeration of ceramic fragments, animal bones, stones and a few cremated wood and clay remains. The dwelling had rectangular shape, with the dimensions of 4.5 × 3.5 m, being placed on a north-west/south-east direction (Fig. 5/1, 2). Its southern part (towards the precincts of the settlement) was destroyed by the arrangements made in the Middle Bronze Age.

The way the archaeological materials were disposed rather marks the moment when this dwelling was abandoned, all materials are mixed and the pottery renders a process of involution. The inventory lacks the painted pottery in the Cucuteni A2 style.

The inventory of this dwelling consisted of a very large quantity of ceramic fragments, of ceramic vessels that can be restored and a large number of objects made of bone, horn, stone, flint and burnt clay.

Based on the analysis of the ceramic material found in this dwelling, we concluded that it belongs to the *Eneolithic III Level* from Păuleni Ciuc, that corresponds to the *Cucuteni Culture*, the late A2 phase.

Dwelling 16. It was found in the northern part of the site, under the settlement's rampart, at the depth of –2.2–2.4 m, right on top of the central area of Dwelling 5. The remains of this dwelling looked like an agglomeration consisting of stones, stone grinders, burnt clay and daub fragments, cremated wood fragments, ceramic fragments and other archaeological vestiges[4].

Since a part of it was found under the eastern witness of S.1, the dwelling couldn't be entirely researched. The investigated area had an approximately rectangular shape, with the dimensions of 4,5 × 4 m.

Judging by the way the archaeological materials were found, we concluded that this was a surface dwelling, made mostly of wood. We found no significant traces of the floor or the walls, as we did in the case of Dwellings 5 and 5A.

A fire installation (a hearth) was found approximately in the centre of the dwelling. It was mostly destroyed in the past, but its remains were found scattered on an approximately round surface, with the diameter of 1.6–1.8 m (Fig. 4/7).

The hearth consisted of a stone "bed", upon which the layer of fine clay was arranged. The stones were placed one next to the other, in a pit that was dug in the older Eneolithic layer. One could observe that the natives used both river stones as

[4] Cavruc *et alii*, 2004, 337–339.

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well as flat stones detached of the local rock. This stone "bed" was 0.2–0.3 m thick.

The upper part of the hearth, the fine layer of clay, was mostly destroyed, but in some areas it was 3–5 cm thick.

The inventory of this dwelling consisted of ceramic fragments, of ceramic vessels that can be restored and objects made of bone, horn, stone, flint and burnt clay. Next to the hearth, a miniature votive altar was found; it was made of burnt clay, having the shape of a small, four-legged table, with a conical cup on top of it.

Based on the analysis of the ceramic material found in this dwelling, we concluded that it belongs to the *Eneolithic III Level* from Păuleni Ciuc, that corresponds to the *Cucuteni Culture*, the late A2 phase.

Dwelling 21. It was found in the northern part of the site, immediately next to Dwelling 5 – Room A, on its western side (Fig. 3/4). The upper part of the dwelling was found at the depth of –2.6–2.8 m. The dwelling was investigated on a surface of 3.8 – 4 × 2.5 – 3 m, being placed on a north-west/south-east direction.

It was only partially researched, since part of it is found under the western witness of S. 1. Future researches that will take place in this area of S.1, will bring new data related to the dimensions of this dwelling and its construction system.

The floor of the dwelling was arranged on an area that was previously dug out, until it reached the local rock layer (Fig. 3/5). To level the floor, the natives used a large quantity of local gravel and soil that was strongly settled. The floor was 15–25 cm thick and it was repaired in some spots (Fig. 3/8).

The walls were dug in the local soil and were daubed with several layers of clay (2 or 3 layers). The wall was built of organic remains, straws and clay, mixture that burnt down and left behind a whitish pigment. The clay layers were thicker towards the surface of the soil. The southern wall was the best preserved one; it was 25–38 cm tall. The southeastern corner of the wall was destroyed. A ceramic support vessel was found near the southern wall, fallen to its side (Fig. 3/6).

The eastern side of the wall was deteriorated. The daub had a thickness between 2 and 6 cm, and there was a layer of clay of about 3 cm thick, that came down the wall, partially covering the floor. The repairs made by the inhabitants rounded off the bottom angle of the dwelling.

The roof was probably made of organic materials, since we found consistent burn traces under the ruins.

In the northern part of the dwelling, at the level of the floor, we found a large pit that was probably used for storage. It was called Pit A. The pit was dug into the local rock. It had circular opening, with a diameter of 0.8 m, and a depth of –0.6–0.8 m, measured from the floor's level. A bi-truncated cone shaped vessel was deposited in the pit; inside it, on its bottom, we found a large quantity of yellow

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clay, mixed with gravel. In the upper part of the pit, near the bi-truncated cone shaped vessel, we found several vessels, that were fragmentary preserved and one that was completely preserved (Fig. 3/7).

The inventory of Dwelling 21 consisted of ceramic vessel fragments, a ceramic stand, two fragments of stone axes and the inventory of the storage pit (the bi-truncated cone shaped vessel, a tureen and fragments belonging to other 2 tureens).

Our observations point that Dwelling 5 was built shortly after Dwelling 21 burnt down.

Based on the analysis of the ceramic material found in this dwelling, we concluded that it belongs to the *Eneolithic II Level* from Păuleni Ciuc, that corresponds to the *Cucuteni Culture*, the early A2 phase.

Dwelling 24. It was found in the northern part of the site, at the depth of –2.8 –3.2 m, north of Dwelling 5 – Room A, where the land was sloped. The dwelling had rectangular shape, with the dimensions of about 4.5 × 4 m, being placed on a north-east/south-west direction.

The floor of the dwelling had two parts: one was made of a clay layer, on a surface of 4.5 × 1.5 m; the other was probably directly on the ground[5] (Fig. 4/1, 2).

The part, which was made of clay, was arranged on the old humus, and consisted of clay mixed with gravel and vegetal remains. It was 0.05–0.10 m thick (Fig. 4/4). There are two points of view in arranging a floor like that. One says that the clay floor was intentionally burnt, to achieve a better isolation of the house, while the other says that the clay layer became compact after the dwelling burnt down.

After burning, the floor looked like a compact mass of burnt clay, resembling the hearth daub. There were no wooden beams used to build this dwelling's floor, as in the case of Dwellings 5 and 5A, and no settled gravel, as used in building Dwelling 21.

We assume that this type of arrangement was necessary in order to maintain a warm temperature at the level of the floor. The preserved part of the floor was slightly inclined towards north.

A fire installation was found in the western part of the dwelling. It consisted of a hearth that bore the traces of several rearrangements. In this case, as well, the hearth was arranged on a stone "bed", made of river stones and flat stones, which was covered with several layers of clay. We were able to gather a large amount of ashes from this hearth.

[5] Kavruk *et alii*, 2007, 362.

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We found no remains of the walls, or the roof; these were probably made of wood and were demolished when the floor of Dwelling 5 was arranged, since it partially superposes this complex.

Several post holes were outlined on the level of the floor; they were probably part of the roof and wall structure (Fig. 4/3). On the eastern side, we found a pit (post hole 1), on the northern side we found 3 pits (post holes 2, 3, 5), in the centre of the dwelling we found a small pit (post hole 4) while on the western side we found 2 pits (post holes 6, 7). The post holes had circular openings, with the diameter between 0.2 and 0.4 m, their walls were oblique towards the relatively flat bottom. The filling of these pits consisted of slightly settled brown-black soil, mixed with small, burnt wood and clay fragments.

The inventory of the dwelling consisted mainly of pottery fragments and of animal bone remains.

Based on the analysis of the ceramic material found in this dwelling, we concluded that it belongs to the *Eneolithic II Level* from Păuleni Ciuc, that corresponds to the *Cucuteni Culture*, the early A2 phase.

Dwelling 17. The dwelling was found in the northern part of the site, at the depth of –2.8–3.1 m, in the eastern part of Dwelling 5, being partially covered by it. The dwelling was researched on a surface of 5 × 2.5–3 m. It was partially investigated, since part of it is found under the eastern witness of S. 1.

The floor of this complex was arranged on the ground, after the terrain was levelled. No other elements belonging to the construction system of this dwelling were found so far. The large quantity of ashes found here makes us believe that the fireplace was set directly on the floor (on the ground), and it was moved from place to place, in certain time ranges.

The filling of the dwelling consisted of loose soil, mixed with a lot of ash, in which ceramic fragments, stone tools, animal bone remains, deer horns, burnt wood, copper objects and stones of different dimension were found.

Based on the analysis of the ceramic material found in this dwelling, we concluded that it belongs to the *Eneolithic I Level* from Păuleni Ciuc, that corresponds to the *Cucuteni Culture*, the early A2 phase.

Dwelling 31. The dwelling was found in the eastern sector of the site, at the depth of –2.8–3.2 m. Only the upper part of the dwelling was researched so far, on a surface of 4 × 2.5–3 m (Fig. 4/5). Part of this complex extends under the rampart found in the eastern area of the site, which hasn't been investigated yet. Given the fact that the land in this sector is sloped, the floor of the dwelling had to be suspended on a wooden beam structure. This type of suspended floor was used, as well, in building Dwellings 5 and 5A.

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Large pieces of clay daub were found in the upper part of the burnt ruins of the dwelling (probably belonging to the walls), as well as ceramic fragments (about 10 ceramic vessels that can be restored), burnt clay pieces, a spindle-whorl, several fragments of anthropomorphic figurines, stones, grinder fragments, burnt wood and clay fragments (Fig. 4/6).

The filling of the dwelling consisted of reddish soil (result of the strong fire that burnt down the house), mixed with daub pieces, probably belonging to the collapsed roof and walls.

In the researched area, the surface of the floor was smooth. The floor wasn't demolished yet, but judging by its aspect, the layer of clay was set on a wooden structure, made of massive beams, placed one next to the other. A hearth was partially revealed in the southern part of the complex; it had a "bed" made of flat stones, placed directly on the dwelling's floor.

The dwelling was preserved at this level and will be researched in the following archaeological campaigns.

Based on the analysis of the ceramic material found in this dwelling, we concluded that it belongs to the *Eneolithic II Level* from Păuleni Ciuc that corresponds to the *Cucuteni Culture*, the A2 phase.

The fire installations (The hearths)

Complex 4 (*hearth*). It was found in the northern part of the site, at the depth of –2.2–2.4 m. It had an approximately circular shape with the dimension of 2–2.2 m. We found no traces of pits around the hearth that could show us whether it was, or not, sheltered by a construction.

The hearth had an uncommon structure. Before it was built, a pit was dug into the *Eneolithic* level. Then a "bed" of stones was placed into the pit, being then covered with a fine layer of clay. The stones that formed the hearth's pavement were placed one next to the other. One could observe that the flat stones used to build it were detached of the local rock. This stone "bed" was 0.2–0.3 m thick.

The upper part of the hearth, the fine layer of clay, was mostly destroyed, but in some areas it was 3–5 cm thick.

Based on the analysis of the ceramic material found around this hearth, we concluded that it belongs to the *Eneolithic III Level* from Păuleni Ciuc that corresponds to the *Cucuteni Culture*, the late A2 phase.

Complex 29 (*hearth-pyre*). It was found in the eastern sector of the site, at the depth of –2.5–2.7 m. The hearth stood out due to a consistent layer of ashes spread on a surface of 1.1–0.85 m, being of about 10 cm thick. Two flat stones

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were found in the centre of this ash agglomeration, one being larger than the other (40×30×10 cm).

The ash was mixed with a large amount of carbonized wood fragments and only a few ceramic vessel fragments.

Several small flat stones were found after the ash was removed; they were probably part of the stone "bed", built mainly to preserve the heat around the hearth.

Based on the analysis of the ceramic material found, we concluded that this hearth-pyre belongs to the *Eneolithic III Level* from Păuleni Ciuc that corresponds to the *Cucuteni Culture*, the final A2 phase.

Complex 30 (*hearth*). It was found in the eastern sector of the site, at the depth of –2.8–3.1 m. The hearth was built in a pit, dug previously in the natural rock. The hearth's "bed" was built of stones of different shapes and dimensions, placed one next to the other (Fig. 4/8). Even older and previously used stones were reused (grinder and grit stone fragments), as well as pottery fragments, flint items pieces and anthropomorphic figurine fragments.

The stones spread on a surface with a diameter of 2 m, and this stone layer was 0.2–0.3 m thick. The surface of the hearth (the layer of fine clay) was probably destroyed in the Middle Bronze Age, when the settlements rampart was built.

Since this hearth was found in the settlement and not in a habitation complex, we can assume that it was used as a watch fire.

Based on the analysis of the ceramic material found, we concluded that this hearth belongs to the *Eneolithic III Level* from Păuleni Ciuc that corresponds to the *Cucuteni Culture*, the final A2 phase.

The "waste" pits

Pit 8. It was found in the northern sector of the site, at the depth of –3.4 m, in the northwestern part of Dwelling 24. Its opening had circular shape, with a diameter of 1.3 m, and its walls were oblique towards the plane bottom. The pit was dug about 0.4 m in the natural rock of the hill.

The filling of the pit consisted of rocky soil mixed with burnt wood, burnt clay and ash concretions. On the bottom of the pit we found archaeological materials consisting of ceramic fragments, stone pieces and animal bone fragments.

Due to the fact that the pit was outlined at the level of the hearth found in Dwelling 24 we don't exclude the possibility that it could have been used for ash disposal.

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Based on the analysis of the ceramic material found in the pit, we concluded that it belongs to the *Eneolithic II Level* from Păuleni Ciuc that corresponds to the *Cucuteni Culture*, the early A2 phase.

Pit 9. It was found in the northern sector of the site, at the depth of –3.3–3.4 m, at about 0.5 m west of Dwelling 24. It probably had a circular opening, with a diameter of 1.4 m (only the western half of the pit was yet researched). The profile of the pit shows us a "sand glass" shape with a spherical bottom. The pit was dug about 1.2 m in the natural rock of the hill (Figs. 5/5, 6).

The filling of the pit consisted of rocky brown-yellowish soil, mixed with brown soil, with carbonized wood remains, burnt clay and few traces of ash. In the lower part of the pit archaeological material was found, consisting of ceramic fragments, stone items and animal bone fragments.

Based on the analysis of the ceramic material found in the pit, we concluded that it belongs to the *Eneolithic II Level* from Păuleni Ciuc that corresponds to the *Cucuteni Culture*, the early A2 phase.

The material culture

The pottery

The inventory of the dwellings researched so far consisted of ceramic vessel fragments, complete ceramic vessels, ceramic vessels that can be restored and as well other objects that belong to the material culture (tools, weapons, ornaments etc.).

The analysis of the pottery shows that it was hand-made, of clay mixed with different degreasing substances: pounded pottery, sand, sand mixed with gravel and gravel.

Until the 2008 campaign we have introduced in the Păuleni Ciuc – Ciomortan database over 7000 ceramic fragments, and the statistics is the following:

- *fine pottery* (clay mixed with fine sand): 14%
- *semi-fine pottery* (clay mixed with sand and well pounded pottery fragments): 50%
- *rough pottery* (clay mixed with pounded pottery fragments and gravel): 36%.

The pottery repertoire was presented in several studies published in specialised journals[6].

[6] Buzea & Lazarovici, 2005, 29–45, Figs.VII, XXV–XXIX; Lazarovici & Buzea, 2004, 57–59.

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Out of the ceramic vessels found so far we will next present one that stood out due to its painted ornament. The exceptional artistic level reached by the *Cucuteni* artist was proved once again after this vessel was restored, reconstructed and its painted ornament was unfolded.

The vessel was found in Dwelling 21, in its "*storage*" pit (Fig. 3/7). In order to store this vessel in the dwelling, the natives dug a pit that had its shape and dimensions. The pit was dug in such a way that the vessel's mouth was at the same level with the floor. A tureen that can be restored and several pottery fragments were found around the bi-truncated cone shaped vessel, in the upper part of the "storage" pit. The tureen was probably used as a lid, to cover the vessel when needed.

The vessel has a bi-truncated cone shape and it was made of clay mixed with pounded pottery fragments, sand and gravel. Its opening is relatively straight; it has a short, truncated cone shaped neck, bi-truncated cone shaped body and a slightly concave bottom. In the area where the diameter reaches the maximum it has an elongated prominence; oxiding firing; it has black colour in the upper part and a brown-brick-red colour towards its bottom (Fig. 8/1, 2, 4).

Its neck is decorated with fine white lines (2–4 mm wide) that form recumbent spirals. These are separated by circles (made of simple or double lines), having a white circular point inside. The upper part of the vessel's body is decorated with 6 wide semicircular grooves (of about 80 mm), being made by polishing; they form in between triangles thrown into relief. In the area where the body's diameter reaches the maximum it is painted with a wide red stripe, enclosed by narrow white lines. This stripe is the starting point for 5 semicircles painted in the same manner and colour, which are oriented towards the vessel's bottom. Other 5 "*petals*" were painted on the lower part of the body, from the bottom upwards, with a wide brown-reddish stripe, enclosed by narrow white lines. These "*petals*" were placed in the spaces between the 5 semicircles mentioned above (Fig. 8/3).

If we look at the vessel from its bottom, the decoration painted on the inferior part of the body can be resembled to a "*flower*" that has two corollas of 5 "*petals*" each (Fig. 8/6). If we unfold the painting from the upper part of the vessel's body and we superpose it on the painting from its lower body we will obtain a remarkable flower decoration, with an exquisite artistic value (Fig. 8/5).

This is a very rare painted ornament, seldom found on the painted vessels belonging to the Cucuteni Culture, Phase A. A similar decoration was found on several bi-truncated cone shaped vessels from Frumuşica settlement, Neamţ County[7]. The author of the Frumuşica discoveries preferred to unfold the ornaments of these vessels on 4 vertical registers. The motifs painted on the lower part of the vessels' bodies were described as elongated semicircles or parabolas.

[7] Mătasă 1946, Pl. XXXII / 223, 225.

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The same study points out the *floral* ornament found on the bottom of small goblets[8].

Vladimir Dumitrescu describes a bi-truncated cone shaped vessel found at Frumuşica that was decorated on its inferior part with incisions that define a series of ample "*leafs*" or "*petals*", painted with white on the well-polished brown cover[9]. If we look at this ornament from the bottom upwards we can see a "*flower*" with 5 "*petals*".

Other bi-truncated cone shaped vessels which have similar decoration were also found at the Poduri "Dealu Ghindaru" site, in Bacău County[10]. The ornament found in the lower part of these vessels is described, and it results that, in the case of 2 vessels, the upper part of the ornament shows a circular stripe painted with white and in the case of another vessel a narrow, incised line. All three vessels are decorated with red parabola-shaped motifs.

If we look at these 3 bi-truncated cone shaped vessels found at Poduri from the bottom upwards we can see that they all have the same decoration of a "*flower*" with 5 "*petals*".

In this study we present only a few examples of such vessels that have a floral motif on their bottom, since this is a new approach of describing this type of decoration. The number of the vessels that are ornamented in such a manner is definitely much larger. We already discovered other such vessels that will be presented in further studies.

The unity of the Cucuteni – Ariuşd Culture, at the level of its A2 Phase, is once again proven by the discovery of ceramic vessels painted in the same manner, on both sides of the Eastern Carpathians.

The anthropomorphic plastic art

The anthropomorphic plastic art represents an important part of the Cucuteni-Ariuşd Culture. At Păuleni Ciuc we discovered about **120** anthropomorphic statuettes and figurines (most of them preserved only fragmentary). These were discovered in the cultural layer as it follows: in the dwellings, among the rocks that were part of the hearths' pavements, in the "waste" pits and in the filling of the rampart that was built in the Middle Bronze Age.

The analysis of the anthropomorphic plastic art found so far at Păuleni Ciuc was made according to the typological criteria elaborated by Dr. Dan Monah[11].

[8] *Idem*, Pl. XVII / 78, 79.
[9] Dumitrescu 1979, Fig. 77.
[10] Monah *et alii*, 2003, 122, Figs. 161, 174; Figs. 158–159.
[11] Monah 1997.

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Most of the anthropomorphic plastic art items were moulded out of two or three clay rolls, stuck together afterwards. They were moulded out of clay, mixed with pounded ceramic fragments. After moulding, they were well smoothened, decorated, sometimes painted and then, finally, put through reducing or oxiding firing.

Based on the positions given to the anthropomorphic plastic art items most of them were women standing uprights (Fig. 6/1, 3, 4, 5, 8, 11, 12) and only a few women sitting (Fig. 6/2). Most of the times, the upper limbs are represented by small elongations of the body (Fig. 6/1, 4, 8, 9). Sometimes, the arms are bent and raised above the head of the figure, "*in adornment*" (Fig. 6/11). The legs are stuck together. Although most of the statuettes we found had no well-defined legs (Fig. 6/1-5), there are some cases in which the legs were quite well outlined (Fig. 6/10, 11, 12).

Most of the statuettes were discovered headless. In some cases the head was stylized by a conical prolongation of the body (Fig. 6/1, 4). In 2 cases the head is well outlined, being shaped as a disc with two lobes, each bearing two perforations, separated by a median vein that represents the nose (Fig. 6/6, 7).

According to their dimensions, the pieces can be separated into 4 categories:

- small (2–8 cm)
- medium (8–25 cm)
- large (25–50 cm)
- very large (over 50 cm).

At Păuleni Ciuc we discovered anthropomorphic items that can be assigned to the first three categories, judging by their height.

The anthropomorphic plastic art items are mostly decorated with lines incised in those spots that mark the body parts: the legs (Fig. 6/11, 12); the buttocks (Fig. 6/1, 2, 4, 5, 11, 12); the sex (Fig. 6/2, 3, 11). The entire surface of a statuette was rarely covered with incised lines that formed geometrical motifs, triangles or rhombuses. We can also find ornaments brought to relief, in the area of the breasts, navel, knee or ankle, shaped as small conical prominences, either applied to, or pinched out, of the statuettes body (Fig. 6/11, 12).

The anthropomorphic plastic art objects were generally well smoothened and polished. The painting was preserved in few cases. The painted motifs were represented by narrow white lines on the red background of the item. The red painting was preserved only in some cases; this was probably applied on the entire surface of the statuette (Fig. 6/7, 11).

From an artistic point of view the anthropomorphic plastic art was mostly stylised. However there are some cases in which certain body parts were realistically represented. Most of the times, the buttocks of the statuettes are well outlined and proportioned (Fig. 6/1, 2, 4, 5, 11, 12).

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A new finding is represented by an anthropomorphic statuette leg that was preserved from the knee to the sole. This piece is realistically made. The sole preserves the human features, being arched on the median area. The toes are not represented. The leg is perforated on the inside (the interior of the leg is hollow in the area of the tibia). On the outside the ankle is well represented by a conical prominence. We do not exclude the possibility that this item might represent the footwear of an anthropomorphic statuette. The object was well smoothened and shows traces of white painting. Such pieces are very rare in the Cucuteni-Ariuşd Culture (Fig. 6/10).

We found two large pieces, both representing a woman standing uprights[12].

The first statuette has a preserved height of 24.8 cm. This item was moulded out of three clay rolls stuck together and smoothened. The body and the arms are much planer than a woman's body, while the thighs and the legs are close to the real anatomic proportions. The buttocks are separated and they follow the anatomical proportions, the legs are separated by an excised line that forms a triangle in the area of the sex. The stylized arms suggest a praying position; they are slightly pulled backwards to the given bodyline. The breasts and the navel are represented by semi-spherical prominences. The surface of the statuette is polished. It has brick-red colour. It bears the traces of red painting on the body (Fig. 6/11).

The second statuette stylistically resembles the first one. The statuette was fragmentary found, and only the lower part (the buttocks and the legs) could be restored; it is 18 cm high. In this case the soles are separated in the frontal area by an excised line. The knees and the ankle are represented by conical prominences. The statuette is polished and has black colour, while the sole is red (Fig. 6/12).

In the Cucuteni-Tripolie Eneolithic are known thousands of feminine statuettes, and thus the differences between obese and pregnant women were well outlined, although most of the plastic art presents the woman in her entire physical beauty[13].

Two anthropomorphic plastic art items discovered so far at Păuleni Ciuc were made out of bone[14]. The first one represents an anthropomorphic figurine, probably a man, cut in an animal bone phalanx (Fig. 6/8). The second one represents an anthropomorphic amulet, probably a woman, of the *en violon* type (Fig. 6/9).

A characteristic of the Cucuteni A Phase plastic art is the presence of pendants – amulets shaped as a violin case, known under the name of *en violon* idols or Trojan plane idols. Shaped or cut out of stone, bone or metal (gold, silver,

[12] Buzea & Lazarovici, 2005, 35, Pl. XXIV/1, 2.
[13] Chirica 2004, 110.
[14] Lazarovici *et alii*, 2000, 103–130, Pl. X/2; Buzea & Lazarovici, 2005, 39, Pl. XVIII/19; Pl. XXX/2.

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copper) the *en violon* pendants are found in a large variety of shapes and seem to have been very popular, especially in the Cucuteni A Phase[15].

Such an item was found at Păuleni Ciuc, in Dwelling 5. The piece was made of bone and it could belong, according to Dr. Dan Monah[16], to the category of plane idols of *type b – amulets*. The amulet has oval shaped body; the arms are represented by two small triangles, while the neck isn't separated from the head. Only one perforation was preserved in the area of the eyes (there were probably two such perforations), and these could have been also used to hang the amulet. The amulet presents a polished surface, due to its long use in time, and it was probably abandoned when its upper part deteriorated. Its characteristics make it unique in the Cucuteni-Ariuşd Culture from Transylvania.

Plane idols of the *en violon* type were also found in Moldova, at Hăbăşeşti[17]; Truşeşti[18]; Scânteia[19]; Poduri[20]; Cucuteni[21]; Drăguşeni[22] and in Moldavia, at Cărbuna[23], bearing tight analogies in the oriental Mediterranean, the Cyclades and western Anatolia, at Troy[24].

It is not a coincidence that most of the anthropomorphic and zoomorphic items were fragmentary preserved; this resulted from a series of magical and religious practices, characteristic for the *Cucuteni* culture. It is also possible and very likely that, after certain rituals ended, the anthropomorphic figures, created specifically for these practices, were no longer considered magical, thus they could be "*thrown away*" [25].

The zoomorphic plastic art

The zoomorphic plastic art items were found in the same circumstances as the anthropomorphous ones, but their number is much smaller. Most of them were fragmentary preserved. Based on their analysis, we were able to establish that they belong to the group of zoomorphic figurines and statuettes. There were found 2 items that can be attributed to the category of the "bucranium" figurines[26].

[15] Monah 1997, 135.
[16] *Idem* 1997, 136.
[17] Dumitrescu 1954, 410–417; Pl. CXXII/9-17; Fig. 36/1–16.
[18] Dîmboviţa *et alii*, 1999, 521; Fig. 370/1–5.
[19] Mantu *et alii*, 1999, 142/Fig. 355.
[20] Monah *et alii*, 2003, 164/Fig. 125.
[21] Petrescu-Dîmboviţa & Văleanu, 2004, 256, Fig. 220/6.
[22] Marinescu-Bîlcu & Bolomey, 2000, Fig. 159/7.
[23] Sorokin 1994, 70.
[24] Dumitrescu 1954, 410, Pl.CXXII/1–17, Fig. 36; Dumitrescu 1979, 77–78; Mantu 1998, 282 Fig. 21/2.
[25] Florescu & Căpitanu, 1996, 346.
[26] Buzea & Lazarovici, 2005, 37, Pl. XXII/1–15.

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The zoomorphic items were made of clay mixed with pounded ceramic fragments, and mostly moulded out of a single clay roll; the limbs (both upper and lower), the neck, the head, the snout, the ears / horns a the tail were all moulded out of the same clay roll that the body was made of. The limbs had conical shape, being slightly rounded at their ends.

The zoomorphic plastic art found so far at Păuleni Ciuc consists mostly of domestic or wild mammals (Fig. 7/1-6). Since the zoomorphous figurines are stylized, it is hard to classify them into species (canine, bovine, ovine etc.).

The zoomorphic items have, in most cases, no ornaments, but there are some fragments decorated with incisions. There is only one case in which the decoration was made with circular pricks that form a series of parallel lines, covering the entire body of the object (Fig. 7/6).

The number of zoomorphic figurines and statuettes found so far at Păuleni Ciuc is quite high, compared to the researched surface. The zoomorphic representations found here show tight analogies with the ones found in the Ariuşd settlement. According to the present data, it is known that the number of zoomorphic representations for the whole area of the Ariuşd type discoveries reaches about 200 pieces[27].

The ornithomorphic plastic art

So far, we found only one item at Păuleni Ciuc that represents a stylized bird. It was made of clay, mixed with pounded ceramic fragments and moulded out of one clay roll. It is in vertical position, with the legs tight together; it has a plane base, of circular shape. The body is plane; the tail is anatomically positioned, with the tip bent slightly downwards. The neck and the head were broken in the past (Fig. 7/7). The object was found near a hearth, in the settlement.

Clay objects

Many miniature objects were moulded of clay, such as: cups, discs, cones and small reels[28], as well as larger pieces: ladles, spoons (Fig. 7/10), spindle-wheels (Fig. 7/11), round pieces, reels, "pintaderas", lid buttons (Fig. 7/8, 9) and others. A separate category of clay objects is represented by fragments of miniature votive altars and tables[29].

[27] Sztáncsuj 2007, 191.
[28] Buzea & Lazarovici, 2005, 37, Pl. XIX/1–17.
[29] Buzea 2006, 127–157; Buzea 2007, 277–292.

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The miniature votive altars

Only one of these pieces was almost entirely preserved, being made of clay mixed with fine sand; its surfaces are well smoothened; it was moulded of two parts, stuck together: a table and a goblet (placed on the table); the table has 4 legs, and the goblet has conical shape. The goblet is placed in the middle of the table, and the contact area between the table and the goblet (the bottom of the vessel) is hollow. The altar was found near a hearth. This piece is extremely rare in the *Cucuteni-Ariuşd Culture* due to its artistic aspect.

We have to mention that such pieces were found in sites belonging to the Early Neolithic period, such as the one from Gura Baciului. These miniature worship shrines were used: for lighting the household, as J. Nandriş suggested; for cultic lighting; to burn fats, offerings; to preserve the fire[30].

The lithic equipment

The lithic equipment found at Păuleni Ciuc consists of: flint, grit-stone, andesites, corneean and obsidian[31]. The natives preferred flint to make their weapons and different types of tools: blades, grits, arrowheads, prickers etc.; the main technique to obtain them was retouching. The different types and sizes of grinders and pounders were made of andesites. The grit-stones were used to sharpen and polish the tools; some pieces bear the traces of friction.

The blades were used in different ways. The retouched blades, with handles, were used as knifes for cutting meat, for detaching meat off the sacrificed or hunted animals' skin and bones. The massive blades were used to process wood, to bark the trees, while the truncated ones were used as insertions of sickles and knifes.

The grits were used to scrape the bones, the wood and the skins. The arrowheads were undoubtedly used as weapons for hunting or in solving the conflicts between the tribes[32].

The bone and horn objects

These materials were used to make ornaments and adornments (beads, amulets etc.), different types of tools (prickers, piercers, needles, spatulas, planters and hoes) as well as other objects the use of which remains yet unknown to us[33].

[30] Lazarovici & Maxim, 1995, 148; Fig. 29/1–4.
[31] Buzea & Lazarovici, 2005, 40-42, Pl. XVI/1–14; Pl. XVII/1–24.
[32] Boghian 1996, 291–307.
[33] Buzea & Lazarovici, 2005, 39–40, Pl. XVIII/1–20.

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Copper objects

Compared to other sites belonging to the Cucuteni-Ariuşd Culture, we found a large amount of copper objects at Şoimeni – Păuleni Ciuc[34]. Until now, we found 11 copper objects. Probably the copper was exploited in the mines found nearby Bălan, locality that lays about 30 km north of this settlement[35]. The first copper objects appeared quite early in the East, they spread on European territory in Bosnia and Bulgaria, and beginning with the late phase of the *Starcevo-Criş* Culture they appear on the territory of Romania as well[36].

General data regarding the Cucuteni-Ariuşd-Tripolie Cultural Complex

In the 5th–4th millenniums B.C. Eastern Europe, an area of cultural convergences, knows an outstanding development of the Eneolithic civilization (Fig. 1/1). The Cucuteni-Ariuşd-Tripolie Culture stands out among these brilliant creations. Its name was given by the discoveries made in the eponym archaeological stations from: *Ariuşd* – Covasna County, close to Sfântu Gheorghe; *Cucuteni* – Iaşi County, close to Târgu Frumos, and *Tripolie* – from Ukraine, found not far from its capital, Kiev. More than 1800 settlements are recorded as belonging to the *Cucuteni* culture, to which we can add other 500, found between the Prut and Nistru rivers[37].

Some consider that the *Cucuteni* Culture reached a pre-urban stage regarding its settlements; it had a complex and extended traffic network of products, ideas, pottery shapes, pottery moulding and copper metallurgy techniques. A series of external influences contributed to this natural development of the culture that, added to the internal causes, produced major mutations in the development of the Eneolithic communities[38].

The *Cucuteni* Culture was divided into three phases: A, A–B and B, each of them being divided into stages, as it follows: Cucuteni A (A_1, A_2, A_3 and A_4) – mentioning that A_1 and A_2 stages weren't stratigraphically separated. The discoveries from Transylvania belong to this phase (Fig. 1/2); the A–B phase was divided in two stages (A–B_1 and A–B_2), as well as the B phase (B_1 and B_2), since stage B_3 wasn't outlined on a stratigraphic basis[39].

[34] Buzea 2004, 111–123.

[35] Maxim 1996, 53; Lazarovici 1996, 36-37; Cucoş 1999, 59; Mareş 2002, 61; Cavruc 2003, 133–134.

[36] Vulpe A. 1973, 217; Gimbutas 1997, 34; Luca 1999, 32; Mareş 2002, 6; Lazarovici 2003a, 16.

[37] László F. 175–226; Monah & Cucoş, 1985, 15; Popovici 2000; László A. 1988, 121–135; Mantu 1998a, 83–100; Sorokin 1994, 67–92.

[38] Dumitroaia 2000, 19.

[39] Dumitrescu 1979, 10.

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Along the time, several archaeologists presented their theories regarding the appearance of the Cucuteni Culture, thus now there is a unanimous opinion, roughly speaking, even if some parts of the founding process still aren't made very clear[40].

Thus, some authors consider that the cultural aspect belonging to the communities of the first sub-phase (*Cucuteni* A_1 or *Protocucuteni*), formed in the central area of western Moldova, in the area of *Precucuteni III*, spreading in the south-eastern Transylvania and towards east, is characterised by the bi-chromatic and even the tri-chromatic pottery, painted before firing, and by the persistency of the incised decoration, that is of Precucuteni tradition[41].

The transformation process of the *Precucuteni* Culture into *Cucuteni* culture can be placed, in the settlement from Poduri, Bacău County, as beginning in the *Late Precucuteni II* phase (white painting on a red background, applied before firing). The *Late Precucuteni III* phase from the same settlement was followed by an intermediary layer with three superposed habitation levels, one of them being considered to mark the beginning of the *Cucuteni* Culture. Due to the new pottery decoration techniques, the Romanian archaeologists speak about a new culture, conventionally called *Cucuteni*, although it is the same population we are dealing with. There is no other station besides Poduri in which this transformation, that took place in such a short time (of approximately 50 years), is so obvious[42].

There were made many statistical analyses upon the ceramic materials, to establish the time frame of the *Păuleni I and II Levels* from Păuleni Ciuc and the *Cucuteni* A_1 and A_2 stages[43]. As a matter of fact, when he defined the *Cucuteni* A_1 phase, Vladimir Dumitrescu took into consideration materials such as those found in the settlements from Izvoare[44] and Frumuşica[45] from Moldova[46], and materials that appear in the *Păuleni I and II* Eneolithic levels, as well as those that appear in the Transylvanian settlements from Tg. Mureş, Olteni[47], Ariuşd[48], Leţ[49], Ciucsângeorgiu[50] and Bod[51]. It is not our intention to create regionalisms in the

[40] Mantu 1998, 33.
[41] * * *, 2001, 165.
[42] Monah *et alii*, 2003, 36.
[43] Lazarovici *et alii*, 2000, 103–130; Lazarovici *et alii*, 2002, 19–40; Lazarovici 2003, 217–231.
[44] R. Vulpe 1956, 53–93.
[45] Mătasă 1946.
[46] * * *, 1960, 62, Fig. 11/2–3; Dumitrescu 1963, 69–73; Dumitrescu 1968, 28–29; Dumitrescu 1979, 17-19.
[47] Lazarovici *et alii*, 1997, 669–687.
[48] László 1924, 1–24; * * * 1960, 61–65; Zaharia & Székély 1988, 101–115; Comşa E. 1988, 115–119.
[49] Lazarovici 1998, 19.
[50] Lazarovici *et alii*, 1989–1993, 221–228; Maxim 1999, 112.
[51] Costea 1995, 25.

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Cucuteni Culture[52], but we do find that the earliest and most numerous materials belonging to the early phase of the *Cucuteni A*, (A1) are in Transylvania[53].

Some researchers from Moldova, Moldavia and Ukraine consider that the *Cucuteni* Culture has its origins in the *Precucuteni III* Culture. We do ascertain that the *Precucuteni III* findings are missing in Transylvania. This situation would plead for the existence of a cultural group of *Ariuşd* type, or for a genesis under the *Petreşti* Culture, *Foeni* group influence of the *Ariuşd – Cucuteni* complex[54].

The Ariuşd type settlements from southeastern and eastern Transylvania

Even if there is a name accepted by the specialized literature, the one of "*Cucuteni-Ariuşd-Tripolie Cultural Complex*", or its short version of "*Cucuteni-Tripolie Culture*[55]", for the discoveries made in the western area of the culture (south-eastern and eastern Transylvania) we will use the term of "*Cucuteni-Ariuşd Culture*" or its short version, "*Ariuşd type*" discoveries.

The most important settlements, that have a vertical or horizontal stratigraphy that proves long-term habitation, are found on the upper course of the Olt River, on the upper course of the Negru River and an isolated one is found on the Mureş River (on the territory of Tg. Mureş city). According to the Archaeological Repertoires of Covasna, Harghita, Braşov and Mureş counties, the number of *Ariuşd* type settlements is of about 40, to which we can add other 50 points with isolated discoveries of this type[56] (Fig. 1/4).

The *Ariuşd* type settlements occupy a surface of about 5000 mp and are found on different types of geographical forms. Most of them are placed on hills, naturally protected on two or three directions.

More simple or complex fortification systems were elaborated in some *Ariuşd* type settlements from south-eastern Transylvania, consisting of ditches (sometimes paved with stones), earth and stone ramparts or counter-ramparts (or with stone core), palisades and fences. These systems resemble in many ways the defending solutions used at the settlements belonging to the Cucuteni A phase from Moldova[57].

The preoccupations regarding the reconstruction of the appearance and construction techniques of Eneolithic and Neolithic dwellings are as old as the research of these prehistoric periods itself; this observation refers to the Ariuşd-

[52] Buzea & Lazarovici 2005, 46.
[53] Mantu 1998, 34.
[54] Buzea & Lazarovici 2005, 46.
[55] Ursulescu 2007, 9.
[56] László 1911; Roska 1943; Monah & Cucoş, 1985; Cavruc 1998; Cavruc 2000a; Popovici 2000; Costea 2005.
[57] László A. 1993, 49.

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Cucuteni-Tripolie Culture as well. The new hypotheses that were launched in the last decades (two-storied houses, dwellings built on pillars, at a certain height from the soil etc.) roused heated discussions that contributed to the clearing of some ideas and even to the conciliation of those hypotheses that seemed to be incompatible before[58].

The observations made at Ariuşd and Malnaş Băi (also corroborated with those from the Cucuteni and Tripolie settlements) point out that, so far, the resistance structures propped upon posts buried in the ground were used only in the case of those dwellings which had simple clay floor. It seems that for building dwellings with a wooden platform the posts were placed in wooden foundation beams[59].

The Cucuteni dwellings had one or more fire installations. Generally, when we find more hearths in a dwelling we deal with at least two rooms, fact which was confirmed by the archaeological discoveries. The exterior firing installations, less than the interior ones, were a part of simple summer kitchens that were used by one or several dwellings[60].

Pottery firing ovens were also used in the settlements belonging to the Cucuteni-Ariuşd-Tripolie complex, and 12 such installations were found at Ariuşd–Dealul Tyszk. These pottery centres, with large workshops for producing vessels and decorating them with painted and engraved motifs, were formed in those areas where one found reserves of mineral raw materials, clay and colouring matters[61].

The "*pair settlements*" are quite known for this culture, placed on both sides of a river, at about 1–2 km away of each other, as for example those from Olteni (Bodoc Commune, Covasna County) "*Cetatea Fetii*" – Olteni "*În dosul Cetății*"[62]; Ariuşd (Vâlcele Commune, Covasna County) "*Dealul Tyiszk*" – Bod "*Dealul Popilor*" (Bod Commune, Braşov District).

Most of the settlements are placed at altitudes between 500–650 m, the only exception being the settlement from Păuleni Ciuc (882 m).

The *Ariuşd* type communities also used as shelter, for a short period of time, the caves found on the Cheile Vârghişului (as for example *Peştera Mare* from Mereşti, Harghita County), probably during their searches for food, ores, rocks and other materials. The archaeological materials found in these caves prove this theory[63].

We have to mention that many mineral water springs are found right nearby the *Ariuşd* type settlements and, in some cases, these water springs are slightly

[58] László A. 2007, 103.
[59] *Idem* 2007, 109.
[60] Scarlat 2007, 159–160.
[61] Alaiba 2007, 148.
[62] Buzea 2006a, 82–85 Pl. II/2.
[63] Marcu 1976, 73–95; Emődi 1980, 429–431.

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salted (Olteni, Vâlcele, Ariuşd). The river terraces and meadows offered optimal conditions for agriculture and animal breeding. Hunting and fishing played important roles in the occupations of that time.

Information regarding the importance of the archaeological researches from Păuleni Ciuc – Ciomortan

* After 1990 the research regarding the Cucuteni-Ariuşd Culture from Transylvania are a step behind those from the eastern area of this culture. The only site where this Eneolithic culture is systematically investigated is found at Şoimeni, Păuleni Ciuc – Ciomortan, Harghita County.

* The research brought information regarding the way the settlement's space was organized, the way the dwellings, hearths and "waste" pits were placed (Fig. 5/8). Since not all dwellings were contemporaneous, we cannot tell exactly if they were placed on more than one row. The dwellings were placed in a semicircle, on the exterior edge of the promontory.

* The dwellings discovered so far at Păuleni Ciuc can be classified as follows:

– dwellings with floor made of beams, on which a thick layer of clay was applied;

– dwellings with floor made of earth and settled gravel;

– dwellings with the floor partially made of clay;

– dwellings with the floor arranged directly on the old humus.

Due to the fact that the natural ground is in a slope, in some cases the natives preferred to arrange the floor of the dwelling on a structure made of wooden beams and posts. The dwellings had two or more rooms.

* The fire installations were found inside and outside of the dwellings, as well as in the precincts of the settlement. Several large hearths were investigated; these probably functioned out-doors. The way the hearths were built was the same, in most of the cases: all hearths had a "bed" made of stones, upon which a layer of clay was applied.

* In the 2006 archaeological campaign an experiment was conducted: a hearth was built, following the Cucuteni model. Warming up around such a hearth is more efficient. Even the different products could be easier prepared, by simply moving the red-hot coals from the smooth surface of the hearth and placing the products directly on the hot hearth[64].

* Based on the stratigraphy and on the analysis of the ceramic material we could define 3 habitation levels of the Cucuteni-Ariuşd period, as it follows: *The*

[64] Buzea *et alii*, 2008, 217–232.

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Păuleni I Eneolithic Level (that corresponds to an early stage of the Cucuteni A2 phase); *The Păuleni II Eneolithic Level* (that corresponds to the Cucuteni A2 phase from Moldova); *The Păuleni III Eneolithic Level* (that corresponds to a late stage of the Cucuteni A2 phase) [65].

* The ceramic inventory of L. 17 consisted of good quality pottery fragments, well fired (mostly by reducing firing) and painted with white on the vessel's natural background. This complex found in the *Păuleni I Eneolithic Level* corresponds to an early stage of the Cucuteni A2 Phase, probably Phase A1.

* The ceramic inventory of Dwellings 5, 5A, 21, 24 and 31 consisted of pottery painted in two colours (white or red on the natural background of the vessel) and painted in three colours (white, red, black on the vessel's background), which is typical for the Cucuteni A2 Phase from Moldova.

* The ceramic inventory found in Dwellings 4, 6, 12 and 16 lacks the painted pottery. On the other hand, one could observe the massive presence of common pottery, this pointing to a late phase of the Cucuteni A2 culture. Pottery fragments belonging to the Bodrogkeresztúr and Cucuteni Phase A-B cultures were also found in this level.

* The presence of ceramic materials belonging to the Coţofeni Culture was noticed in the upper part of the Cucuteni-Ariuşd cultural layer. Complexes belonging to this culture were probably destroyed when the rampart was built in the Middle Bronze Age.

* Although it is one of the most investigated sites from Transylvania, the Păuleni Ciuc-Ciomortan settlement is far from being entirely researched. It still hides many secrets and holds a very precious scientific potential. By continuing the researches in this site, we will substantially contribute to a better knowledge of the prehistory of this area. The good state of preservation of the vestiges, the outstanding chronological palette that outlines the relations between Moldova and Transylvania, recommend this site as being a real research laboratory of the Eneolithic and Bronze Age civilizations[66].

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[65] Kavruk *et alii*, 2006, 355.
[66] Cavruc & Buzea, 2006, 69.

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THE CUCUTENI B FROM SĂRATA MONTEORU, MEREI COMMUNE, BUZĂU COUNTY, ROMANIA

CERAMICA CUCUTENI B DE LA SĂRATA MONTEORU, COMUNA MEREI, JUDEŢUL BUZĂU, ROMÂNIA

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Cuvinte-cheie: Sărata Monteoru, Cucuteni B, facies Monteoru, caracteristici ceramică.
Rezumat: În regiunea Buzăului, faza Cucuteni B este reprezentată prin aşezări cu ceramică pictată, care se găsesc şi în zona sitului „Cetăţuia", de la Sărata Monteoru. Locuirea se caracterizează prin colibe, fără fortificaţii create de om, dat fiind că locul era protejat în mod natural de către înălţimea lui, dar şi de poziţia lui, fiind înconjurat de o incintă de alte dealuri. Aceste aşezări au o trăsătură specifică, aşa-numita ceramică cu pastă fină, lustruită, gri-neagră. Acest tip special de ceramică a fost denumit de către Hubert Schimidt faciesul Monteoru a etapei târzii Cucuteni B. Unele trăsături relevante ale acestei ceramici sunt redate în prezenta lucrare.

Key words: Sărata Monteoru, Cucuteni B, Monteoru facies, pottery characteristics.
Abstract: In the Buzău region, the Cucuteni B phase is represented by settlements with painted pottery that are also to be found in the area of the "Cetăţuia" site at Sărata Monteoru. The habitation is characterized by huts with no man-made fortifications, as the place was naturally protected by its height but also by its location, being surrounded by other hills. The distinctive feature of these settlements is the so-called fine greyish-black (burnt) burnished pottery. This distinctive type of pottery was designated by Hubert Schmidt as the Monteoru facies of the late Cucuteni B phase. Some particular features of this pottery are presented in this paper.

The Cucuteni B settlement of Sărata Monteoru is situated in the sub-carpathian region of Buzău county, mainly occupying the NNE slopes of a hill called "Cetăţuia", starting at the lower slopes which were artificially terraced. These settlements represent an actual occupation by Late Neolithic communities with painted pottery who originated in Moldova, south of the Carpathians. The most south-easterly known Cucuteni B settlement also occurs in Buzău county.

Sporadic remains and pits of this type of settlement were also found in the surrounding areas at the southern margin of the Cetăţuia. This last-mentioned southern region of these settlements together with other archaeological remains of the Bronze Age and the 12th century A.D. were destroyed by villas constructed in the Valea Călugărului between 1990 and 1994.

The settlements are characterized by huts made of wooden slats or twigs plastered with clay, but without the wooden, clay-plastered floor found in other Cucuteni B sites. This may be explained by the fact that they were constructed on narrow terraces, on hill slopes.

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Nowhere in the area was any evidence of fortifications found. In fact the "Cetățuia" Hill is naturally fortified by its height, but also by its position surrounded by other hills.

These settlements are distinguished from other Cucuteni B settlements by their painted pottery and by the presence of burnt, greyish-black, burnished fine pottery (Fig. 1/1–7). This ceramic type, found for the first time at Sărata Monteoru, beginning even with the early research of Hubert Schmidt, led to the recognition of the Monteoru facies of the late Cucuteni B ceramics.

The principal economic activities of the area were stockbreeding and plant cultivation. The first is evidenced by the large quantity of domestic bovid and ovicaprid bones. Horse was also very important. The second main activity is attested by the use of chaff and straw as construction materials, but also by a pot containing charred wheat grains, discovered beneath the remains of a dwelling. The numerous loom weights, (possibly used for fishing) are also helpful for understanding these activities.

The most important discovery, however, relates to copper metallurgy. In the burnt adobe of a ruined hut was discovered an Aegean type dagger (Fig. 3/1) with two hafting rivets, and two small axe-heads (Fig. 3/2, 3). In a pit were found copper beads, which points to a local metallurgical industry.

Pottery: the main form is the amphora with a biconical body, cylindrical neck, everted rim and two small lateral handles on the vessel shoulder (Fig. 1/8-9). There are also conical dishes with numerous anthropomorphic (Fig. 1/10-11) but mostly zoomorphic figural decorations, both of which are traditional for the Cucuteni culture. The dish and drinking vessels that were so characteristic of stages A and AB of the Cucuteni culture disappear. In their place appeared a cup with a large functional handle, in both the reddish and the greyish burnt pottery.

Painting was used in both ceramic categories, but there is also a large quantity of pottery (in both categories) that is unpainted. To put this in context, I will briefly sketch the evolution of painting styles in the three main phases of the Cucuteni Culture, A, AB, and B. In phase A the main style was of continuous spiral-meandrical character. In phase A-B there was a shift toward stylization of the same motifs, but adapted to the shape of the pot. The painted motif was used sporadically. In phase A-B changes take place to a certain extent: styles ά and ß (alpha and beta) in some cases have the background subdued and the painted bands which carry the motif have equal emphasis – the first signs of the evolution of positive painting toward the next phase (Fig. 2/2–10).

Once the transition to phase B of the Cucuteni culture occurred, the painting became gradually positive, in the sense that the applied painted bands form the decoration proper, passing gradually from bichrome to a mixture of bichrome and monochrome.

*

The Cucuteni B pottery from Monteoru is characterized by the dominant presence of painted pottery, namely the ξ and ε (zeta and eta) styles: of these two styles the ξ style is the most widely used, characterized by large red stripes between brown-black ones. Besides these two styles there are also δ1 and δ2 (delta 1 and detla 2) and γ1 and γ2 (gamma 1 and gamma 2) styles.

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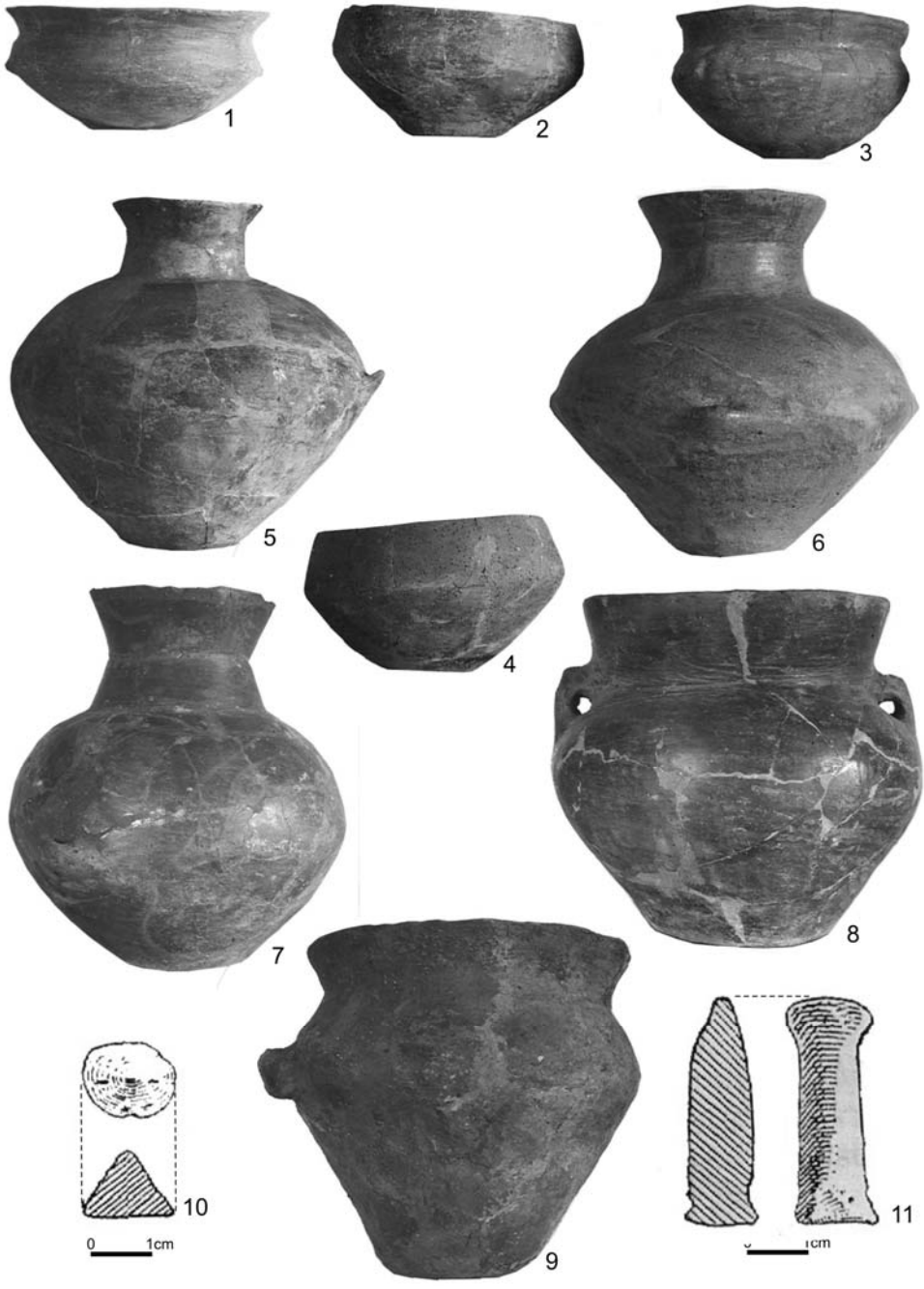

Fig. 1 – 1–7 grey pottery; 8, 9 common ware; 10–11 clay idols.

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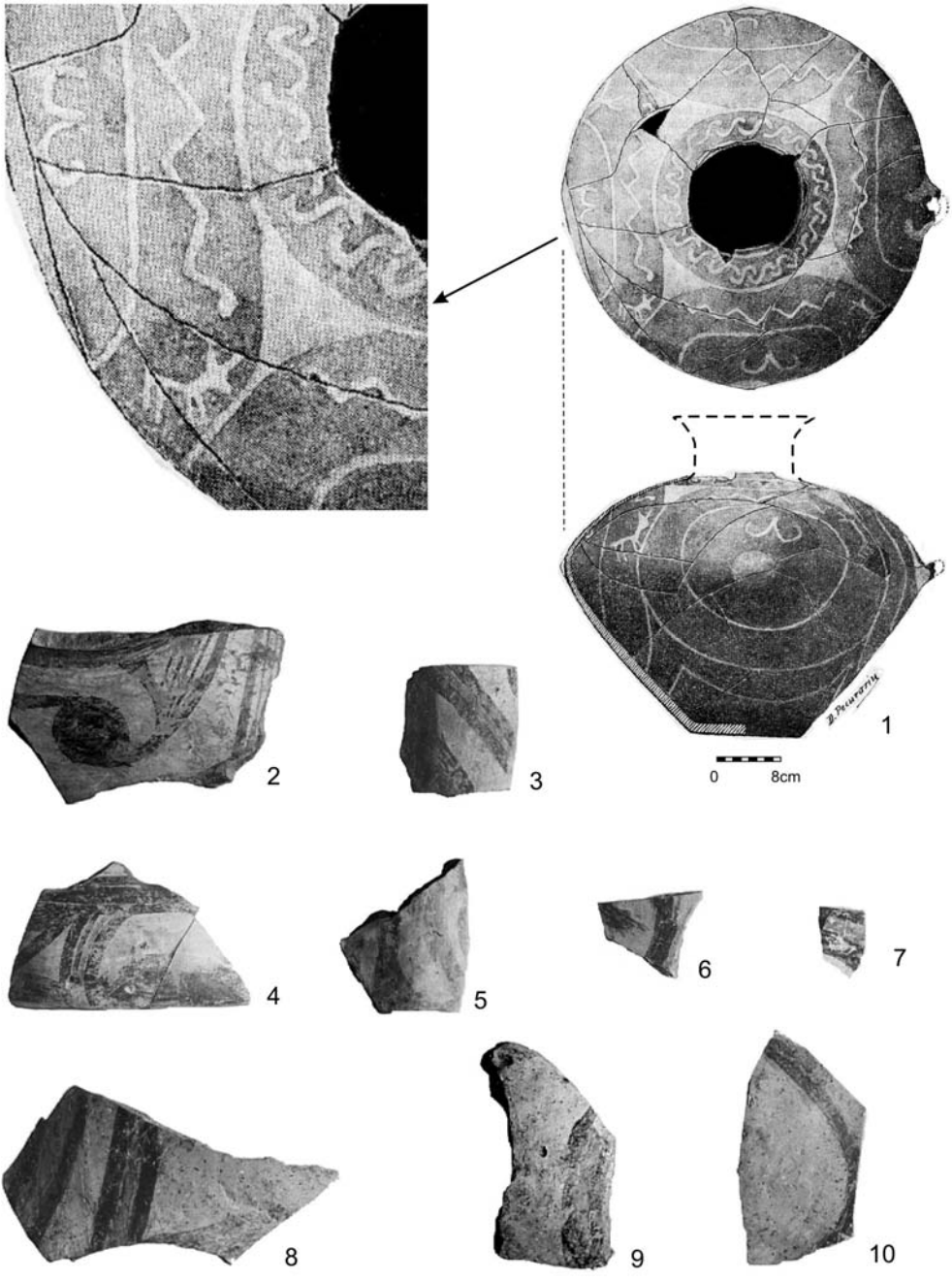

Fig. 2 – 1 grey pottery painted with white matter; in detail animal motifs and joint spirals, shapes as an S; 2–10 ceramics burnt to red, with positive painting.

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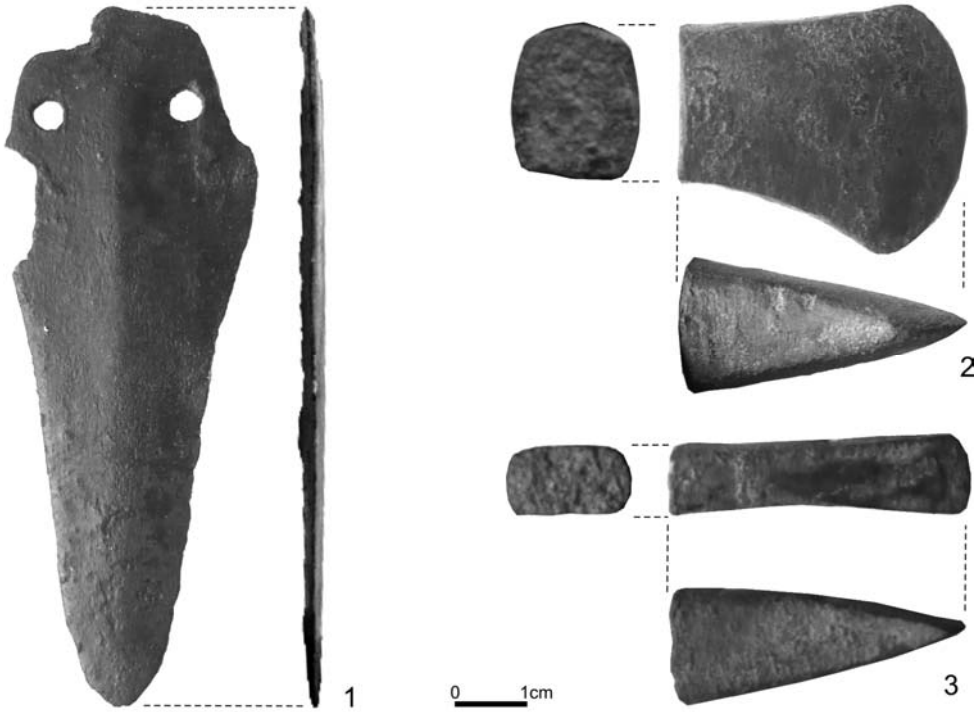

Fig. 3 – 1 copper dagger; 2, 3 fragmentary copper axes,
with possible crossed cutting edges.

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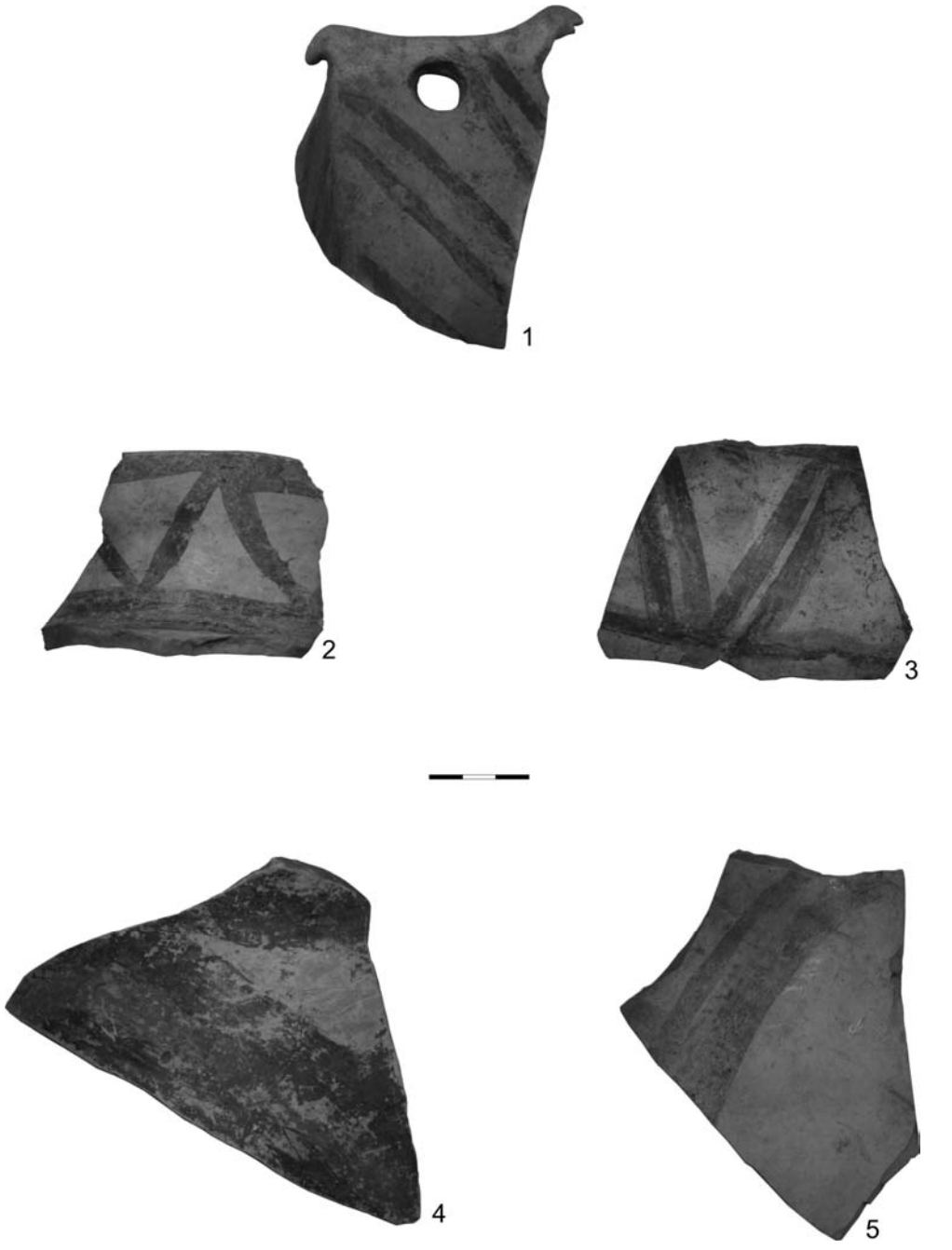

Fig. 4 – Burnt to red pottery, with painting in brown and red stripes (in Zeta style).

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The greyish burnt pottery is mostly unpainted, but a few pots are painted in white (Fig. 2/1), and very rarely painting in blood red is found. Also very rare in this ceramic tradition is excised decoration (spirals), probably filled with paste, and relief decoration (stylized bucrania) made from applied paste.

Ceramic C is well represented by various forms of kraters, vessels with an oval body, and drinking cups with high, cylindrical necks. The decoration consists of impressions in various motifs, such as (i) simple bands on a single row, three rows, or in zig-zag; (ii) embossed knobs, meandered bands, horizontal angled lines; (iii) a row of small triangles covered with small impressions; (iv) horizontal bands of lines or triangles covered with impressions; and (v) applied knobs. On the rims of the vessels there are impressions usually called "twisted cord". Many of the motifs used in this ceramic category would be found again in the Early and Middle Bronze Age. In the ceramic C, the first non-plastics are used in the form of crushed shell or crushed limestone.

Such Cucuteni B settlements do not extend beyond the east and south Carpathian hill area, or the distribution range of the late settlements with painted pottery. The Cucuteni B settlement of Sărata Monteoru can be assigned to the same phase as the Cernavoda Ic-Râmnicelu settlement (which however had no white-painted grey ceramics).

The latest research undertaken at Cucuteni-Băiceni has confirmed the earlier observations of Hubert Schmidt that there were two Cucuteni B levels, B.1 and B.2. Therefore, the painted pottery in the Cucuteni B settlement of Sărata Monteoru should be assigned to the B.2 horizon. More recent investigations have established the position of the Cucuteni B settlements-Monteoru facies in the evolution of the Cucuteni B phase.

In this session, celebrating the 85th birth anniversary of Eugen Comşa, Ruxandra Alaiba presented in her paper the latest results concerning the position of the Cucuteni B settlements, Monteoru facies: "Ştefan Cucoş found similarities between the method used to prepare the paste of the Monteoru type pottery and that used for the Cernavoda Ib ceramics from Râmnicelu, Brăila County. According to him, the synthesis between the Cucuteni B.2 and Cernavoda I pottery led to the development of the Monteoru ceramic variant; therefore the Monteoru facies should belong to level B.2b of the Cucuteni B phase"[1].

[1] This information was provided by Ruxandra Alaiba, who presented a paper on the topic at the International Symposium dedicated to the 85th birth anniversary of Eugen Comşa.

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LE SITE ARCHÉOLOGIQUE DUMEŞTI – *ÎNTRE PÂRAIE* (DÉP. VASLUI), CUCUTENI A_{3-4}, ROUMANIE. LA CÉRAMIQUE PEINTE – LES VERRES

STAŢIUNEA ARHEOLOGICĂ DUMEŞTI – *ÎNTRE PÂRAIE* (JUD. VASLUI) CUCUTENI A_{3-4}, ROMÂNIA. CERAMICA PICTATĂ – PAHARE

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Cuvinte-cheie: arheologie, eneolitic, complex cultural Cucuteni – Tripolie, Cucuteni A_{3-4}, Dumeşti – *Între pâraie*, ceramica pictată – pahare.

Rezumat: Paharele reprezintă o categorie ceramică aparte, care, prin formă şi decor a dobândit valenţe valorice specifice în cadrul complexului cultural Cucuteni – Tripolie, iar prin modificarea lor în timp, precum şi a altor tipuri de vase, a oferit criterii pentru datarea etapelor cronologice succesive. Originea formei poate fi urmărită în cadrul culturilor din Orientul Apropiat şi Anatolia, dar şi în neoliticul sud-est european. În Precucuteni este considerată „formă principală". Din multitudinea de exemplare descoperite în staţiunea Dumeşti – *Între pâraie*, am ales paharele de dimensiuni medii şi mici, numite pentru frumuseţea lor şi *cupe*. Între ele frecvent s-au semnalat: 1, varianta paharelor mici, cu marginea scurtă, evazată şi corp sferoidal (Fig. 1-4; 5/1, 3-4); 2, varianta paharelor cu marginea scundă, dreaptă, corp bombat sau uşor alungit (Fig. 5/6, 8, 10-12; 7/1, 3-4); 3. varianta paharelor cu forme ovoidale şi marginea scurtă, invazată (Fig. 5/2, 5; 6/1-3, 5, 7-10; 7/2; 8/1); 4. varianta paharelor cu gât scurt, drept sau evazat şi corp bombat (Fig. 5/11, 6-7; 6/6, 4; 8/2-9).
Simbolismul cupelor, vase de ofrandă cu picior – în Evul Mediu vizează „Graalul" – şi al paharelor – ca vase destinate libaţiunilor rituale, se leagă nu numai de forma acestora, de conţinut, dar şi de motivele ornamentale. Simbolismul picturilor cu care s-au acoperit presupune folosirea lor în desfăşurarea anumitor ritualuri – de iniţiere, renaşteri ciclice, cosmice, pornite din centrul manifestării, spre alte direcţii ale orizontului. Între motivele simbolice predominau: *spiralele în S*, rezervate cu negru din fondul alb, uneori reduse la volute înconjurate de ove sau integrate *cercurilor circumscrise*; *motivele în Z*, predominante pe micile pahare ca şi *ovele*, constant secţionate de margini, dar şi motivul apropiat de cel al *tablei de şah*. Prin decorarea minuţioasă a vasului ars, cu deosebire prin acoperirea lui cu pictură, ca şi în orice altă creaţie, se producea ascensiunea spirituală a omului, pentru noi, cei de astăzi, măsura ascensiunii spirituale a complexului cultural Cucuteni – Tripolie; «atunci când se şlefuieşte o gemă, scrie maestul zen Dogen, ea devine un vas; conţinutul acestui vas este strălucirea luminii revelată prin şlefuire, aşa precum în inima omului se produce iluminarea prin concentrarea spiritului»[1].

[1] Chevalier, Gheerbrant 1994, 416.

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Mots clés: archéologie, Enéolithique, complexe culturel Cucuteni – Tripolie, Cucuteni A_{3-4}, *Dumeşti – Între pâraie*, la céramique peinte-verres.
Résumé: Les verres représentent une catégorie ceramique particulière, qui, par la forme et le décor, a acquis des valeurs spécifiques dans le cadre du complexe culturel Cucuteni – Tripolie et dont les modifications dans le temps, comme celles des autres formes, a fourni des critères pour la datation des étapes chronologiques successives. L'origine de la forme peut être suivie dans le cadre des cultures du Proche Orient, et d'Anatolie, mais aussi du Néolithique Sud-Est européen. Pendant Precucuteni on la considère comme „forme principale". De la multitude de formes, découvertes surtout à Dumeşti – *Între pâraie*, nous avons choisi les verres, dénommés aussi coupes, grâce à leur beauté. Fréquemment on a signalé: 1. la variante de petits verres à bord court, évasé et corps sphéroïdal (Fig. 1-5/1, 3-4); 2. la variante des verres à bord court, droit et corps légèrement allongé (Fig. 5/6, 8, 10-12; 7/1, 3-4); 3. la variante des verres à formes ovoïdales, à bord court, invasé (Fig. 5/2, 5; 6/1-3, 5, 7-10; 7/2; 8/1); 4, la variante des verres à bord court, droit ou évasé, et corps bombé (Fig. 5/11, 6-7; 6/6, 4; 8/2-9).
Le symbolisme des coupes, vases d'offrandes, à pied – pendant le Moyen Âge ils visent le Graal, et des verres – destinés aux libations rituelles, est lié non seulement à la forme, au contenu, mais aussi aux motifs ornementaux. Le symbolisme des peintures dont ils ont été couverts suppose leur utilisation dans le déroulement de certains rituels – d'initiation, renaissances cycliques, cosmiques, commencé au centre de la manifestation, vers d'autres directions de l'horizon. Parmi les motifs symboliques, il faut mentionner *les spirales en S*, réservées du fond blanc à l'aide du noir, parfois réduites aux volutes entourées d'oves ou intégrées dans *les cercles circonscrits*; *les motifs en Z*, prédominants sur les petits verres, comme *les oves* d'ailleurs, constamment sectionnés par les marges, et aussi le motif similaire à *la table d'échecs*. La décoration minutieuse du vase cuit, surtout par la peinture, déterminait, comme toute autre création, l'ascension spirituelle de l'homme, pour nous, les gens d'aujourd'hui, la mesure de l'ascension spirituelle du complexe culturel Cucuteni – Tripolie ; «lorsqu'on polit une gemme, – écrit le maître zen Dogen – elle devient un vase ; le contenu de ce vase est l'éclat de la lumière révélée par le polissage, de la même manière que dans le cœur de l'homme l'illumination se passe par la concentration de l'esprit»[1].

La connaissance de la poterie spécifique à la première phase de la culture Cucuteni, des sites étudiés archéologiquement dans le Plateau de Bârlad, surtout de celle provenant des sites à niveaux stratigraphiques non dérangés par les habitats ultérieur, apporte des données importantes concernant l'encadrement chronologique de celle-ci. Une telle situation a été rencontrée à Dumeşti – *Între pâraie*, site daté à partir de Cucuteni A_3, jusqu'en A_4, conformément aux chronologies les plus fréquemment utilisés[2].

L'étude de la céramique de cette période a commencé de l'analyse descriptive et explicative de la forme et des aspects décoratifs. Dans l'ordre de leurs dimensions et fonctionnalité, on a établi quelques types de base: verres, cratères, pots à pied, bols, terrines, couvercles, plats, pots à cou haut et corps bombé, pots amphoroïdaux, pots piriformes-ovoïdaux, pots bitronconiques, supports et pots à sup-

[2] Alaiba 2007, 84–87, Pl. 22–24.

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port, pots doubles ou parallélépipédiques et en miniature. Certains récipients ont aussi sous la lèvre ou sur le corps une cannelure circulaire ou des proéminences.

À Dumeşti – *Între pâraie*, le décor de la céramique, initialement peint librement à la surface du pot, devient tectonique, ordonné en deux ou trois registres horizontaux, parfois aussi verticaux, séparés par de simples lignes blanches, rouges ou noires, mais aussi par des lignes blanches ou rouges, délimitées par du noir. Les motifs principaux formés de bandeaux couverts de couleur étalée rouge-brun, mais surtout blanche, délimitée avec du noir, ont été soit réservés du fond rouge ou blanc du pot, soit peints en positif. L'interspace a été couvert de peinture étendue ou linéaire, toujours différente de celle des motifs, blanche ou rouge-brun. Parfois on a peint aussi le cercle de la base et à l'intérieur on a d'habitude peint en bichromie, au registre supérieur et moyen, rarement en trichromie, ou on a laissé seulement l'engobe qui couvrait le pot. La bichromie est devenue presque une règle pour la peinture intérieure des pots à cou plus large: verres, cratères, bols, terrines, et aussi de d'autres à cou plus étroit, des amphores et pots piriformes.

De la multitude de formes, nous avons choisis les verres, dénommés aussi coupes, grâce à leur beauté. Nous avons utilisé le terme de coupe surtout pour les pots à pied. Les verres représentent une catégorie qui a acquis de valeur spécifique dans le cadre de la culture Cucuteni et dont les modifications dans le temps représentent des critères de datation des étapes successives. L'origine de la forme peut être suivie dans le cadre des cultures du Proche Orient, et d'Anatolie, mais aussi du Néolithique sud-est européen. Pendant Precucuteni on la considère „forme principale"[3].

Dans le Plateau de Bârlad, les verres peints en trichromie ont été fréquentes pendant les étapes Cucuteni A_{3-4}, la plupart du temps ayant été réalisés en argile bien préparée et ils ont été modelés d'une manière particulièrement attentive. La forme est caractérisée soit par la bouche large, légèrement évasée ou droite, quasi-cylindrique, et le corps bombé ou légèrement allongé, terminé par une base à petit diamètre, droit ou concave. On peut différencier par rapport à l'ouverture du bord, approximativement égale au corps plus petite ou plus large, par le degré d'inclinaison du bord, le finissage de la lèvre, arrondie, rarement amincie et la forme du corps légèrement bombé**,** sphéroïdal ou bitronconique. La plupart ont à l'intérieur une peinture bichrome, des anses, ou de petites proéminences perforées, d'habitude situé sur la courbure maximale. Ce rarement que la manière de constitution des registres s'éloigne des normes générales.

Fréquemment on a signalé: 1. la variante de petits verres à bord court, évasé et corps sphéroïdal; 2. la variante des verres à bord court, droit et corps légèrement allongé; 3. la variante des verres à formes ovoïdales, à bord court, invasé; 4, la variante des verres à bord court, droit ou évasé et corps bombé.

[3] Marinescu-Bîlcu 1974, 58.

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1. ***La variante des petits verres à bord court, évasé et corps sphéroïdal, au diamètre de la lèvre proche à celui du corps***, $ø_{lèvre} < ø_{corps}$.

Ce sont les exemplaires couverts à l'extérieur de motifs angulaires conjugués, peints de bandeaux très étroits, blancs, positifs, délimités de noir, et l'interspace rouge linéaire qui ont été le plus fréquemment signalés à Dumeşti – *Între pâraie*. Entre eux, deux verres découverts en fosse no. 7 – F_7, ont été peints en trichromie, l'un sur fond brun-rougeâtre clair, l'autre sur fond blanc, à oves à tangentes et boucles sur le cou, à motifs angulaires en fils horizontaux formés de trois éléments doubles accrochés et conjugués sur le corps, à la base couverte d'un réseau de lignes ou à deux oves (Fig. 1/1 = 10/4; 1/2). Dans la même fosse, on a trouvé deux exemplaires à motifs angulaires conjugués disposés à travers toutes la surface, ayant l'interspace couvert de rouge étendu ou linéaire (Fig. 1/3, 5).

Le cou d'autres verres a été peint d'oves horizontalement alternantes avec une spirale en S. Sur le corps des motifs angulaires se succèdent (Fig. 2/3). Similairement, à l'intérieur on retrouve des oves circonscrits, réalisés avec du rouge sur un fond blanc, plus rarement seulement de peinture rouge, et l'interspace est brun, linéaire ou étendu. La plupart gardent encore sur l'épaule des proéminences coniques perforées ou proches de la forme de petites anses (Fig. 1/1–3, 5; 2/1–4, 6-8; 3/1–2; 4/1–3). Deux présentent sur le cou un motif en *table d'échecs* et à l'extérieur, sur le corps, toujours une composition à motifs décrivant des Z, prévus de ligatures (Fig. 3/1–2), à l'interspace ligné de brun et à l'intérieur présentant une peinture bichrome à oves circonscrite brunes sur un fond blanc[4]. Un petit nombre de verres ont été couverts de couleur rouge à l'extérieur (Fig. 2/5) ou seulement à l'intérieur (Fig. 5/7, 9, 11).

C'est de la même fosse, no. 7, qu'on a récupéré des fragments provenant de deux autres verres (Fig. 1/4, 6), qui ont permis la reconstitution par dessin du décor peint à l'extérieur dans le style de la sous-phase Cucuteni A_4, mais seulement à quelques lignes noires et rouges sur le fond blanc, ordonnées en cercles concentriques sur le corps bombé, au centre hachuré ou libre et la base hachurée. Le second verre présente au-dessus de ce décor une cannelure. On les distingue par la technique picturale linéaire, à noire et rouge sur le fond blanc, aux hachures peints avec du noir linéaire et non avec du rouge, mais toujours dans le style ornemental spécifique de la fin de la première phase, Cucuteni A. La manière picturale a été utilisée sur certains pots découvertes dans les sites de Drăguşeni – *Ostrov* ou Drăguşeni – *Lutărie*, publiés parfois aussi comme découvertes de Drăguşeni – *Săveni*[5]. Anton Nițu, dans les études concernant l'interprétation des groupes stylistiques spécifiques de la céramique cucuténienne peinte, a inclus ce type d'ornement dans le cadre de «l'espèce à décor linéaire trichrome à noir et rouge sur fond blanc»[6]. Les éléments du même style pictural, annonçant la formation de la phase de transition Cucuteni A-B, apparaissent aussi sur la céramique découverte à Chetreşti – *Capul Dealului*, dép. Vaslui[7].

[4] Alaiba & Văcariu, 2005, 4, Fig. 1.
[5] Crîşmaru 1977, 35, Figs. 48–49.
[6] Nițu 1984, 19–21, Figs. 4/8; 5/6–7.
[7] Alaiba 2002, 33 et suiv., Fig. 20/1.

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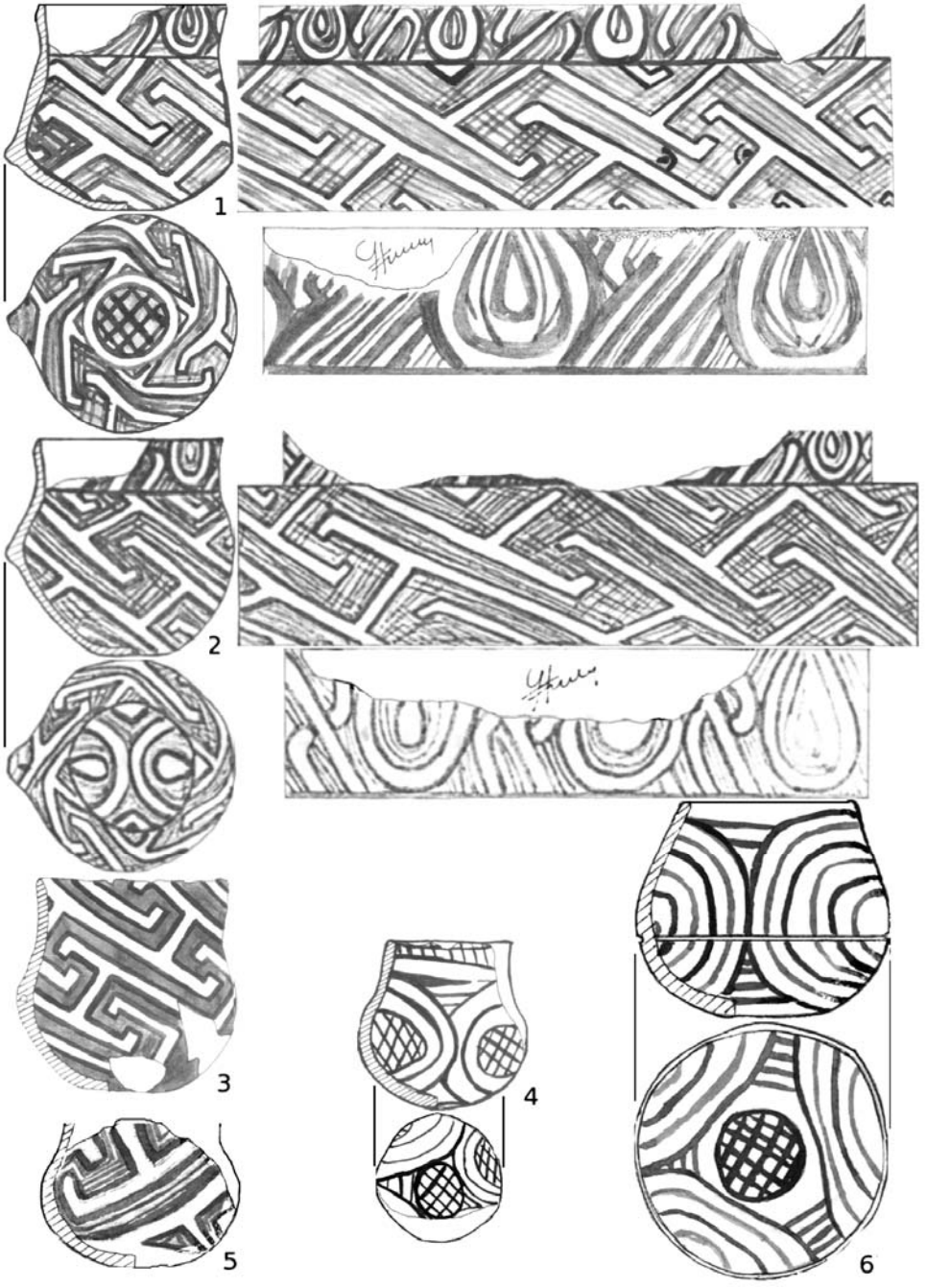

Fig. 1 – Dumeşti – *Între pâraie*, fosse no. 7. Verres.
Exemplaire peint en trichromie sur fond brun 1, 3, et blanc 2, 4–6. Cucuteni A_{3-4}.

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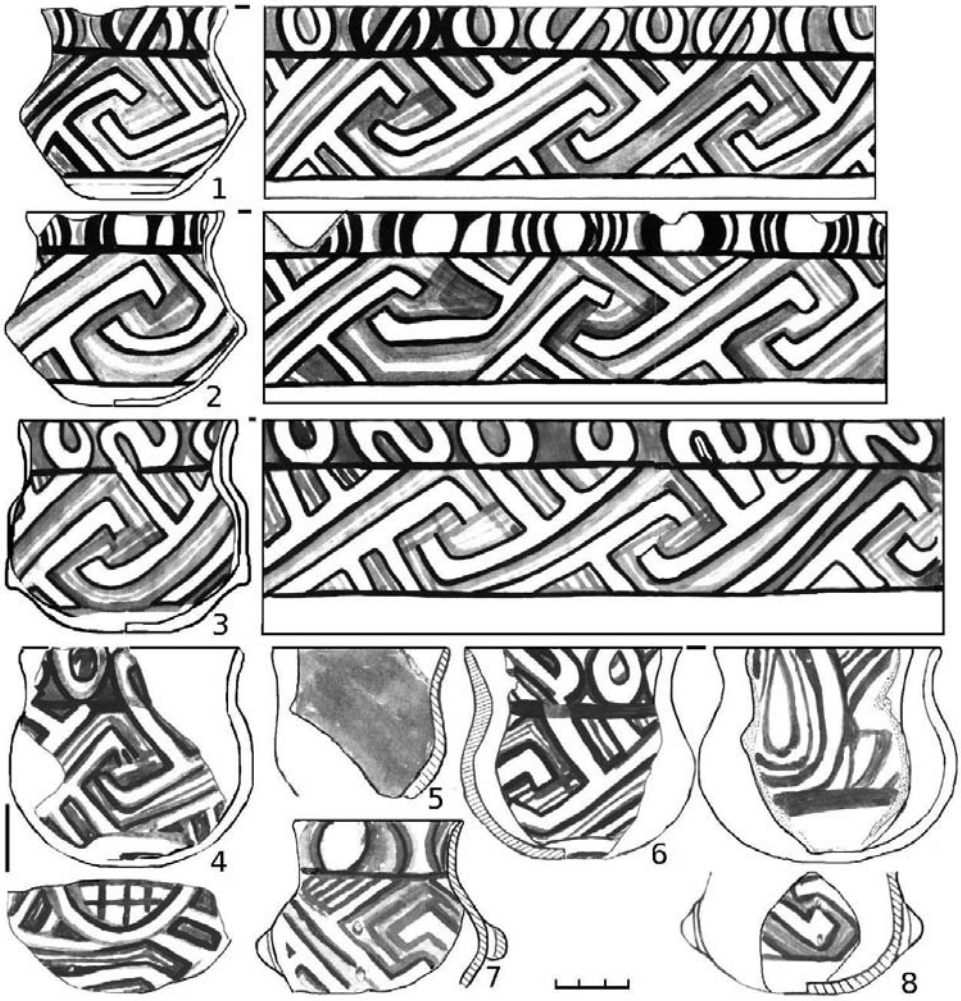

Fig. 2 – Dumeşti – *Între pâraie*, 1–7 fosse no. 7; 8 demeure no. 6. Verres. Exemplaire peint en trichromie sur fond blanc 1–4, 6–8; couverte de couleur 5. Cucuteni A_{3-4}.

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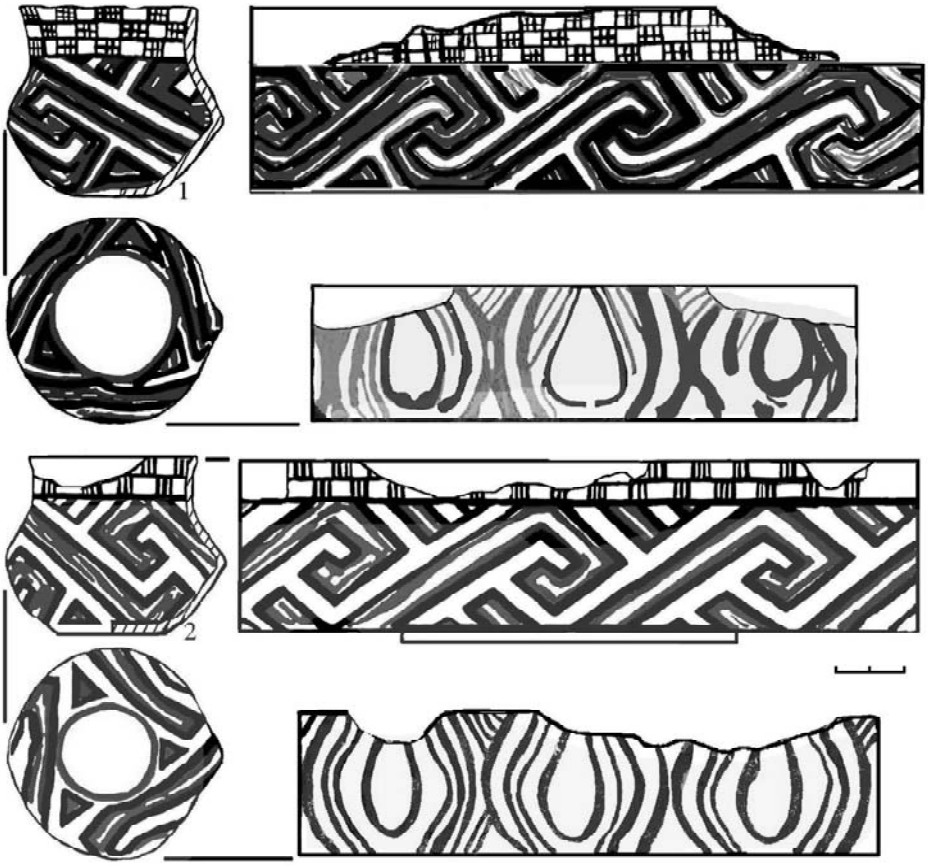

Fig. 3 – Dumeşti – *Între pâraie*, 1–2 fosse no. 7. Verres. Exemplaire peint en trichromie sur fond blanc 1–2. Cucuteni A_{3-4}.

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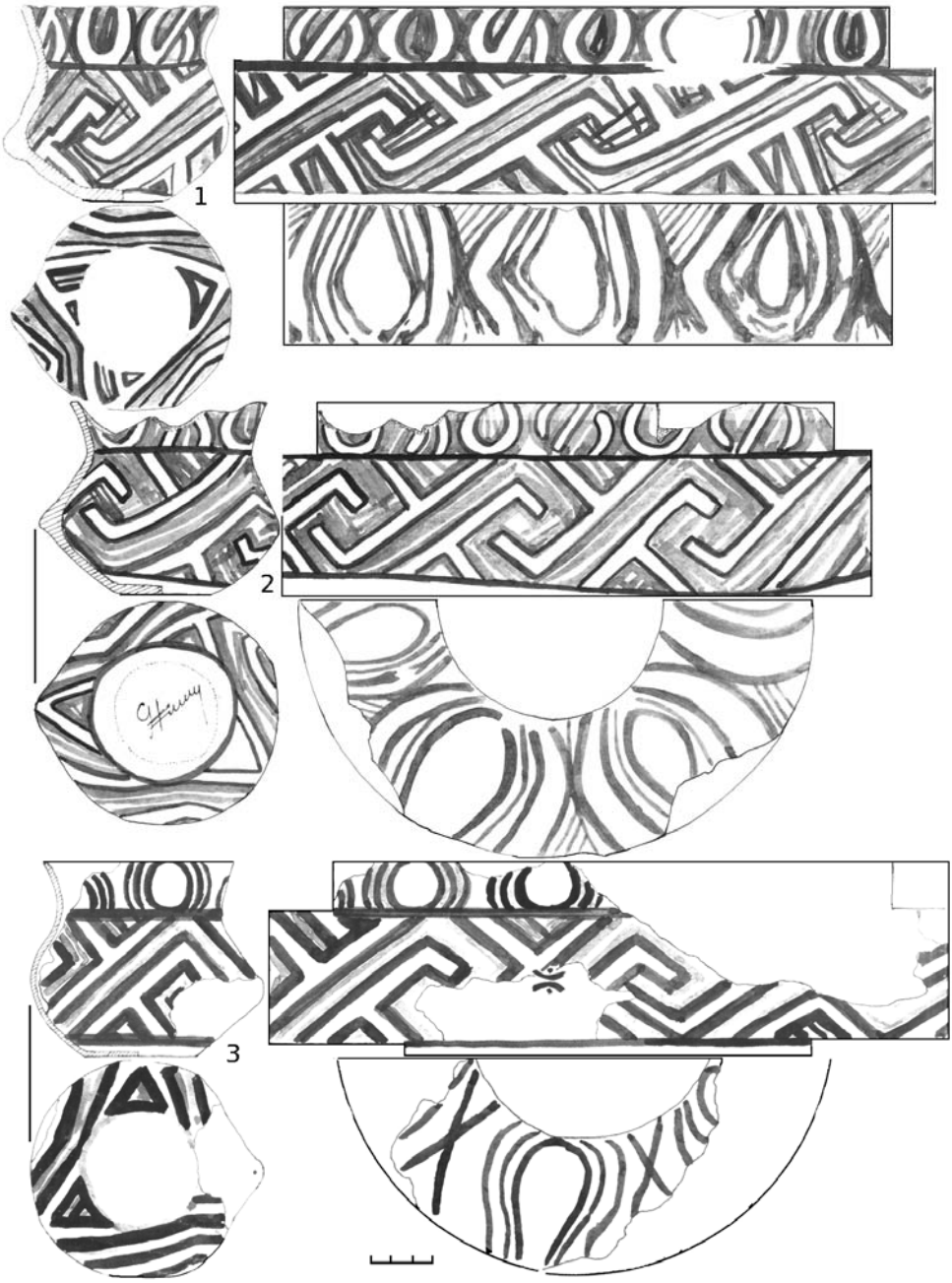

Fig. 4 – Dumeşti – *Între pâraie*, 1–3, fosse no. 7. Verres. Exemplaire peint en trichromie sur fond brun 1 et blanc 2–3. Cucuteni A_{3-4}.

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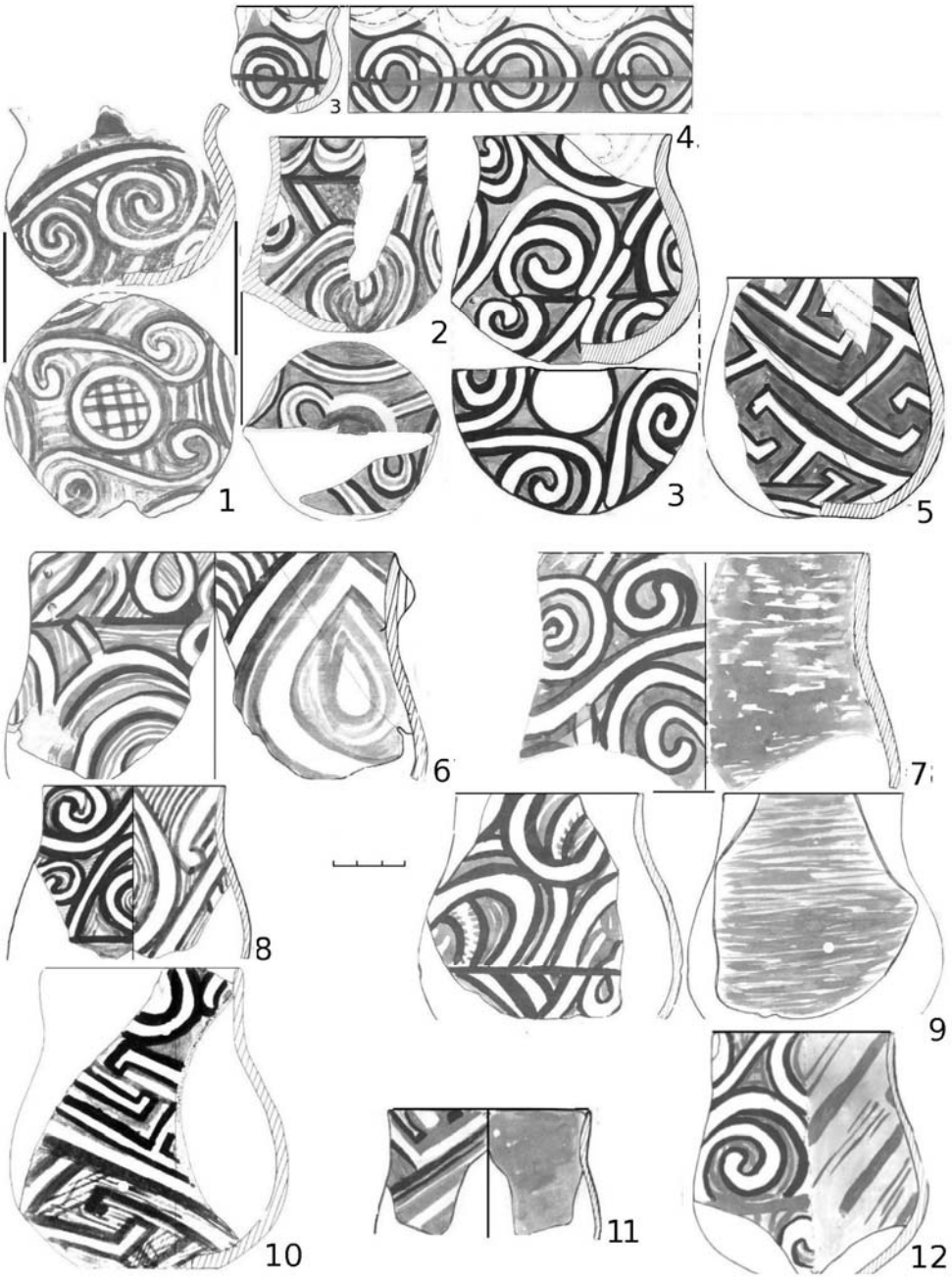

Fig. 5 – Dumeşti – *Între pâraie*, 1, 9 fosse no. 2; 2, 6 demeure no. 7; 8 demeure no. 3, 12 demeure no. 1; 7, 10–11 dans la couche. Igeşti – *Scândureni* 3–5. Verres. Exemplaire peint en trichromie. Cucuteni A_{3-4}.

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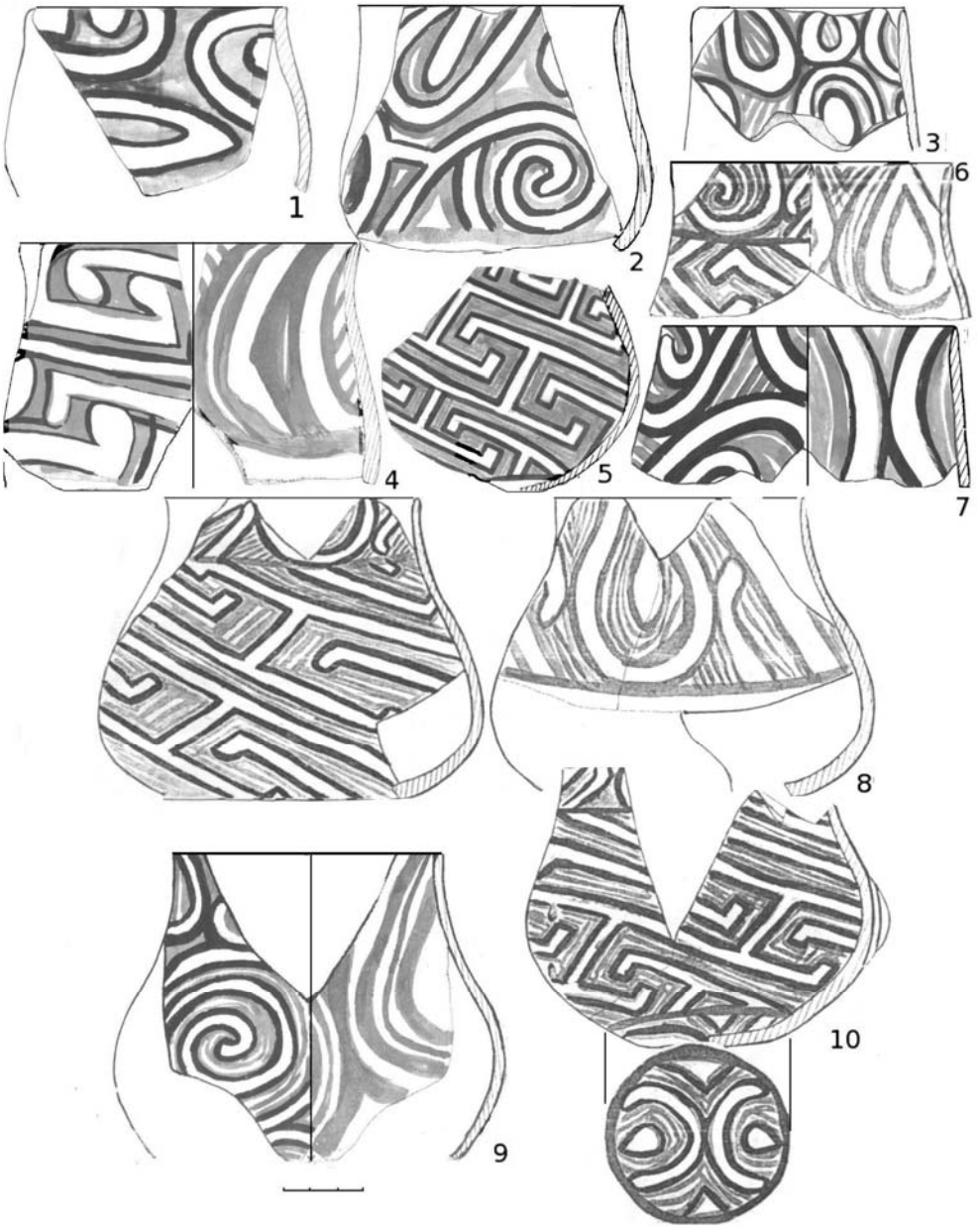

Fig. 6 – Dumeşti – *Între pâraie*, 1–2 fosse no. 7; 3, 5 dans la couche; 4 demeure no. 3; 6, 8–10 demeure no. 6. Exemplaire peint en trichromie sur fond blanc 1–2, 4–5, 6, 8–10 et brun 3, 7. Armăşoaia – *În Luncă* 7.

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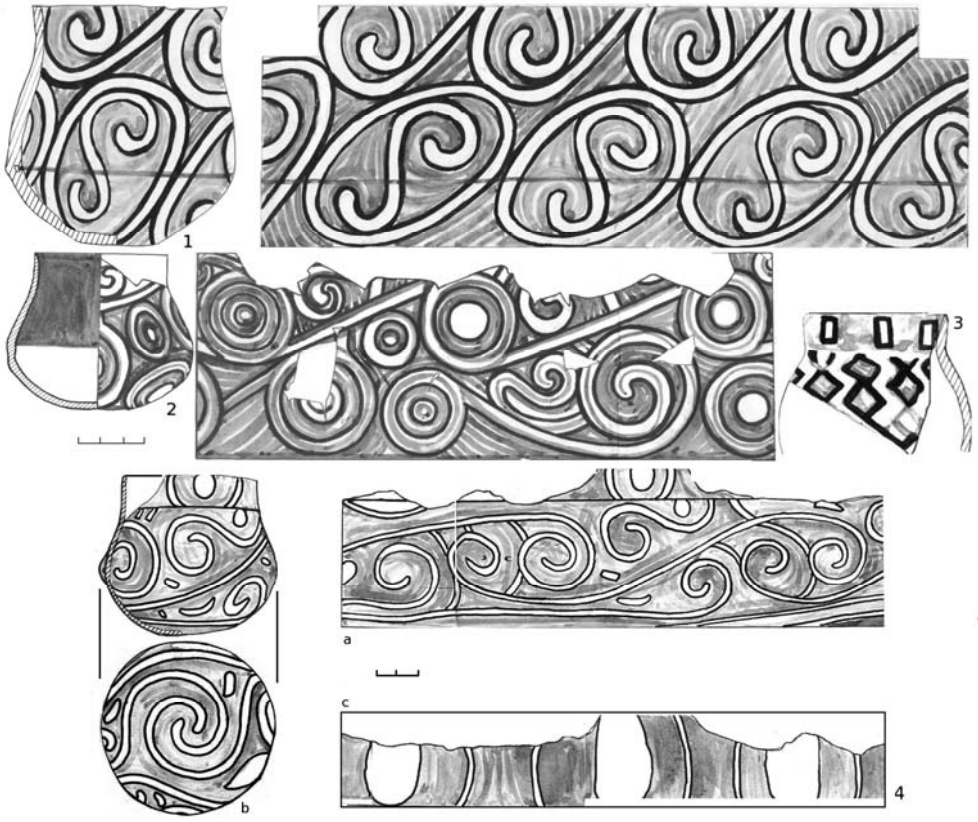

Fig. 7 – Dumeşti – *Între pâraie*, 1–2 demeure no. 6; 4 demeure no. 7; 3 Igeşti – *Scândureni*. Verres. Exemplaire peint en trichromie. Cucuteni A_{3-4}.

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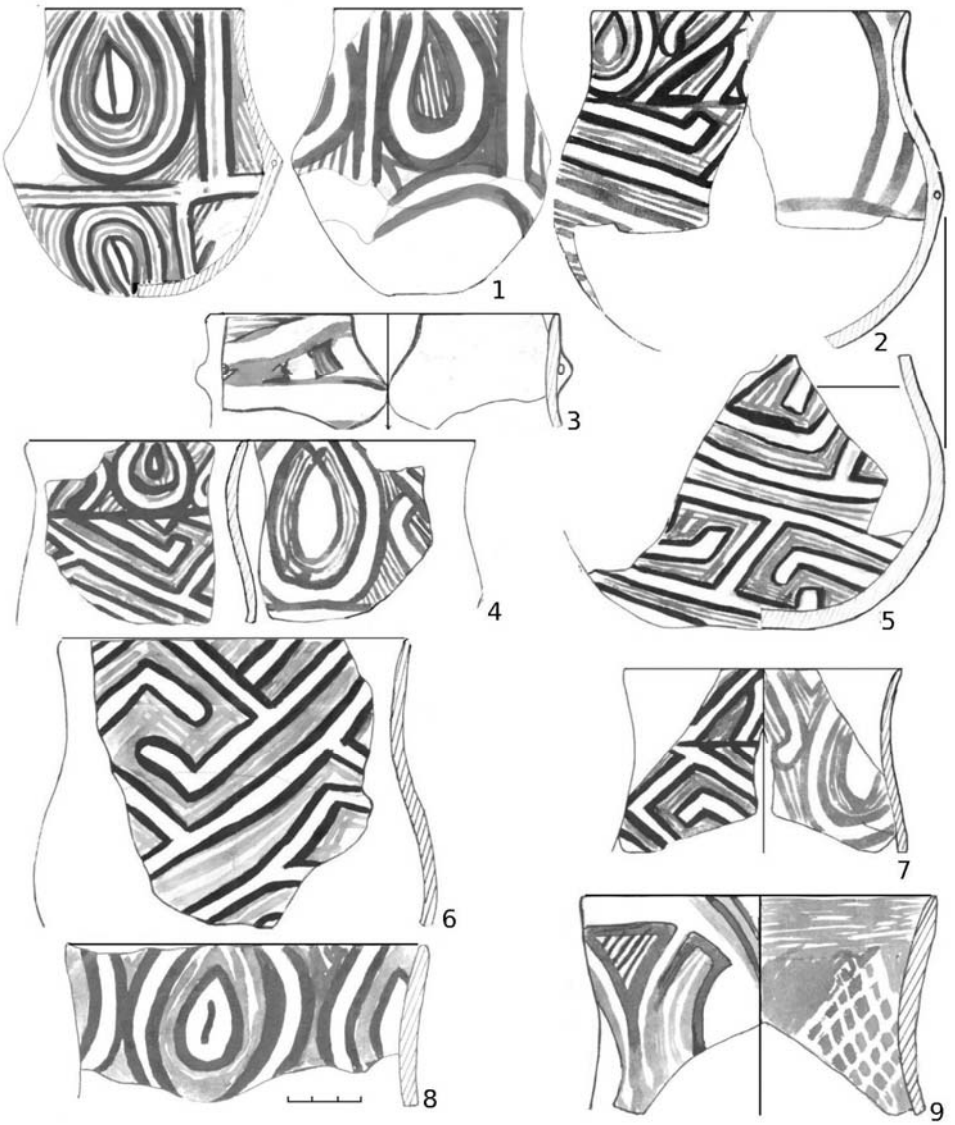

Fig. 8 – Dumeşti – *Între pâraie*, 1 demeure no. 8, 2 dans la couche; 3 fosse no. 6, 4–9 demeure no. 3. Verres. Exemplaire peint en trichromie. Cucuteni A_{3-4}.

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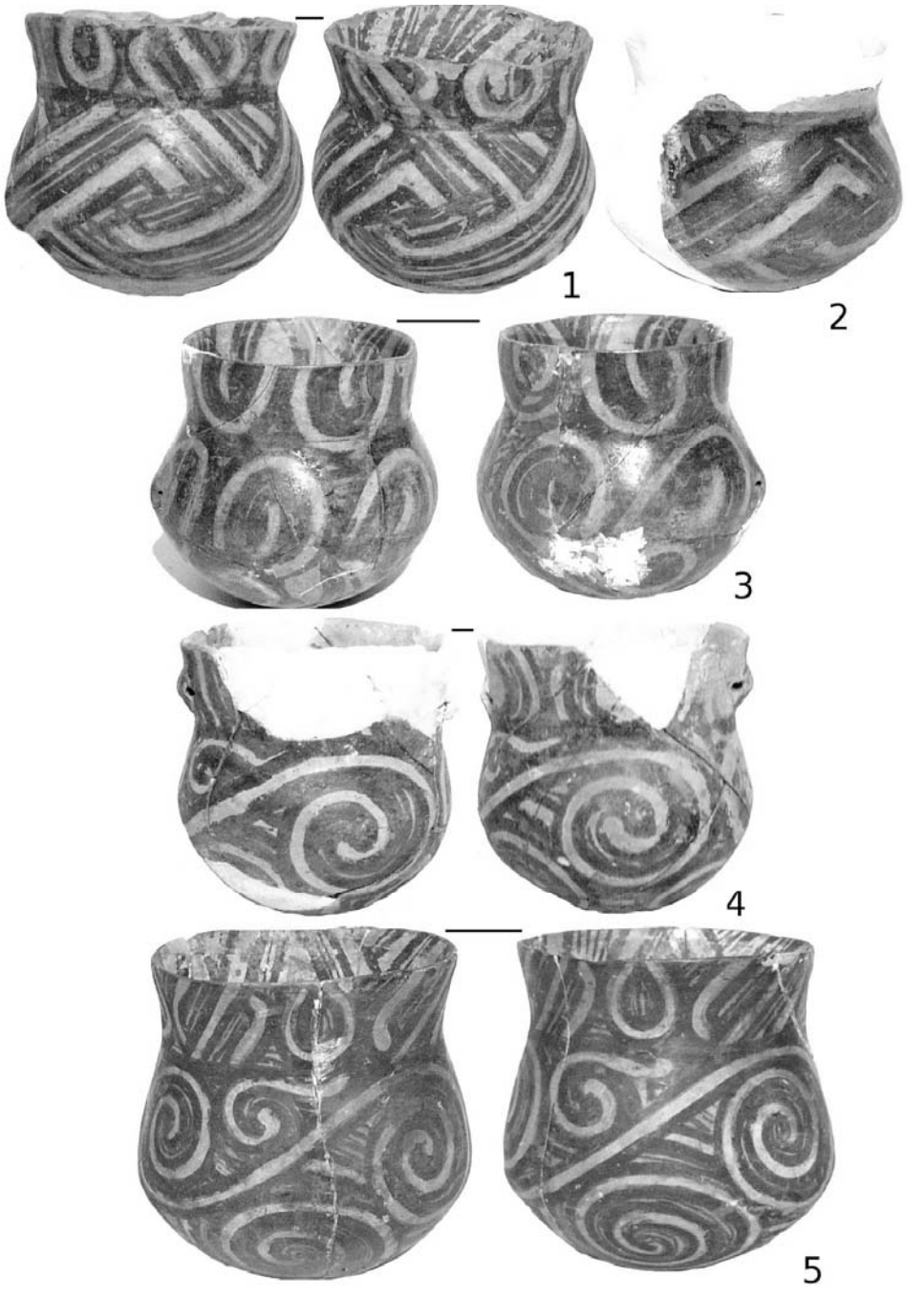

Fig. 9 – Dumeşti – *Între pâraie*, 1–2, fosse no. 7. Verres. Exemplaire peint en trichromie. Cucuteni A_{3-4}.

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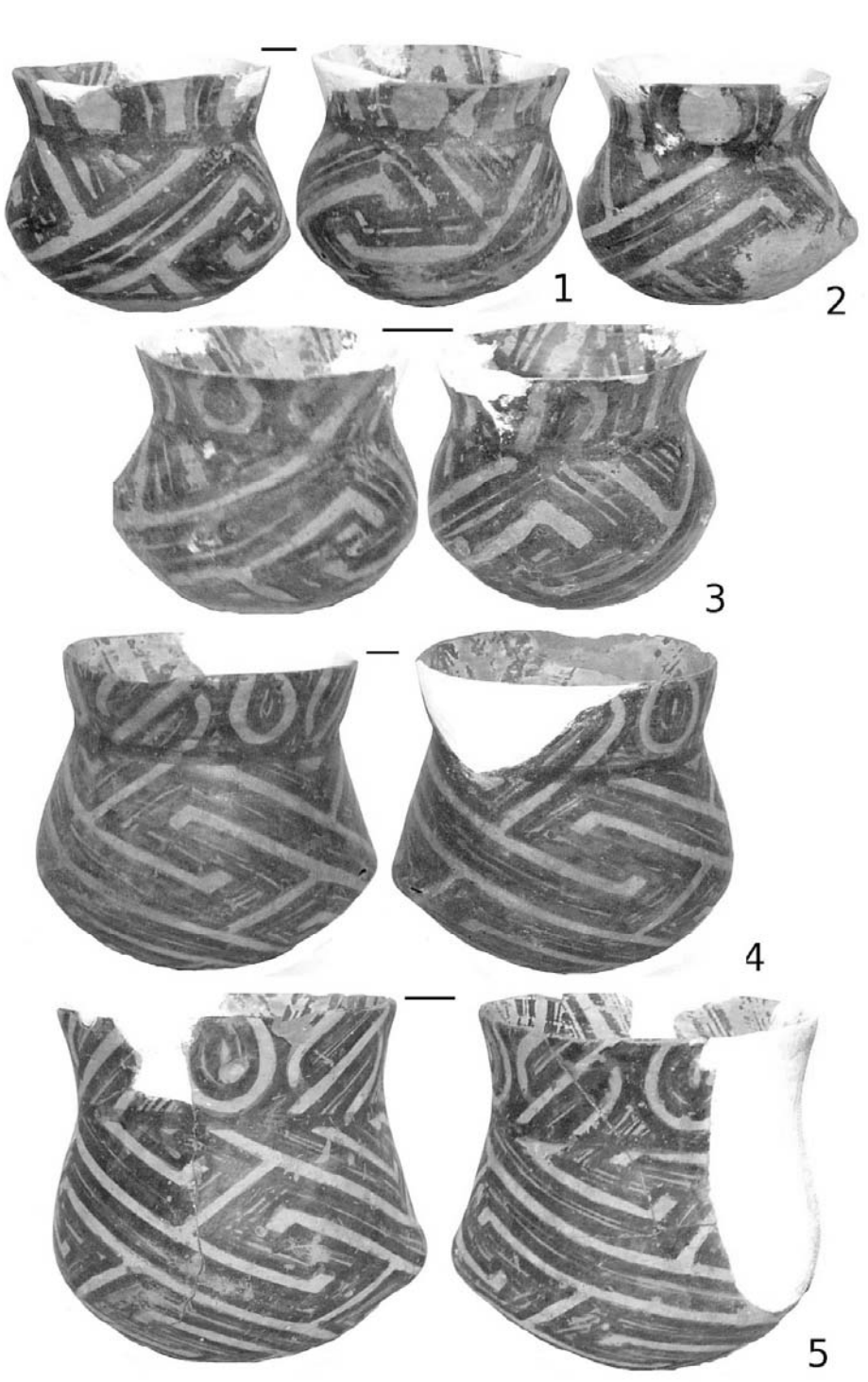

Fig. 10 – Dumeşti – *Între pâraie*, fosse nos. 7, 4. Les verres. Exemplaire peint en trichromie. Cucuteni A_{3-4}.

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Rarement, à Dumeşti, les petits verres ont sur le corps des spirales horizontales. Le verre à bord haut, cylindrique et corps allongé, prévu d'anses, présente à l'intérieur et à l'extérieur une peinture fine. Le premier registre est formé d'oves séparés de bandeaux verticaux blancs, avec une ligne médiane rouge et délimités de noir. Les mêmes lignes fines couvrent le fond brun de l'ove et des interspaces, le décor se répète sur le registre suivant, où l'ouverture de l'ove est dirigée vers la base et à l'intérieur le décor est plus simplifié (Fig. 5/1). L'interspace rouge linéaire ou hachuré, tracé sur le fond brun. Dans le cas de deux exemplaires d'Igeşti – *Scândureni*, le corps a été couvert d'une succession de quatre segments de volutes ouverts vers la lèvre ou vers la ligne noire sous le diamètre maximal, par lequel on sépare les registres au niveau des proéminences perforées. Les volutes extérieures décrivent un ovale, dans lequel on a inclus des volutes intérieures, coupées par une ligne noire (Fig. 5/3-4). De tels exemplaires ont été trouvés aussi à Deleşti – *Cetăţuia*, mais ayant des dimensions plus grandes[8].

2. ***La variante des verres à bord court, droit et corps légèrement allongé***, à l'ouverture de la bouche au diamètre moindre que celui du corps, $ø_{lèvre} < ø_{corps}$.

Un exemplaire de la demeure no. 3, le bord tout droit, court, la base amincie et le corps ovoïdal. Sur le premier registre, élargi jusqu'au diamètre maximal, deux rangées de spirales se succèdent et à l'intérieur deux oves bichromes (Fig. 5/8). Sur une forme similaire, les parties des volutes ont été sectionnées soit par la lèvre du verre, soit par la cannelure sous le diamètre maximal, soit par d'autres parties de volutes ou d'oves alors que l'intérieur a été couvert de rouge (Fig. 5/9). Un autre exemplaire, de la demeure no. 1, a été décoré à l'extérieur en trichromie, jusqu'au milieu du corps avec des spirales et à l'intérieur de lignes larges rouges, disposées obliquement (Fig. 5/12). Un exemplaire de la demeure no. 7, a le cou peint d'oves et le corps de rangées de motifs en forme de Z accrochés et conjugués. L'interspace sur le cou a été couvert de rouge étendu sur le corps de manière linéaire, et vers la base avec des lignes en réseau (Fig. 5/10). Bien qu'ils aient le cou petit, ils présentent souvent un autre décor à l'intérieur (Fig. 5/8, 12).

Un autre, a été couvert d'une composition trichrome sur fond brun, disposée tripartite. Sur le cou, à l'extérieur, quatre volutes couvrent la surface, légèrement coupées par la limite supérieure et à l'intérieur toujours quatre motifs bichromes, peints avec du rouge sur un fond blanc. Sur le corps, quatre autres spirales indépendantes, disposées obliquement, ont été comprises en quatre ellipses, réalisant des symboles proches des motifs ovoïdaux signalés par Marija Gimbutas[9]. La ligne noire séparatrice a été peinte au milieu du corps, au-dessus des ellipses (Fig. 7/1). Pour ce qui est des verres de la fosse no. 7, l'un a été décoré en trichromie sur les

[8] Alaiba & Marin, 2002–2003, 44, Fig. 10/8.
[9] Gimbutas 1989, 215 et suiv.

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deux faces, à l'extérieur par des spirales en S au trajet allongé, avec deux autres spirales vers la base dont les bouts sont tordus en deux volutes imbriquées, à bandeaux étroits blancs, bordés de noir, dont l'interspace a été couvert de rouge étendu (Fig. 7/4).

D'autres verres ont été signalés à Igeşti – *Scândureni*, peints sur le bord avec six rectangles blancs, bordés de noir et sur le corps des rangées verticales de zigzags blancs qui réservent des rhombes, à l'interspace peint rouge au pinceau (Fig. 7/3).

3. ***La variante des verres à formes ovoïdales, à bord court,*** à l'ouverture de la bouche au diamètre moindre que celui du corps, $ø_{lèvre} < ø_{corps}$.

À Dumeşti – *Între pâraie*, la forme a également permis la répartition organique du décor. Un pot de la demeure no. 7, bien que petit, a été minutieusement décoré sur le cou avec une guirlande en bandeau blanc délimité de noir, médian présentant une ligne rouge et ayant sur le corps des spirales (Fig. 5/2). D'autres parties de verres, couverts à l'intérieur et à l'extérieur d'oves et spirales (Fig. 6/1–2), bien qu'ils aient le corps ovoïdal, leur profil a été beaucoup plus courbé, le bord passant graduellement dans la rondeur du corps. Sur le cou on a d'habitude peint des oves, tangentes, petits bâtons et sur le corps des motifs en forme de Z accrochés et conjugués (Figs. 6/5, 8, 10) ou des volutes à plusieurs spires (Figs. 6/7, 9). Un autre vase a le bord orné d'oves de diverses dimensions (Fig. 6/3).

Une composition bipartite a été formée sur un verre décoré de bandeaux blancs négatifs, à l'intérieur de 1–2 lignes rouges, par les deux motifs conjugués, déroulés de gauche à droite et avec l'interspace rouge linéaire. Ils dérivent en spirales en S, aux bouts transformés en cercles concentriques, dont deux au centre blanc. Parallèles à ceux-ci, dans la partie inférieure du pot, deux spirales libres ont aux bouts soit trois cercles, toujours concentriques, dont l'un centre blanc, soit une spirale. Dans les espaces entre celles-ci, on a peint d'autres spirales et un cercle (Fig. 7/2). Dans cette variante on peut inclure un autre verre à petites anses, qui se trouvait en état fragmentaire en fosse no. 9, ayant le bord invasé plus haut et le corps allongé, et qui, comme le pot antérieurement décrit, présente à l'intérieur et à l'extérieur une peinture réalisée avec beaucoup d'attention. Sur le premier registre, les oves étaient séparées par des bandeaux verticaux blancs, bordés de noir et contenant en position médiane une ligne rouge. Les mêmes lignes fines couvrent le fond brun de l'intérieur de l'ove et des interspaces, le décor est répété sur le registre suivant où les oves ont l'ouverture vers la base, alors que le même motif se retrouve peint à l'intérieur de manière plus simplifiée par la peinture bichrome du même motif avec du rouge sur le fond blanc (Fig. 8/1–1a).

Ils sont présents pendant Cucuteni A_3 à Armăşoaia – *În Luncă* (Fig. 6/7). L'exemplaire d'Igeşti – *Scândureni* a été couvert de motifs en forme de Z, qui communiquent entre eux par des ligatures (Fig. 5/5).

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4. ***La variante des verres au bord court, droit ou évasé, corps bombé*** et l'ouverture de la bouche au diamètre moindre ou proche que celui du corps, $ø_{lèvre} \leq ø_{corps}$.

Deux, ayant le bord droit et la lèvre évasé, ont été différemment ornés, le premier présente sur le bord des oves, tangentes et petits bâtons et sur le corps des spirales (Fig. 5/6), pour le second, situé dans la couche de SIV, on a utilisé à l'extérieur de volutes et l'intérieur a été couvert de rouge (Fig. 5/7). Les motifs angulaires apparaissent aussi sur un autre verre de L_6 (Fig. 5/11), et un autre a été décoré sur le bord avec de volutes, le corps avec de motifs en Z et à l'intérieur des oves (Fig. 6/6).

Un exemplaire récupéré de la couche a, à l'extérieur, d'un décor plus rarement rencontré à Dumeşti – *Între pâraie*, de rangées de motifs en Z accrochés, aux bouts ovales, formés de bandeaux larges blanches, délimités de noir et ayant l'interspace rouge étendu et à l'intérieur des oves peintes de manière bichrome (Fig. 6/4). Les coupes peintes avec des spirales en S, aux volutes allongées avec des ovales ont été moins nombreuses dans le site éponyme, Cucuteni – *Cetățuie*[10], mais fréquentes dans les sites Hăbăşeşti – *Holm*[11] et Truşeşti – *Țuguieta*[12]. A l'est du Prut, dans la République de la Moldavie, on retrouve les verres de Duruitoarea Nouă, avec le même motif, ce dernier étant aussi peint sur d'autres formes à Cuconeştii Vechi ou Putineşti II, dans la zone caractérisée par l'aspect régional Drăguşeni – Jura, défini par Victor Sorokin[13].

Nous mentionnons dans ce contexte la partie inférieure d'un pot peint, couvert de rangées de motifs en Z conjugués, réalisés en bandeaux blancs, délimités de noir, l'interspace étant couvert de rouge (Fig. 8/5). C'est du même complexe que provient un autre cou de pot, dont le bord a été décoré d'oves de dimensions variables (Fig. 8/2). Le cou droit mais au diamètre légèrement plus petit par rapport à celui du corps a été peint par des bandeaux blancs, plus larges, qui s'étendent aussi sur la petite anse (Fig. 8/3).

C'est de L_3 que provient un verre dont le cou est couvert de quatre oves (Fig. 8/8) et un autre à l'extérieur prévu de motifs cordiformes et à l'intérieur d'hachures rhomboïdaux sur un fond blanc (Fig. 8/9). D'un autre verre, la zone du cou a été décorée d'oves, tangentes, petits bâtons et celle du corps de motifs en forme de Z, qui se sont préservées. Le même décor mais bichrome est représenté à l'intérieur. Deux autres, ont à l'extérieur d'oves et de motifs angulaires et à l'intérieur seulement d'oves (Figs. 8/4, 7). Rarement les motifs en Z couvrent toute la surface extérieure (Fig. 8/6).

[10] Petrescu-Dîmboviţa *et alii*, 2004, 164–166, Fig. 86/1, 5–6; 87/1, 3–4, 7.
[11] Dumitrescu *et alii*, 1954, 325–326, Pl. LXXVI.
[12] Petrescu-Dîmboviţa *et alii*, 1999, 316, 328, Figs. 204/5–7, 205/1–5208/1–3, 6 et photographies 209–211.
[13] Sorokin 2002, 123–124, Figs. 64/1, 5 et 65/1; 68/4.

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De tels verres sont fréquents dans la sous-phase Cucuteni A_3, dans le Plateau de Bârlad, à Deleşti – *Cetăţuia*, mais ayant des dimensions plus grandes[14].

La présentation des espèces de la céramique a eu comme but d'établir certains types distincts, définis par la qualité de la pâte, le spécifique des inclusions et du modelage, de bonne ou très bonne qualité, les dimensions variables des formes, le décor, c'est-à-dire des spécificités nécessaires pour suivre l'origine des types et leur continuation dans les phases ultérieures, par la forme, le décor et la fonctionnalité. Les variantes ont été signalés le plus fréquemment sur le Plateau de Bârlad, à Scânteia – *La Nuci*[15], mais aussi dans d'autres zones, à Hăbăşeşti – *Holm*[16], qu'à Drăguşeni – *Ostrov*[17].

L'analyse complexe de la structure stylistique a commencé des critères établis par H. Schmidt, en 1932[18], plus clairement définis pour la phase Cucuteni A-B par Vl. Dumitrescu, en 1945[19], synthétisés et expliqués jusqu'au niveau des séquences chronologiques par Anton Nițu, en 1984[20] et par M. Petrescu-Dâmboviţa, en 1999[21].

La présentation des verres – véritables coupes modelées de manière très attentive et finement ornementées – a été censée établir des variantes distinctes, réalisées en pâte à inclusions naturelles, mais surtout décorées très soigneusement, nécessaires pour en suivre l'origine, mais surtout leur transformations dans les phases suivantes, en Cucuteni, A–B et B.

Le symbolisme des coupes – vases d'offrandes, à pied, pendant le Moyen Âge ils visent le Graal, et des verres – destinés aux libations rituelles, est lié non seulement à la forme, au contenu, mais aussi aux motifs ornementaux. Le symbolisme des peintures dont ils ont été couverts suppose leur utilisation dans le déroulement de certains rituels – d'initiation, renaissances cycliques, cosmiques, initiés au centre de la manifestation, vers d'autres directions de l'horizon.

Parmi les motifs symboliques, il faut mentionner les spirales en S, réservées du fond blanc à l'aide du noir, parfois réduites aux volutes entourées d'oves ou intégrées dans les cercles circonscrits; les motifs en Z, prédominants sur les petits verres, comme les oves d'ailleurs, constamment sectionnés par les marges, et aussi le motif similaire à la table d'échecs.

La décoration minutieuse du vase cuit, surtout par la peinture, déterminait, comme toute autre création, l'ascension spirituelle de l'homme, pour nous, les gens

[14] Alaiba & Marin, 2002–2003, 44, Fig. 10/8.
[15] Mantu & Ţurcanu, 1999, nr. 94, 121–123, 151–152, 164.
[16] Dumitrescu *et alii*, 1954, 11.
[17] Marinescu-Bîlcu & Bolomey 2000, 93 et suiv., Figs. 115–117/2–3; 118/2–3; 119/2–5; 120/1–4; 121/4–6; 122/1, 3.
[18] Schmidt 1932, 14 et suiv.
[19] Dumitrescu 1945, p. 11 et suiv.
[20] Nițu 1984, 13 et suiv.
[21] Petrescu-Dîmboviţa *et alii*, 1999, 472 et suiv.

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d'aujourd'hui, la mesure de l'ascension spirituelle du complexe culturel Cucuteni – Tripolie. « Lorsqu'on polit une gemme, écrit le maître zen Dogen, elle devient un vase ; le contenu de ce vase est l'éclat de la lumière révélée par le polissage, de la même manière que dans le cœur de l'homme l'illumination se passe par la concentration de l'esprit»[22].

Prenant en discussion un nombre d'environ 60 verres (Fig. 1–10), notre intention a été tout d'abord d'intégrer ces découvertes de Dumeşti – *Între pâraie*, dans le corpus des pots cucuténiens et tripoliens connus déjà dans les publications, et deuxièmement nous avons essayé de souligner le respect constant des règles classiques, pour ce qui est de la forme et du décor, qui ont mis de l'ordre dans la variété des verres présentées et des aspects décoratifs de ceux-ci.

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THE ARCHAEOZOOLOGICAL STUDY OF FAUNAL REMAINS IDENTIFIED IN THE CUCUTENIAN SETTLEMENT OF DUMEŞTI – *ÎNTRE PÂRAIE*, VASLUI COUNTY, ROMANIA

STUDIUL ARHEOZOOLOGIC AL UNOR RESTURI FAUNISTICE DESCOPERITE ÎN SITUL CUCUTENIAN DE LA DUMEŞTI – *ÎNTRE PÂRAIE*, JUDEŢUL VASLUI, ROMÂNIA

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Cuvinte-cheie: archeozoologie, eneolitic, cultura Cucuteni, A_3-A_4, Dumeşti – *Între pâraie*, *Alces alces*.

Rezumat: Situl arheologic Dumeşti – *Între pâraie*, cercetat arheologic de Ruxandra Alaiba, se găseşte situat către partea sudică a formaţiunii geomorfologice denumită Podişul Central Moldovenesc, în apropiere de cursul râului Bârlad, puţin mai departe de izvoarele acestuia, într-o zonă şi astăzi oarecum păduroasă, reprezentată prin asociaţia floristică de „gorunete" şi aparţine etapelor Cucuteni A_{3b}-A_4. Într-o groapă, numerotată cu 7, s-au găsit resturi faunistice doar de la mamifere, acestea fiind în număr de 150, dintre care au putut fi aduse până la determinare specifică 119. Ele aparţin la zece specii: vita domestică – *Bos taurus*, oaia, capra – *Ovis*, *Capra*, porcul *Sus domesticus* şi câinele *Canis familiaris* şi alte cinci sălbatice, mistreţul – *Sus scrofa ferus*, cerbul – *Cervus elaphus*, căpriorul – *Capreolus capreolus*, bourul – *Bos primigenius* şi elanul, *Alces alces*, acesta din urmă actualmente stins. S-a realizat un studiu morfologic şi altul biometric, alăturându-se şi frecvenţa acestora (tabelele 1 şi 2, cât şi măsurătorile). Speciile găsite sunt comune zonei caracteristice pentru neo-eneoliticul de la noi, exceptând elanul care astăzi este o specie ce frecventează mai ales zona de tundră a latitudinilor înalte. În partea a doua a lucrării se arată importanţa speciilor găsite în economia animalieră a locuitorilor sitului – creşterea animalelor domestice fiind o ocupaţie de bază, vânătoarea având un caracter secundar. În final, se arată caracteristicile ambientului din jurul sitului de la Dumeşti – *Între pâraie*, acesta fiind în mare măsură păduros, propice pentru sălbăticiunile găsite. S-a arătat că unele dintre ele, precum cerbul, dar şi ursul, mai vieţuiau în Evul Mediu, cum sugerează existenţa în zonă, în apropiere de aşezare, a unui sat denumit Valea Ursului. Cele două specii, datorită defrişărilor, au devenit carpatine.

Key words: archaeozoology, Eneolithic, Cucuteni Culture, A_3-A_4, Dumeşti – *Între pâraie*, *Alces alces*.

Abstract: The archaeological settlement of Dumeşti – *Între pâraie*, where archaeological research was carried out by Ruxandra Alaiba, belongs to Cucuteni phases A_{3b}-A_4. The site is situated to south of the geomorphological formation known as the Central Moldavian Plateau, near the River Bârlad, slightly below its sources, in an area that even today is quite forested, represented by the 'durmast' flower association. In a pit,

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designated as pit no. 7, there were found faunal remains only from mammals; of the total of 150 bones, only 119 could be identified to species. They belong to ten domestic species: cattle – *Bos taurus*, sheep, goat – *Ovis, Capra*, pig – *Sus domesticus* and dog – *Canis familiaris*, and five other wild species, wild boar – *Sus scrofa ferus*, red deer – *Cervus elaphus*, roe deer – *Capreolus capreolus*, aurochs – *Bos primigenius*, and elk – *Alces alces*, the latter now being extinct in the area. Morphological and biometrical studies were undertaken, as well as an analysis of frequencies (Tables 1 and 2, and the measurements). The identified species are common for the area characteristic for the Romanian Neo-Eneolithic, except for elk which nowadays is a species populating especially the tundra areas of higher latitudes. In the second part of the work, the importance of the species for the animal economy of the settlement is pointed out – domestic animal husbandry being a basic occupation, while hunting was a secondary one. Finally, attention is drawn to the features of the environment around the settlement of Dumeşti – *Între pâraie*, which was to a great extent a wooded one, favorable to the identified wild animals. It is shown that some of them such as roe deer, but also bear, were still living there in the Middle Ages, as suggested by the name of a nearby village, Valea Ursului (Valley of the Bear). The two species, owing to the deforestation, have become Carpathian species.

The Cucutenian settlement of Dumeşti is situated in the northeast of Vaslui county, toward the southern part of the geomorphological formation known as the Central Moldavian Plateau. The upper course of the east-oriented Bârlad River is situated near this formation, which at the level of the settlement reaches an absolute height of over 300 metres. At present, the river valleys, especially the southern one, are covered with durmast (*Quercus petraea*) – forested massifs, to which other species of trees are to be added; even in the areas now deforested, the soils still belong to the 'forest' group[1]. Mention should be made that not far from the spring of the Bârlad River, on the western slope of the Central Moldavian Plateau, toward the valley of the Siret river, there is at present a village which was established during the final period of the Middle Ages, named Valea Ursului 'Bear Valley' (nowadays belonging to the southeast of Neamț county); this indicates that in relatively recent times, not far from the settlement, there existed this species of carnivore.

It is worth pointing out that until now, the animal remains belonging to the Cucuteni culture of Moldavia were studied by various archaeozoologists, and the author of the present study has produced a synthetic work which is to be published soon[2], on the basis of the fauna remains available, dated to the first phase of the culture, found in ten settlements.

The material discussed in this paper was found in the Cucutenian settlement of Dumeşti, location *Între pâraie*, dated to phases A_{3b}-A_4, in pit no. 7. It is a relatively small assemblages, but apparently interesting for two reasons: on the one hand, due to the fact that archaeologist Ruxandra Alaiba, who provided us with the

[1] Gugiuman *et alii*, 1973.
[2] Haimovici 2007.

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fauna remains has informed us that there was archaeological material stored in that pit together with well-preserved pottery and other items, and on the other hand that among the bone remains was found a fragment of the upper maxillary, which also shows some teeth of the species *Alces alces*, known by the common name of elk (in Romanian, the word 'elan' meaning elk, was borrowed from French, and introduced into the Romanian vocabulary only during the second half of the 19th century, being used only by specialists). This genus is nowadays found only in Northern Europe, that is the north of Norway, Sweden and Finland and also in north Russia, reaching, naturally, Siberia as well. It was recently reintroduced in Poland and the Baltic States. It is considered a tundra animal, as shown in all specialized manuals. In Romania, at present, this animal appears only here and there and is not recognized by the common people. As a species, in the north its habitat consists of marshy areas, which are rather common in the tundra. The elk shows some specific features in its extremity bones, in order to prevent it from sinking into boggy ground. The weight of an adult elk exceeds 500 kilograms.

The material from pit no. 7 is entirely from mammals, which are always present, almost exclusively, among the archaeozoological remains. Out of a total of only 155 fragments of bones, only 124 could be identified to species, the other 31 being considered as indeterminate, since they comprise very small fragments of cranium, pieces of vertebrae and ribs, and long bone splinters, so that it was impossible to provide specific and generic diagnoses. We can still point out that they mostly derive from the genera *Bos*, *Cervus* and maybe even *Alces*, representing about 20% of the animal material found in the pit.

Remains of ten species could be identified, of which five are domestic animals, more precisely: *Bos taurus*, of large dimensions, *Ovicaprinae*, of small dimensions, with *Ovis* and *Capra*, *Sus domesticus*, of medium dimensions and *Canis familiaris*, of rather small dimensions; five others are wild species: *Sus scrofa ferus*, of rather moderate dimensions, *Cervus elaphus*, of large dimensions, *Capreolus capreolus*, of small dimensions, *Alces alces*, of very large dimensions and *Bos primigenius*, of even larger dimensions.

Below are given the frequencies of the species identified, and the relative proportions of the two groups (domestic and wild) within the economy of the settlement.

Table 1

Frequency of the species of mammals

Species	Fragments		Individuals	
	No.	%	No	%
1. *Bos taurus*	47	48.20	5	21.74
2–3. *Ovicaprinae*	19	15.96	4	17.39
(*Ovis* and *Capra*)				
4. *Sus domesticus*	38	31.93	6	26.09

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5. *Canis familiaris*	4	3.36	2	8.69
6. *Sus scrofa ferus*	3	2.52	1	4.34
7. *Cervus elaphus*	4	3.36	2	8.69
8. *Capreolus capreolus*	2	1.68	1	4.34
9. *Alces alces*	1	0.84	1	4.34
10. *Bos primigenius*	1	0.84	1	4.34
TOTAL		119		23

Table 2

Frequency of the species according to economic importance

	Fragments		Individuals	
	No.	%	No.	%
Domestic mammals	108	90.75	17	73.91
Wild mammals	11	9.25	6	26.08

Mention should be made of the fact that all the species discovered in pit no. 7 are used for food, except for dog. Each species is discussed below.

Domestic species

Bos taurus – common name, domestic cattle – with the highest frequency within the assemblage (pig exceeding cattle only in the number of individuals), taking into account that the species is large and when slaughtered provides more meat. Still, it is not only by its size, but also by its functions, that its frequency exceeds by far those of the other domestic species, being obviously much more versatile by virtue of the fact that apart from meat obtained by slaughtering it is also a good work animal; since the Cucuteni times at least, castration of male animals was known to the inhabitants. As for the female animals, they would provide milk, which could be used directly or processed to obtain various other products.

From the surviving sections of tooth rows as well as isolated teeth, it seems that slaughtering was done after the ages of 6 or even 8 years, thus showing that long after the individuals reached maturity the species was used for various labours, but also as a milk provider. Below are listed the measurements that could be taken, expressed in millimetres.

Measurements carried out so far indicate more gracile individuals compared to the ancestor – *Bos primigenius* – but still relatively massive; out of the five individuals, we consider that three are female, and therefore milk sources.

Ovicaprinae (genus *Ovis* – sheep and genus *Capra* – goat). These are represented by few remains. Out of the four individuals, three were adult and one was

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9–10 months old, M_2, being almost out of alveolus. The remains of sheep are generally equal to those of the goat. Some measurements in mm were possible.

Upper maxillary	
Length of the molar	70
Scapula	
Length of the articular end	66
Length of the articular surface	57
Radius	
Breadth of the inner epiphysis	73
Metacarpal bone	
Breadth of the lower surface	60
Coxal bone	
Acetabular diameter	66
Tibia	
Breadth of the lower epiphysis	60
Metatarsian bone	
Breadth of the upper epiphysis	45

Humerus		o = *Ovis* c = *Capra*
Breadth of the lower epiphysis	27.5 31	
	o c	
Metacarpal bone		
Breadth of the upper epiphysis	23	
	o	
Breadth of the lower epiphysis	27	
	c	
Tibia		
Breadth of the lower epiphysis	26	
	o	

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According to the measurements carried out, the ovines were gracile and small and the caprines slightly bigger, and among the four individuals three were adult and one was young.

Sus domesticus – the pig. The material belonging to this species comes from six individuals. According to the state of eruption and wear on teeth, one was almost one year old, the age of the others ranging from 16 to 24 months when the animal was considered adult and could be slaughtered. The primitive type would have a slower growing rhythm in comparison to the modern type, which typically is slaughtered at the age of about 12 months. Primitiveness is also visible in the face, in that the muzzle was longer than in modern individuals. In terms of height, it was short and small, similar to the *palustris* type of Central Europe. Certain measurements (in mm) were possible:

M^3	
Length	32
Mandible	
Length of the symphysis	57
M_3	
Length	36
Scapula	
Length of the articulary end	33
Length of the articulary surface	29
Minimal neck Breadth	22
Radius	
Breadth of the upper epiphysis	27, 27, 30
Coxal bone	
Acetabular diameter	30; 33, 34, 34

Canis familiaris – dog – has a frequency slightly higher than the average for Eneolithic settlements, but we are of the opinion it was not eaten. The type is small, of low stature, similar to *Canis palustris* of Central Europe.

Wild animals

Sus scrofa ferus – wild boar – is represented by only one individual from which three remains were identified: part of the symphysis of the mandible, a fragment of scapula, and a calcaneal bone with the tuber detached and missing, and therefore still a relatively young wild boar.

Cervus elaphus – red deer – is represented by four fragments that belong to two individuals. A fragment of the mandible with the m_3 tooth, which shows a rela-

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tively low degree of erosion, and which belonged to a young individual, about one year old; a fragment of frontal bone with a horn core broken almost at the base, originating from a male individual. The fact that it was slaughtered indicates that young individuals were not necessarily spared. There is also a fragment of mandible to which a piece of the 3rd phalange is to be added as well. The mandible fragment could be measured and it confirmed the age at death of the individual as three or four years.

Mandible	
Length of the connecting teeth	122
Length of the molars	81
Length M_3	34

Capreolus capreolus – roe deer – is represented by two fragments probably from the same individual, that is: a fragment of a scapula with the glenoid cavity almost complete, with a greatest diameter of 24 mm, and another one, from a humerus, with the lower epyphysis 27 mm in breadth.

Bos primigenius – aurochs – the ancestor of the domestic cattle, which is represented by only one rib fragment of very large size, much bigger than a rib from *Bos taurus*. This is the largest species, males reaching one tonne in weight.

The last genus we refer to in this context is *Alces alces*, which is another cervid, also of larger dimensions than red deer. As noted above, it is found nowadays in Europe only at high latitudes, described in all specialist reports as typical of tundra areas but recently reintroduced by humans into lower latitudes, but not beyond the 55° parallel. In Romania, only sporadically do wandering individuals arrive, especially in the east of Romania, on average one every 8–10 years. Yet, it is found in the archaeozoological record from the Neo-Eneolithic period until the Middle Ages, when it appeared especially in the areas between the Prut and Dniester rivers, obviously coming from northeast. In the settlement of Andrieşeni, dated to the Precucuteni epoch, there was found a fragment of elk antler from a young male individual[3]. It also appeared in the site of Dumeşti – *Între pâraie*, as noted above. During La Tène times, more precisely during the Geto-Dacian period, we found it in two fortified settlements (*davae)* on the River Siret, that part of the valley having a large floodplain and a marsh. Thus, in the *dava* of Poiana – *Cetate*, near Tecuci, was found only one antler, from an adult individual, in which the side toward the rosette was cut so that we cannot therefore determine whether that particular antler belonged to a hunted individual or was a shed antler that someone picked up (it is also possible the antler arrived in the *dava* from elsewhere, but unlikely). In the dava of Brad – *Cetățuia*, there appear many bone remains that belonged to at least

[3] Coroliuc 2005, 9.

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seven individuals of which one was less than one year old. It is obvious there existed in those times a colony of the species living in the valley of River Siret and not just a stray individual. It has been recently identified within the archeozoological material of the Getic settlement of Satul Nou, near the Danube, in southern Dobrudja, near the frontier with Bulgaria. This would then indicate the presence of the species approximately at the 44° parallel. These data refer to work in progress.

With regard to the settlement of Dumeşti – *Între pâraie*, there was found only one bone fragment, more precisely a part of the upper left maxilla, with premolars found *in situ*, and also M^1, M^2, a bone that would not have been brought from elsewhere. The teeth were measured and their dimensions in mm are as follows:

Length $P^2 – P^4$	57
Length M^1	25
Length M^2	28

It is clear that the maxilla belongs to elk, given the dimensions of the teeth, which exceed those of red deer teeth. Also, a typical morphological feature for the upper molars of *Alces* is found: the enamel protuberance on the anterointernal selena, which makes its upper part look doubled. This feature is most visible on M^3, but also on M^2, of our sample, where this double aspect is very obvious, in spite of the rather strong erosion of the tooth, indicative of a relatively old individual that obliterates this double feature.

After pointing out and describing the features of each species, we now pass on to the question of their place within the animal-based economy of the settlement, based on the data outlined above.

As noted, the animal material came from a pit and was not found in a large quantity. This is why we only refer to remains belonging to groups of mammals. Foraging, a very ancient occupation, and fishing (the upper course of River Bârlad was not a large river and therefore, fishing could not have had much economic importance), were certainly practised.

A very clearly defined occupation was animal husbandry, which was well established, taking into account only the four species. The dog, as we showed, was not eaten, and it might have been used for another occupation, such as hunting wild animals, or possibly helping to defend domestic animals from carnivores. However, carnivores were not found in the archaeozoological material available for study. Being at the top of Elton's pyramid of numbers they are present in only very small quantities and appear only when animal remains are numerous.

Among the domestic species, the most important is *Bos taurus*, a large species and at the same time multi-purpose because it also represents a work animal of prime order, which at the same time, by its slaughtering, also providing meat, which represents about half of the animal protein necessary for the inhabitants of

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the settlement, if account is taken also of the female individuals and the milk they provide. The ovicaprines are present in a lower percentage and at the same time they are of small dimensions, totalling about ten individuals, together approaching the value of a *Bos taurus* individual. They are also multi-purpose, especially by virtue of the fact that the females would provide milk. *Ovis* would also provide wool with much more primitive features, being shorter and rougher. It is obvious that by slaughtering they also provide animal proteins but the amount seems to be rather small taking into account their dimensions. The domestic pig is a single-purpose animal providing only meat and fat by slaughtering, the latter in ancient times also used as a lighting source. In comparison to *Bos taurus* the species provided a much smaller protein yield, but is a very good fat provider.

As shown in Table 2, the domestic species represent 90.75% of the identified fragments and 73.91% of the estimated minimum number of individuals. Therefore, stock rearing was the most important occupation.

Another occupation worth taking into account is the hunting of the five wild species, which in terms of number of individuals are fewer than the domestic species, but at the same time they have a frequency that cannot be neglected. Hunting is a much older occupation but the smaller numbers of wild animals indicate that it was less important than animal husbandry, which is chronologically more recent. The hunting of these species, except for *Capreolus*, which is of moderate, large or even very large dimensions, also brings a relatively important amount of animal protein necessary to humans.

It is worth pointing out that by slaughtering as well as by hunting, the inhabitants of the settlement obtained a large part of their necessary food, but such activities also had other usages which were very important within the economy of the Cucuteni culture, some of them still practised nowadays. Leather, horns and even the teeth were used for various purposes, as were some soft materials of animal origin, such as entrails, the urinary bladders and so on, which putrefied and left no traces behind them. In those times, some species or their remains could be used also for various cultic purposes.

In conclusion, it is worth mentioning the character of the natural environment around the settlement, taking into account especially the wild species. To a larger extent than today the area included wildwoods, which people would frequently cut back for various necessities, especially for agricultural purposes (about which we cannot say much taking into account the bone remains, except that castrated individuals of *Bos taurus* had started being used as draft animals). Although they cut down the woods, these would grow back in time, so that the deforested areas were much smaller than today. The existence of the forest would also sustain a much more balanced climate than today. Within the fauna there existed woodland-adapted species that have since disappeared or retreated to high altitude forests.

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This is the case with deer as well as bear, as noted at the beginning of the paper, which have become Carpathian animals.

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LA CÉRAMIQUE PEINTE DE L'ÉTAPE CUCUTENI B_2, DÉCOUVERTE À TRINCA – *LA ŞANŢ*, DÉPARTEMENT D'EDINEŢ, RÉPUBLIQUE DE LA MOLDAVIE

CERAMICA PICTATĂ A ETAPEI CUCUTENI B_2, DESCOPERITĂ LA TRINCA – *LA ŞANŢ*, RAIONUL EDINEŢ, REPUBLICA MOLDOVA

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Cuvinte-cheie: Eneolitic, complex cultural Cucuteni – Tripolie, Cucuteni B_2, Trinca – *La Şanţ*, ceramica pictată – stiluri $\varepsilon - \zeta$ şi ceramica de tip Cucuteni C.

Rezumat: Sondajul realizat în anul 1999, în fortificaţia situată la periferia de sud-vest a satului Trinca, punctul *La Şanţ* (raionul Edineţ, Republica Moldova), pe locul unde promontoriul format de valea râuleţului Draghiştea se îngustează puţin, pentru studierea perioadei de construcţie a sistemului defensiv a dus şi la descoperirea unei locuiri eneolitice. Ceramica aflată în secţiunea realizată, în straturi, val sau şanţ, specifică complexului cultural Cucuteni – Tripolie, a fost în mare măsură fragmentară, în multe cazuri cu pictura păstrată parţial. Ţinând seama de caracteristicile tehnologice ale acesteia, degresarea pastei, arderea vaselor, procedeele decorative sau aspectele motivelor, întregul material ceramic, inegal sub raport cantitativ, s-a analizat în funcţie de prezenţa sau nu a picturii, la care s-a adăugat ceramica de tip Cucuteni C, degresată cu scoică. În total s-au conservat 1851 de fragmente, între ele buze 272, pereţi 1438 şi baze 137. Între forme s-au semnalat: boluri, străchini, castroane sau cratere, vase bitronconice, vase cu gât drept şi corp bombat şi capace. Predomină pictura bicromă Cucuteni B_2, specifică stilului ε, cu negru pe fondul brun-gălbui al vasului, dar s-au păstrat şi fragmente ceramice pictate tricrom, cu negru şi roşu liniar sau etalat, pe fond deschis, de stil ζ.

Mots-clés: Enéolithic, complexe culturel Cucuteni – Tripolie, Cucuteni B_2, Trinca – *La Şanţ*, la céramique peinte-styles $\varepsilon - \zeta$, et céramique de type Cucuteni C.

Résumé: Le sondage a été réalisé en 1999, sur la colline située à la périphérie « sud-ouest » du village Trinca, dans l'endroit *La Şanţ* (département d'Edineţ, République de la Moldavie), là où le promontoire, délimité par la vallée du ruisseau Draghiştea, devient un peu plus étroit. Il a été effectué pour établir la période de construction de l'ancienne fortification encore visible. Pendant les fouilles des premières couches, tout comme pendant la recherche du rempart et du fossé, on a découvert beaucoup d'objet et de la céramique cucuténienne: fine peinte, mais aussi sans peinture. La céramique cucuténienne, en grande partie fragmentaire, peut être divisée en trois catégories inégales d'un point de vue quantitatif : fine sans peinture (Figs. 2; 3/4–6), fine peinte (Figs. 3/1–3; 4–7) et de type Cucuteni C (Fig. 8–9). La céramique fine contient environ

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1850 fragments, dont 272 lèvres, 1438 parois et 137 bases. Morphologiquement, on peut identifier toutes les catégories de base des récipients propres à la sous-phase Cucuteni B_2, et spécifique aux groupes ε et ζ: verres à pied – coupes, terrines, cratères – casseroles, couvercles, pots à cou droit ou légèrement penché et corps arrondi, mais aussi des vases à provisions, silos.

Le sondage qui a été réalisé en 1999, sur la colline située à la périphérie de Sud-Ouest du village Trinca, dans l'endroit *La Şanț* (département d'Edineț, République de la Moldavie), où le promontoire, délimité par la vallée du ruisseau Draghiştea, devient un peu plus étroit, a été effectué pour établir la période de construction de l'ancienne fortification encore visible (Fig. 1). Le système de défense du site, formé d'un rempart et d'un fossé, traverse le promontoire du Sud-Ouest au nord-est. Son altitude dépasse 245,2 m et la différence de niveau par rapport de la vallée du ruisseau Draghişte est de plus de 75 m[1]. Aussi, l'endroit est situé au Nord-Ouest du site Trinca – *Drumul Feteştilor*[2].

On a tracé une section perpendiculaire sur le rempart, à sud-ouest de l'entrée dans l'enceinte fortifiée, là où le rempart est interrompu. La section est longue de 24 m et large de 2 m. A l'intérieur de l'enceinte, *extra-muros* et à la base du rempart, on a trouvé beaucoup de vestiges de la culture matérielle. Pendant les fouilles des premières couches, à la recherche du rempart et du fossé, on a découvert beaucoup d'objets et de la céramique cucuténienne : de la céramique fine peinte et aussi de la céramique sans peinture. Seule une partie d'un récipient en pâte jaune/verdâtre et peint de bandeaux linéaires, appartient à la céramique d'aspect Gordineşti, le groupe culturel Horodiştea / Erbiceni-Gordineşti, défini aussi dans le cadre du complexe culturel Cucuteni – Tripolie, par les sous-phases B_3 / C_{II}.

La vaste zone du complexe Cucuteni – Tripolie a été structurée dans l'historiographie contemporaine, pour toute la durée, 3800/3750–2700/2600 ou 4650–3500 B.C.[3], en deux grandes aires culturelles : *Cucuteni,* qui inclut les découvertes archéologiques de Roumanie et de la République de la Moldavie, le Sud-Est de la Transylvanie, à l'aspect Ariuşd, le Nord-Est de la Valachie, l'espace entre les Carpates et le Dniestr; *Tripolie*, avec les découvertes d'Ukraine, entre le Bug et le Dniestr, respectivement le Bug et le Dniepr, y compris la rive gauche et le Nord-Est des Carpates – la Galice, la région des cours supérieurs des rivières Dniestr, Prut et Siret, mais sans le Nord de la Mer Noire[4].

[1] Leviţki et Alaiba 2008, 176 et suiv.

[2] Leviţki *et alii*, 1994, 130; Leviţki et Alaiba 1999, 17; Leviţki *et alii*, 1999, 27; Leviţki 2006.

[3] Le rapport chronologique entre les deux cultures a été réalisé en fonction des correspondances établies : Precucuteni III / Tripolie A; Cucuteni A_{1-4} / Tripolie A–B et B_I; Cucuteni A–B_{1-2} / Tripolie B_{I-II} et B_{II}; Cucuteni B_{1-2} / Tripolie B_{II}-C_I; C_I et le complexe Horodiştea-Folteşti / Tripolie C_{I-II} et C_{II}, cf. Teleghin 1985, 15; Monah 1987, 75 et suiv.; Petrescu-Dîmboviţa 1993, 548; Mantu 1998, 193 et suiv.

[4] Niţu 1977, 208; Sorokin 1993, 85.

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La culture Cucuteni est surtout connue par les résultats des recherches archéologiques entreprises pendant le siècle passé, le XX^{e}. Elle est renommée, pas seulement par le splendide art plastique anthropomorphe et zoomorphe, mais surtout par les formes de la céramique fine ou très fine, dont les parois sont transformées en supports non-périssables pour la peinture, à pigments minéraux qui a résisté au cours du temps, avec des scènes cosmogoniques à caractère mythologique et religieux[5]. Bien que l'ornementation de la céramique tripolienne soit dominée par le décor gravé à motifs géométriques, plus rarement zoomorphiques ou anthropomorphiques, les aspects décoratifs sont proches de ceux obtenus par la technique de la peinture.

La céramique

La céramique cucuténienne, découverte dans le site Trinca – *La Şanț* – dans la première section –, et qui est spécifique au complexe culturel Cucuteni – Tripolie, B_2, respectivement C_{Ia}, est en grande partie fragmentaire ; la peinture n'étant parfois que partiellement préservée. Tenant compte des caractéristiques technologiques de la céramique, du dégraissage de la pâte, de la cuisson des pots et des procédés décoratifs utilisés pour les différents aspects ornementaux (motifs), le matériel céramique peut être divisé en trois catégories, inégales du point de vue quantitatif : la céramique fine sans peinture (Figs. 2; 3/4–6), la céramique fine peinte (Figs. 3/1–3; 4–7) et la céramique de type Cucuteni C (Fig. 8–9).

La céramique fine contient environ 1850 fragments, dont 272 lèvres, 1438 parois et 137 bases. Elle a été modelée avec une pâte homogène, bien mélangée, à de rares exceptions dégraissée avec des petits cailloux de calcaire. La cuisson oxydante, dans la plupart des cas uniforme, a eu comme résultat de lui conférer une couleur rose-brique ou brique-jaunâtre, aussi bien en pronfondeur, qu'en surface. En quelques cas la cuisson a été incomplète. Les bases de deux pots révèlent des empreintes de branchages. Morphologiquement, et indépendamment de l'état fragmentaire du matériel, on peut identifier toutes les catégories de base des récipients propres à la culture Cucuteni, pour la sous-phase B_2 : des verres à pied-coupes, terrines, cratères-casseroles, couvercles, pots à col droit ou légèrement penché et corps arrondi, mais aussi de grands vases à provisions – silos. Ils sont mis en évidence en fonction des caractéristiques des bords uniformément grossis, aplatis ou obliquement biseautés et évasés, et des lèvres amincies, légèrement arrondies ou épaissies à l'intérieur.

Nous présenterons ci-dessous la céramique, tenant compte des trois catégories déjà mentionnées, la céramique sans peinture et la céramique peinte, et finalement la céramique de type Cucuteni C.

La céramique cucuténienne sans peinture

Les formes découvertes à Trinca – *La Şanț* sont nombreuses ; mais on n'exclut pas la possibilité que sur certains fragments les motifs se soient effacés. Certains récipients présentent des inclusions, dans la pâte ; d'autres vases ont été, par contre, modelés avec la même argile que les pots peints. Certains ont été cuits,

[5] Monah 1997; Alaiba 2000, 295 et suiv.

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jusqu'à ce que la pâte soit de couleur brique, dans des fours performants, dans lesquels la température était élevée. D'autres vases, par contre, présentent des taches brunes ou grisâtres et le milieu plus foncé. Les restes préservés ont permis de distinguer quelques formes : des verres, des terrines tronconiques ou hémisphériques, aux parois légèrement courbés ; des couvercles, des casseroles ou des cratères, des pots à col et corps arrondi.

Des *verres* à col cylindrique ou légèrement tronconique et à corps arrondi ou bitronconique, on n'a gardé que des fragments. Certaines parties provenant de vases plus fins, sans ornement, appartiennent à des exemplaires dont la peinture s'est effacée.

Les terrines sont plus nombreuses. Elles ont été modelées dans une pâte plus homogène, poussiéreuse. Elles sont de petites ou moyennes dimensions et présentent des formes tronconiques ou légèrement hémisphériques (Figs. 2/3, 5; à $ø_{lèvre}$ 58; 56 cm; h = 9,5; 12,2 cm; 3/6 à $ø_{lèvre}$= 26; h = 9,3 cm), cette dernière ayant été aussi couverte d'une couche d'engobe de couleur brique, sans polissage, présente une perforation sous la lèvre.

Les couvercles, et peut être des pots de petites dimensions ont été inclus dans cette catégorie tenant compte de leur base arrondie ou asymétrique (Figs. 2/4; 3/4–5; $ø_{lèvre}$= 11,5 et 12,7; h = 4,4 et 5 cm).

Un fragment provient d'un *pot à bord évasé et corps arrondi*, probablement un cratère (Fig. 2/1; $ø_{lèvre}$= 14; h = 3,4 cm).

D'un autre pot, à *bouche basse, droite et à corps arrondi*, seuls le bord et le col (Fig. 2/2; $ø_{lèvre}$ = 29; h = 4,8 cm) se sont préservés.

C'est du même sondage que proviennent aussi d'autres nombreux fragments. De l'inventaire céramique récupéré, on a aussi dessiné quelques *bases* droites (Fig. 2/7–9; $ø_{base}$= 13,5 ; 12 ; 12,5 cm; h = 7,2 ; 3,4 ; 1,8 cm).

La céramique peinte, spécifique aux styles Cucuteni B_2,

les groupes ε et ζ

Les fragments de céramiques peintes, et plus rarement, les pots entiers ont été réalisés avec une pâte bien préparée, présentant peu d'inclusions, surtout du sable. Elle a été cuite en atmosphère oxydante, dans des fours performants, à des températures hautes et les vases sont de couleur rouge-brique ou jaune-brique. Après le modelage et le finissage, ils ont été couverts d'une engobe fine, blanche-jaunâtre, plus rarement brun-brique (Fig. 5/2) sur laquelle on a appliqué la peinture avec du noire et du rouge, dans les styles *ε* (Fig. 3/1–3; 4-5) et *ζ* (Fig. 6–7), de la sous-phase Cucuteni B_2. Parfois la couche de couleur blanche n'était pas assez épaisse pour couvrir la couleur naturelle du pot.

Les registres décoratifs, séparés par des bandeaux horizontaux, qui couvrent la partie supérieure, le bord, l'épaule et le corps arrondi des pots ont été d'habitude divisés verticalement. Après la peinture, ils étaient polis surtout à l'aide de galets. Entre les motifs, il y a des compositions simples, en zigzag ou serpentiformes, des

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bandeaux obliques, des triangles peints de noir, des demi-cercles et des cercles, des clepsydres, une petite branche, probablement des silhouettes zoomorphes.

Le groupe ε

Les verres-coupes à col cylindrique ou moins évasé, aux épaules prononcées et au corps arrondi ou bitronconique, ne sont pas très nombreux. Un fragment provient d'un exemplaire à bord cylindrique et corps courbé presqu'en angle droit. Sous sa lèvre on a peint deux lignes, qui se répètent sur la courbure maximale, et au-dessus d'elles, des triangles (Fig. 4/1; $ø_{lèvre}$= 9; h = 8,4 cm).

Les terrines sont assez nombreuses à Trinca – *La Şanț*, tout comme sur d'autres sites de la phase Cucuteni B, et, comme dans le cas de la céramique sans peinture, on distingue deux variantes, tronconiques, la plupart et légèrement hémisphériques, proches de la forme des couvercles. Pour l'ornementation des terrines, on a utilisé surtout la peinture bi-chrome du style *ε,* ordonnée en plusieurs variantes « compositionnelles ». Sur deux petits exemplaires, on a peint le motif cruciforme par l'intersection de deux lignes droites, qui se terminent sur le bord intérieur par de petits arcs de cercles – tracés au pinceau –, et couverts toujours de noir (Fig. 3/2; $ø_{lèvre}$ = 11,5; h = 4,8 cm). Sur une autre terrine tronconique, c'est du bord extérieur, au niveau d'une des quatre petites perles noires disposées en croix, commencent toujours des bandeaux formés de deux lignes (Fig. 4/3; $ø_{lèvre}$ = 15,7 ; h = 6,5 cm). Sur une autre, de grandes dimensions, sous la lèvre, à l'extérieur, on a peint toujours des ovales allongés – des perles, coupées du bord de la terrine, tout comme à l'intérieur, mais asymétriques. Sur le fragment conservé, on peut suivre le trajet oblique d'un bandeau aux lignes extérieures plus larges (Fig. 4/2; $ø_{lèvre}$= 26,5; h = 8,9 cm).

Des compositions cruciformes à bandeaux formés d'une ou de deux lignes entrecoupées centralement sont aussi présentes à Truşeşti – *Ţuguieta*, à l'intérieur d'une terrine présentant un tel ornement monochrome, sous la lèvre et les segments de cercle ou seulement de petites taches noires réalisées au pinceau, sont disposées entre les lignes[6]. Le motif cruciforme a été aussi réalisé à partir de bandeaux linéaires s'arrêtant centralement dans un cercle[7] où il est suggéré par le croisement des points de deux angles droits formés de lignes noires et rouges de style *ζ*[8].

Sur les terrines, de plus grandes dimensions, polies, on a peint des oves (probablement en groupes de quatre) à l'extérieur, avec du noir sur un fond blanc-brun clair, en style *ε.* Les espaces entre celles-ci sont remplis de bandeaux linéaires à bordures plus larges (Fig. 4/5-6; $ø_{lèvre}$ = 39; 49; h = 5,8; 6,5 cm). Sous la lèvre, il y a aussi des lignes courtes ou seulement de petits triangles allongés à l'intérieur des entailles. Des tangentes obliques et courbes ou des guirlandes complètent le décor. La surface intérieure n'a pas été ornementée.

[6] Petrescu-Dîmboviţa *et alii* 1999, 459, Figs. 342/2a–b, 5a–b.
[7] *Ibidem*, Fig. 342/3a–b; 6a–b.
[8] *Ibidem*, Fig. 342/1a–b.

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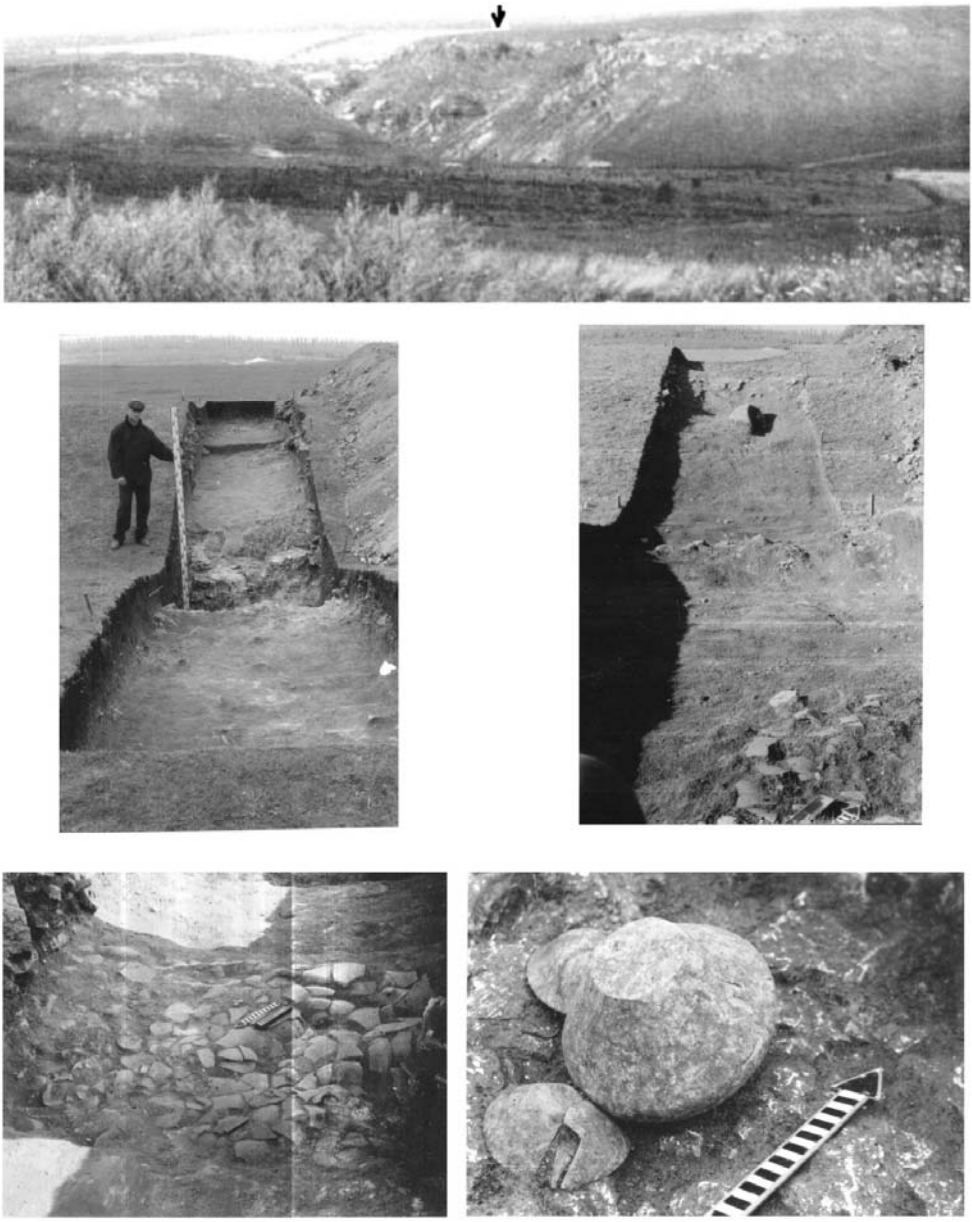

Fig. 1 – Le site Trinca – *La Şanţ* 1–5.

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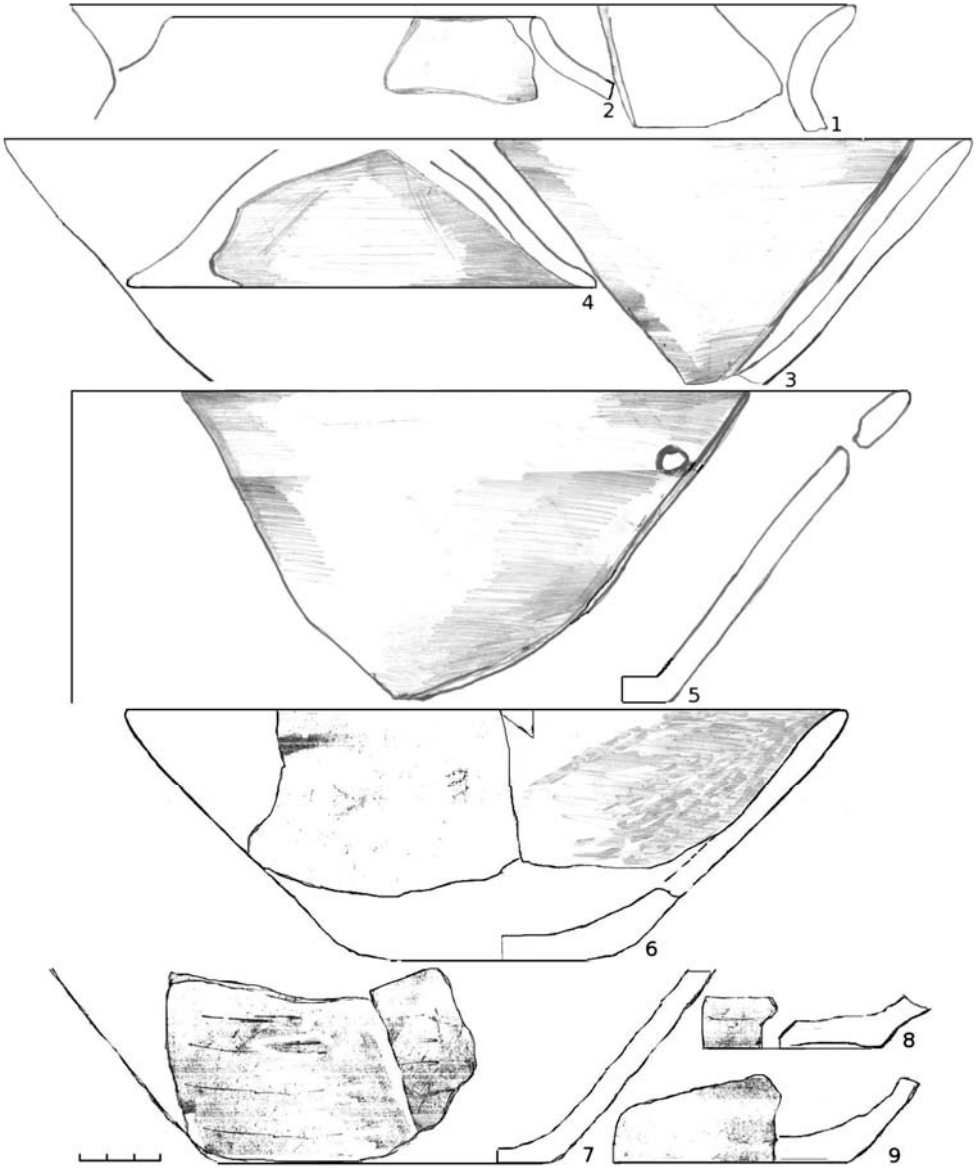

Fig. 2 – Trinca – *La Șanț*. Fragments de vase à bord évasé et corps arrondi 1, bouche courte, droite et corps arrondi 2 ; terrines 3–6; bases 7–9.

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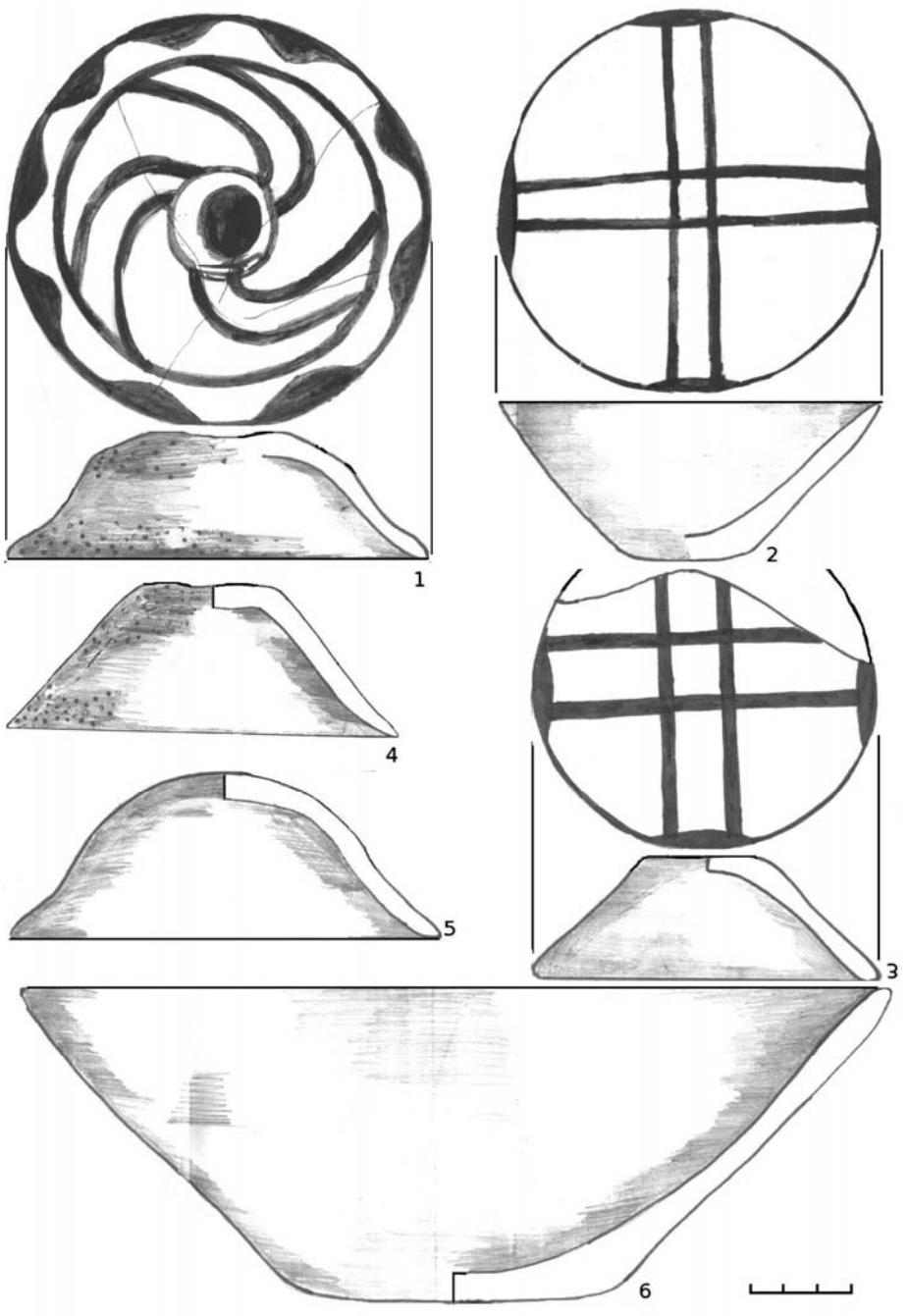

Fig. 3 – Trinca – *La Şanţ*. Fragments de couvercles 1, 3–5; terrine 2, 6. Cucuteni B_2, style *ε.*

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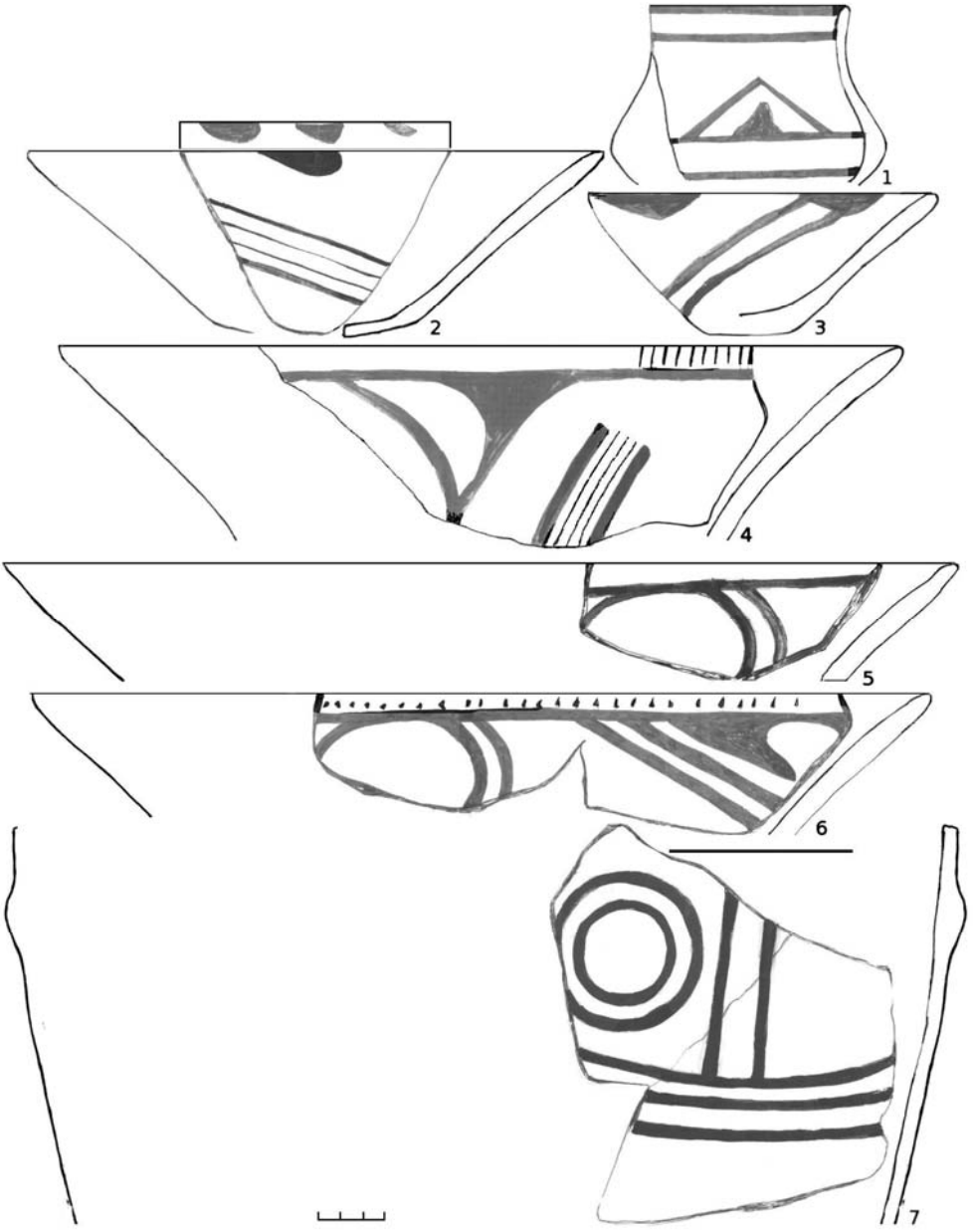

Fig. 4 – Trinca – *La Şanț*. Fragments de : verre-coupe 1, terrine 2–3, 5–6; cratère 4; corps vase Cucuteni B_2, style *ε*.

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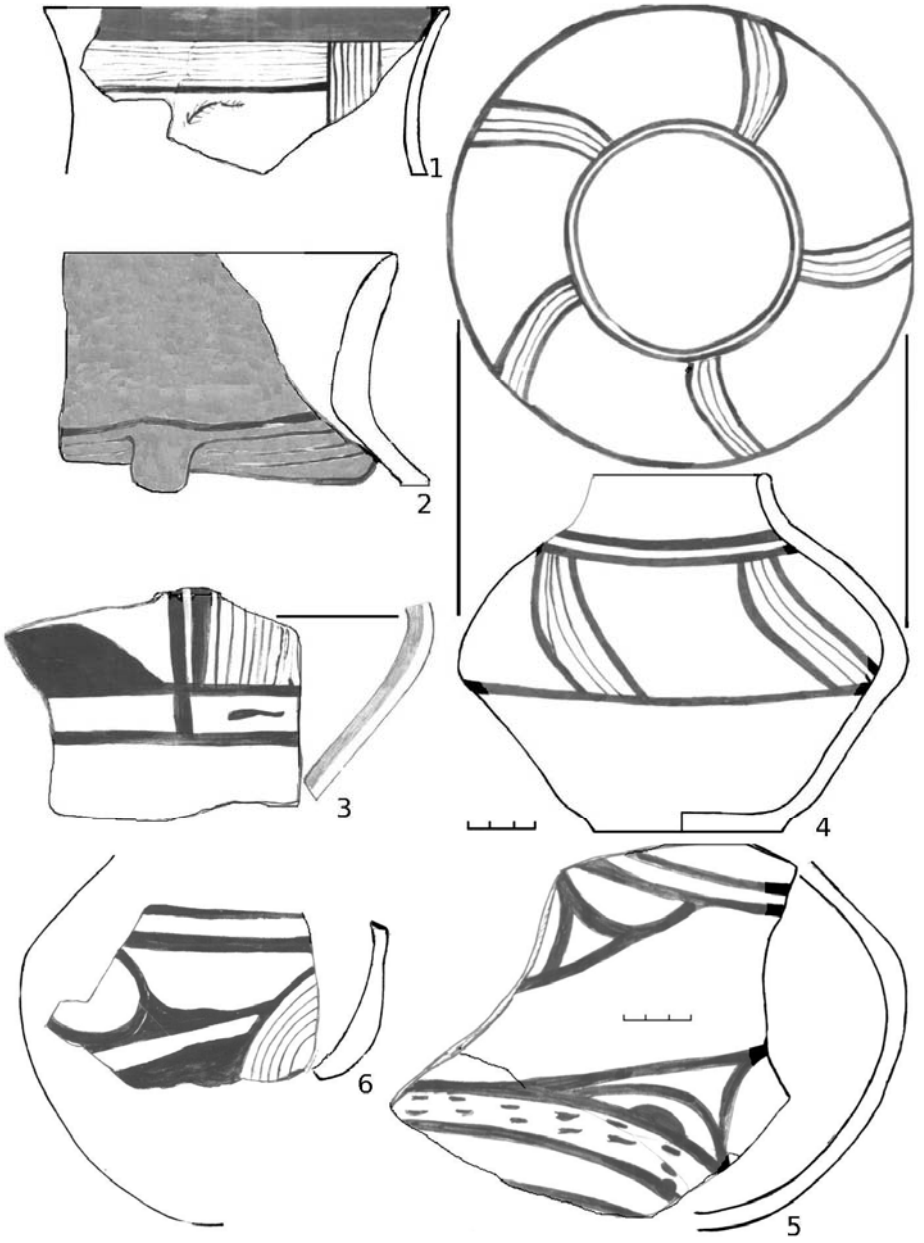

Fig. 5 – Trinca – *La Şanţ*. Fragments de : vase à cou haut 1, 5; vase amphoroïdal 2; fragments céramique 3–4, 6. Cucuteni B_2, style *ζ*.

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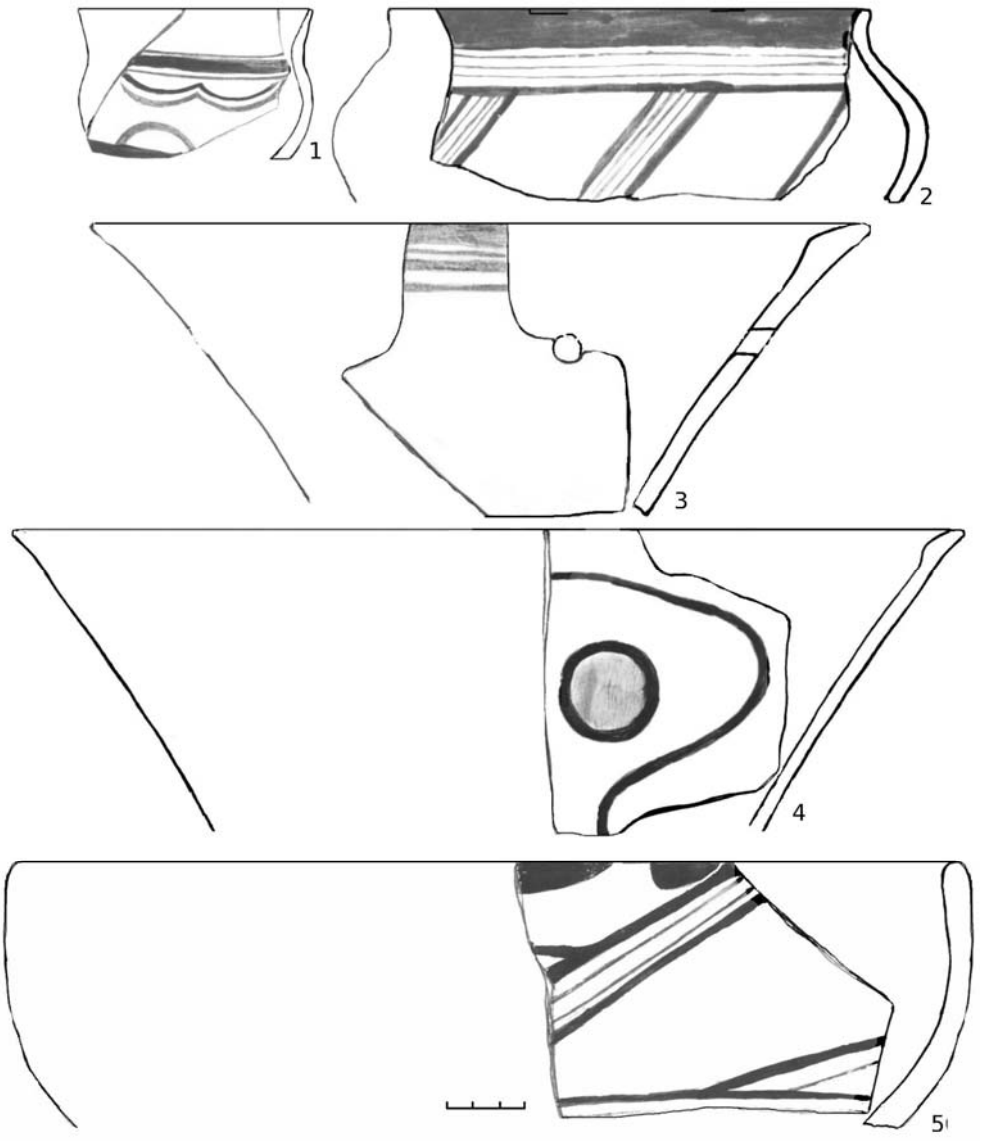

Fig. 6 – Trinca – *La Şanț*. Fragments de : verre 1; vase à cou court et corps arrondi 2; terrines 3–4; bol 5. Cucuteni B_2, style *ζ*.

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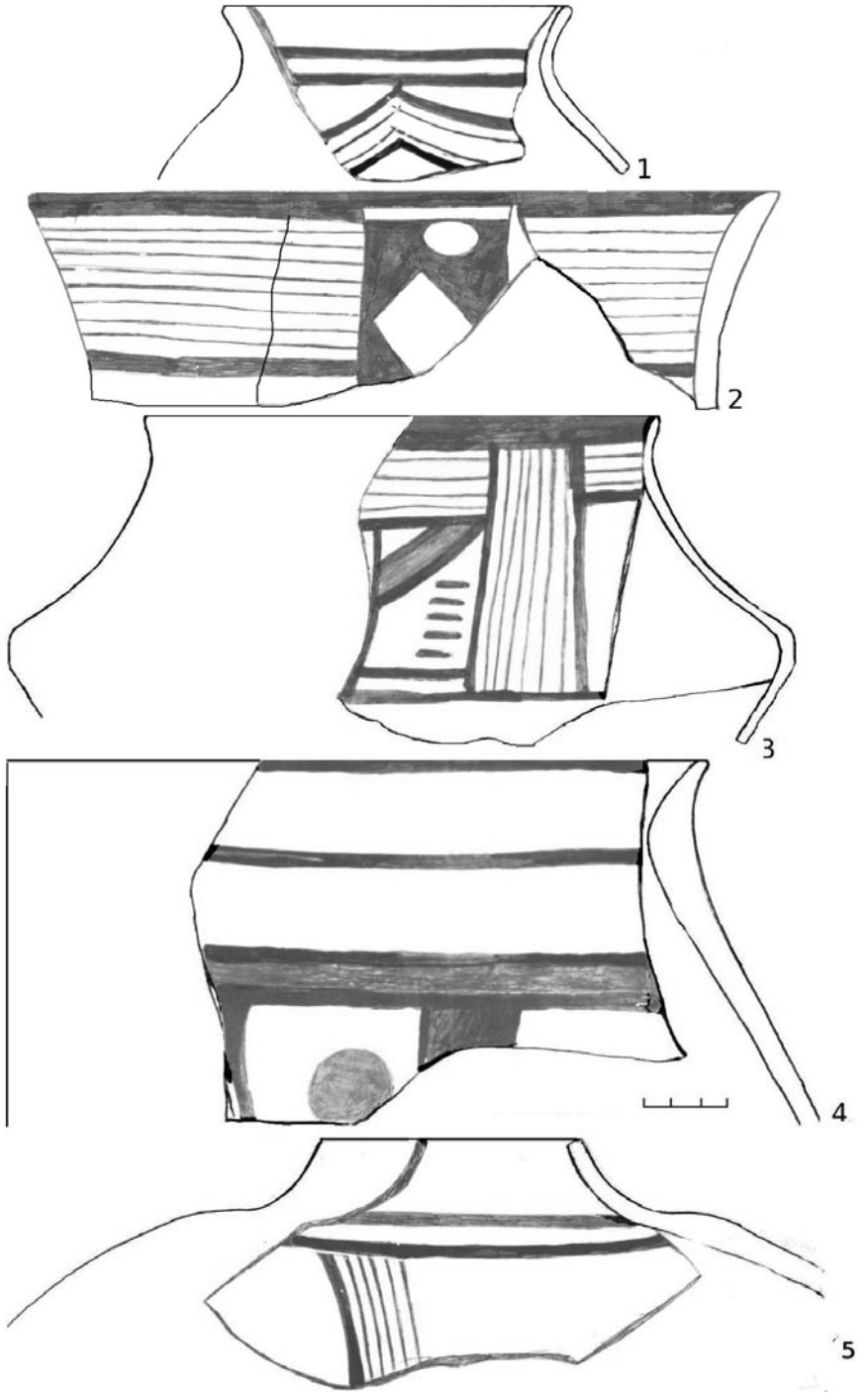

Fig. 7 – Trinca – *La Şanţ*. Fragments de : vase à cou court et corps arrondi 1, 5 cratère 2; vas piriforme 4. Cucuteni B_2, style *ζ*.

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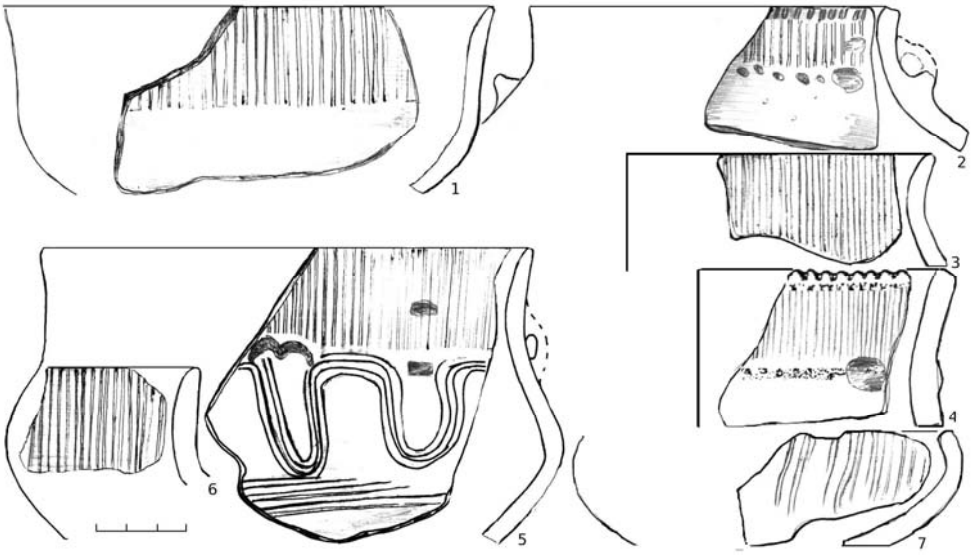

Fig. 8 – Trinca – *La Şanț* 1999. Fragments de : casserole 1; vase à cou haut et corps arrondi 2–4, 6; cratère 5; corps vase 7. La céramique de type Cucuteni C.

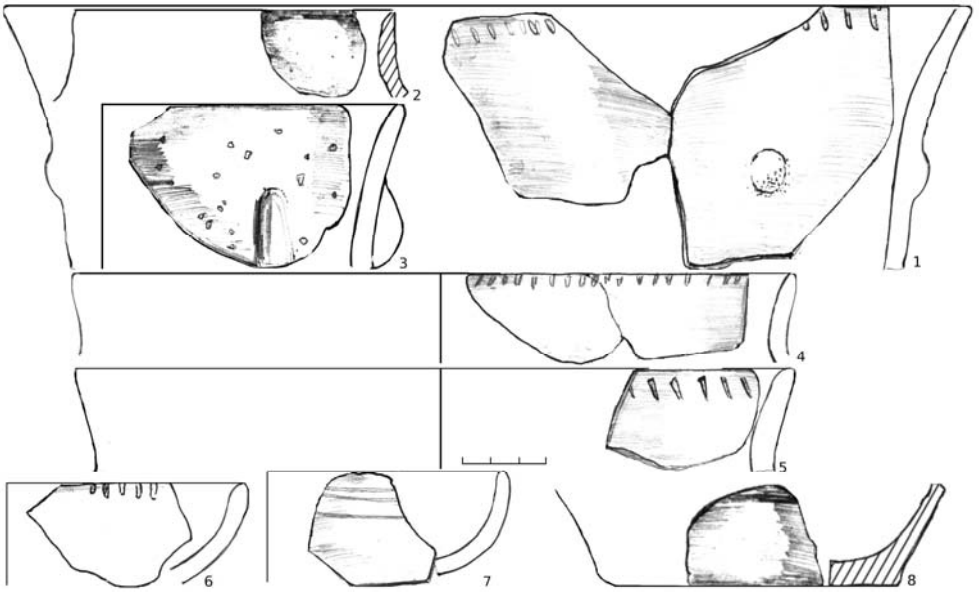

Fig. 9 – Trinca – *La Şanț* 1999. Fragments de : vase à profil en S 1; cratère 2; vase à cou haut et corps arrondi 3–5; bols 6–7, base 8. La céramique de type Cucuteni C.

Les cratères – à la lèvre évasée et au corps arrondi, de petites ou moyennes dimensions, ont été ornés d'oves et d'autres motifs connexes (Fig. 4/4; $ø_{lèvre}$= 28,5;

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h = 9 cm). Ils ont été aussi décorés de spirales en bandeaux larges noirs en forme de lettre S horizontale.

Des *vases à col haut et au corps arrondi*, surtout des fragments se sont préservés. Un seul, de dimensions pas trop grandes (Fig. 5/4; $ø_{lèvre/base}$= 8 et 7,8; h = 16,2 cm) s'est conservé entier. Sur la couche d'engobe blanchâtre, on a peint avec du noir, à l'exception de la partie vers la base qui a été laissée sans ornement. Le registre décoratif se trouve entre l'épaule marquée par deux lignes larges et, la ligne de la circonférence maximale. Il consiste en cinq bandeaux linéaires courbés : deux larges sur les côtés et deux autres minces au milieu.

Un col de vase, couvert sous la lèvre d'un bandeau large, noir, et d'un autre sous celui-ci, interrompu par un bandeau vertical, avec des lignes de délimitation légèrement plus larges, présente sous ceux-ci le dessin d'une petite branche courbée, formée de lignes courtes (Fig. 5/1; $ø_{lèvre}$ = 18; h = 7,4 cm).

Vases amphoroïdaux. Il s'agit de pots plus grands, dont la partie supérieure est haute et le corps arrondi, avec des manches larges sur l'épaule. De ces céramiques, proviennent quelques fragments ornés de bandeaux linéaires sur le col. L'un est peint de manière bichrome de noir sur un fond brun (Fig. 5/2; $ø_{lèvre}$ = 22; h = 9 cm).

Des fragments de grands pots, à corps arrondi, présentent des parties ornées de diverses compositions, peintes de noir sur un fond blanc (Fig. 5/3, 6; $ø_{lèvre}$= 44; 32; h = 11; 10,4 cm) représentant des demi-cercles ou des bandeaux marqués de petits segments (5/5; $ø_{lèvre}$= 46; h = 17,5 cm). On observe aussi deux cercles circonscrits, délimités de deux autres lignes sur un autre fragment, peint de manière bichrome en style *ε* au-dessus d'un bandeau tri-linéaire (Fig. 4/7; $ø_{lèvre}$= 56; h = 18,4 cm).

Les couvercles sont relativement peu nombreux. Tous les exemplaires appartiennent au type dit « *casque suédois »*, à calotte hémisphérique, à la lèvre courte et légèrement évasée. On distingue aussi des variantes plus hautes, toujours plates. L'ornement est très simple : au centre approfondi, on observe des surfaces de couleur, des bandeaux radiaux courbes sur le corps, des segments et vers la lèvre, des ovales interrompus par la ligne peinte sur le bord. A l'extérieur d'un couvercle marqué de noir, on a peint le motif du *« dévidoir »,* suggéré par trois bandeaux courbés jusqu'à la ligne circulaire noire au niveau du cou, et sur le côté neuf petits arcs de cercle, couverts toujours de noir (Fig. 3/1; $ø_{lèvre}$= 12,4 ; h = = 4 cm). Un autre couvercle, plus petit, a été peint de deux bandeaux droit formant une croix, se terminant sur le bord extérieur par de petits arcs de cercle noirs (Fig. 3/3; $ø_{lèvre}$= 15; h = 3,8 cm).

Le groupe ζ

Les pots peints en style *ζ* ont été couverts de motifs ornementaux proches de ceux que nous avons déjà décrits. Ils sont cependant formés surtout de bandeaux

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linéaires noirs, avec des lignes minces rouges ou à cercles, bandeaux larges rouges. Le décor, partiellement préservé, se déroule de la même manière en registres sur le bord ou la partie supérieure du pot, parfois divisée en bandeaux larges verticaux.

Un *verre* au bord légèrement évasé et au corps arrondi, dont le col est peint d'une ligne large noire bordée sur les deux côtés d'une autre ligne mince rouge, avait sur l'épaule une simple guirlande faite de minces lignes noires et rouges (Fig. 6/1; $ø_{lèvre}$= 10; h = 6,7 cm).

Les terrines – deux formes tronconiques ont la lèvre élargie vers l'intérieur – comme un manchon ; l'une a été peinte de rouge étalé sur le bord extérieur, puis de quelques lignes plus minces (Fig. 6/3; $ø_{lèvre}$= 40; h = 11 cm) ; tandis que l'autre a conservé probablement une partie d'une ove dont le centre est un cercle rouge, bordé de noir (Fig. 6/4; $ø_{lèvre}$= 38; h = 14,2 cm).

Un vase ayant la forme d'un *bol* présente sous la lèvre les mêmes taches de couleur noire et sur le corps des bandeaux linéaires bichromes – noirs et rouges, obliques, croisés (Fig. 6/5; $ø_{lèvre}$= 40; h = 14,5 cm). Le bord évasé d'un *cratère* a été orné d'un bandeau noir et sous celui-ci se trouve un autre bandeau formé de huit lignes rouges minces, mais interrompu par un bandeau vertical noir, dont on a réservé, du fond blanc du pot, un ovale et un rhombe blanc (Fig. 7/2; $ø_{lèvre}$= 25,5; h = 7,5 cm).

Le *col court et du corps arrondi* d'un autre récipient est orné par deux lignes noires peintes sous le col. Sous ces lignes, se trouvent des guirlandes, au milieu desquelles il y a des lignes minces rouges (Fig. 7/1; $ø_{lèvre}$= 11,5; h = 5,8 cm). Un autre pot, est décoré d'un bandeau large noir sous la lèvre, suivi par un autre linéaire rouge, dont probablement six bandeaux linéaires bichromes se détachent obliquement sur le corps (Fig. 6/2; $ø_{lèvre}$= 17,8 cm; h = 7,3 cm). Un autre pot est représenté par un fragment : la zone de la bouche qui s'est préservée, présente sur l'épaule un bandeau rouge, un autre blanc réservé du fond, et un autre noir. C'est de ce dernier qu'a été tracé un bandeau linéaire rouge, délimité par une ligne noire courbée, probablement la partie d'une ove (Fig. 7/5; $ø_{lèvre}$= 9,5; h = 8,7 cm). Le corps bitronconique, très courbé à l'extérieur, présente un autre pot avec le bord légèrement évasé, décoré sous la lèvre d'un bandeau noir, suivi par un autre linéaire bichrome, croisé d'un autre, vertical. Sur le fragment, d'autres motifs ont été préservés (Fig. 7/3; $ø_{lèvre}$= 12; h = 10,5 cm).

Les récipients ovoïdaux ne sont pas très nombreux. Nous mentionnons l'existence d'un *pot piriforme*, au bord court, évasé, à la lèvre amincie avec un épaississement au niveau du col et au corps arrondi. Sous la lèvre et sur le col, on a peint une ligne noire, et sur l'épaule, un bandeau large rouge, bordé de noir. Des bandeaux larges noirs se détachent et présentent divers motifs dont un cercle rouge (Fig. 7/4; $ø_{lèvre}$= 40; h = 12,2 cm).

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L'analyse des formes et des décors des céramiques peintes a révélé le grand nombre de pots fragmentés à peinture bichrome, en style *ε*, réalisée avec du noir appliqué sur le fond blanc-jaunâtre, plus rarement rougeâtre, et légèrement moins rouge que celui des formes à peintures trichrome, en style *ζ*, à noir et rouge linéaire ou étalé. Les styles mentionnés ont permis d'encadrer le niveau d'habitat cucuténien dans les séquences culturelles de B_{2a}. Les sites de cette période, situés à gauche du Prut, à l'exception du site Brânzeni III[9], daté pendant Cucuteni B_{2b}, n'ont pas été étudiées jusqu'à présent par des fouilles systématiques.

Dans l'espace à l'ouest de Prut on trouve des analogies aux découvertes plus anciennes de Cucuteni – *Cetățuie*, pour le style *ε*[10], et aussi pour le style *ζ*[11], ou à la céramique peinte de la dernière phase de Truşeşti – *Țuguieta*[12] .

La céramique de type Cucuteni C

Nous présenterons ci-dessous des fragments de pots mieux conservés, parmi les 60 fragments environ dégraissés avec des coquillages, plus rarement avec des coquillages et du calcaire (Fig. 9/2), du calcaire (Fig. 9/7) ou de la chamotte (Fig. 8/3), cuite de manière semi-oxydante, brun-grisâtre ou brun-brique, et parfois, à cause de la cuisson secondaire, brique-verdâtre[13]. La classification a été réalisée en fonction de la forme des pots et de leurs décors. Les fragments découverts, proviennent de casserole ou de cratères, de pots à col haut et à corps arrondi, de pots à profil en S et de moindres pots. D'habitude, on a couvert le bord, et parfois aussi une partie du corps, de stries : un cratère, un casserole et quatre pots à col haut et à corps arrondi (Fig. 8) ; ou d'entailles : deux pots à cou haut et corps arrondi, un bol et un vase à profil en S (Figs. 9/1, 3–7). Un cratère et une base ne présentent pas d'ornement (Figs. 9/2, 8).

La céramique décorée par des stries : une casserole, un cratère (Figs. 8/1, 5) et des vases à col haut et à corps arrondi (Figs. 8/2–4, 6), dont un seul avec des encoches et un décor en profondeur présente une proéminence sur l'épaule (Fig. 8/4).

Les cratères (casseroles) à lèvre amincie et arrondie, au bord droit ou évasé, à l'épaule parfois épaisse et la moitié inférieure tronconique, avec des manches fixés sur le bord. D'habitude, ils représentent les formes les plus nombreuses à l'intérieur de cette catégorie, fréquemment utilisée, dénommée "vase à bouillir", selon l'appellation que lui donnait Hubert Schmidt[14]. Une casserole qui se trouvait en SI/M14,30, dans la deuxième couche, au profil en S courbé et au bord strié, a été

[9] Marchevici 1981, 33 et suiv, Fig. 62; 98.
[10] Schmidt 1932, 39, Pl. 17/3–8, 11–14; 20/4, 6; 21/3–13.
[11] *Ibidem*, 41–42, Pl. 20/5; 21/14.
[12] Petrescu-Dîmboviţa *et alii* 2004, 196 et suiv., Fig. 338–343; Petrescu-Dîmboviţa dans Petrescu-Dîmboviţa *et alii,* 1999, 454 et suiv., Fig. 338–340.
[13] Alaiba 2002, 63 et suiv.; *Eadem* 2004, 28 et suiv.
[14] 1932, 43, B 21 et 22.

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modelée dans une terre dégraissée avec beaucoup de coquillages et a été cuite jusqu'à obtenir une couleur brun clair. Le cratère découvert en SI, M 12,70, dans la seconde couche, fabriqué dans une pâte dégraissée avec beaucoup de coquillages (Fig. 8/5; $ø_{lèvre}$= 16 cm), de couleur brun clair, un corps courbé et une lèvre légèrement inclinée à l'extérieur. Entre le bord strié et le corps, a été appliqué un petit manche. Dans le registre formé entre la limite inférieure du bord et les bandeaux horizontaux, vers la base, il y a un bandeau linéaire incisé serpenté. Par sa forme, mais surtout par l'application en relief, sous le bord, il évoque des cornes d'ovicaprin, probablement de chèvre domestique (*Capra hircus*), un exemplaire le plus à part de la catégorie de céramiques de type Cucuteni C.

Les *pots à col haut et à corps arrondi* sont assez nombreux. Ils ont été modelés dans une terre glaise dégraissée avec des coquillages (Fig. 8/6; $ø_{lèvre}$= 24 cm) ou avec de la chamotte (Fig. 8/3; $ø_{lèvre}$= 20 cm). Ils présentent un bord strié, pas trop haut, généralement droit (Fig. 8/3), courbé à l'extérieur (Fig. 8/6) ou marqué par de petites pastilles (Fig. 8/4; $ø_{lèvre}$= 32 cm). Sur un fragment de vase dégraissé avec des coquillages, dont l'extérieur est de couleur jaunâtre et l'intérieur noir, les stries ont été tracées jusque vers la base du pot (Fig. 8/7).

A ces formes, il faut aussi ajouter quelques fragments de *petits pots*, dont certains proches de ceux cucuténiens. Une partie d'un *bol* orné d'incisions horizontales (Fig. 9/7; $ø_{lèvre}$= 16 cm) se trouve toujours dans la seconde couche, en SI. Un pot à col haut et à corps arrondi, de couleur brun-grisâtre, poli à l'extérieur, avec des inclusions de sable et probablement du mica dans la pâte, présente sur la lèvre des encoches, sur le bord des incisions et sur l'épaule des profondeurs ovales, non ordonnées (Fig. 8/2; $ø_{lèvre}$= 14 cm). Sous la lèvre et l'épaule, on voit la marque d'accrochement d'un nouveau manche.

La céramique à décor entaillé : deux pots à col haut et à corps arrondi, un bol et un vase à profil en S (Figs. 9/1, 4-6).

Le bol modelé en pâte glaiseuse brun clair, à taches grisâtres (Fig. 9/6; $ø_{lèvre}$= 16), dégraissée avec un peu de coquillages, de forme hémisphérique, a une lèvre arrondie et entaillée vers l'extérieur. Deux pots à col haut et à corps arrondi, dont les dimensions, sont similaires, ont été modelés en pâte dégraissée à l'aide de coquillages, et cuite de couleur brique ou modelés en terre glaise mélangée aussi à des petites parties de calcaire, cuite de couleur grisâtre. Ils ont une lèvre épaisse, mais légèrement arrondie, et présentent des entailles sous la lèvre ou sur le bord extérieur (Fig. 9/4-5; $ø_{lèvre}$= 30 × 2 cm).

Un vase de dimensions moyennes, à profil en S, dégraissé avec des coquillages, a été cuit jusqu'à ce que la couleur devienne brique. Sous la lèvre évasée et taillée de manière droite, on a réalisé des entailles et, à la base du bord droit, on a appliqué une proéminence (Fig. 9/1; $ø_{lèvre}$= 32 cm).

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La céramique sans décor approfondi est au moins nombreuse. Le bord de *cratère*, à la lèvre étroite mais coupée de manière droite, légèrement évasée, provient d'un vase dégraissé avec beaucoup de coquillages, de couleur gris foncé à taches brunes. Il présente vers le col, une proéminence allongée (Fig. 9/3; $ø_{lèvre}$= 30). Cette forme rappelle les pots à lèvre entaillée.

Un autre bord, dégraissé toujours avec des coquillages, mais aussi avec du calcaire, toujours courbé à l'extérieur, à la lèvre arrondie, mais aux parois épaisses, provient d'un pot au corps arrondi (Fig. 9/2; $ø_{lèvre}$= 12 cm), probablement une forme proche de la céramique cucuténienne. Une *base*, de couleur brique, dégraissée avec des coquillages (Fig. 8/7; $ø_{lèvre}$= 10 cm), a été cuite en oxydation. Dans le site de Cârniceni – *Holm II*, caractéristique de la séquence chronologique Cucuteni B_{2b}, quelques pots aux formes plus proches des vases cuits de manière oxydante, ont été dégraissée avec des coquillages[15].

Considérations

La découverte, dans le même complexe, de pots avec diverses inclusions : du sable, des coquillages, plus rarement du calcaire ou de la chamotte implique leur contemporanéïté. Parmi eux, les pots de type Cucuteni C, décorés par des stries, ne seront plus utilisés à la fin de la phase Cucuteni B_2 ; par contre, les vases dont les lèvres, le bord ou l'épaule, sont ornés de différentes impressions (surtout des entailles), resteront des types céramiques spécifiques de la période suivante et de l'Âge du Bronze.

Quelques uns des pots dégraissés avec des coquillages, ont la base alvéolée. Leurs formes sont similaires aux céramiques de la culture Horodiştea / Erbiceni-Gordineşti[16], qui a suivi au grand complexe Cucuteni – Tripolie. La céramique de type Cucuteni C du site Trinca – *La Şanţ* présente de nombreux traits qui la rapproche d'autres sites, mais aussi des particularités technologiques, morphologiques et décoratives, qui l'individualise. Selon E. Comşa „les fours évolués ont été inventés par les porteurs de la culture Cucuteni de l'Ouest de la Moldavie et du Sud-Est de la Transylvanie, ayant à la base le complètement constructif graduel des fours appartenant à la première catégorie. Plus tard, les fours évolués ont été transmis, par les communautés voisines, aussi chez ceux qui vivaient dans la région située de l'autre côté du Dniestr"[17]. On a considéré aussi que, les porteurs de la culture Srednyj Stog ont été ceux qui ont assurait le transfert de ce type de fours. Parmi les sites, de la même période, situés à gauche et à droite du Prut, les plus importants sont ceux de Brânzeni III[18], Truşeşti – *Ţuguieta*[19], Cucuteni – *Cetăţuie*[20], *Gura Văii*[21], ou Cârniceni – *Pe Holm II*[22].

[15] Alaiba et Grădinaru 2002, 67 et suiv.
[16] Alaiba 1995, 25 et suiv.
[17] Comşa 1976a, 30; *Idem* 1976b, 353.
[18] Marchevici 1980, 33 et suiv.
[19] Petrescu-Dîmboviţa *et alii* 1999, 459, Fig. 338–343.
[20] Alaiba, dans Mircea Petrescu-Dîmboviţa *et alii* 2004, 229 et suiv., Fig. 225–244.
[21] Niţu *et alii*, 1971, 107 et suiv.
[22] Chirica et Niţu 1987, 289–290 et 1989, 23–26.

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Les fouilles de Trinca – *La Şanț* ont conduit à l'identification d'un nouveau site cucuténien, particulièrement important pour la compréhension de la phase Cucuteni B_2 – Tripolie C_I. Ultérieurement, sur la même colline on a aménagé un système défensif, dont les particularités de la construction et sa datation n'ont pas été encore clarifiées.

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CUM A FOST DESCOPERIT „SOBORUL ZEIŢELOR” DE LA PODURI, ROMÂNIA

COMMENT ON A DÉCOUVERT „SOBORUL ZEIŢELOR” DE PODURI, ROUMANIE

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Cuvinte-cheie: *tell*, Poduri, Pre-Cucuteni, statuete, religie.
Rezumat: Ansamblul de obiecte sacre denumit „Soborul Zeiţelor” este destul de bine cunoscut specialiştilor în perioada neolitică, preocupaţi de sud-estul Europei. Descoperit în 1981, complexul ritual a fost publicat în anul următor şi apoi s-a revenit cu precizări ale autorului. În acest articol, scopul este de a prezenta circumstanţele în care au fost găsite aceste obiecte sacre, dar şi condiţiile uneori dificile, în care s-au efectuat cercetările.
În decurs de circa două decenii, „Soborul Zeiţelor” a fost considerat ca unic, singurul său concurent fiind ansamblul de obiecte sacre, numit „Scena”, de la Ovčarovo: după aceea, cum arheologia este o disciplină dinamică, în 1998 s-a descoperit la Isaiia, judeţul Iaşi, tot într-un sit Pre-Cucuteni, un complex de cult, care se aseamănă celui de la Poduri. Ultima descoperire ne permite să susţinem ideea că triburile Pre-Cucuteni posedau o religie unitară, chiar dacă erau răspandite pe o arie geografică largă.

Mots-clé : *tell*, Poduri, Pré-Cucuteni, statuettes, religion.
Résumé : L'ensemble d'objets sacrés nommé „Soborul Zeiţelor” est assez bien connu aux spécialistes du Néolithique intéressés par le sud-est de l'Europe. Découvert en 1981, le complexe rituel a été publié l'année suivante, et par la suite l'auteur y est revenu avec des précisions. Dans cet article il se propose d'apporter des renseignements pas seulement sur les circonstances où les objets sacrés ont été trouvés, mais aussi sur les conditions, parfois difficiles, où les recherches ont été menées.
Pendant près de deux décennies, „Soborul Zeiţelor” a été considéré comme unique, son seul concurrent étant l'ensemble d'objets sacrés nommé „Scena”, de Ovčarovo; pourtant, comme l'archéologie est une discipline dynamique, en 1998 on a découvert à Isaiia, dans le département de Iaşi, toujours dans un site Précucuteni, un complexe de culte qui ressemble à celui de Poduri. La nouvelle découverte nous permet de soutenir l'idée que les tribus Précucuteni possédaient une religion unitaire, même s'ils étaient répandus sur une aire géographique étendue.

Printre arheologi circulă o butadă: „Orice descoperire importantă va apărea în ultima zi de săpătură, atunci când banii s-au terminat, şi va fi, obligatoriu, într-un taluz unde săpătura nu poate fi extinsă”. Superstiţioşi, ca toţi cei care depind şi de hazard, arheologii aşteaptă cu speranţe ultimele zile de săpătură, dar caută să dea

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impresia că nu speră nimic, cel puţin pentru campania în curs. E un mod de a păcăli soarta, prin utilizarea unei forme de magie simpatetică inversă. Conştienţi sau nu, toţi arheologii speră, de-a lungul anilor de eforturi şi privaţiuni, de muncă rutinieră şi meticuloasă, să facă *descoperirea cea mare*.

Comuna Poduri din judeţul Bacău se găseşte în Subcarpaţii Moldovei, o regiune cu soluri fertile, climat plăcut şi păduri încă impresionante. În neolitic, întreaga zonă era puternic împădurită, în zona colinară dominau pădurile de foioase, cu o faună extrem de diversă şi bogată, în timp ce munţii erau acoperiţi de păduri de conifere. Vegetaţia şi fauna sălbatică ofereau locuitorilor resurse naturale deloc neglijabile, dar, în afara acestora, comunităţile neolitice au descoperit aici existenţa unor izvoare cu apă sărată[1]. Sarea devenise deja pentru neolitici o substanţă deosebit de preţioasă.

Primii locuitori neolitici, câteva comunităţi Starčevo-Criş, s-au instalat în zonă, la Vermeşti şi Leontineşti, la începutul mileniului şase (6050–5500 Cal B.C.)[2]. Deşi depresiunea Moineşti oferea populaţiilor neolitice excelente condiţii de viaţă şi mai ales preţioasa sare, timp de aproape un mileniu, regiunea va fi destul de slab populată. De abia la începutul mileniului următor (4780–4619 Cal B.C.)[3], o comunitate Precucuteni se aşează pe Dealul Ghindaru, întemeind un sat destul de important[4]. Timp de peste un mileniu, comunităţile Pre-Cucuteni şi Cucuteni vor locui pe Dealul Ghindaru, reconstruindu-şi cu încăpăţânare, de peste 13 ori, satele distruse de incendii violente. Datorită locuirii îndelungate şi a arhitecturii specifice, locuinţe de suprafaţă alcătuite dintr-un schelet de lemn acoperit cu chirpic, pe Dealul Ghindaru s-au acumulat depuneri arheologice de peste 4,5 m, care au căpătat forma unui *tell*, cu o suprafaţă actuală de peste 12 000 mp[5].

Tell-ul Dealul Ghindaru se găseşte într-o bună vecinătate: la 4–5 km nord-vest se află micul oraş Moineşti, în care s-a născut Tristan Tzara, unul dintre creatorii dadaismului, iar la 8–9 km sud-est, Tescani, locul unde George Enescu a creat faimoasa sa operă *Oedip*. Spre nord-est de *tell*, se găseşte satul Valea Arinilor, unde s-a născut Nicu Enea pictor, în perioada interbelică, a caselor regale ale României şi Iugoslaviei. De Poduri este legat, în copilărie, şi pictorul şi graficianul român Marcel Chirnoagă. În Subcarpaţii Moldovei toamna şi mai ales aşa-zisa „vară indiană” filtrează o lumină specială, care conferă peisajului, mai ales pădurilor de foioase şi conifere, o frumuseţe ireală. Regiunea Moineşti-Tescani nu a dat numai mari pictori ci, i-a atras şi pe cei mai importanţi artişti români contemporani, în căutare de peisaje şi idei. La Tescani, în conacul familiei

[1] Monah 1991, 391; Monah 2002, 135–138.
[2] Monah 1976, 7-29 ; Mantu 1995, 223.
[3] Monah 1987, 78; Mantu 1995, 223; Mantu 1998, 255.
[4] Monah 1987, 70; Mantu 1995, 223.
[5] Monah *et alii*, 2003; Monah *et alii*, 2004, 349–357.

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Rossetii-Tescanu, donat de prințesa Maruca Cantacuzino și George Enescu ca loc de creație și odihnă pentru intelectualii români, se află un un centru de creație unde pictează, an de an, cei mai importanți maeştri ai penelului din România. Îl voi aminti aici doar pe regretatul Horia Bernea, un mare pictor, pasionat de magia ceramicii Cucuteni şi frecvent vizitator al şantierului arheologic de la Poduri. Poate că şi pasiunea lui Romeo Dumitrescu, născut la Moineşti şi sponsor al cercetărilor de la Poduri, pentru cultura Cucuteni se explică prin sensibilitatea față de paleta coloristică, mereu în schimbare, a dealurilor subcarpatice de pe valea Tazlăului Sărat.

Cercetările de la Poduri au început în anul 1979 şi, în scurt timp, stațiunea s-a dovedit a fi un *tell* cu o stratigrafie impresionantă, o adevărată axă cronologică a calcoliticului de la Dunărea de Jos. Peste un sfert de secol de investigații, 27 de campanii de săpături au prilejuit o serie de descoperiri deosebit de interesante, atât în ceea ce priveşte cronologia culturilor Precucuteni şi Cucuteni, cât şi viața cotidiană. În timpul săpăturilor au fost făcute mai multe descoperiri privind viața spirituală a celor ce au locuit în perioada calcolitică pe Dealul Ghindaru. Dintre acestea, ne-am propus să prezentăm istoricul descoperirii care se bucură, până în prezent, de cea mai mare notorietate.

În 1981, după o „vară indiană" splendidă, săpătura ajunsese în cel mai vechi nivel de locuire al *tell*-ului. Începuse luna noiembrie şi vremea s-a schimbat radical. Au venit zile răcoroase şi ploioase. Frigul s-a instalat peste Dealul Ghindaru. Au apărut problemele cu lucrătorii, toți locuitorii satului fiind preocupați de strângerea recoltei. Totul anunța sfârşitul campaniei de săpături şi, bineînțeles, acea zi magică când trebuia să apară *descoperirea*. Împreună cu colegul Gheorghe Dumitroaia mimam că nu ne mai aşteptăm la nimic deosebit, deoarece campania fusese darnică în descoperiri interesante: sanctuare, depozite de cereale carbonizate, cunoscuta „moară cu silozuri" Precucuteni[6] şi nelipsitele vase pictate, unele adevărate capodopere. Hotărât, nu mai aveam nimic de aşteptat pentru acea campanie, şi totuşi.

Aşa cum era prescris în ghidul arheologului nesuperstițios a venit o zi mohorâtă de noiembrie, cu nori cenuşii şi grei, lucrători puțini şi lipsiți de entuziasm. În plus, eram într-o situație specifică ultimului deceniu din timpul lui Ceuşescu. Din mâncarea adusă de la oraş nu mai aveam decât o bucată de pâine care începuse să mucegăiască şi o conservă de peşte în sos tomat. Din sat era imposibil de procurat alimente şi, de fapt, banii personali erau pe terminate. Erau întrunite toate condițiile pentru a încheia săpătura, dar, în definitiv, nu mai aveam de demontat decât vreo patru metri pătrați dintr-o construcție, care făcea parte din cel mai vechi nivel de locuire de pe Dealul Ghindaru. Apreciam optimişti că două zile de lucru ar fi fost suficiente. Eram la adâncimea de 4.35 m, într-un tranşeu cu o

[6] Monah şi Monah, 2008, 40, Fig. 12–14.

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deschidere de 3 m. Deasupra capetelor noastre se ridicau semețe şi destul de instabile, taluzurile tranşeei slăbite de un mare şanț din epoca bronzului care „tăia” construcția Precucuteni.

Cu entuziasm mediocru şi privind mereu spre cerul plin de nori grei de apă, am început o nouă zi de lucru. Colegul Dumitroaia a început demontarea chirpicului ars din capătul nordic al construcției, în timp ce eu făceam aceeaşi operațiune în extremitatea de sud-est. Am demontat rare fragmente de chirpic ars, ce proveneau de la pereții prăbuşiți şi am remarcat câteva grupări de fragmente ceramice care ne-au permis datarea construcției spre sfârşitul fazei Precucuteni II. Dărâmăturile erau puternic tasate, fragmentele de pereți fiind sudate de platforma de chirpic, puternic arsă. Încă înainte de prânz, colegul Dumitroaia mi-a semnalat aparția, în sectorul său, a unei vetre. După ce a cerut unui lucrător să îndrepte taluzul a venit să-mi comunice noutatea. Şi în sectorul meu începuse să apară o grupare interesantă de fragmente ceramice. Ne-am apropiat de lucrătorul care îndrepta taluzul cu multă vigoare şi, spre disperarea noastră, am observat că secționase cu hârletul câteva statuete. L-am îndepărtat de la locul crimei şi am început operațiunea de recuperare a fragmentelor micilor statuete. Din păcate, greşeala nu mai putea fi reparată. Am reuşit, totuşi, să stabilim că pe marginea de vest a vetrei se aflaseră un vas miniatură, un tron de lut ars şi patru statuete, care scăpaseră de ardoarea lucrătorului. Pe latura de nord-est erau etalate alte trei statuete, parțial secționate de lucrător dar care, inițial, fuseseră întregi. Din cauza friabilității pastei şi a arderii slabe, eforturile noastre de a recupera fragmentele au fost zădarnice. Oricum descoperirea era interesantă, astfel de ansambluri de obiecte sacre fiind destul de rare chiar şi în calcoliticul din sud-estul Europei[7].

Ansamblul de statuete era format dintr-un vas miniatură, un tron de lut ars, decorat cu crestături pe margine, o statuetă reprezentând o femeie obeză pe care am numit-o „Matroana” şi şase statuete feminine mai mici, care păreau să reprezinte copii. Datorită compoziției sale: o mamă (Matroana) şi cei şase copii am numit acest ansamblu de statuete „Sfânta Familie”. Absența tatălui este firească pentru neoliticul şi calcoliticul din sud-estul Europei unde elementul masculin este destul de rar reprezentat plastic. Firesc, ne-am spus că după această descoperire nu se mai poate întâmpla nimic. Împinşi de spiritul datoriei, totuşi, ne-am întors la cele câteva fragmente ceramice pe care le descoperisem pe latura de sud-est a construcției. Am continuat lucrul şi am scos la iveală o nouă vatră, a doua din construcție, lucru mai puțin obişnuit. După un prânz extrem de frugal am reluat munca, constatând că cea mai mare parte dintre lucrătorii noştri ne abandonaseră.

După degajarea şi înregistrarea în planul săpăturii a vetrei şi a grupului de fragmente ceramice, am constatat că atât aceasta, cât şi resturile ceramice, intrau sub taluzul de peste 4,35 m înălțime. Orice tentativă de degajare a acestora era

[7] Monah 1982, 11.

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exclusă. Situația corespundea întru totul butadei amintite la început. Ne-am resemnat şi am început recoltarea fragmentelor ceramice. Am remarcat că primele fragmente proveneau de la un vas mare, cu pereții destul de friabili, aşezat cu fundul în sus. Sub primele fragmente ceramice am observat, într-o oarecare dezordine, dar grupate, mai multe statuete şi tronuri de lut ars. Deasupra acestora şi printre ele se vedeau, foarte clar, resturile unor paie de cereale. Materia organică se dezintegrase, rămânând doar o membrană subțire şi transparentă. În momentul în care am încercat să recoltăm paiele de cereale, acestea, precum un papirus scos la lumina zilei, se dezintegrau.

Am făcut câteva fotografii ale ansamblului de obiecte sacre *in situ*, prilej de a blestema tot şi toate. Era evident că aparatul nostru, un Lubitel' sovietic, bun pentru copii aflați la primul contact cu fotografia, nu va reuşi să înregistreze mulțumitor descoperirea. Combinația aparat sovietic şi film chinezesc precum şi lumina unui sfârşit de zi din noiembrie au concurat la obținerea unor fotografii cu valoare mai mult sentimentală decât documentară. Orice arheolog ştie câte operațiuni prilejuieşte o astfel de descoperire. Marcarea pe plan a complexului, alcătuirea unui plan de detaliu la 1/10, descrierea amănunțită a condițiilor de descoperire. Şi, peste toate, eram într-o criză de timp teribilă. Mai ales că, în tranşeul adânc de peste 4 m, umbrele înserării se lăsau amenințătoare şi lăsarea *in situ* a complexului era imposibilă. În plus, începuse să cearnă o ploaie măruntă, tipică pentru regiunea subcarpatică. Entuziasmul începuse să fie înlocuit de disperare. După operațiunile obligatorii de înregistrare a descoperirii şi desenare a planului de detaliu, am hotărât să înregistrăm, în memoria noastră, cât mai multe detalii, pentru a le consemna apoi în jurnalul de săpătură.

Am început demontarea pieselor. Am remarcat că statuetele şi tronurile nu erau separate, ele păreau să fi fost aşezate în mijlocul unui vas mare, având sub ele, în jurul lor şi deasupra, paie de cereale. Pe măsură ce ridicam o piesă îi acordam un număr şi cu infinite precauțiuni o aşezam pe un strat de vată într-o oală de supă, singurul recipient suficient de încăpător pe care l-am găsit în grabă. Au fost recoltate 21 de statuete şi 13 tronuri de lut ars. La început am avut impresia că sunt 14 tronuri, fapt ce a fost consemnat în jurnal şi menționat în prima publicație[8] . Mai târziu am observat că fragmentul pe baza căruia numărasem 14 tronuri făcea parte dintr-un tron şi astfel cifra exactă a tronurilor este de 13. În timpul recoltării obiectelor, am observat că piesele sacre fuseseră depuse într-un vas mare, decorat cu incizii ce alcătuiau aşa-zisul motiv „tablă de şah"[9].

În afara statuetelor şi tronurilor, din ansamblu făceau parte şi două obiecte mai greu de clasificat: o sferă de lut cu o gaură pe mijloc, decorată cu grupuri de incizii şi un obiect bitron-conic cu partea superioară terminată printr-o creastă,

[8] Monah 1982, 11.
[9] Monah 2004, 12–13.

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decorată cu crestături. Grupuri de incizii se aflau şi pe corpul piesei. Piesa, cu puţine analogii în plastica Pre-Cucuteni, avea o înfăţişare destul de stranie, aducând oarecum cu navă extraterestră aşa cum şi-o imaginează amatorii de literatură S.F. În glumă, am numit aceste două misterioase obiecte OPNI (Obiecte Preistorice NeIdentificate).

Târziu, după ce s-a înnoptat, am coborât de pe *tell*, strângând la piept oala albastra cu preţioasa comoară. Parcă şi administraţia reţelelor electrice părea că aflase despre descoperire şi, în mod excepţional, lumina electrică nu fusese întreruptă. Prilej pentru noi să examinăm detaliat ansamblul de obiecte sacre. Remarcasem încă de pe şantier existenţa a două grupuri de statuete. Primul grup era format din şase mici statuete feminine nedecorate. Toate statuetele erau modelate în poziţie şezândă. Respectând canoanele plasticii Pre-Cucuteni corpul lor era sever schematizat, capul era sumar modelat la capătul uni gât scurt sau, uneori, era unit direct cu trupul. La cele mai multe exemplare şoldurile şi bazinul erau ample, chiar exagerate faţă de dimensiunile pieselor. Sexul feminin al personajelor reprezentate era clar marcat, prin linii incizate. Toate statuetele din acest grup erau modelate îngrijit din pastă fină, compactă şi arse oxidant, uniform, căpătând culoarea roşie.

Fig. 1 – Ipoteză de punere în scenă a „Soborului Zeiţelor” de la Poduri.
Hypothèse de mise en scène du « Soborul Zeitelor » de Poduri.

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Un prim personaj ne-a reținut atenția. Statueta era modelată cu bustul şi capul puternic „trase" spre spate. Capul era vag schițat prin ciupirea lutului, care forma un soi de creastă ce reprezenta nasul. Pe lobii astfel obținuți au fost marcați, prin imprimarea vârfului unei spatule, ochii. Două incizii orizontale şi o incizie asemănătoare marcau ochii şi gura. Sânii alungiți erau „crestați" orizontal, probabil pentru a sugera un tatuaj. Pântecul era proeminent, vrând, probabil, să sugereze graviditatea. Statueta părea, prin dimensiuni, modelare şi detalii, să reprezinte personajul cel mai important din grupul statuetelor nedecorate. O altă mică statuetă, expresiv modelată, avea reprezentată o coafură. De data aceasta, artizanul a renunțat la reprezentarea gâtului, modelând un cap disproporționat de mare, față de restul trupului. Capul coboară până aproape de talie, iar bustul dispare cu totul. Nasul proeminent îi dă aerul unei păsări. Ochii sunt de data acesta alungiți şi marcați prin două imprimări verticale, în timp ce gura mică subliniază expresia mirată a statuetei. Pe creştet, statueta pare să aibă o coafură înaltă şi destul de complicată. Părul pare să fie susținut de două legături orizontale, în timp ce, la partea superioară, cocul este fixat prin legături verticale. Celelalte patru statuete sunt modelate mai convențional şi lipsite de detalii, totuşi, putem remarca că două exemplare au picioarele separate, în timp ce alte două au picioarele lipite. Întregul grup al statuetelor nedecorate are un aer destul de straniu şi pare, prin dimensiuni şi lipsa decorului pictat, să fie subordonat grupului ce cuprindea statuete mai mari, dintre care cele mai multe conservă un luxuriant decor, pictat cu ocru roşu[10].

Al doilea grup este format din 15 statuete feminine, de dimensiuni mai mari (6–12 cm); trei exemplare par să aibă pictura corodată. Una dintre acestea reprezintă un personaj scund, cu bazinul şi şoldurile exagerat de largi, față de dimensiunile statuetei. Sânii, destul de mari, sunt fermi, iar capul mic, cu gura larg deschisă, sugerează parcă „răutatea". Brațele modelate sub forma unor proeminențe conice au la extremități reprezentate, prin incizii, brățări. Cu toată schematizarea pronunțată, statueta pare să reprezinte o femeie mai în vârstă, obeză. O altă statuetă, de pe care pictura s-a şters, are un gât lung, cilindric, la capătul căruia a fost modelat sumar capul. Figurina este mai zveltă decât celelalte, cu sânii fermi şi gura larg deschisă şi rotunjită, de parcă ar invoca. În sfârşit, ultima statuetă, lipsită de pictură, reprezintă o matroană cu coapse, şolduri şi fese generoase, dar cu trunchiul subțire, aplatizat. În partea superioară a coapselor se află două mici adâncituri circulare. Acestea par să aibă o anumită semnificație, deoarece apar doar pe această statuetă.

Al doilea grup este format din 12 statuete de dimensiuni diferite, dar fără mari diferențe somatice sau decorative, îngrijit modelate şi cu un bogat decor, pictat cu roşu. Deşi statuetele sunt unitar modelate, pot fi diferențiate două grupuri: primul, alcătuit din statuete cu picioarele lipite şi separate doar printr-o incizie

[10] Monah 1982, 11; Monah şi Dumitroaia, 2005, 21–213.

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puțin profundă şi al doilea grup, cu picioarele separate. Este interesant că la acest tip de statuetă picioarele nu sunt modelate separat şi apoi lipite de corp, cum se întâmplă la statuetele obişnuite. Separarea picioarelor pare să fi fost obținută prin tăierea lutului cu ajutorul unui instrument tăios. Amintim şi faptul că statuetele masculine din faza Cucuteni A sunt modelate, întotdeauna, cu picioarele separate. Totuşi, statuetele cu picioare separate din complexul de la Poduri sunt cu certitudine feminine. Să fie acest detaliu de modelare o aluzie discretă la androginitatea unor personaje din ansamblul de la Poduri ? Iată o întrebare la care nu avem încă un răspuns.

Grupul celor şase statuete pictate este unitar modelat şi doar dimensiunile şi unele detalii de decor le individualizează. Toate sunt în poziție şezândă, având şoldurile şi coapsele ample, în timp ce trunchiului i se acordă mai puțină atenție, fiind îngust şi aplatisat. Totuşi, la unele exemplare, abdomenul este uşor reliefat sau chiar proeminent. Cu o singură excepție, brațele nu sunt reprezentate, un soi de amorse conice ținând loc şi de umeri şi de brațe. Gâtul este lung şi la capătul lui este modelat, sumar, un cap mic, străbătut de o nervură verticală, ce marchează nasul sub care o incizie destul de profundă reprezintă gura. Ochii sunt marcați de imprimări dreptunghiulare dispuse puțin oblic. Deşi fața este foarte sumar tratată, figurinele au o expresie interesantă, destul de grotescă. Sânii sunt marcați prin mici pastile de lut aplicate prea sus, ajungând uneori aproape pe gât. Mai jos de sâni, statuetele pictate sunt acoperite cu o angobă alb-gălbuie, pe care s-a pictat cu roşu un decor bogat[11].

Fiecare grup pare să aibă un personaj mai important. În grupul statuetelor pictate şi modelate cu picioarele lipite se diferențiază o statuetă pe care am numit-o „Gânditoarea”, prin analogie cu mai cunoscuta statuetă, cunoscută sub numele de „Gânditorul de la Hamangia”, descoperită de fapt la Cernavodă. Capul acesteia este modelat la extremitatea gâtului lung cilindric, ochii piezişi sunt adânci, nasul destul de proeminent se ridică deasupra gurii, dându-i o expresie gânditoare. Două proeminențe conice marchează brațele, dar printr-o ciudată inadvertență, mâna dreaptă este modelată chiar pe gât, în poziție orizontală, palma fiind încleştată pe cotul mâinii stângi, care este ridicată şi sprijinită de obraz. Cu toată modelarea rigidă, nefirească, gestul subliniază expresia de îngândurare dorită de modelatorul Pre-Cucuteni. Modelarea trupului este tradițională şi poate datorită acestui fapt este sigură şi echilibrată. Se remarcă sânii realist modelați, căzuți, alungiți, de femeie care a născut şi alăptat numeroşi copii. Imediat sub sâni, statueta este acoperită cu o angobă de lut fin gălbui pe care a fost pictat cu ocru roşu un bogat decor geometric. Personajul are o atitudine demnă, hieratică, un aer uman, parcă uşor obosit. Fără îndoială, gestul reprezentat are o valoare magică, rituală, greu de stabilit, după trecerea a aproape şase milenii. Celelalte cinci statuete sunt modelate după canonul

[11] Monah 1982, 12.

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obişnuit, dar fără să fie identice. Mici detalii de modelare, de atitudine sau de decor, le individualizează. Acest lucru ne face să credem că fiecare reprezenta un anumit personaj, cu atribuţii specifice, în cadrul grupului de zeiţe. Pare destul de evident faptul că aşa numita „Gânditoare" era personajul cel mai important, nu numai al primului grup de statuete pictate ci, probabil, şi al întregului complex de statuete[12].

Al doilea grup de statuete pictate este format din şase exemplare, modelate după canonul reprezentărilor feminine, dar au picioarele separate şi unele detalii par să semnaleze caracterul lor androgin. Şi în acest grup, o statuetă se diferenţiază de celelalte şi pare să aibă o poziţie deosebită, în cadrul grupului. Capul este modelat în maniera obişnuită, cu ochii şi gura marcate prin imprimări adânci. Pe gâtul lung, cilindric, a fost aplicat un colier modelat dintr-un sul de lut. Amorsele, ce ţin loc de braţe, sunt abia schiţate şi, din această zonă, corpul este acoperit cu o angobă alb-gălbuie pe care a fost pictat decorul cu roşu. Pe talie este pictat un soi de centură alcătuită din două linii orizontale, unite prin haşuri oblice. Pe coapse au fost pictate două benzi destul de late care, uneori, se termină cu franjuri. Spre extremitatea picioarelor se află un soi de jambiere, trasate cu culoare roşie. Degetele de la picioare sunt marcate, ca şi la statuetele din primul grup, prin două sau trei incizii. Două dintre statuetele cu picioarele separate au pe piept, pictat cu roşu, un colier. Pe spatele unor statuete este pictată, cu roşu, o diagonală franjurată, care porneşte de pe umăr şi se leagă de centură. Bogăţia decorului de pe cele douăsprezece statuete pictate şi culoarea roşie aprinsă le conferă un aer sărbătoresc, o anumită vioiciune, fără însă a le răpi din expresia stranie, chiar grotescă, plină de importanţă şi demnitate.

Ansamblul de obiecte sacre de la Poduri cuprindea şi 13 tronuri de lut ars. Tronurile au forme şi dimensiuni diferite, părând să fie confecţionate pentru o anumită statuetă. Din păcate, pe şantier nu am putut stabili căreia dintre statuete îi aparţinea un anumit tron. Statuetele şi tronurile erau amestecate, dar de pe teren am avut impresia că, iniţial, unele statuete fuseseră aşezate pe anumite tronuri. Mai târziu am încercat, printr-o analiză laborioasă, să stabilim relaţia dintre statuete şi tronuri. Este evident că cele 12 statuete pictate dispuneau fiecare de un tron. Mai greu este de stabilit căreia dintre statuetele lipsite de decor îi aparţinea cel de al treisprezecelea tron. Se conturează două ipoteze. Al treisprezecelea tron ar putea aparţine fie statuetei cu două împunsături pe coapse fie statuetei cu şoldurile exagerat de largi.

Unul dintre tronuri are spătarul terminat printr-un soi de coarne şi, după dimensiuni, ar putea fi destinat statuetei numită „Gânditoarea". Fără să putem corela cu certitudine tronurile cu statuetele, remarcăm că două tronuri au spătarul terminat prin coarne, iar unul are spătarul terminat printr-un corn, rupt din

[12] Monah 2004, 13.

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vechime, unit cu cealaltă parte printr-o punte de lut ars. Celelalte 10 tronuri au forme banale, cu spătarul mai înalt sau mai scund, şi dimensiuni diferite. Asupra tronurilor se pot face câteva observaţii. Dimensiunile şi forma lor par să ne semnaleze existența unei ierarhii în cadrul complexului de statuete, iar faptul că unele tronuri au rupturi din vechime pare să acrediteze ideea că setul de obiecte sacre a fost folosit timp îndelungat, piesele suferind unele deteriorări.

Reflectând asupra setului de obiecte sacre de la Poduri, cu mult timp în urmă, am considerat că acesta reprezintă o ilustrare a unei părți din panteonul populației Pre-Cucuteni, probabil un grup important de zeități[13]. Fără îndoială, în spatele lor se afla un mit, ansamblul de obiecte constituind ilustrarea acestuia. După părerea noastră, setul de obiecte sacre a fost găsit de noi în condiţii rituale, fiind depozitat între puneri în scenă rituale. Presupunem că, la anumite intervale de timp, aşa cum se procedează la catolici cu „Creşa”, obiectele sacre erau scoase de anumite persoane, cu certitudine femei, şi cu ajutorul lor era montat un spectacol ritual, în cadrul căruia timpul mitic era readus în prezent. Este posibil ca mitul ilustrat de „Soborul Zeițelor” să aibă caracter cosmogonic. După ceremonie, piesele erau din nou adăpostite în vasul depozit unde, protejate de paiele de cereale, erau păstrate până la un nou ceremonial. Suntem siguri că paiele de cereale nu aveau doar rolul utilitar de a proteja fizic obiectele sacre, ci aveau o menire mai profundă, între zeitățile agrare şi cereale existând o relaţie mistică.

După 15 ani de la descoperirea de la Poduri, în aşezarea Pre-Cucuteni de la Isaiia, jud. Iaşi, a fost găsit un alt ansamblu de obiecte sacre, depus într-un vas, aflat într-un sanctuar. În vasul de la Isaiia au fost găsite 21 statuete feminine, 13 tronuri, 42 de sfere de lut perforate, 21 de conuri de lut şi 21 de sfere incomplet perforate[14]. Ca şi la Poduri, obiectele sacre erau păstrate într-un vas, fiind remarcat faptul că unele statuete erau „sudate” de presiunea pământului de un anumit tron, iar pe fundul vasului a fost observată o peliculă de pământ, interpretată ca provenind de la descompunerea unei materii organice[15]. Între cele două complexe de cult de la Poduri şi Isaiia constatăm o serie de similitudini, atât în ceea ce priveşte modul de depozitare, numărul pieselor, precum şi modelarea statuetelor şi a tronurilor de lut ars. Numărul de statuete şi tronuri este identic, în timp ce, în ceea ce priveşte celelalte obiecte sacre, există unele deosebiri, explicabile printr-un anumit decalaj temporar între cele două complexe rituale. Putem remarca şi repetarea numărului 21, în ceea ce priveşte conurile şi sferele de lut incomplet perforate, dar şi faptul că numărul celor 42 de sfere perforate este un multiplu al numărului 21[16].

[13] Monah 1982, 13.
[14] Ursulescu 2001, 51–66; Ursulescu şi Tencariu, 2006.
[15] Ursulescu şi Tencariu, 2006, 35.
[16] Ursulescu 2001, 57; Ursulescu şi Tencariu, 2006, 46.

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Modul în care era folosită recuzita sacră, de la Poduri şi Isaiia, pare să ne fie semnalată de descoperirea de la Sabatinovka II, din Ucraina. La Sabatinovka, aşezare Pre-Cucuteni, piesele rituale au fost găsite etalate într-un sanctuar, care avea pe latura opusă intrării o banchetă de lut, un soi de altar, lângă care se afla un tron mare de lut, în faţa lor găsindu-se un cuptor. Pe banchetă se aflau, după descoperitor, 16 statuete feminine; numărul total al figurinelor din sanctuar fiind de 32. După ilustraţia publicaţiei se pare (autorul săpăturii nu oferă detalii precise) că, între obiectele sacre erau şi două tronuri de lut ars, miniaturale[17]. Suntem nevoiţi să remarcăm că numărul total de statuete şi tronuri este de 34 (21+13 la Poduri şi Isaiia şi 32+2 la Sabatinovka). În sfârşit, pentru aşezarea Tripolie B de la Kolomiscina I, din regiunea Niprului mijlociu, se citează descoperirea, într-un altar, a 21 de statuete şezânde. Complexul pare să fie alcătuit din 18 statuete feminine şi trei masculine. Deşi complexele sacre din România şi Ucraina nu sunt identice, ele conţin suficiente asemănări, pentru a nu fi simple coincidenţe. Remarcăm portretizarea constantă a 21 de personaje antropomorfe şi, în unele cazuri, existenţa unei evidente ierarhii în cadrul grupului de zeităţi, ierarhie dezvăluită şi de existenţa destul de constantă a 13 tronuri de lut ars.

La ansamblurile de obiecte sacre atribuite complexului cultural Cucuteni-Tripolye, evocate mai sus, putem să adăugăm un interesant set de obiecte sacre, descoperit în *tell*-ul calcolitic Ovčarovo din Bulgaria. Ansamblul de obiecte a fost descoperit în nivelul IX al *tell*-ului, atribuit culturii Karanovo VI-Gumelniţa A[18]. Cronologic, între seturile de obiecte sacre de la Poduri şi Isaiia şi cel de la Ovčarovo nu există un decalaj important. „Scena" de la Ovčarovo este alcătuita din 26 de obiecte: patru statuete feminine, trei altare, trei mese miniaturale, trei vase cu capac, nouă tronuri, trei tobe şi două străchini. Ca şi la Poduri, statuetele şi alte câteva piese sunt pictate cu ocru roşu[19]. Setul de obiecte de la Ovčarovo pare să fi fost descoperit etalat ca la Sabatinovka, ceea ce a şi determinat-o pe descoperitoare să o numească „Scena".

Cele două complexe rituale, de la Poduri şi Isaiia, ne permit să afirmăm că triburile Pre-Cucuteni aveau în panteonul lor un grup de 21 zeităţi antropomorfe, care juca un rol important, probabil, în ceremonialele rituale, de reînnoire a ciclului calendaristic. Nu riscăm prea mult considerând că ciclul calendaristic avea legătură cu ciclul agrar, cu anul, sezonul agrar. Putem afirma, fără frică de a greşi, că ideile religioase erau destul de unitare, deşi triburile Pre-Cucuteni erau răspândite pe un areal destul de întins. Mai mult, putem presupune că mituri asemănătoare existau şi la triburile Karanovo VI-Gumelniţa, deoarece şi ilustrarea lor plastică („Scena") este asemănătoare.

[17] Makarevič 1960, 290–301.
[18] Todorova *et alii*, 1983, Pl. VII.
[19] Todorova *et alii*, 1983, Pl. VII.

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Complexele rituale cu statuete antropomorfe descoperite în cadrul unor culturi calcolitice de la Dunărea de Jos ne semnalează existenţa, în mileniul V Cal B.C., a unor religii bine structurate, cu mituri cunoscute şi acceptate de triburi diferite şi ne permite să întrevedem complexitatea vieţii spirituale a acestora. Descoperirea „Soborului Zeiţelor” şi apoi a complexului ritual de la Isaiia ne semnalează posibilitatea unor noi şi interesante descoperiri, care să îmbogăţească cunoştinţele noastre despre fascinanta civilizaţie neolitică din sud-estul Europei, pe care regretata Marija Gimbutas o numise cu o inspirată sintagmă „Old Europe”.

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PÂINI, PLACHETE SAU TĂBLIŢE DE LUT CU SEMNE ŞI SIMBOLURI

CLAY BREADS, SLATES OR TABLETS WITH SIGNS AND SYMBOLS

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Cuvinte-cheie: complexul Cucuteni-Tripolie, semne, simboluri, tăbliţe, pâini.
Rezumat: În acest articol intenţionăm să analizăm, din nou, unele obiecte de lut din complexul cultural Cucuteni-Tripolie (Lazarovici C.-M. 2006), denumite pâini sau plachete, care pot fi interpretate, de asemenea şi ca tăbliţe. Unele dintre ele conţin semne şi simboluri. Şapte piese au fost descoperite până acum la Scânteia. Trei, poate patru dintre ele, au semne sau simboluri. Obiecte similare au fost descoperite în alte situri Cucuteni A, cum ar fi Truşeşti, Hăbăşeşti sau Toflea. Este posibil ca alte descoperiri similare să aparţină unor alte situri diferite dar, până acum, acestea nu au fost în directa noastră atenţie. Piesele de la Hăbăşeşti par să fie fără niciun semn sau simbol, dar cele de la Truşeşti şi Toflea conţin astfel de elemente. În timpul fazei Cucuteni B, astfel de obiecte apar până acum numai la Ghelăeşti–*Nedeia.* În recent publicata enciclopedie a civilizaţiei Tripolie (2004), alte piese similare simple, sau cu semne şi simboluri au fost prezentate, într-un mod foarte sugestiv (Fig. 3/1–6). Numai pâinea de la Maidaneckoe (Fig. 3/4) are suprafaţa pictată cu o cruce de culoare neagră. Astfel de artefacte, discuri, tablete ale Culturii Cucuteni au analogii cu piese similare descoperite în alte situri, aparţinând altor culturi, cum sunt cele de la Parţa (Fig. 2/12–14), Uivar (Fig. 2/11) sau din arii învecinate de la Suplevac (Fig. 3/9), sau din Macedonia (Fig. 3/10). Cu această ocazie, ne vom axa mai mult pe contextul descoperirii, analiza semnelor şi a simbolurilor, studiind baza noastră de date. Aceste tipuri de artefacte sunt rare, dar au fost descoperite pe o arie mai vastă (Mesopotamia prehistorică; la Çatalhöyük în cercetările recente sunt menţionate unele sigilii; în perioada aceramică din Cipru sunt menţionate diferite obiecte de piatră, „tokens") până la începutul Epocii Bronzului. Noi credem că piesele cu semne pot fi puse în legatură cu sacrul şi cu iniţierea, reprezentând un pas important în apariţia sistemelor de scriere.

Key words: Cucuteni-Tripolye Complex, signs, symbols, tablets, clay breads.
Abstract: In this article we intent to analyze again some clay objects from Cucuteni–Tripolye cultural complex (Lazarovici C.-M. 2006) named as breads, or slates that might be interpreted as well as tablets. Some of them contain signs and symbols. Seven pieces have been discovered until now at Scânteia. Three, maybe four of them have signs or symbols. Similar pieces have been found in other Cucuteni A sites, such as Truşeşti, Hăbăşeşti or Toflea. It is possible that other similar pieces belong to different other sites, but until now these have not been in our direct attention. Pieces from Hăbăşeşti seem to be without any sign or symbol, but those from Truşeşti and Toflea contain such elements. During Cucuteni B phase such pieces are present only at Ghelăieşti – *Nedeia* until now. In the recent published *Encyclopedia of Trypillya civilization* (2004), other similar pieces simples or with signs and symbols, have been presented in a very suggestive way (Fig. 3/1–6). Only the bread from Maidaneckoe (Fig. 3/4) has the surface painted with a cross in black color. Such artefacts, discs, tablets of the Cucuteni culture present analogies with similar pieces discovered in other

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sites, belonging to different cultures, as those at Parța (Fig. 2/12–14), Uivar (Fig. 2/11) or in neighboring areas at Suplevac (Fig. 3/9), or in Macedonia (Fig. 3/10). With this occasion we focus more on the context of the discovery, analyze of the signs and symbols based on our database. These type of artifacts are rarely, but have been discovered on a larger area (prehistoric Mesopotamia; at Çatalhöyük in the recent researches are mentioned some seals; in aceramic period in Cyprus are mentioned different stone objects, "tokens") until the beginning of the Bronze Age. We believe that the pieces with signs and symbols can be related with the sacred and initiation representing an important step to the appearance of the writing systems.

În lucrarea de față ne vom ocupa din nou[1] de câteva categorii de obiecte din lut ars, desemnate drept plachete, discuri, tablete sau pâini din arealul Cucuteni. Unele din ele conțin semne şi simboluri. Din aşezarea de la Scânteia provin şapte piese de acest fel, trei, poate patru din ele au incizii care pot fi interpretate drept semne sau simboluri (şase din ele au fost publicate în 1999[2]; una singură a fost descoperită ulterior, aici Fig. 1/4[3]).

Piesele sunt de dimensiuni relativ mici, între 2,3 şi 4,6 cm (Fig. 1/7–7a, inv. MIMIS 18060: diametru = 3 cm; Fig. 1/2–3, inv. MIMIS 18066: diametru = 2,5 cm; Fig. 1/5, inv. MIMIS 18080: diametru = 2,8 cm; Fig. 1/6, inv. MIMIS 18081: diametru = 3,6 cm; Fig. 1/8, inv. MIMIS 18082: diametru = 4,6 cm; Fig. 1/1, inv. MIMIS 18083: diametru = 4,1 cm; Fig. 1/4, piesa descoperită ulterior = 2,3 cm). În legătură cu contextul de descoperire al pieselor, una, Fig. 1/2–3 provine din locuința sanctuar, L1, iar alte două au fost descoperite într-o groapă de cult, Fig. 1/6–7, cu inventar deosebit de bogat, Gr. 21, Fig. 1/6–7; restul pieselor provin din complexe obişnuite.

Deoarece m-a interesat în mod deosebit această problemă şi m-a contrariat totodată numărul mic al pieselor de acest fel, am reverificat în literatura de specialitate prezența acestor artefacte. Este posibil ca cea mai mare parte a lor să nu fi prezentat nici un fel de semne sau decor, motiv pentru care nu li s-a acordat o atenție prea mare.

Piese asemănătoare au mai fost descoperite şi în alte aşezări Cucuteni A, precum Truşeşti, Hăbăşeşti sau Toflea. Cele de la Hăbăşeti par să nu aibă nici un fel de semne sau incizii, spre deosebire de cele de la Truşeşti şi respectiv Toflea. La nivel de Cucuteni B astfel de piese au fost descoperite la Ghelăieşti – *Nedeia.*

De la Hăbăşeşti provin patru piese, care din cauza lipsei decorului sau a oricăror alte însemne, au fost încadrate fără comentarii în categoria *Diverse obiecte*[4]. Ele sunt de mici dimensiuni (Fig. 2/2: 2,2 cm; Fig. 2/3: 3,3 cm; Fig. 2/4: 3 cm; Fig. 2/5: 2 cm). Două dintre ele[5] par să aibă formă aproape rotundă, sunt mai voluminoase, amintind unele pâini, Fig. 2/2–3, iar celelalte două sunt aproape plate, Fig. 2/4–5 şi prezintă asemănări cu piesele descoperite de noi la Scânteia, Fig. 1/4, 8.

[1] Lazarovici C.-M. 2006.
[2] Mantu şi Țurcanu, 1999, 124-125, piesele cu numerele de catalog 271–276.
[3] Lazarovici C.-M. 2006, 60–61, Fig. 5/1–2.
[4] Dumitrescu *et alii*, 1954, 466, Fig. 49/1, 5, 7–8.
[5] Dumitrescu *et alii*, 1954, Fig. 49/1, 5.

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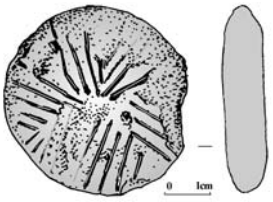
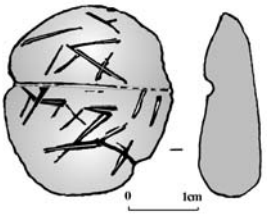
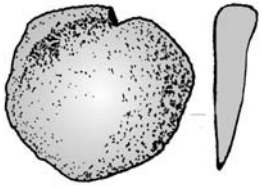


1 – Scânteia, L5



2-3 (desen şi foto) – Scânteia, L1



4 – Scânteia, passim

5 – Scânteia, Gr. 17

6 – Scânteia, Gr. 21

7-7a (cu sublinierea semnului M) – Scânteia, Gr. 21

8 – Scânteia, sub L5

Fig. 1 – Plachete Cucuteni A, descoperite la Scânteia.

De la Truşeşti, din nivelul Cucuteni A, din anexa 40 a locuinţei LII, a fost publicată o altă piesă plată[6], aproape circulară, cu marginile uşor festonate, Fig. 2/1, ce conţine două sau trei rânduri de incizii lungi, subţiri; perpendicular pe ele sunt alte incizii orizontale, ce par a fi grupate în trei – patru şiruri (cele păstrate sunt în număr de 3 pe primul şir; 6 pe al doilea şir; 7 pe al treilea şir; doar 3 pe ultimul şir, piesa fiind ruptă în această zonă). Piesa a fost interpretată drept tabletă[7], ea având, 5,2 cm în diametru şi o grosime de 1,5 cm. Decorul ei este mai deosebit şi nu prezintă analogii cu piese provenind din medii culturale apropiate.

[6] Petrescu-Dîmboviţa *et alii*, 1999, 104, 540, Fig. 381/5.
[7] Petrescu-Dîmboviţa *et alii*, 1999, 540.

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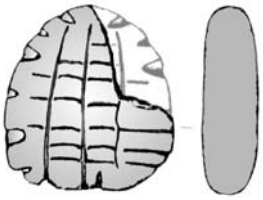
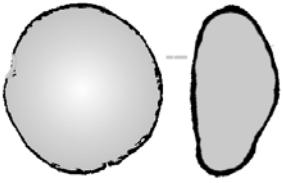
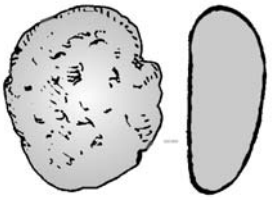


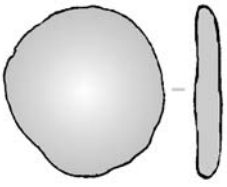
1 – tabletă Truşeşti



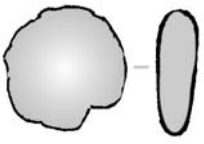
2 – Hăbăşeşti (Fig. 49/1)



3 – Hăbăşeşti (Fig. 49/5)



4 – Hăbăşeşti (Fig. 49/7)

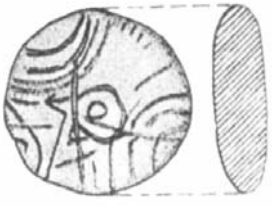


5 – Hăbăşeşti (Fig. 49/8)

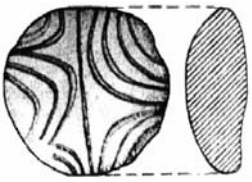
6 – plachetă-tabletă Toflea

7 – plachetă-tabletă, Cucuteni

8 – pâine Cucuteni



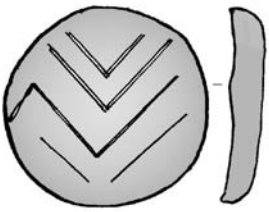
9 – tabletă Ghelăieşti – Nedeia



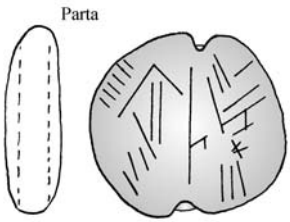
10 – tabletă Ghelăieşti – Nedeia

11 – Uivar

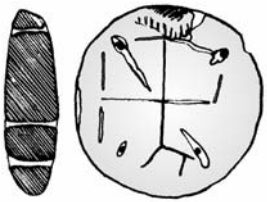
12 – sigiliu, Parța



13 – tabletă Parța



14 – Parța



15 – Zorlenț

Fig. 2 – Alte plachete – tablete cucuteniene.

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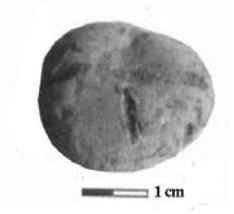
1 – pâine, Olexandrivka

2 – pâine, Bernaşivka

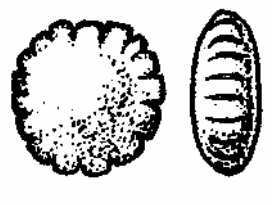
3 – pâine, Luka Vrublevetskaja



4 – pâine, Maidanetskoje

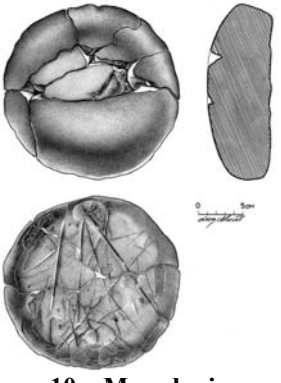
5–6 – pâini, plachete? Colecţia Platar

7 – plachetă, Okopi



8 – plachetă, Kliščev

9 – Suplevac



10 – Macedonia

Fig. 3 – Pâini şi plachete – tablete din arealul Tripolie.

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O ultimă piesă, întreagă, Fig. 2/6, provine din aşezarea Cucuteni A (probabil A2–A3: săpături nepublicate efectuate de Marilena Florescu şi Nicu Mircea între anii 1970–1971) de la Toflea – *Dealul Tănăsoaia* (com. Brăhăşeşti, jud. Galaţi). Ea a fost descoperită în 1967, dar nu în cadrul unui complex (informaţii amabile Nicu Mircea; Muzeul orăşenesc Tecuci, inv. 8680). Placheta, de formă circulară, are diametrul de 4 cm şi o grosime de 1,3 cm. Este realizată din pastă semifină, ca şi cele de la Scânteia şi Truşeşti. Una din feţe este împărţită în patru sferturi de două linii incizate. Fiecare sfert conţine cinci rânduri de incizii ce se unesc spre centru. Această plachetă este asemănătoare cu piesa de la Scânteia, care este însă parţial deteriorată (aici Fig. 1/1), ca şi cu cea de la Okopi (Fig. 3/7).

În momentul de faţă nu deţinem informaţii cu privire la acest tip de piese din aşezări Cucuteni A-B. Alte două plachete – tăbliţe de formă circulară, plate, cu semne sunt cele descoperite la Ghelăieşti – *Nedeia*[8], pe care le-am prezentat şi cu altă ocazie[9]. Cele două tăbliţe provin după Ştefan Cucoş, autorul descoperirilor, din locuinţele 8 şi respectiv 18 de la Ghelăieşti – *Nedeia*[10], fiind realizate din pastă fină (diametrul de 5,7 cm; Fig. 6/13, diametru de 6 cm; ambele au o grosime de 1 cm). El le-a considerat drept tablete cu semne de „reprezentare şi nu de comunicare", atribuindu-le un posibil caracter de cult. Ştefan Cucoş le găsea analogii la o piesă publicată de Hubert Schmidt pentru Cucuteni[11].

Referindu-ne direct acum la această ultimă piesă de la Cucuteni-*Cetăţuia*[12], Fig. 2/7 (dimensiuni: diametru 5,4 cm, grosime 0,7 cm), precizăm că ea are acum cele mai bune analogii în obiectele de la Scânteia (Fig. 1/1) şi respectiv Toflea (Fig. 2/6), cu observaţia că are doar trei linii ce se unesc în cruce. Având în vedere aceste asemănări am fi tentaţi să atribuim piesa nivelul Cucuteni A de pe *Cetăţuia.*

Astfel de discuri, plachete, tablete din cultura Cucuteni prezintă asemănări şi cu alte piese cu semne şi simboluri descoperite în teritoriul românesc la Parţa, Fig. 2/12–14, sau mai recent la Uivar[13], Fig. 2/11 sau în alte zone învecinate la Suplevac, Fig. 3/9, sau în Macedonia, Fig. 3/10.

Tot la Cucuteni a fost descoperit şi un obiect ovoidal, în formă de pâine[14] (dimensiuni: lungime 6,2 cm, lăţime 3,2 cm, grosime 2,1 cm), decorat cu caneluri paralele, atribuit orizontului Cucuteni târziu (lipsesc alte date cu privire la contextul arhelogic al acestor obiecte de la Cucuteni-*Cetăţuia)*.

Drept pâini pot fi considerate şi alte câteva piese tripoliene, recent publicate[15], Fig. 3/1–6, la care se adaugă altele menţionate anterior[16]. În enciclopedia menţionată sunt ilustrate mai multe obiecte din lut de diferite dimensiuni, unele poate şi dintre cele denumite „tokens", pentru care din păcate nu

[8] Cucoş 1999, 139, Fig. 68/10, 13.
[9] Lazarovici C.-M. 2006, 60, Fig. 6/2–3.
[10] Cucoş 1999, 139, Fig. 68/10.
[11] *Ibidem*, nota 535: Schmidt 1932, 69, Pl. 37/6.
[12] Schmidt 1932, 69, tafel 37/6 sus.
[13] Scharl şi Suhrbier, 2005, S. 53, Abb. 54.
[14] Schmidt 1932, tafel 37/6 jos.
[15] *Enţiklopedia Tripolskoi ţivilizaţii 2004*, tom 1, 471.
[16] Lazarovici C.-M. 2006, 60–61, ca şi Fig. 6/1, 4–6.

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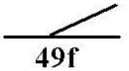
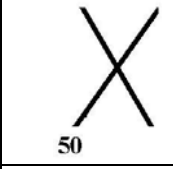
deţinem prea multe date (contextul, dimensiunile), ilustraţia fiind prea redusă pentru a putea face şi alte observaţii[17]. Doar piesa din Fig. 3/4, de la Maidaneckoe (circa 2 × 2,5 cm) are suprafaţa împărţită în patru de două linii brun-negre pictate[18]. Despre „pâini" au scris mai mulţi autori[19].

Plachetele, tabletele, circulare, fără perforaţii, au atras atenţia şi în alte areale culturale, aşa că vom aminti doar câteva din ele: în Mesopotamia preistorică obiecte similare au fost prezentate de mai mulţi autori[20]; la Çatalhöyük în cercetările recente sunt menţionate unele sigilii[21]; diferite piese din piatră, „tokens", au fost identificate în Cipru chiar în perioada aceramică (mileniile 9–6 B.C.)[22], ele fiind prezente până la începutul Epocii bronzului[23].

În stadiul actual al cercetării nu putem trage concluzii cu privire la acest tip de obiecte. Fără îndoială însă că cele cu semne şi simboluri pot fi legate de sacru şi iniţiere, prezenţa simbolurilor şi semnelor reprezintând totodată o etapă importantă în apariţia scrisului[24].

În rândurile care urmează ne vom referi la semnele din partea superioară a tabletei/discului descoperit în locuinţa 1 de la Scânteia (sanctuar casnic), din Fig. 1/2–3, care ar putea fi chiar asociată categoriei idolilor „en violon", la fel ca şi piesa de la Parţa, Fig. 2/14, cu care prezintă asemănări vizibile. În partea de sus a tabletei apar mai multe semne, care au primit numărul de catalog din bazele noastre de date (Gh. Lazarovici – M. Lazarovici)[25], ce prezintă analogii cu semne aflate pe diferite alte piese. Tabelele de mai jos au fost obţinute prin interogarea bazei de date menţionate.

					
Vase de cult, cu semne sacre; Parţa P126 Lazarovici & 2001 I.2, Fig. 51/10	1				

[17] *Enţiklopedia Tripolskoi ţivilizaţii 2004*, tom 1, 470.
[18] *Enţiklopedia Tripolskoi ţivilizaţii 2004*, tom 1, 471.
[19] Citǎm doar: Makkay 1984; 1990, Fig. 18/2a–c; Gimbutas 1991, 114; Tornka 1992; Lazarovici Gh. 2003, 72–73, Fig. 9–14; 2003a.
[20] Goff 1963; Sabah Abboud Jasim 1985.
[21] Umit Türkcan 2005.
[22] Steel 2004, 57, Fig. 3.6/2, 4.
[23] Peltenburg 1982, 55; Pilides 1994, 1–9, le interpretează drept greutăţi pentru plasa de pescuit.
[24] Zalhaas 1995, 56.
[25] Lazarovici Gh. 2003.

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	4d	49f	50	1b =c	0c
Plachetă rotundă registru 1; Karanovo, Schier 2002, II/8	1	1	1		
Fund de vas, cu semne; c. Vinča, Srem; Makkay 1990, 42/24: Trbuhović Vailjević 1983, VIII			2		
Fragment cu semne; liniar stichband, Makkay 1990, Fig. 21/j; 24s; Kaufmann 1976, 15			2		
Fragment de vas, „Zeus” de la Turdaş; c. Turdaş; M. Roska, Z. Torma, 141/6; Makkay 11/22.2			1		
Fund de vas, cu semne; Turdaş; M. Roska, Z. Torma, 131/44, 46			1		
Idol cu semne; Turdaş; M. Roska, Z. Torma, Fig. 138/1			1		
Discul negru; Turdaş; M. Roska 1941, Fig. 128/18; Vlassa 1970, 20, 11; Makkay 1990, 15.5–7			1		

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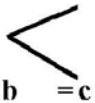
	4d	49f	50	 1b =c	0c
Fragment cu semne; Csapojevka; Makkay 1990, 37/9; Masson – Merpert 1982, LXXXIII; morminte kurgan			1		
Fragment cu semne; Târpeşti			1		
Fusaiola; Svetozarevo			1		
Idol cu semne sacre; Parţa P40			1		
Semn sacru, fecioara; în general			1		
Semn sacru, femeie gravidă; în general			1		
Fund de vas, cu semne; Vršac-At			2	1	
Fund de vas, cu semne; Gradesnica			1	1	
Fragment cu semne; Turdaş			1	1	
Tăbliţa tableta; Tangâru			1	1	
Fusaiola; Turdaş				1	
Altăraş; Turdaş				1	
Altăraş; Vršnik				1	
Disc sau bilă; Ghirbom				1	
Fusaiolă; Dikili Tash				1	
Altăraş; Rudna Glava, Jovanović 1982, Fig. 27: Bánffy 1997, 32/3, 5				2	3

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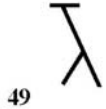
	4d	49f	50	1b =c	0c
Idol, cu semne; Turdaş, M. Roska, Z. Torma 1941, 141/14					1
Plachetă rotundă registru 2; Karanovo, Schier 2002, II/8					1

În partea de jos a aceleiaşi tablete pot fi identificate următoarele semne, care apar pe diferite obiecte şi în alte situri.

	50b	49f	50	49a	 49
Parța	1				
Parța P18	1				
Karanovo	2	1	1		
Csapojevka			1		
Gradesnica			1		
Parța P40			1		
Svetozarevo			1		
Tangâru			1		
Târpesti			1		
Turdaş 138.1			1		
Turdaş			4	1	
Liniar stichband			2	1	
Vršac-At			2	2	
C. Vinča, Srem			2	1	1
Cifer, Pacon				1	
Daia Română				1	
Glăvăneştii Vechi, fața b SC tăbliță				1	
Nandru 2				1	
Perieni SC tăblița				1	
Svetozarevo 2				1	
Ghirbom					1

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Anexe

A. I. Unde mai apare semnul cu numărul de catalog 49

1. **Ghirbom, tabletă sau bilă** din construcţia sanctuar: Aldea 1974, 40–47, Fig. 1–4; Gimbutas 1976, 3, Makkay 1990, 19/4a–b:
2. **Fund de vas cu semne, Srem**,Vinča C, Makkay 1990, 42/12.1: Trbuhović-Vailjević 1983, VIII:

II. Unde mai apare semnul cu numărul de catalog 49a

1. Fusaiolă, România, Transilvania, Nandru 2, Torma, S Vlassa 1970, 19: Makkay 1990, 16/1: Winn 1981 Nandru 1, neolitic târziu, gr. Turdaş, Vinča C1–C2,
2. Tabletă, Iugoslavia, Svetozarevo 2, Winn 1981, Svetozarevo2, neolitic, c. Vinča C1,
3. Fund de vas, cu semne, neolitic, Iugoslavia,Vršac-At, Jovanović 1981, 134: Makkay 1990, 35/I.2,Vinča C,
4. Fund de vas, cu semne, neolitic, Iugoslavia, Vršac-At,Jovanović 1981, 134: Makkay 1990, 35/XVIII.1–2,Vinča C,
5. Vas sacru, cu semne, România, Daia Romana, Paul, Gimbutas 1991, 8–7.3:, eneolitic, Petreşti A,
6. Fund de vas, cu semne, Iugoslavia, Srem, c. Vinča, Srem, Makkay 1990, 42/15.1: Trbuhović Vailjević 1983, VIII:, neolitic, Vinča B2/C,
7. Fragment cu semne, Germania, liniar stichband, Kaufmann 1976, 15: apud Makkay 1990, 24/ s:neolitic târziu, LBK,
8. Tăbliţa tabletă, România, Moldova, Perieni, Makkay 1990, 18/7: neolitic, Starčevo-Criş IIIb,
9. Tăbliţa tabletă, România, Moldova, Glăvăneştii Vechi, faţa b, Makkay 1990, 18/8a: neolitic, Starčevo-Criş IIIb,
10. Vas sacru, cu semne, Slovacia, Cifer, Pacon, Makky 1990, 22/7, eneolitic, Lengyel,
11. Fund de vas, cu semne, România, Transilvania, Turdaş, M. Roska, Z. Torma, 131/43, n, gr. Turdaş.

III. Unde mai apare semnul cu numărul de catalog 49f

Tableta de la Karanovo, Schier 2002, II/8.

IV. Lista bibliografică cu piesele unde mai apare semnul cu numărul de catatalog 50

1. **Discul negru**; România; Transilvania; n; Turdaş; gr. Turdaş; Roska 1941, 128/18: Vlassa 1970, 20, 11: Makkay 1990, 15.5–7; 1
2. **Tăbliţa tabletă;** România; Muntenia; neolitic târziu; Tangâru; Gumelniţa; Marinescu-Bîlcu apud Ursulescu 1998, 103, 27/3; 1
3. **Placheta rotundă registru** 1; neolitic; Bulgaria; Karanovo; Karanovo; Schier 2002, II/8; 1
4. Fragment cu semne; Germania; neolitic târziu; liniar stichband; LBK; Kaufmann 1976, 15: apud Makkay 1990, 24/s;1

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5. Fragment cu semne; Germania; neolitic târziu; liniar stichband; LBK; Kaufmann, apud Makkay 1990, 21/j; 1
6. Fragment cu semne; România; Moldova; eneolitic tarziu; Csapojevka; mormintele Kurgan; Makkay 1990, 37/9: Masson-Merpert 1982, LXXXIII; 1
7. Fragment cu semne; România; Moldova; eneolitic; Târpeşti; Makkay 1990, 37/10: Masson–Merpert 1982, LXXXIII:; 1
8. Fragment cu semne; România; Transilvania; n; Turdaş; gr. Turdaş; M. Roska, Z. Torma, 136/7; 1
9. Fragment de vas, „Zeus" de Turdaş; România; Transilvania; n; Turdaş; gr. Turdaş; M. Roska, Z. Torma, 141/6: Makkay 11/22.2; 1
10. Fund de vas, cu semne; Iugoslavia; Srem; neolitic; c. Vinča, Srem; Vinča B2/C; Makkay 1990, 42/24: Trbuhovic Vailjevici 1983, VIII;1
11. Fund de vas, cu semne; Iugoslavia; Srem; neolitic; c. Vinča, Srem; Vinča B2/C; Makkay 1990, 42/3.1: Trbuhović-Vailjević 1983, VIII; 1
12. Fund de vas, cu semne; neolitic; Iugoslavia; Vinča C; Vršac -At; Jovanović 1981, 134: Makkay 1990, 35/I.3, 5, 6, 10, 11, 27, 34, 38; 1
13. Fund de vas, cu semne; neolitic; Iugoslavia; Vinča C; Vršac -At; Jovanović 1981, 134: Makkay 1990, 35/I.28; 1
14. Fund de vas, cu semne; Bulgaria; neolitic; Gradešnica; Gradešnica; Makkay 1990, 29/5 : Nicolov, 1974, 110 şi urm.; 1
15. Fund de vas, cu semne Turdaş; România; Transilvania; n; Turdaş; gr. Turdaş; M. Roska, Z. Torma 1941, 131/44, 46; 1
16. Fusaiolă; Jugoslavia; neolitic; Svetozarevo; c. Vinča C1; Winn 1981, Svetozarevo1; 1
17. Idol cu semne sacre; România; Banat; neolitic; Parța P40; c. Banatului II; Lazarovici & I.2, 2001, Fig. 6/3; 1
18. Idol, cu semne Turdaş 138.1, M. Roska, Z. Torma, 138/1; 1
19. Semn sacru, fecioară; în general; cod Lazarovici; 1
20. Semn sacru, femeie gravidă; în general; cod Lazarovici; 1.

V. Lista bibliografică cu piesele unde mai apare semnul cu numărul de catalog 1b

1. Fragment cu semne, România, Transilvania, Turdaş, M. Roska, Z. Torma, 136/:12, M Fig. 11/22.2, n, gr. Turdaş
2. Altăraş R. Macedonia,Vrsnik, Bánffy 1997, 24/7: apud Praist Mak. Fig. 97: neolitic,
3. Altăraş Iugoslavia, Serbia, Rudna Glava, Jovanović 1982, Fig. 27: Bánffy 1997, 32/5: neolitic, Vinča C
4. Altăraş Iugoslavia, Serbia, Rudna Glava, Jovanović 1982, Fig. 27: Bánffy 1997, 32/3: neolitic,Vinča C
5. Fund de vas, cu semne, neolitic, Iugoslavia, Vršac-At,Jovanović 1981, 134: Makkay 1990, 35/XXIII.2,Vinča C.

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6. Fund de vas, cu semne, Bulgaria, Gradesnica, Makkay 1990, 29/14, Nikolov, 1974, 110 şi urm., neolitic, Gradešnica
7. Disc sau bilă, România, Transilvania, Ghirbom, Aldea 1974, 40–47, Fig. 1–4; Gimbutas 1976, 3, Makkay 1990, 19/4a–b: eneolitic, Petreşti AB
8. Fusaiolă, Grecia, Tracia greacă, Dikili Tash, Gimbutas 1974, 41: Makkay 1990, 19/1:, neolitic
9. Tăbliţa tabletă, România, Muntenia, Tangâru, Marinescu-Bîlcu apud Ursulescu 1998, 103, 27/3; neolitic târziu, Gumelniţa
10. Fusaiola, România, Transilvania, Turdaş, M. Roska, Z. Torma, 127/16, n, gr. Turdaş
11. Altăraş România, Transilvania, Turdaş, Roska 1941, 98/6:n, gr. Turdaş.

B. Pe tableta descoperită în Groapa 21 de la Scânteia, Fig. 1/7–7a este prezent semnul cu numărul de catalog 111 = 89c,

, care mai apare în următoarele situri:

1. Tăbliţa-tabletă, Falkenstein-Scheanzboden 111; Neugebaurr-Maresch 1982, 18: Makkay 1990, 19/5;
2. Casiopeea, Parţa 111 Lazarovici *et alii* 2001, p. 271–274, Fig. 244–247;
3. Casiopeea, Parţa 89c Lazarovici *et alii* 2001, p. 271–274;
4. Casiopeea, Bucovăţ 111 Lazarovici *et alii* 2001, p. 271–274, 244/1, 8;
5. Casiopeea, Vinča 111 Lazarovici *et alii* 2001, p. 271–274, 244/3;
6. Casiopeea, Parţa 111 Lazarovici *et alii* 2001, p. 271–274, 244/2a, 2b, 4–7, 9;
7. Casiopeea, Pişcolt 111 Lazarovici *et alii* 2001, p. 271–274, 244/10;
8. Casiopeea, Segvar 111 Lazarovici *et alii* 2001, p. 271–274, 245/1.

C. Pe pâinea de la Maidaneckoe, Fig. 3/4, apare semnul cu numărul de catalog 127g,

. Acesta a mai fost identificat şi pe un fund de vas cu semne de la Vršac-At (Jovanović 1981, 134; Makkay 1990, 35/I.13).

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CUCUTENI REMAINS IN THE COGÂLNIC VALLEY (STOLNICENI VILLAGE, HÂNCEŞTI COUNTY, REPUBLIC OF MOLDOVA). A PRELIMINARY REPORT

VESTIGII CUCUTENI PE VALEA COGÂLNICULUI (SATUL STOLNICENI, RAIONUL HÂNCEŞTI, REPUBLICA MOLDOVA). RAPORT PRELIMINAR

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Cuvinte-cheie: vestigii cucuteniene, ceramică pictată, cronologie, Republica Moldova.
Rezumat: Artefactele Culturii Cucuteni-Tripolie – una dintre cele mai spectaculoase civilizaţii cu ceramică pictată din sud-estul Europei, apărută în Moldova centrală şi de vest, pe un fond Precucuteni, apoi răspândindu-se pe întreg teritoriul Moldovei, sud-estul Transilvaniei şi nord-estul Munteniei, până la fluviul Nipru – nu au încetat, nici după 120 de ani de cercetări, să stârnească controverse între specialişti. Discuţiile se referă la atribuirea cronologică, la trăsăturile importante pentru fiecare fază de evoluţie, dar şi la interpretări privind simbolismul reprezentărilor artistice ale Culturii Cucuteni-Tripolie, o dimensiune spirituală a acestei civilizaţii.

Key words: Cucuteni vestiges, painted pottery, chronology, Republic of Moldova.
Abstract: The artifacts of the Cucuteni-Tripolje Culture – one of the most spectacular civilizations with painted pottery in south-east Europe, which emerged in central and western Moldova on a Precucuteni background, then expanded throughout Moldova, south-east Transylvania and north-east Muntenia, up to the Dniepr river – have not ceased, even after 120 years of investigation, to spark debates among scholars. Discussions have ranged from the chronologicy, to the important features of each developmental phase, to interpretations of the symbolism of the artistic representations (the spiritual dimension) of the Cucuteni-Tripolje Culture.

Each discovery adds something new to the archaeological picture, even if we cannot always speak about well-preserved archaeological complexes, like the one near the village of Stolniceni, Hânceşti County, Republic of Moldova (Fig. 1). The Neolithic settlement was identified on a foothill created at the junction of two valleys, 0.5 km from the village of Stolniceni, on the left bank of the Cogâlnic river, a watercourse that, owing to the dry summers of the past few years, has now almost dried up. Investigation of the site has been underway since 2007, with the

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active participation of students from the summer school at Stolniceni, as part of the project *Students without frontiers*[1]. On the surface of the site some ceramic fragments, fragmentary anthropomorphic figurines, and lithic items were found[2].

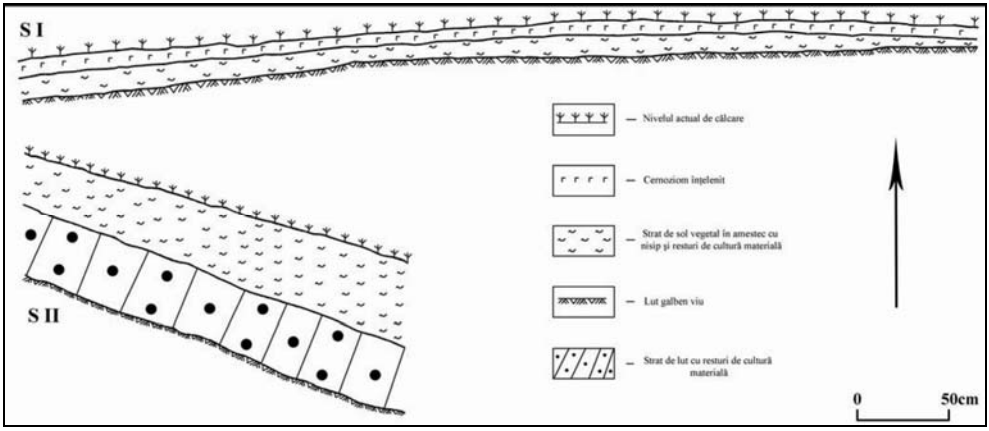
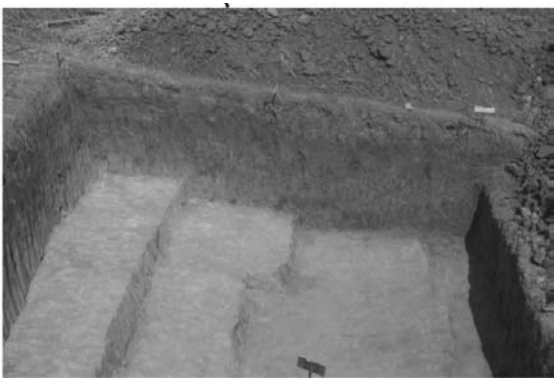


Fig. 1 – Stolniceni. Trench profile.

Site investigation. Research method

The soundings since 2007 have been aimed at establishing the cultural-chronological background of the settlement. To this end, two trenches (labelled A and B) were opened in the middle of the promontory: trench I (with a west-east orientation, 10 m long and divided into squares of 2 × 2 m) and trench II (4 × 4 m, with a west-east orientation) (Fig. 2).



2a

[1] The authors of the present study wish to express their gratitude to their younger colleagues who took part in the investigation: O. Chitic, V. Pasa, S. Popovici, M. Vasilachi, and others.

[2] The settlement was discovered by Tudor Arnăut in 2003, in the course of the investigation of another site in the area, the fortificated precinct of Stolniceni belonging to the Getic culture (sec. IV î.Chr.).

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2b

Fig. 2 – Stolniceni.
Views of trenches I and II (2a–2b).

Trench I
(Plate 1)

Stratigraphically, we found the following situation: the **1st layer,** with a thickness of about 0.25 m, was excavated over the entire area of the trench. This contains a compacted chernozem containing no archaeological finds. The **2nd layer**, with a thickness of 0.25–0.45 m, was mixed with sand and bore traces of archaeological materials, out of which 19 ceramic fragments were recovered.

Trench II

The 1st layer, with a thickness of about 0.25 m, was investigated across its full extent. It contained chernozem, mixed with sand and archaeological remains. In total, 12 ceramic fragments were recovered.

The 2nd layer, with a thickness of 0.25–0.50 m, was excavated over the entire area of the trench. It contained a mixture of chernozem, sand, and dispersed archaeological materials, of which 49 ceramic fragments and the following two items are worthy of note:

a) a fragmentary anthropomorphic figurine, of yellowish colour, made of fine paste. This takes the form of the lower part of a leg (Fig. 6/3).

b) a spherical, unpierced ball, made of fine paste, and yellowish in colour.

The 3rd layer has a thickness of 0.50–0.75 m. In the mixture of chernozem and sand, 19 ceramic fragments and 11 animal bones were found.

The 4th layer, with a thickness of 0.75–1.00 m, comprises a clayey earth; 26 ceramic fragments were recovered from this layer.

The 5th layer was 1.00–1.25 m thick and produced 32 ceramic fragments.

The 6th layer, with a thickness of 1.25–1.50 m, consisted of clay containing archaeological remains, from which 43 ceramic fragments were recovered.

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The 7th layer, with a thickness of 1.50–1.75 m, was a clayey soil, from which 57 ceramic fragments, 25 animal bones were recovered, along with the following two special finds:

a) a fragmentary zoomorphic figurine, shaped like a horn. The fragment is made of a semi-fine paste (sand with sherds) of a brick-like colour (Fig. 6/2).

b) a clay cone, made of fine paste. This item has a brick-like colour, and a polished surface.

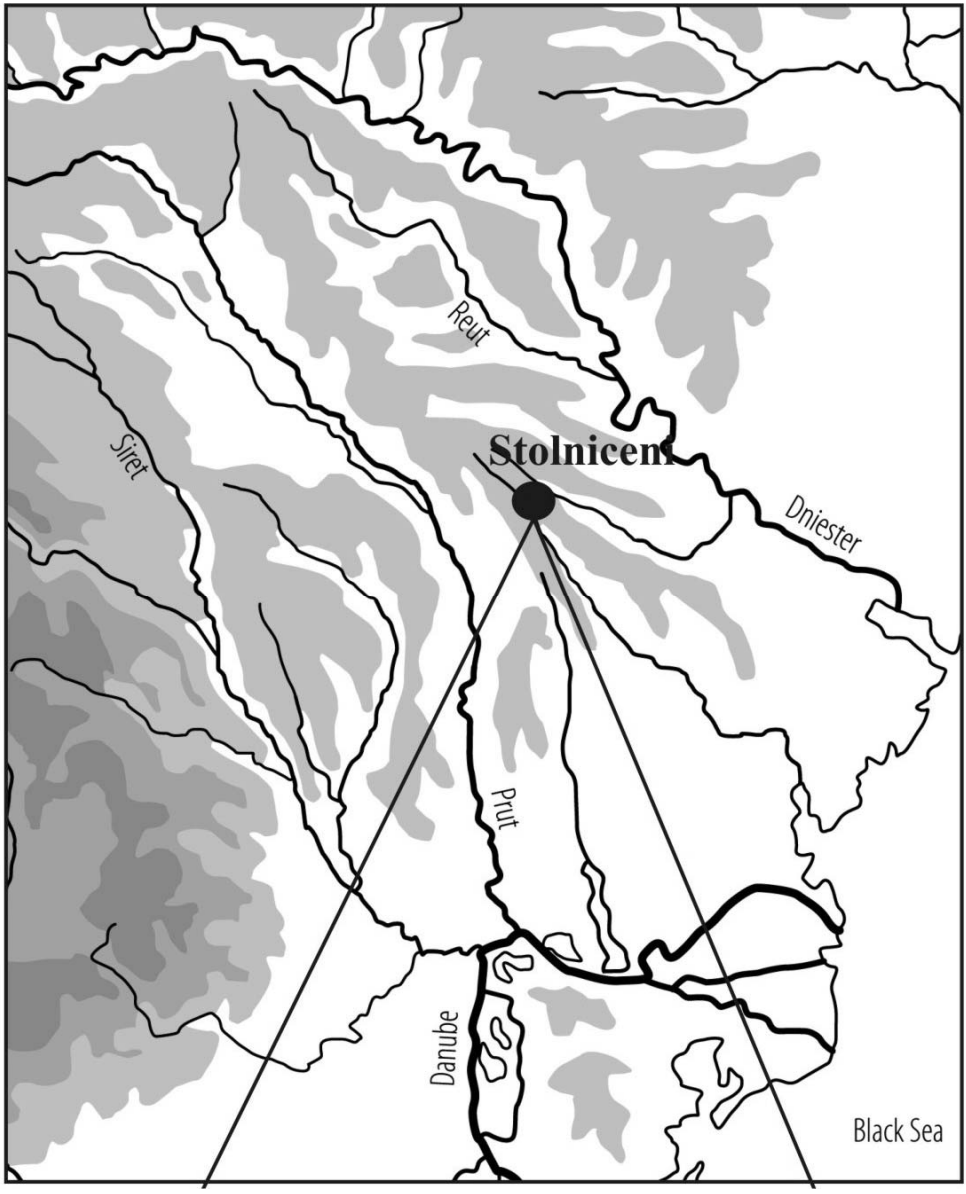

Plate 1 – Geographical location of the site.

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Pottery analysis

Pottery (Figs. 3, 4, 5)

Statistical analysis of the ceramic material was performed according to the method established by the archaeologist, Dr. Gh. Lazarovici, using the Zeus managing and processing of the archaeological materials.

This is how, the analysis of the ceramic materials revealed the prevalence of semi-fine pottery, followed by coarse ware. Fine pottery is the least well represented.

Typologically, the commonest forms are: glasses, dishes, pots, footed cups, an "S" – shaped profiled vessel, lid, and vessel stand. In terms of decoration, the largest category comprised trichromic painted pottery, followed by incised and impressed decoration.

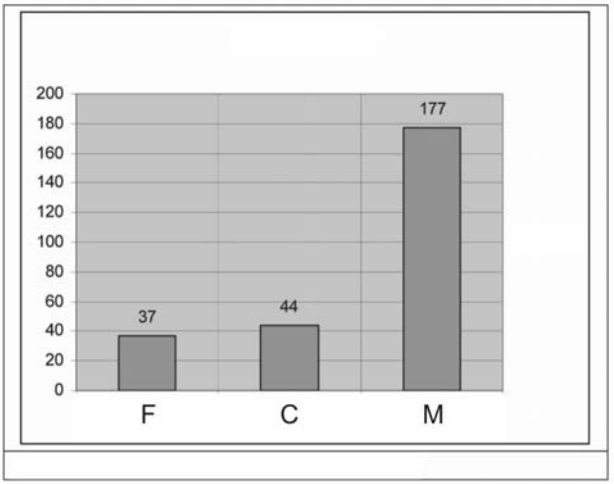

Diagram 1 – Pottery classification by texture
(F – Fine, C – coarse, M – medium).

Regarding the painted pottery, the closest analogies are found in several sites from Romania: Cucuteni-*Cetățuie*[3] (chronologically belonging to Cucuteni A), Drăguşeni[4] (chronologically belonging to Cucuteni A4), Hăbăşeşti (chronologically belonging to Cucuteni A3)[5], Cucuteni – *Cetățuie*[6] (chronologically belonging to Cucuteni A3), Fulgeriş – *Trei Cireşi*[7] (chronologically belonging to final Cucuteni A3), Bereşti – *Dealul Bulgarului*[8] (chronologically belonging to Cucuteni A3), Brăiliţa[9]

[3] Petrescu-Dîmboviţa & Văleanu, 2004, 161–179, Fig. 86–136.
[4] Marinescu-Bîlcu & Bolomey, 2000, Figs. 76–82; 86–91; 94–96; 105–106; 115–122; 126–130; 133–135; 141–142.
[5] Dumitrescu *et alii*, 1954, 309-386; Pl. LXXXV–CIX.
[6] Petrescu-Dîmboviţă & Văleanu, 2004, 161–179, Fig. 86–136.
[7] Istina 2005, 66–67, Fig. 6–7.
[8] Dragomir 1996, 238–240, Fig. 3–4.
[9] Voinea 2005, Pl. 99–100.

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(imports at the level of Gumelnița A2), Carcalilu[10] (imports at the level of Gumelnița A2) and from the Republic of Moldova: Druța I[11] (chronologically belonging to Cucuteni A4), Duruitoarea Nouă I[12] (chronologically belonging to Cucuteni A4), Văratic XII[13] (chronologically belonging to Cucuteni A4), Duruitoarea Veche[14] (chronologically belonging to Cucuteni A4), Cuconeştii Vechi I[15] (chronologically belonging to Cucuteni A3), Bădragii Vechi IX[16] (chronologically belonging to Cucuteni A4), Darabani I[17] (chronologically belonging to Cucuteni A3), Nezvisko II[18] (chronologically belonging to Cucuteni AB 1 a), Kudrincy[19] (chronologically belonging to Cucuteni A4), Jura[20] (chronologically belonging to Cucuteni A4), Solonceni II[21] (chronologically belonging to Cucuteni AB 1 a), Jora de Sus[22] (chronologically belonging to Cucuteni A 2-3), Berzovskaja GES[23] (chronologically belonging to Cucuteni A3), Sabatinovka I[24] (chronologically belonging to Cucuteni A3).

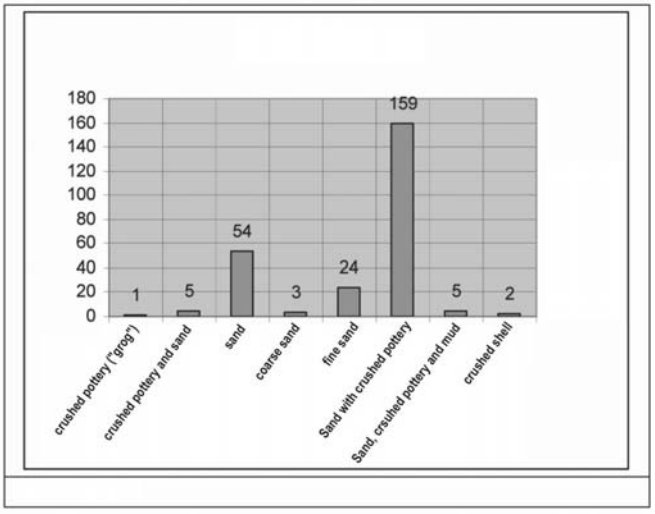

Diagram 2 – Pottery classification according to tempering material, (crushed pottery ("grog"); crushed pottery and sand; sand; coarse sand; fine sand; sand with crushed pottery; sand, crushed pottery and mud, crushed shell).

[10] Lăzurcă 1991, 13–19.
[11] Pălăguță 2007, Pl. 34–35.
[12] *Ibidem*, Pl. 39.
[13] *Ibidem*, Pl. 40.
[14] *Ibidem*, Pl. 41–42.
[15] *Ibidem*, Pl. 51.
[16] *Ibidem*, Pl. 53.
[17] *Ibidem*, Pl. 60.
[18] *Ibidem*, Pl. 64–65.
[19] *Ibidem*, Pl. 66.
[20] *Ibidem*, Pl. 68, 69, 70, 71, 72.
[21] *Ibidem*, Pl. 74.
[22] *Ibidem*, Pl. 80.
[23] *Ibidem*, Pl. 83.
[24] *Ibidem*, Pl. 83.

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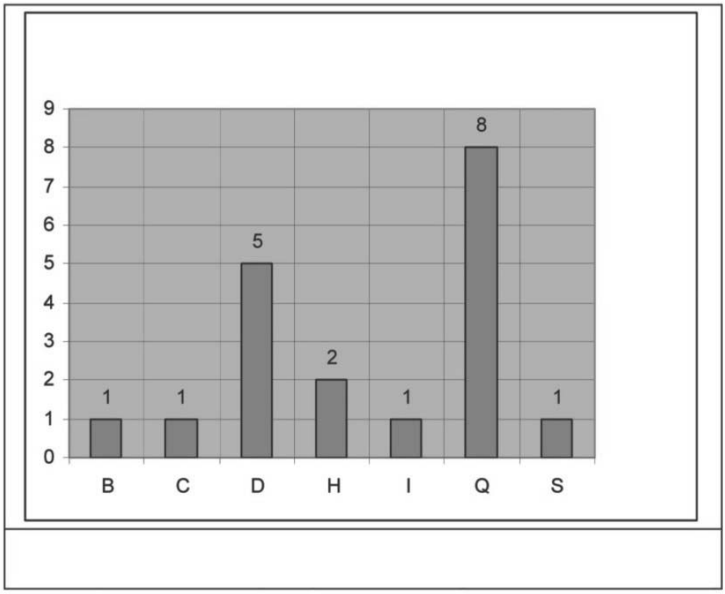

Diagram 3 – Morphological type: B – cup with foot; C – S-profile vase; D – bowl; H – pot; I – lid; Q – "glass"; S – vase support.

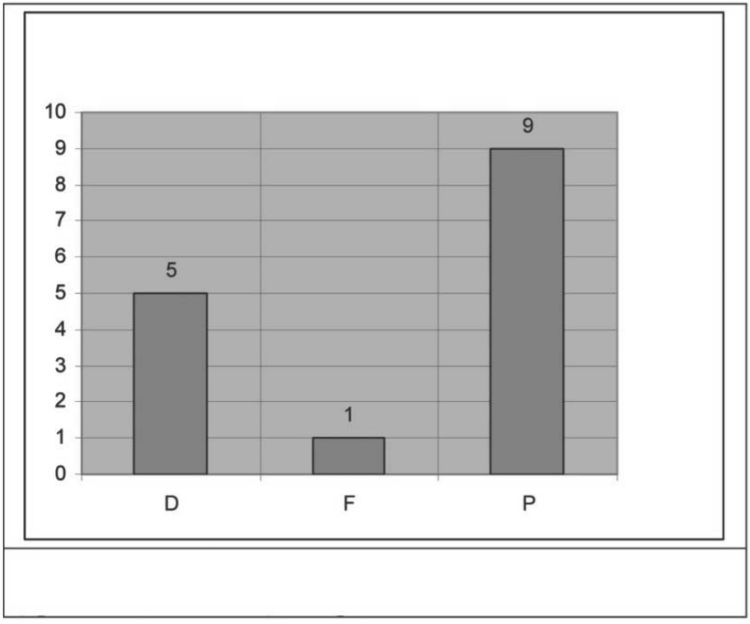

Diagram 4 – Decoration technique: D – incision; F – impression (pressed with an object); P – painting.

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Fig. 3 – Stolniceni. Painted ceramic sherds, discovered at the surface.

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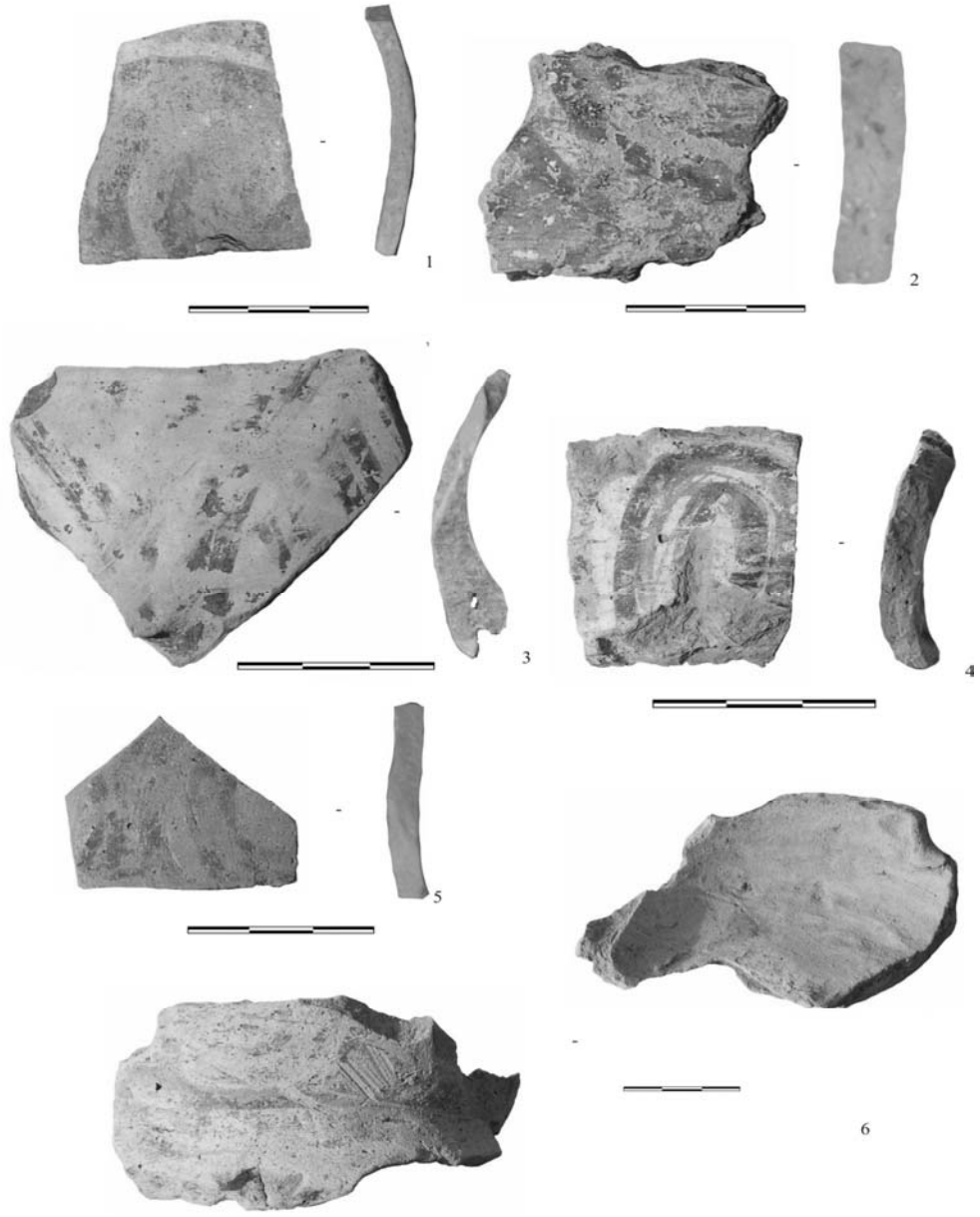

Fig. 4 – Stolniceni. Ceramic fragments discovered at the surface
(no. 1–5 – vessel walls; no. 6 – fragmentary vessel base).

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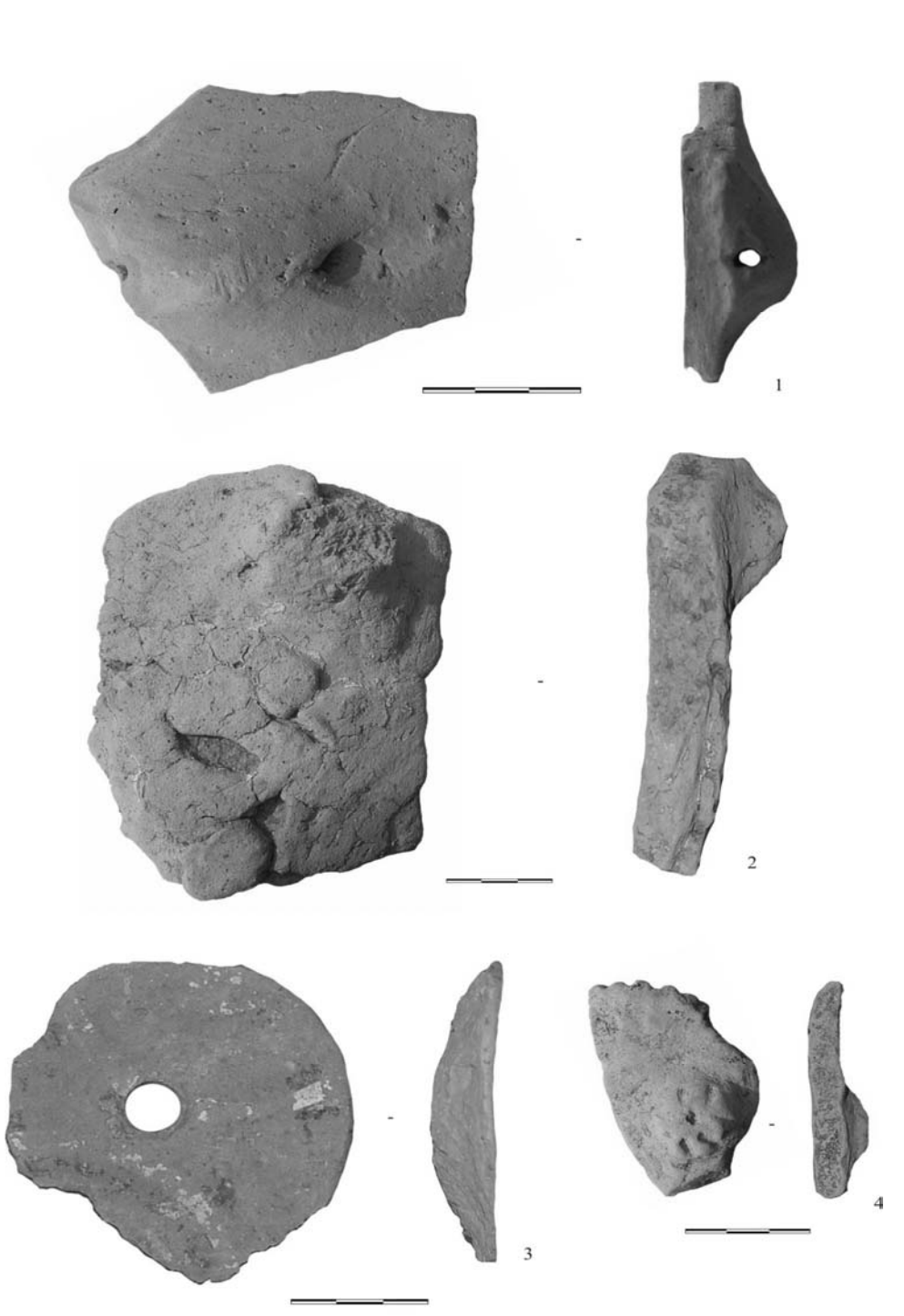

Fig. 5 – Stolniceni. Ceramic fragments discovered at the surface.

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Choroplastic

Among the archaeological remains discovered during the surface investigations, several anthropomorphic figurines could be mentioned. Among them, one well-preserved piece is noteworthy, being modelled out of fine paste, with an oxidant burning, of brick-like colour (Fig. 6/1). The figurine represents part of a female statuette (6.5 cm high, 2.5 cm maximum width in the hip region), with its head missing (the figurine had been damaged since antiquity). The whole surface is decorated with incised parallel lines (done before firing), forming a fir-tree motif and organized into geometric signs (triangles, rhombuses, rectangles). The navel is emphasized, the abdomen and possibly the vulva were rendered by a rhombus. This type of anthropomorphic plastique is widespread in the Cucuteni cultural space, there being close analogies in finds from the Neolithic sites of Drăguşeni[25], Hăbăşeşti[26], Cucuteni – *Cetăţuia*[27], Bereşti – *Dealul Bulgarului*[28], Ţigăneşti[29], Duruitoarea[30], Scânteia[31], Bereşti[32], Răuceşti [33], Târpeşti [34], Bârlăleşti [35], Ruginoasa[36], Igeşti[37], Fedeleşeni[38], Mărgineni[39], Costişa – *Dealul Stanciului*[40], Izvoare[41], Petricani[42], Frumuşica[43], Podoleni[44], Ţihucani[45], Putineşti III[46], Duruitoarea Veche I[47], Drăguşeni[48].

All these items have been assigned chronologically to Cucuteni phase A, the great majority to A3 or A4.

[25] Marinescu-Bîlcu & Bolomey, 2000, Fig. 159–160, 162–169.
[26] Dumitrescu *et alii*, 1954, 401–422, 405, Fig. 32, 5, 8; Pl. CXXII, 6–8.
[27] Monah 1997, Fig. 53/1, 55/1–5; 1, 6, 9.
[28] *Ibidem*, Fig. 54/ 1–2; 58/ 15; 68/8.
[29] *Ibidem*, Fig. 54/3.
[30] *Ibidem*, Fig. 56/3.
[31] *Ibidem*, Fig. 61/1.
[32] *Ibidem*, Fig.61/2.
[33] *Ibidem*, Fig. 62/ 5; 67/ 2; 80/5–6.
[34] *Ibidem*, Fig. 66/6.
[35] *Ibidem*, Fig. 67/ 6; 68/5.
[36] *Ibidem*, Fig. 68/10.
[37] *Ibidem*, Fig. 75/ 3, 6.
[38] *Ibidem*, Fig. 78.
[39] *Ibidem*, Fig. 80/7/3.
[40] Sorochin 2002, Fig. 122/2.
[41] *Ibidem*, Fig. 124/1.
[42] *Ibidem*, Fig. 125/1, 4.
[43] Monah 1997, Fig. 75/3, 6.
[44] *Ibidem*, Fig. 78.
[45] *Ibidem*, Fig. 80/ 7/ 3.
[46] Sorochin 2002, Fig. 122/2.
[47] *Ibidem*, Fig. 124/1.
[48] *Ibidem*, Fig. 125/1, 4.

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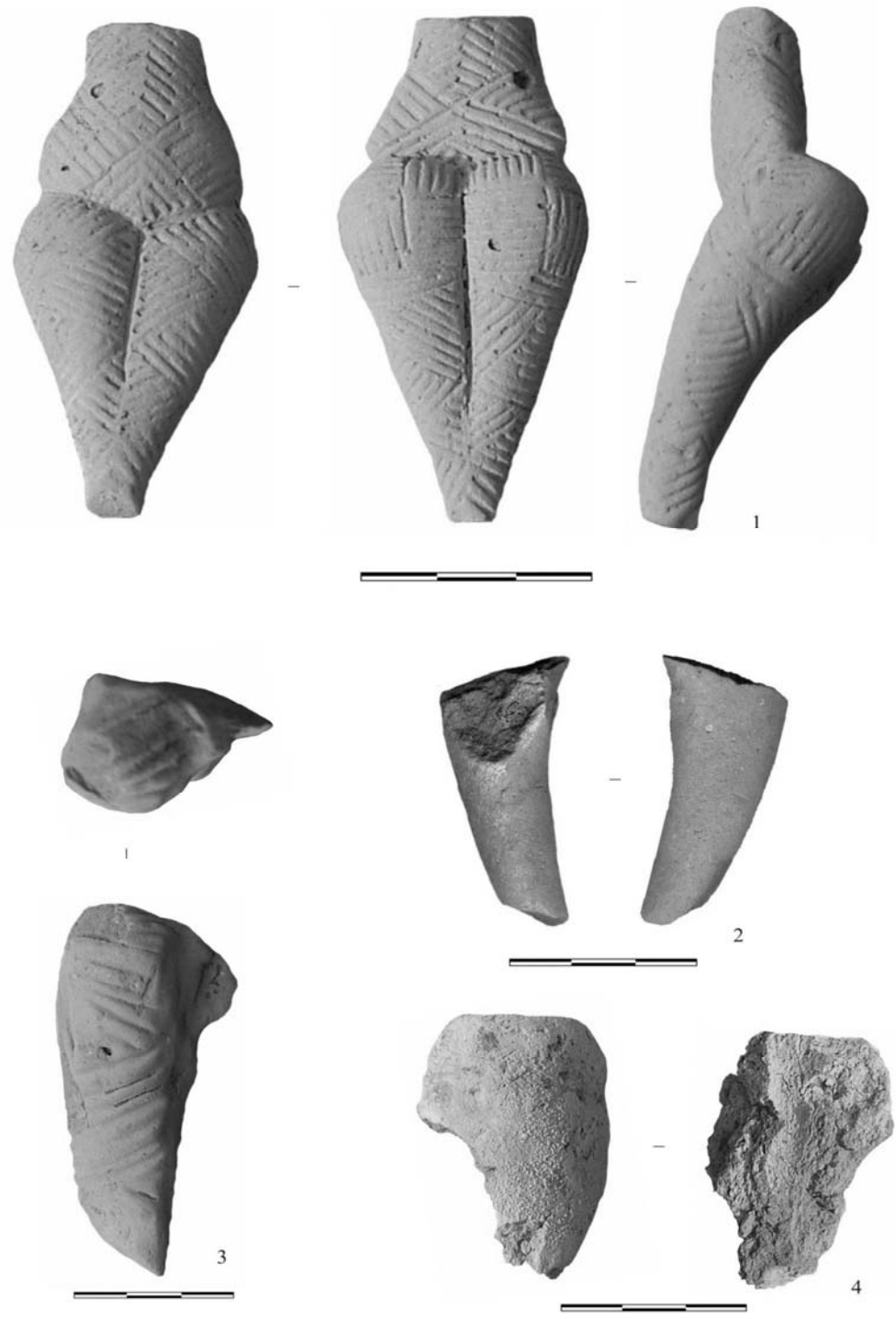

Fig. 6 – Stolniceni. Fragmentary figurines and ceramic items
(no. 1 – female statuette; no. 2 – horn fragment; no. 3 – leg fragment; no. 4 – spindle whorl).

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Flints (Fig. 7)

Another category of find is represented by flints, found in significant numbers during the surface investigation. Among the inventoried items can be mentioned spear points (Fig. 7/1–2), arrow points (Fig. 7/2, 3–4) with their edges retouched, end-scrapers (Fig. 7/5–8) and burins (Fig. 7/9).

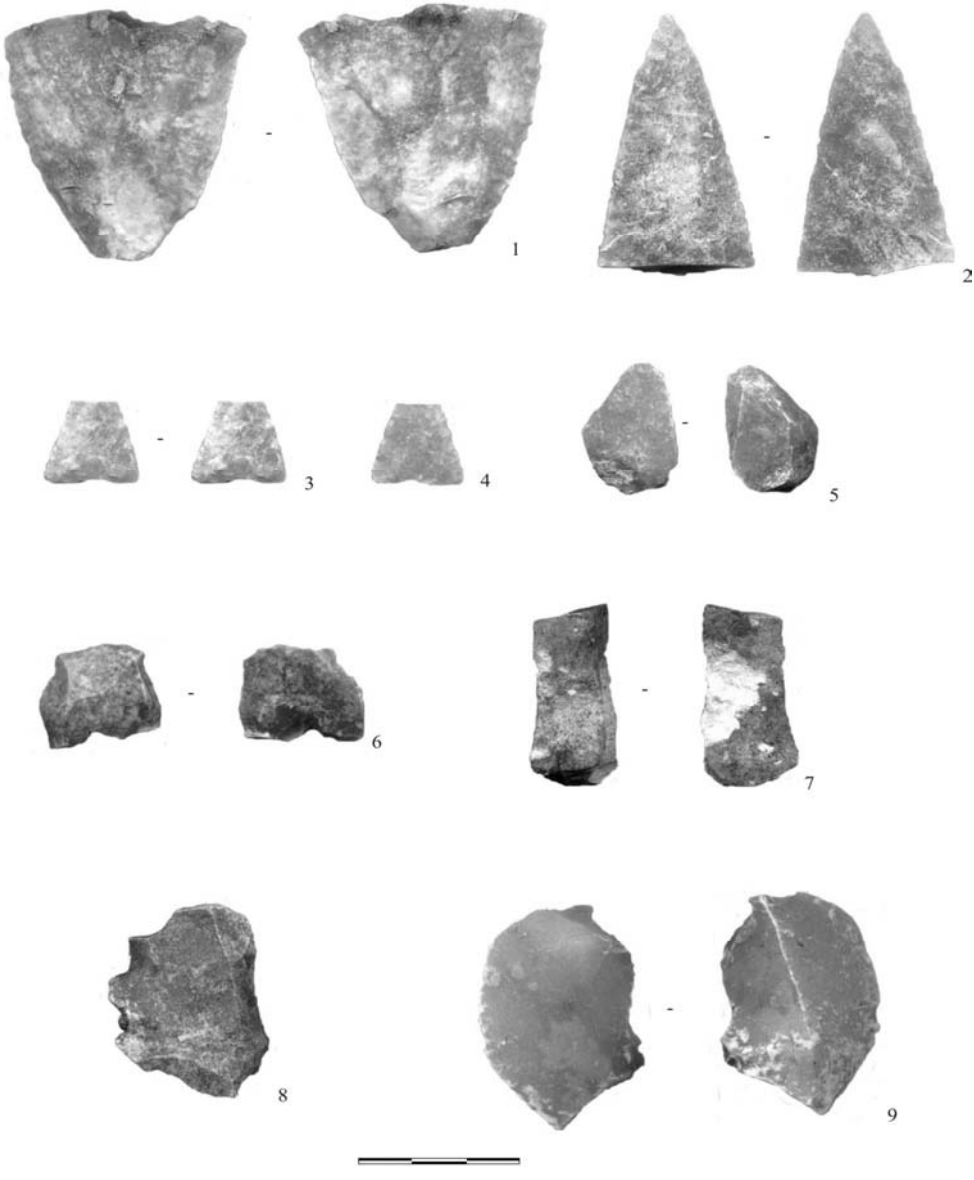

Fig. 7 – Stolniceni. Lithic artefacts discovered at the surface. Spear points (no. 1–2), arrow points (no. 3–4), end-scrapers (no. 5–8), burin (no. 9).

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Osteological material

In total, 36 bone fragments were recovered, as it follows: 11 fragments of large horned bovids; 5 ovicaprine fragments; 1 suid fragment; 1 fragment de deer, and 18 fragments of uncertain provenance.

Conclusions

By the time of its investigation the settlement of Stolniceni had been 95% destroyed by the alluvial soil that overlapped the agricultural works. The cultural layers had been disturbed by plants and no in situ architectural remains were detected. Yet, judging by the quantity and typology of the material recovered, we presume the existence of a settlement that originally extended over about 1.5 ha, with considerable settlement intensity comparable to the Cucuteni sites on the upper and middle courses of the Prut river and belonging essentially to the same ecosystem. The special interest of the Neolithic site at Stolniceni is in its geographical location, which demonstrates the southernmost extent of the Cucuteni Culture in the region. Analysis of the ceramic material enables us to place it in Cucuteni phases A3–A4.

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SĂLCUŢA IV CULTURAL ELEMENTS IN PROTOCERNAVODĂ III-PROTOBOLERÁZ HORIZON FROM NORTH-WESTERN ROMANIA

ELEMENTE CULTURALE SĂLCUŢA IV ÎN ORIZONTUL PROTOCERNAVODĂ III-PROTOBOLERÁZ DIN NORD-VESTUL ROMÂNIEI

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Cuvinte-cheie: arheologie, preistorie, Sălcuța, Protocernavodă III – Protoboleráz, analogii.

Rezumat: La Carei – *Drumul Căminului*, arheologul Németi János şi autorul acestui material au efectuat un sondaj, din care au rezultat, în stratul inferior al unei aşezări Cernavodă III, materiale arheologice reprezentative pentru orizontul Protocernavodă III – Protoboleráz. Autorul întocmeşte o tipologie a formelor ceramice descoperite aici, prezentând în lucrare tipul I-ceşti, tipul II-căni, tipul III – străchini cu evidente caracteristici Sălcuța IV târzii. Autorul recurge la analogii cu resturi arheologice sălcuțene, dar şi cu materiale arheologice Protocernavodă III – Protoboleráz, descoperite în Europa Centrală. Dovezile arheologice argumentează aserțiunea lui Petre Roman, conform căreia rădăcinile procesului de badenizare se află în orizontul Sălcuța IV – Herculane II–III.

Key words: archaeology, prehistory, Sălcuța, Protocernavodă III – Protoboleráz, analogies.

Abstract: At Carei – *Drumul Căminului*, the archaeologist Németi János and the author of the following lines had done a survey that resulted in archaeological materials representative for the Horizon of Protocernavodă III – Protoboleráz type, in the lower layer of a settlement Cernavoda III. The author makes a typology of the ceramic forms uncovered there, rendering in this paper: type I – cups, type II mugs, type III dishes, with obvious features of the Late Sălcuța. He is also focused upon the analogies with Sălcuța archaeological remains, but also with archaeological materials of Protocernavodă III – Protoboleráz type, discovered in Central Europe. The archaeological proofs back up the presumption of Petre Roman, that the roots of the "badenisation" process occured in the Sălcuța IV-Herculane II-III Horizon.

Sălcuța IV[1] phenomenon does not end abruptly with Herculane III – Hunyadihálom – Lažňany phase. Sălcuța communities do not disappear, but take over a different lifestyle; therefore, the cultural characteristics are reflected in the material culture of the next stage.

[1] Roman 1995, 17–23.

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The discovery from Carei – *Drumul Căminului*[2] is relevant in this sense. Bodrogkeresztúr archaeological remainders were found nearby the fertile area of Carei, having Hunyadihálom[3] characteristics, with remainders of Cernavodă III[4] culture, and material elements at the basis of the cultural layer belonging to a previous horizon of this culture. The archaeologist Németi János, author of this work, carried out a research[5] in Carei – *Drumul Căminului*. In the inferior layer of a Cernavodă III, it revealed settlement representative archaeological materials for a post – Sălcuța cultural stage, Protocernavodă III – Protoboleráz.

Next, using the typology of pottery forms, we shall analyze the Late Sălcuța elements, in order to demonstrate the above.

Type I. Cups. Ia (Pl. I/1–14) is a *variant of a cup without handle, with a bulged body, straight, cylindrical neck, flat or slightly rounded bottom*.

Ia$_1$ (Pl. I/1–6) *is a subvariant with thin walls, hemispherical body, cylindrical neck, slightly rounded bottom. Sometimes, the rim is a little out-turned.*

Artifacts of this subvariant were found in Carei – *Drumul Căminului* at a depth of 0.70–1 m, in the inferior layer of the excavation. The pottery is black or brick-like colored, mechanically polished, obviously made in the Sălcuța style.

Cups with bulged body and cylindrical neck from the Sălcuța culture appear in the IVth phase – Sălcuța – *Piscul Cornişorului*[6]. There are also cups having a bulged body and cylindrical neck, with a slight out-turning of the rim[7]. Others that were also found in Sălcuța – *Piscul Cornişorului* are bulged, with cylindrical neck, but shorter[8]. Similar forms appear also in Peştera Hoților from Băile Herculane in the Herculane III[9] phase, levels e_1 and e_2. This subvariant is thus inherited from Sălcuța IV[10] culture.

Similarities of this subvariant exist in Kétegyháza[11]. The author who analyses the finds from Kétegyháza asserts that the archaeological material belongs to the Cernavodă III[12] culture, while Kalicz Nándor stands that the same materials belong to the previous[13] horizon of Cernavoda III culture, to the Protocernavodă III-Protoboleráz horizon, respectively.

[2] Sălceanu 2008, Pl. 17–22, 88–121.
[3] Németi 1988, 121–145.
[4] Németi & Sălceanu, 1995, 55–58.
[5] *Ibidem*; Németi 2001, 299–329.
[6] Berciu 1961, Fig. 136/7.
[7] *Idem*, Fig. 135/1, 8.
[8] *Idem*, Fig. 138/8–9; Roman 1971, 31–170, Abb. 3/3.
[9] *Idem*, Abb. 29/18.
[10] See also Sălceanu, 2008, Pl. 11/1 – type XVI from the presented typology Sălcuța IV.
[11] Kalicz 2001, 385–435, Abb. 16/2; 17/7.
[12] Ecsedy 1972, 39.
[13] Kalicz 2001, 395.

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We also have other analogies in Hungary in Pécsbagota[14] and Budapest[15].

The same analogies are to be found also in Western Slovakia, in Šturovo[16], Svodin[17] and in Komjatice[18]. The published vessels are identical with those from Carei – *Drumul Căminului*. Němejcová – Pavúková agrees that the finds from Šturovo, Kamjatice differ in typology and decorations from the ones belonging to the Boleráz culture. The author is situating them at the beginning of the Cernavodă III[19] culture. Kalicz Nándor draws the conclusion that the archaeological remainders from Šturovo, Svodin, Komjatice, Červeny Hrádok, Velké Kostalny belong to the Protocernavodă III[20] horizon. The same form appears later on in Căscioarele[21] within the Cernavodă III culture. The subvariant doesn't have analogies in the Boleráz area.

Ia$_2$ (Pl. I/7, 9–12)[22] is a *subvariant with thickened walls, with a pear-like shaped body, straight, cylindrical neck, sometimes longer* (Pl. I/5-6). Sometimes there is a small ditch between the neck and body (Pl. I/11). Some samples are decorated with parallel angular incisions, made with a blunt needle (Pl. I/11).

The black, mechanically polished pottery was made in the Salcuța style. The cups were found 0.40–0.50 m deep (Pl. I/11) and 0.60–0.80 m deep (Pl. I/9, 10).

The development of this form starts with Sălcuța IV[23], and it is visible in the Herculane II phase, level[24] c_1 and Herculane III, level[25] e_{1c}.

This form is not found in the Boleraz area. It has analogies in Šturovo[26] and in Keszthely – Fenékpuszta[27], Hungary.

Ia$_3$ (Pl. I/8, 13–14) is a *subvariant, with similar characteristics in general, cylindrical neck, hemispherical body, of small dimensions.* Sometimes its bottom part is flat. A similar form appears in Băile Herculane – *Peştera Hoților*, in the deposition b[28] or in Cheile Turzii – *Peştera Ungurească*[29].

[14] *Idem*, Abb. 4/12 – bulged form, cilindrical neck, out-turned rim; Abb. 5/7 – hemispherical body, cylindrical neck, both are perfect analogies with the forms from Carei-Drumul Căminului.
[15] *Idem*, Abb. 8/3 – hemispherical body, cylindrical neck.
[16] Němejcová – Pavúková 1979, Obr. 2/2, 4.
[17] *Ibidem*, Obr. 13/2.
[18] *Ibidem*, Obr. 17/1, 3.
[19] *Ibidem*, 51.
[20] Kalicz 2001, 396–397.
[21] Morintz & Roman, 1968, Abb. 21/10.
[22] See also Sălceanu 2008, Pl. 108/4; 109/2.
[23] Berciu 1961, Fig. 138/11.
[24] Roman 1971, Abb. 29/15.
[25] *Ibidem*, Abb. 29/16.
[26] Němejcová – Pavúková 1979, Obr. 2/1.
[27] Kalicz 2001, Abb. 1/2.
[28] Roman 1971, Abb. 29/14.
[29] Sălceanu 2008, Pl. 57/3.

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Ib (Pl. I/15–17; II/1–11)[30] *is also a variant without handles, with elegant profile, swan-like neck, bitronconical shape, sometimes with thickened, out-turned rim, having knobs on the maximum diameter* (Pl. I/15-16). The majority of samples were found 0.80–1 m deep, in the ground.

The pottery is brown and black, mechanically polished, in the Sălcuța style. The shape is also influenced by Sălcuța[31] and Cernavodă[32] cultures, if we consider the way the vessel from the Late Cernavodă I culture was made. In Piscul Cornişorului from the Sălcuța IV phase, the shape has a rounded and out-turned lip, but angular body, like in the subvariant **b_1** of this typology (Pl. II/5-6). In the Cernavodă III culture the shape is visible in the late period and has thickened lip, like our samples, a long, straight neck and angular body. According to the references presented above, the vessel originating in the Cernavodă culture, published by Petre Roman is relevant, especially for the way that shape was conceived. The same approach is visible on Sălcuța dishes from the IVth[33] phase.

A similar form with the one represented in Pl. I/16 is to be found in Svodin[34], and another form from Pl. II/3 has a perfect analogy in Šturovo[35]. There are also analogies in Hungary, Kaszthely – Fenékpuszta[36].

Ib_1 (Pl. II/5–6) is a *subvariant with bitronconical aspect; the body has a pronounced flattened form.*

The pottery is black-grayish, with brownish reflexes. One piece is decorated with vertical, hardly visible channeling, starting from the demarcation line of the neck, to the maximum diameter of the body. The samples of this subvariant were found 0.60–0.85 m deep, situated in the third section. Finding similarities among the forms of this subvariant with the ones from the Late Cernavoda I culture[37] might be relevant for the origin of the entire variant in our typology. **Ib_2** (Pl. II/7–10) is a *subvariant with a pronounced out-turned rim.* **Ib_3 (**Pl. II/11)[38] is a *subvariant with semispherical shape, flat bottom, thickened and bent over rim.* This sample has a knob, on its maximum diameter of the body.

It was found 0.60–0.80 m deep, in the ground. The shape is specific to the Sălcuța culture. We found it here again, after D. Berciu had mentioned it in Sălcuța – *Piscul Cornişorului* during the IVth phase of the Sălcuța culture[39]. The

[30] *Ibidem*, Pl. 96/2; 103; 109/4; 113/7; 114/1.
[31] Berciu 1961, Fig. 135/7.
[32] Roman 2001, Abb. 8/2.
[33] Sălceanu 2008. Pl. 3/12, 13.
[34] Němejcová – Pavúková 1979, Obr.13/1.
[35] *Ibidem*, Obr. 2/1.
[36] Kalicz 2001, Abb. 1/ 2–3.
[37] Roman 2001, 43, Abb. 8/1.
[38] This pottery fragment appears also in Sălceanu 2008, Pl. 100/4.
[39] Berciu 1961, Fig. 138/2, 10; Roman, 1971, Abb. 3/13.

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author of this find thinks the shape of this cup is inspired from the Cernavodă culture.

Our subvariant is neither present in the next stages of the Sălcuța IV phenomenon, nor in other places, containing Protocernavodă III – Protoboleráz remainders. It also doesn't appear in the Cernavodă III – Boleráz culture.

Ic (Pl. II/12–19) *variant with most handled cups.* They were made of fine, black-grayish or brick-like colored pottery, generally mechanically polished.

Ic$_1$ (Pl. II/12)[40] *subvariant with one handle, starting from the rim, and going down from the bulge on the body line, tronconical body.* This shape appears and develops in the classic Sălcuța until the IIc[41] phase. It appears again in Sălcuța IV phase, in Ostrovul Şimian[42], Ostrovul Corbului[43], Sălcuța – *Piscul Cornişorului*[44], Valea Anilor – *Malul Înalt*[45], Cheile Turzii[46], Ostrovul Corbului in the 22[nd][47] grave.

We found the same form in Carei – *Drumul Căminului*. The handle, though, is not rounded in section, like the samples from Sălcuța, but in the 1 cm wide band. Also, unlike the Sălcuța samples, we have here a slight upraising. This form is also present in Băile Herculane – *Peştera Hoților*[48], but having an angular handle, rounded in section. In Carei – *Drumul Căminului*, this form was found in the inferior side of the culture layer, 0.80–0.95 m deep, which is relevant for the Cernavodă III – Boleráz culture genesis.

It doesn't have analogies with other Protocernavodă III – Protoboleráz finds, nor does it appear in the next stages.

Ic$_2$ (Pl. II/13–15)[49] *subvariant with globular body; the upper side has the shape of a circle arc, with bent over rim. The 1 cm band handle starts from the rim. It is upraising.* Fine, black-grayish, with brown reflexes, pottery mechanically polished. The samples were found in the middle of the culture layer.

Analogies dating from the Sălcuța IV culture also appear in Ostrovul Corbului[50]. We can also find similar shapes in Bodrogkeresztúr area from Transylvania. They have similar handles, but strongly upraising[51].

There is also another analogy in Western Slovakia, Šturovo[52].

[40] See also Sălceanu 2008, Pl. 88/6.
[41] Berciu 1961, Fig. 84/2, 3; 99/9; 103/4.
[42] Roman 1971, Abb. 2/59–62.
[43] *Ibidem*, Abb. 8/2.
[44] *Ibidem*, Abb. 4/28.
[45] Sălceanu 2008, Pl. 49/2, 54/3.
[46] *Ibidem*, Foto 20/2.
[47] Roman & Dodd-Oprițescu, 1989, Fig. 11/5.
[48] Roman 1971, Abb. 31/8.
[49] See also Sălceanu 2008, Pl. 90/3.
[50] Roman 1971, Abb. 8/6.
[51] Vlassa 1967, Fig. 3/3,5.
[52] Němejcová – Pavúková 1979, Obr. 4/1, 3.

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Ic_3 (Pl. II/16–19)[53] *is a subvariant with a handle, with straight body, bulged at the bottom part. We also mention two exceptions: although they have identical forms, the handle is missing* (Pl. II/18-19).

Black-grayish pottery, mechanically polished. The sample from Pl. II/16 was found 0.60–0.70 m deep, and the next, from Pl. II/17 was found 0.30–0.40 m deep.

This form has relevant analogies in Radovanu[54].

Type II. Cups. II (Pl. II/1–3)[55] has one variant, *with globular body at the bottom part, sometimes with bent out rim at the upper part, with band handles of 1–1.5 cm wide, starting from the edge.* The pottery material is fine, black-grayish, mechanically polished. They were found 0.60–0.80 m deep, and one sample 0.30–0.40 m deep.

The cups have analogies in western Slovakia, Šturovo[56], in Hungary, Pécsbagota, Mözs Szekszárd[57]. Similar forms are to be found in Sălcuța – Piscul Cornișorului, dating from the IInd phase of Sălcuța[58] IV culture and they developed until the IIc[59] phase. They are also present in Sălcuța – *Piscul Cornișorului*[60], from the Sălcuța IV phase and are more developed in Cheile Turzii[61]. These Létkes type cups are characteristic to the Protoboleráz horizon according to Kalicz Nándor[62] and are considered to originate in the Furchenstich pottery.

Type III. Bowls. IIIa (Pl. III/1–3)[63] *tronconical at the bottom part, and out-turned at the upper part.* They are specific to the Cernavodă culture. The shape was taken over from the Gumelnița[64] culture and it was assimilated by the Cernavodă I[65] culture. Identical forms were present in the Sălcuța IV stage, at Sălcuța – *Piscul*

[53] See also Sălceanu 2008, Pl. 104/1, 9; 112/2; 115/5; 121/2–3.

[54] Roman 1971, Abb. 15/4.

[55] See also Sălceanu 2008, Pl. 88/1, 4; 118/2.

[56] Němejcová – Pavúková 1979, Obr. 4/4–5.

[57] Kalicz 2001, Abb. 1/8; 3/9; 5/17.

[58] Berciu 1961, Fig. 128/1.

[59] *Ibidem*, Fig. 127/1.

[60] Roman 1971, Abb. 5/8.

[61] *Ibidem*, Abb. 38/18, 21, 22; See also Sălceanu 2008 – these forms belong to the XXVII type from the presented Sălcuța IV typology.

[62] Kalicz 2001, p. 399, Abb. 6/6,8.

[63] See also Sălceanu 2008, Pl. 92/1, 2; 94/3; 96/1; 99/1–2; 100/2; 102; 108/1.

[64] Berciu, 1961, Fig. 218/1; 219; 223/1, 3.

[65] Morintz & Roman, 1968, Abb. 21/6; Oprinescu 1981, Fig. 5/8–9; 6/5; Roman 2001, 43, Abb. 6/2–9; 9/1–3; 10/5; 15/7–8.

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Cornişorului[66] and in Herculane III[67] phase, e_2 deposition, and also in Cheile Turzii – *Peştera Ungurească*[68].

IIIb (Pl. III/4–6)[69] *is a variant with shouldered forms, more pronounced in the subvariant* **IIIb$_1$** (Pl. III/5–6). Their analogies are to be found in Băile Herculane – Peştera Hoţilor, Herculane II[70] phase, level c_2–e_{1a}.

IIIc (Pl. III/7–8) *is a variant with tronconical bottom part that joins in a pronounced angle with the upper side.*

IIIc$_1$ (Pl. III/7) *is a subvariant with deep angle*. This shape appears in the Sălcuţa I[71] culture and develops during this culture until the IIc[72] phase. In the Sălcuţa III phase it appears again in Băile Herculane – *Peştera Hoţilor*, level b[73], and in the Sălcuţa IV phase, at Sălcuţa – *Piscul Cornişorului*[74]. It is the same in Herculane II[75] phase.

IIIc$_2$ (Pl. III/8) *is a subvariant with deep but rounded angle*. It is present in Sălcuţa – *Piscul Cornişorului*[76] and in Băile Herculane – *Peştera Hoţilor*[77], e_2 deposition.

IIId (Pl. III/9–11) *is a variant of dish with tronconical bottom side and straight upper side.* It has two subvariants: **IIId$_1$** (pl. III/10) *with bent over rim* and **IIId$_2$** (Pl. III/11) *with one knob on its middle side*.

IIIe (Pl. III/11a), *dish with thickened rim,* subvariant of the Sălcuţa culture. It appears in the Ist phase of this culture[78], but in the Sălcuţa IV stage the thickening lasts like in our case. It preserves the aspect in the Herculane II[79] phase.

IIIf (Pl. III/12–13) with the subvariant **IIIf$_1$** is a *tronconical dish at its bottom part, with flat bottom.* It has analogies in the deposition c_2–e_{1a} from Băile Herculane – *Peştera Hoţilor*[80]. Its development starts with the forms of the classic Sălcuţa period from Sălcuţa – *Piscul Cornişorului*[81].

[66] Berciu 1961, Fig. 135/1.
[67] Roman 1971, Abb. 26/6.
[68] Sălceanu 2008, Pl. 76/ 4.
[69] *Ibidem*, Pl. 118/4.
[70] Roman 1971, Abb. 23/3.
[71] Berciu 1961, Fig. 85/6.
[72] *Ibidem*, Fig. 107/5.
[73] Roman 1971, Abb. 18/3.
[74] Berciu 1961, Fig. 142/1.
[75] Roman 1971, Abb. 18/9.
[76] *Ibidem*, Abb. 3/2.
[77] *Ibidem*, Abb. 27/16.
[78] Berciu 1961, Fig. 85/1.
[79] Roman 1971, Abb. 18/2, 7–8; 32/23.
[80] *Ibidem*, Abb. 23/1.
[81] Berciu 1961, Fig, 135/1; Roman 1971, Abb. 3/2.

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IIIg, (Pl. III/13a)[82] *is a variant of hemispherical dish, straight, cylindrical neck and subcutaneous handles.* It is a relevant form in establishing the archaeological identity of the material from Carei – *Drumul Căminului*. This kind of samples also appears in Szerencs, Hungary[83] and in Létkes[84]. Kalicz Nándor considers this type of handle – the subcutaneous handle – a "leading fossil" of Protoboleráz horizon, inspired by Furchenstich[85] pottery.

The other pottery types – types IV–VII[86] – that were found in Carei – *Drumul Căminului* are not the object of this study.

The first aspect that needs to be solved is the archaeological identity of the material that was found in Carei – *Drumul Căminului*. Many analogies with other archaeological remnants from the Protocernavodă III – Protoboleráz finds help us believe that the materials in the matter belong to this cultural horizon. Most of the materials from Carei – *Drumul Căminului* disappeared in the next stages of the Cernavodă III-Boleráz culture. We mention that here was also found a tabletted[87] handle.

The second aspect that needs to be explained is if we have archaeological remnants of the Protocernavodă III or Protoboleráz type. We may draw the conclusion that the materials from Carei – *Drumul Căminului* belong to the Protocernavodă III area, because the analogies with materials of the Sălcuța type are more numerous and fully illustrative and other analogies also appear in the Late Cernavodă I culture, of the Radovanu[88] type. Most of them inherited the previous horizon Sălcuța IV – Herculane II – III, alike Dunărea de Jos[89].

Interesting is that the Late Sălcuța materials were found at the inferior level of the excavation. This might mean that, in the north-western country, the beginning of the Cernavodă III communities makes them the late representatives of the culture.

There is no doubt that the materials from Carei – *Drumul Căminului* are to be found at the utmost chronological limit of the Sălcuța IV – Herculane II – III cultural horizon. It is also certain that the Sălcuța IV phenomenon leaves marks also on the new cultural stage, as well as on the chronological limits of the horizon it creates.

[82] Sălceanu 2008, Pl. 121/5; Foto 27/ 8.
[83] Němejcová – Pavúková 1979, Obr. 9.
[84] Kalicz 2001, Abb. 6/4.
[85] *Ibidem*, 401.
[86] Sălceanu 2008, Pl. 20–22.
[87] *Ibidem*, Foto 27/5.
[88] Roman 2001, 18.
[89] *Ibidem*.

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This way is confirmed, as Petre Roman said, that the roots of the Baden process are situated in a previous period to the Cernavoda III culture, in the Sălcuţa IV – Herculane II – III[90] cultural horizon, respectively.

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[90] Roman 1983, 118.

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ETHNO-ARCHAEOLOGICAL DISCOVERIES FROM OLTENI, COVASNA COUNTY, ROMANIA

DESCOPERIRILE ETNO-ARHEOLOGICE DE LA OLTENI, JUDEŢUL COVASNA, ROMÂNIA

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Cuvinte-cheie: Transilvania, repertoriu arheologic, etnografie, apă minerală, sare.
Rezumat: În studiul de faţă sunt prezentate rezultatele cercetărilor arheologice desfăşurate între anii 2001–2008 în zona satului Olteni, comuna Bodoc (sud-estul Transilvaniei). Cu ocazia acestor cercetări au fost repertoriate opt situri arheologice, ce datează din mai multe perioade de timp: neolitic, eneolitic, epoca bronzului, epoca fierului (cultura geto-dacică), epoca romană, epoca post-romană şi perioada medievală. Studiul etnografic, realizat în anul 2008 asupra celor două surse cu apă minerală sărată de la Olteni, indică faptul că mulți oameni consumă această apă fără indicații medicale prealabile pentru tratarea arsurilor gastro-intestinale, hiperaciditate, cure pentru fiere şi căi urinare, tratament post-hepatic, artrită incipientă şi anemie.

Key words: Transylvania, archaeological repertoire, etnography, mineral water, salt.
Abstract: The study presents the results of the archaeological researches conducted between 2001 and 2008 in the area of Olteni village, Bodoc Commune (southeastern Transylvania). During these researches we recorded eight archaeological sites that belonged to different periods in time: Neolithic, Eneolithic, Bronze Age, Iron Age (the Geto-Dacian Culture), Roman Period, Post-Roman Period and Medieval Age. The ethnographic study conducted in 2008 around the two salty mineral water sources from Olteni shows that many people consume this water without any previous medical advice to treat gastro-intestinal burns, hyperacidity, and incipient arthritis, anaemia, using it also in cures for gall and urinary ducts and post-hepatic treatments.

Geographical position

Olteni village is found in the northern part of the Sfântu Gheorghe Valley, which belongs to the Braşov Valley (or Bârsei Valley) found in the southeast of the Transylvanian Plateau, in the Carpathian Curvature. The Braşov Valley looks like a large "hollow" (of about 1,800 square metres) being surrounded on all sides by a well profiled mountain chain.

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The Sfântu Gheorghe Valley occupies the central-northern part of the Braşov Valley. It is characterised by the presence of a piedmont called Câmpu or Şesu Frumos and a meadow and swamp region drained by the Olt, Negru and Tărlung rivers. This basin spreads on a length of about 30 km and it is 10–12 km wide; its boundaries are marked by the Baraolt and Bodoc Mountains and the Tărlung heights[1].

The village is administrated by the Bodoc Commune, Covasna County. The village is laying 10 km north of Sfântu Gheorghe, on both sides of D.N. – 12, Braşov – Miercurea Ciuc (Fig. 1/1). The Olt River crosses it, from north to south, after it leaves the Tuşnad pass.

The Olt Valley marks the boundaries of the Baraolt Mountains on their eastern, western and southern sides. Thus they set the limits of the Olt River on its right side, their peaks reaching 1,000 m high. The Bodoc Mountains are found on the left side of the Olt River, being higher than the Baraolt Mountains, reaching heights between 800 and 1,200 metres. They consist of grit stones, micro-conglomerates and marls of cretaceous system, of the internal flysch.

The high terraces found on both sides of the Olt River, placed nearby Olteni village, were preferred by ancient populations for founding their settlements.

This locality is well known in the archaeological literature, mostly because of the two sites found on its northern border: the "*În Dosul Cetății – Vármegye*" site, belonging to the Cucuteni – Ariuşd Culture, and the *Roman Camp* from Olteni.

The salty mineral springs from Olteni

Local name: "Sóskút" [Hung.], "Sósborviz" [Hung.], "Izvor sărat" [Rom.] [The Salty Spring]

The age of this salty mineral spring is uncertain, but it is, in this area, the only salt source that can be found today.

GPS co-ordinates: 45° 59'082" N; 25°51'002" E; Altitude: 534 m.

The salty mineral spring from Olteni is found in the northeastern side of the village, on the left bank of the Olt River, at the bottom of the Bodoc Mountains (Fig. 2/1, 2; Fig. 8/6).

There is a road sign that points towards the spring, found at the crossroad over the railway (Fig. 2/7, 8). On this sign one can find several important data about the spring: the latest chemical analyses of this spring were taken in 1998, by the Institute of Balneology from Bucharest. These pointed out that the spring has curative features; it is mineral and salted, very rich in alkaline substances. Its chemical composition consists of: 10.300 gr/kg sodium bicarbonate, 1.49 gr/kg common salt, 2.18 gr/kg carbon dioxide; thus the total quantity of mineral salts found in this water is of 2.18 gr/kg.

According to the medical indications, the consumption of this water is very beneficial in treating the following diseases and affections: gastro – intestinal burns, hyperacidity, and incipient arthritis, anaemia, in cures for gall and urinary ducts and post-hepatic treatments.

[1] Cavruc 1998, 12.

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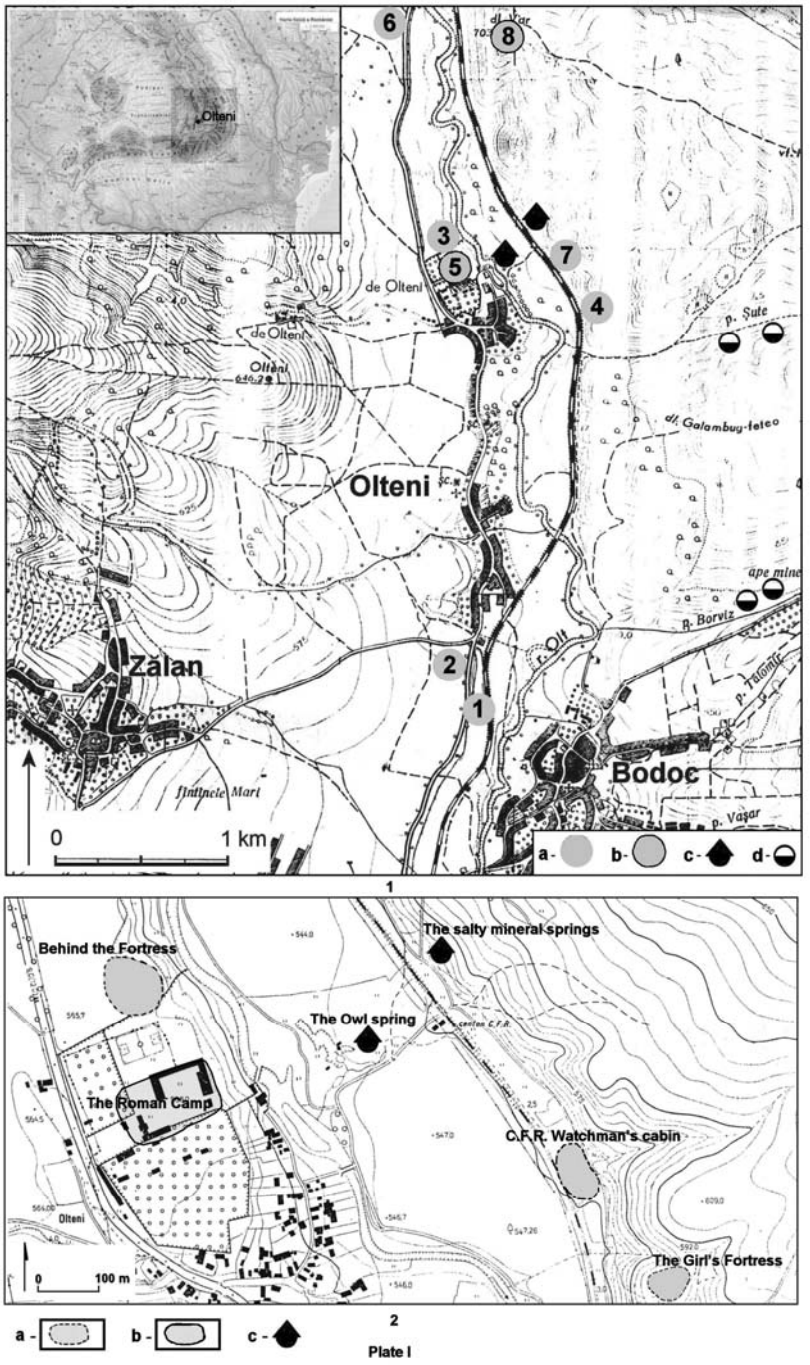

Fig. 1 – 1 – The geographical position of Olteni, Covasna County. The position of the archaeological sites and the salt water sources. Legend: a – settlements; b – fortifications; c – mineral-salted water spring; d – mineral water spring. 2 – The concentration of the settlements in the area of the salt water springs. Legend: a – settlements; b – fortifications; c – salt water springs.

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On the same road sign one can read that many people drink this water without any prior medical advice, to treat and ameliorate liver and intestine affections.

The sign that is found right next to the spring presents the contents of its water (in mg ‰): Cl – 650, HCO_3 – 11938, Na – 6983, K – 125, Fe_2 – 22, Ca_2 – 228, Mg_2 – 95, CO_2 – 3436. Indications: affections of the digestive tube, nutrition diseases, hyperacidity (Fig. 3/1).

Being asked how old this spring is, Szánto János, born in 1929, answered: "when my father was born, the spring was here". It was quite differently arranged than we see it today. Since then the spring went through a series of consistent rearrangements. At the beginning, about 100 years ago, the water of the spring was collected in a wooden barrel, a hollowed out cerris trunk [*Quercus cerris* – tree related to the oak]. In 1941 the wooden tube was replaced with concrete rings; these required many repairs. In 1994 a new pump was set up, as well as concrete lids; all these were stolen as time went by.

In 2003, the spring had a metallic pump, worked with a crank, used to draw the salty mineral water out of the well. The tube of the spring was quadrilateral, with concrete walls. The well was covered with a round iron sheet lid (Fig. 3/3, 4).

As time went by the spring's flow decreased considerably. In the old times, around the 50's, it had a much stronger flow, the water ran continuously, as Mr. Kovács József (born in 1945) remembers. But today its flow is of about 200–300 litres/day, even if its "power" didn't change, being just as efficient as he remembers it from his childhood. The spring had no other arrangements around it; the water was drawn out from the surface, with a jug or a mug, with anything handy found in the household, since people used to get water from this spring daily. They did not store this water at home, since it had a strong flow, it ran continuously and it was easy to get to; the well was maximum 1 metre deep.

The spring had been rearranged recently; so it got a new pump, which was covered with a thick layer of soil, not to get stolen again (Fig. 3/6). The pump of the well was buried, and the water today runs through underground pipes, ending with a faucet (Fig. 3/2, 3) built in a brick wall, placed at about 20 metres west of the initial source. The area is arranged in such way that the spring is hygienic and easy to use. The administrator's only concern is that the faucet might freeze during the winter, since the water doesn't freeze "… because it is salty and thus it doesn't freeze… it never froze, only on its margins, but the tube never froze, I mean the well, it never froze, no matter how cold it was outside". If the water was left to run continuously the faucet wouldn't freeze.

The diggings made around the salty mineral spring's main source during the time it was rearranged brought to light a black-bluish mud that had a specific strong smell. The same type of mud, as well as the same salty mineral water, were found at about 60–70 metres further up, under the forest, where the people made some diggings in search of a salt mine. But the diggings were stopped at the depth of 1.5–2 metres (Fig. 3/4).

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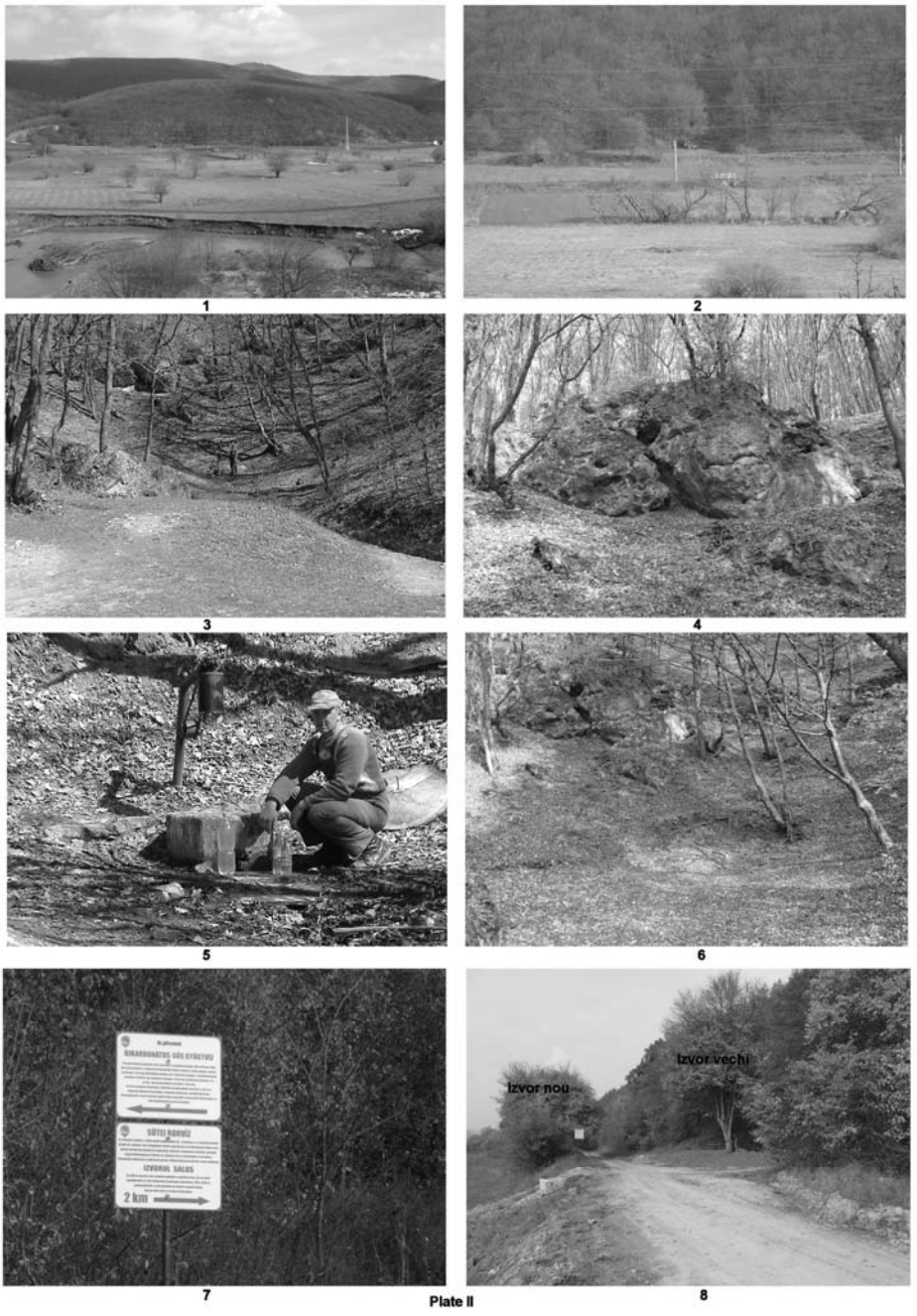

Plate II

Fig. 2 – 1 – General view from the west upon the mineral-salted water spring; 2 – Taking mineral-salted water from the spring, western view; 3 – The mineral salted water spring, picture taken in year 2003; 4 – The rock found nearby the origin of the mineral-salted water spring; 5 – The mineral-salted water spring, picture taken in year 2003; 6 – The abandoned mineral-salted water spring, picture taken in year 2008; 7 – Directories towards the mineral water springs, placed by the Bodoc town hall; 8 – View of the road that leads to the mineral-salted water spring.

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This salty mineral water is drunk especially by those suffering of stomach diseases or ulcer, being very good in treating heartburns. The usual dose is of one cup/day (about 1 dl), in the morning, on the empty stomach. The largest consumption of this water is around holidays and feasts, when people eat and drink more than usual, thus getting heartburns; this water helps digestion and relieves pain (Fig. 2/5). In these cases it is consumed right after eating or drinking, in the moment when the pains appear, not only in the morning.

Some people recall having heard stories about using this water to prepare food; Mr. Kovács József remembers his mother using it to prepare maize porridge. But he doesn't remember the recipe and cannot mention anyone that still uses the water in this purpose; it is a lost custom nowadays.

Some remember using it to salt the meat, bones and bacon after killing off pigs for Christmas. The bacon was placed in salty mineral water; it was covered and left there for 6 weeks. Then it was smoked.

This salty mineral water is also used to treat rheumatism, being added to the heated bathing water. Domestic animals, such as cows, are treated as well with this water, when their stomach gets swallowed. They are given to drink this water in large quantities, such as 2 litres at a time, to treat their aches.

The slightly salted mineral water spring from Olteni

Local name: "Bagoly – forrás" [Hung.], "Izvorul Bagoly" [n.n. "Bufnița" – Rom.] – [the Owl Spring] (Fig. 3/5; Fig. 8/5).

The age of this spring is uncertain. It is found at about 150–200 metres southwest of the salty mineral spring.

The information plate found nearby the spring reveals the chemical contents of its water (in mg ‰): Cl – 249, HCO_3 – 2767, Na – 1567, K – 44, Fe_2 – 13, Ca_2 – 228, Mg_2 – 97, CO_2 – 1135. Indications: acidity, diseases of the digestive apparatus (Fig. 3/6).

From the locals we found out that its water is consumed especially by those suffering of liver diseases.

The mineral water springs from Sütő

Local name: "Sütei borviz" [Hung.], "Izvorul Salus" [Rom.] – [Salus spring] (Fig. 3/7, 8).

It is found at about 2 km southeast of the salty mineral water. The information plate states: it is found in the Olteni Forrest, reaching the surface on the valley of the Sütő [Sute] brook. This very tasteful mineral water was bottled in the inter-war period, and it was sold especially on the markets from Galați. The water contains calcium, magnesium and, in smaller concentration, iron and chlorine. It also contains mineral salts and carbon dioxide. It could be used for treating gastro-intestinal hyperacidity.

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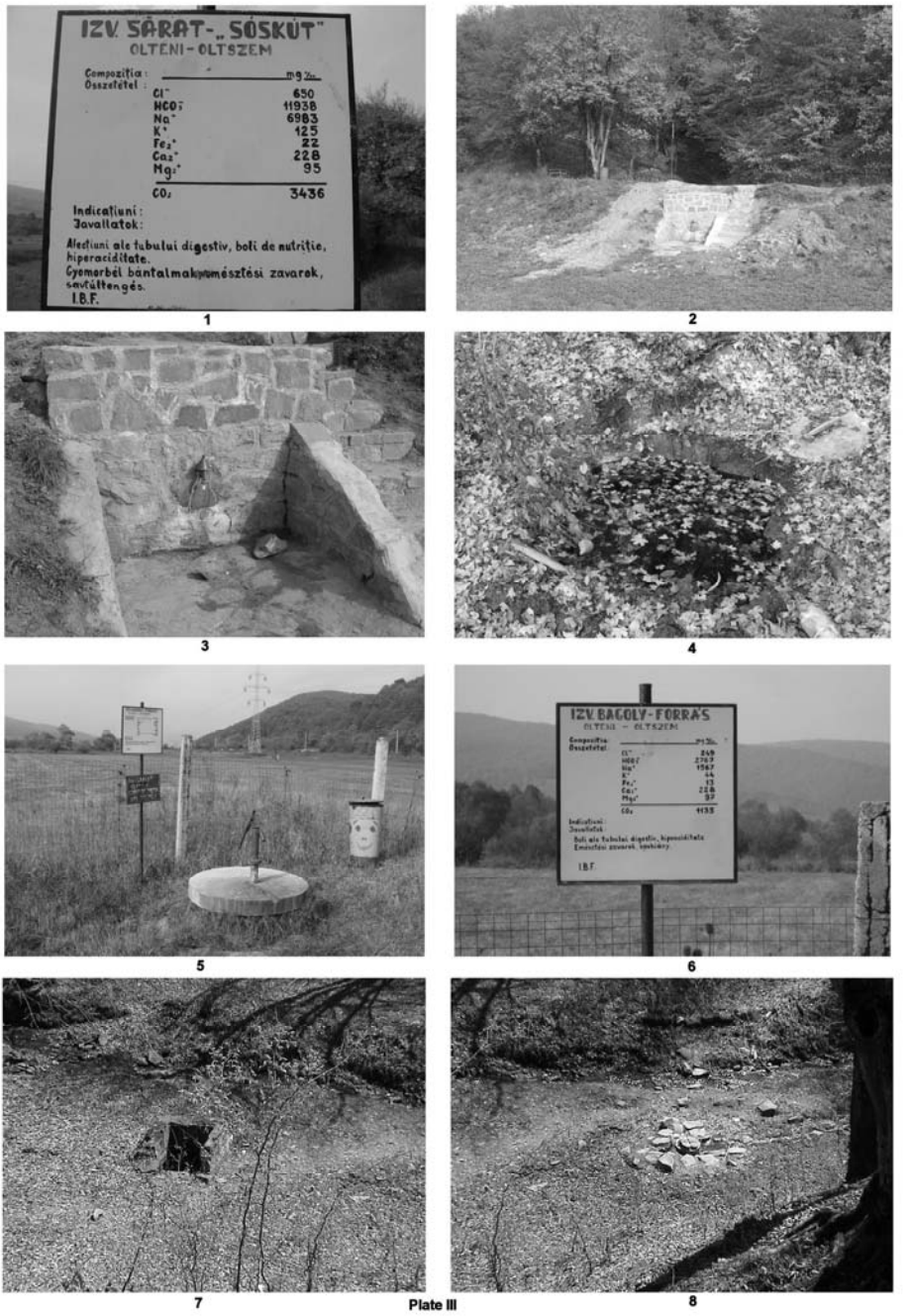

Fig. 3 – 1 – The chemical contents of the mineral-salted water spring – detail; 2 – View from the west of the rearranged mineral-salted water spring; 3 – The mineral-salted water spring – detail taken in 2008; 4 – The excavation made in order to find a new mineral-salted water source – picture taken in 2008; 5 – The slightly salted mineral water spring "Izvorul Bagoly – Bufniței" – general view from the south-west; 6 – The chemical contents of the slightly salted mineral water spring; 7 – General view of the Suto 1 mineral water spring; 8 – General view of the Suto 2 mineral water spring.

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Fig. 4 – 1–4 – The *"În dosul cetății"* Cucuteni – Ariușd settlement: 1 – View from the west; 2 – View from the north; 3 – General view upon the settlement taken while standing on the *"Cetatea Fetii"* settlement; 4 – View of the settlement taken while standing nearby the mineral salted water spring; 5–8 – The *"Cetatea Fetii"* Cucuteni – Ariușd settlement: 5 – View from the northwest; 6 – View from the west; 7 – View of the Sand Quarry taken from the settlement; 8 – View from the south.

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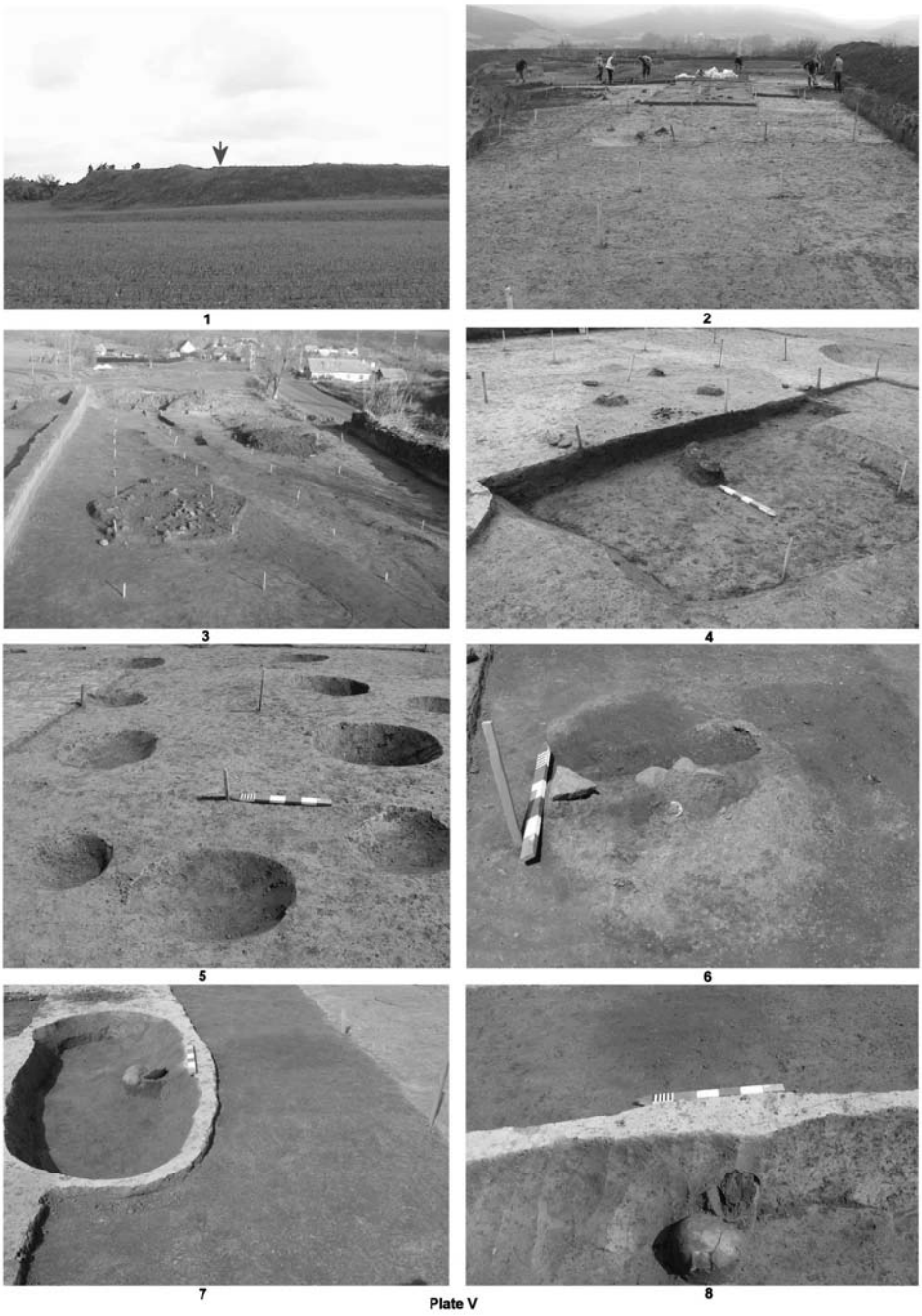

Fig. 5 – 1–8 – Olteni *"Cariera de nisip"* Site B, Covasna County. 1 – General view from the north; 2 – Aspects caught during the archaeological rescue excavations; 3 – The eastern sector of the settlement – view from the south; 4 – The research of an Eneolithic dwelling; 5 – Post-holes belonging to an Eneolithic complex; 6 – A hearth belonging to the Eneolithic period; 7 – Ritual pit – view from the south; 8 – In-pit pottery deposit.

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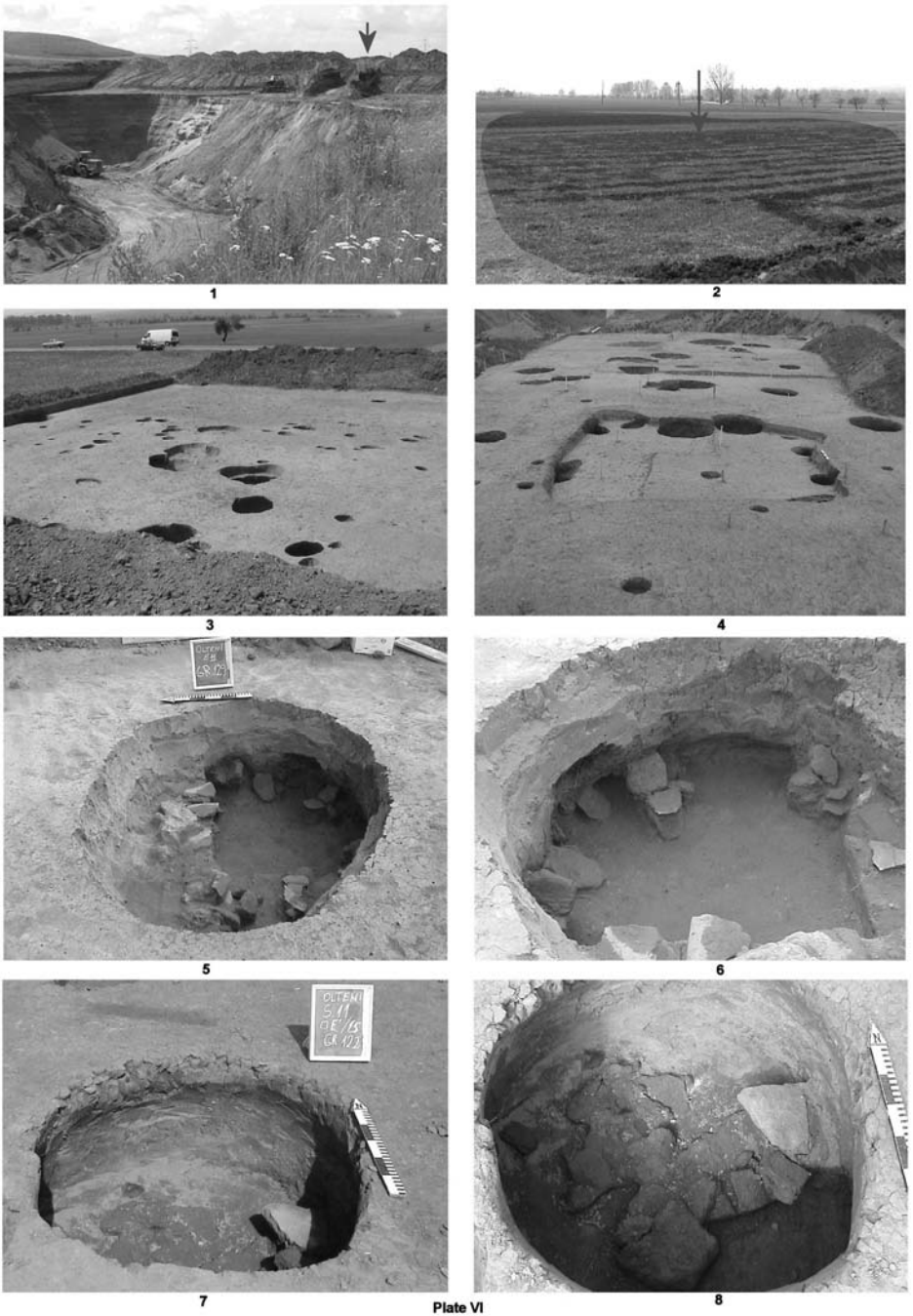

Fig. 6 – 1–8 – Olteni *"Cariera de nisip"*, Site A, Covasna County – 1 – General view from the northwest; 2 – The surface of the archaeological site; 3 – Aspects caught during the archaeological rescue excavations – year 2003; 4 – Aspects caught during the archaeological rescue excavations – year 2004; 5 – The "waste" pit nr. 129 – general view; 6 – The "waste" pit nr. 129 – detail; 7 – The "waste" pit nr. 122 – general view; 8 – The "waste" pit nr. 122 – detail.

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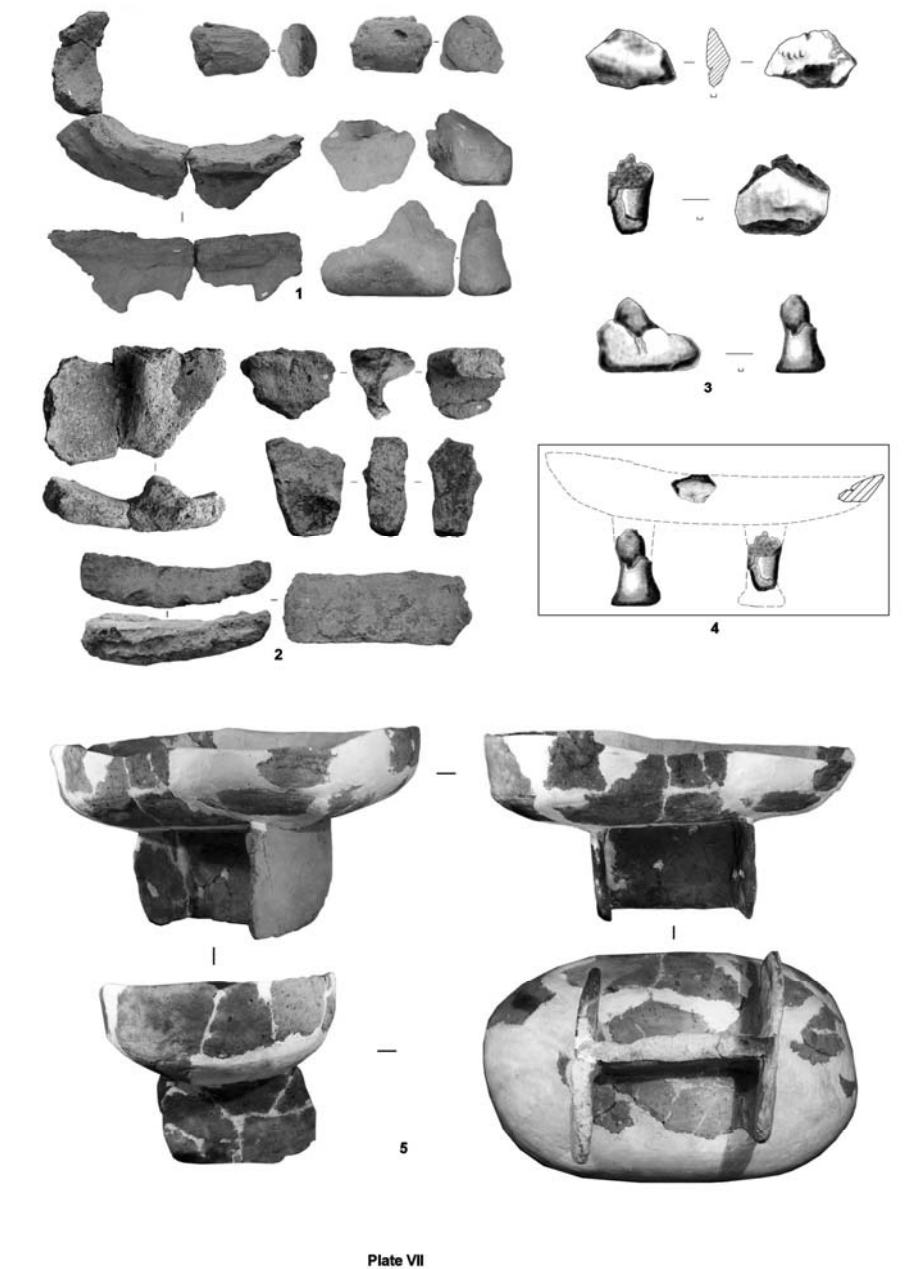

Fig. 7 – 1, 3, 4 – Olteni *"Cariera de nisip"*, Site A, Covasna County; 2. Zoltan *"Nisipărie"*, Covasna County; 5 – Stelnica, Ialomița County. 1–5. Fragments of massive ceramic vessels called briquetage, probably used to obtain fine salt through boiling and evaporating salt water.

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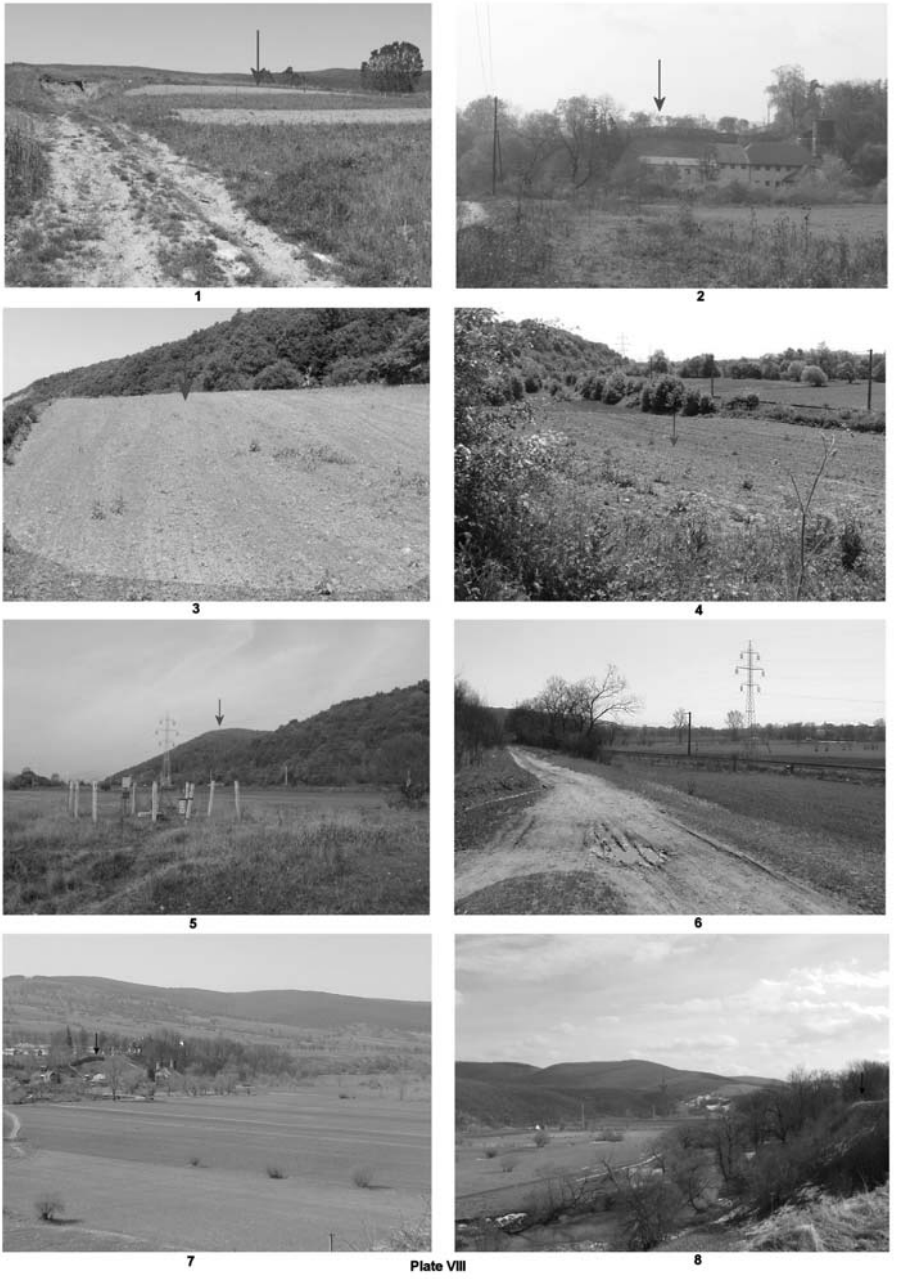

Fig. 8 – 1 – The Olteni North "Quarry" settlement – view from the east; 2 – The Roman camp from Olteni – general view from the east; 3 – The "Canton C.F.R." Dacian settlement – view from the south; 4 – The "Canton C.F.R." Dacian settlement – view from the north; 5 – The Heretz fortress – general view from the south; 6 – View towards south taken while standing nearby the mineral-salted water spring; 7 – General view taken while standing on the *"Cetatea Fetii"* settlement, upon the *"În dosul Cetății"* Eneolithic settlement and the Roman camp; 8 – General view taken while standing on the *"În dosul Cetății"* settlement upon the *"Cetatea Fetii"* Eneolithic settlement and the "Canton C.F.R." Dacian settlement.

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The repertory of archaeological discoveries

The article deals with 8 findings, part of which were recorded and researched in the past century, and the other part were discovered and are researched at the present moment. Each description of the findings from Olteni points out: the GPS coordinates, property, the state of conservation, the history of the researches, positioning, the character of the discovery, cultural – chronological placement, data regarding the place where the archaeological materials are kept[2].

Olteni South *"The sand quarry"*

Two archaeological sites (Site A and Site B) were found in the autumn of year 2000 at Olteni, when the Domarkt company opened a sand quarry at the southern end of this village, found in Bodoc Commune, Covasna County. Both sites were previously damaged by construction works. Site A was affected by the older sand exploitations, in its southern area, while the construction of the Braşov – Miercurea-Ciuc railroad damaged it on its eastern side. Site B was mostly destroyed by the old sand quarry that functioned here at the beginning of the 20th century, and by the construction of DN 12 Braşov – Miercurea-Ciuc highway.

During the years 2001–2008, as a result of several rescue excavation contracts signed with SC Domarkt SRL, The National Museum of Eastern Carpathians investigated both sites. The researches were made on a surface of about 15,000 sq metres in Site a, and of about 10,000 sq metres in Site B; these excavations brought to light 450 complexes that belong to the Late Neolithic, Early Eneolithic, Late Bronze Age, the Second Iron Age and the Post-Roman period[3].

1. Site A

G.P.S. coordinates: 45° 57'464" N; 25°50'783" E; Altitude 567 m.

Property: the surface of the site is divided into several private lots (Fig. 6/1, 2).

State of preservation: The sand exploitation begun in the quarry after the rescue archaeological researches have ended. The site was entirely destroyed by the sand exploitation, since the soil was removed on a depth of 15 metres. On those

[2] Buzea 2006, 67–122.

[3] Cavruc & Buzea, 2002, 219–221; 2003, 217–219; 2004, 220–222; Buzea 2002, 183–226; Buzea 2003, 73–80; Buzea 2003a, 27–29; Buzea 2003b, 28–29.

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surfaces that weren't yet affected by the sand exploitations the owners undertake agricultural works.

The rescue archaeological researches took place between 2001–2005, being coordinated by dr. Valerii Kavruk (Fig. 6/3, 4).

The site is placed on a high terrace found on the right side of the Olt River, and spreads from the southern border of the village on a length of about 800 metres (on a north-south direction), and on a width of 80–200 metres (on an east – west direction). It is limited at west by DN 12 (Braşov – Miercurea-Ciuc highway) and at east by the Braşov – Miercurea-Ciuc railroad and the Olt River. The surface of the site is plane.

General stratigraphy: The cultural layer is extremely poor. The black arable soil is 0.3–0.6 m thick. The sterile soil, consisting of yellow clay, is found right underneath it. The agricultural works undertaken with mechanized devices destroyed in time the cultural layer; those complexes that were dug in the sterile layer were not affected by human interventions.

The Late Bronze Age – the Noua Culture. There are 119 complexes that seem to belong to this period, being mostly "waste" pits, but their number is probably higher, since there are still 96 complexes left undated. The complexes were found at a depth of 0.4–0.6 m from the modern surface, and were outlined at the level of the sterile soil (yellow clay); they appeared as circular spots of brown soil.

The "waste" pits are generally *bell-shaped*, with circular and very rarely oval opening (the diameter is often between 0.6 and 1.4 m), their walls are oblique towards the outside, sometimes even being vertical, and their bottom is flat.

There were a few cases in which the pit's infill contained large fragments of daub or clay that probably came from mobile installations of large dimensions, with thick and porous walls (Fig. 6/5–8).

If we consider the position, the shape and the infill of the pits we cannot place them only in the category of pits used for clay extraction. These complexes could belong to the category of storage pits, which after emptying were filled up with household wastes and then intentionally plugged.

The Dacian inhabitation of the 5th–3rd centuries B.C. One dwelling and three early Dacian "waste" pits were found and researched until now[4]. The researches allowed several observations regarding the way the houses were built, the materials used for constructions and data regarding heating installations. A large variety of vessels was also found, covering a wide range of a family's household necessities.

The Post-Roman inhabitation (the 4th century, the Sântana de Mureş – Cerneahov Culture). Site A comprised 8 dwellings, 2 oven complexes and 101 "waste" pits belonging to this culture, that were researched entirely. The researches allowed several observations regarding the way the houses were built, the materials

[4] Cavruc & Buzea, 2005.

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used for constructions and data regarding heating installations. The dwellings were slightly or entirely dug in the sterile soil. They had either rectangular or oval-rounded shape. Their surface was comprised between 20–30 sq metres, reaching 1 metre deep in the sterile soil. They probably had gable roof, propped on posts. The traces of the wall and roof post were found both inside and outside the perimeter of the dwellings'. The heating installations (hearths and ovens) were found inside the dwellings.

If we take into consideration the position, the shape and the infill of the "waste" pits we can place them in the category of clay and sand extraction pits, filled up with household wastes after their main role ended. The archaeological materials found during these researches are deposited at the National Museum of Eastern Carpathians, while the research reference material is found in the Scientific Archives of the museum.

2. Site B

GPS coordinates: 45° 57'666" N; 25°50'781" E; Altitude 569 m.

Property: The surface of the site is separated into several private properties.

State of preservation: Agricultural works are taking place in the area.

The site is placed on a high terrace found on the right side of the Olt River, at west of the DN 12 highway, in front of the northwest sector of Site A.

Site B is of about 120 metres long (on an east–west direction) and 100 metres wide (on a north–south direction). The surface of the site is relatively plane, with a slight slope towards the west (Fig. 5/1).

Between years 2005–2008 preventive archaeological researches were undertaken in this site, coordinated by dr. Valerii Kavruk and Dan Buzea (Fig. 5/2, 3).

General stratigraphy: The Cultural stratum was partially preserved, form place to place, and it is 0.2–0.8 m thick. The vegetal layer is 0.3–0.6 metres thick, and consists of black soil. Immediately underneath it the sterile soil emerges, consisting of yellow clay.

Until now the site has been researched on a surface of 10,000 square metres. The results of the archaeological researches revealed archaeological complexes that belong to the Developed Neolithic Period, the *Linear Pottery Culture with Musical Notes*, and to the Early Eneolithic, the *Boian-Giuleşti* and *Precucuteni I Cultures*. 14 dwellings (Fig. 5/4, 5), 3 fire installations (hearths), 1 oven (Fig. 5/6), 3 ditches and 20 pits (Fig. 5/7, 8) belong to these prehistoric inhabitancies. A flat necropolis was also found in this site; it consisted of ten cremation graves, belonging to the second Iron Age (the 4th–3rd centuries B.C.), to a Dacian community[5].

5 Cavruc & Buzea, 2005, 121–154, Pl. V–IX.

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The rescue archaeological researches from Olteni are ongoing, since the surface of the sand exploitation has been enlarged.

The archaeological materials excavated during the researches are deposited at the National Museum of Eastern Carpathians, and the reference material is found in the Scientific Archive of the museum.

3. The *"În Dosul Cetății" – "Behind the Fortress" – "Vármegye"* Eneolithic settlement belonging to the Cucuteni-Ariuşd Culture

G.P.S. coordinates: 45° 58'988" N; 25°50'658" E; Altitude 563 m.

Property: The surface of the site is separated into several private properties.

State of preservation: relatively good. Agricultural works are undertaken in the area; these have damaged the upper part of the cultural layer (Fig. 4/1).

The settlement is found at the northern end of the village, in the placed called by natives "*În dosul cetății*" or "*Vármegye*", near the Mikó Castle, between DN-12 Braşov-Miercurea Ciuc and the Olt River. The site is placed on a two metres high elliptical elevation, compared to the actual surface of the surrounding land, and 20 metres high, compared to the Olt's riverbed. The dimensions of the site are 100 m (north-south) × 60 m (east-west). The settlement is naturally protected on its eastern side by the steep bank of the Olt River that has a 70–80º inclination (Fig. 4/2–4).

The first researches of this site took place in 1908, when László Ferencz undertook researches on a surface of 31 × 14 m, finding the traces of an *Ariuşd* type (*Cucuteni A*) settlement. The thickness of the archaeological deposits doesn't go beyond 1 m, and right underneath it the sterile soil is found, consisting of yellow clay.

The upper part of the cultural layer was affected by the agricultural works. The arable layer is 0.3–0.4 m thick, consisting of black soil. Two inhabitation levels belonging to the Cucuteni-Ariuşd Culture were identified during the archaeological researches.

A "*defence*" ditch was also found, towards the west, in an area where the land is relatively plane; it had circular shape and its opening was 6–8 m wide. The ditch also spread on the northern and southern sides of the settlement, thus outlining it[6].

In 1995 the researches were resumed by Gheorghe Lazarovici (the National History Museum of Transylvania); archaeological sections were opened to verify the stratigraphy and to reveal the settlement's "*fortification*" ditch[7].

[6] László 1911, 177–178; Monah, & Cucoş, 1985, 125; László A. 1993, 41; Cavruc 1998, 48; Popovici 2000, 84.

[7] Lazarovici *et alii*, 1997, 669–687.

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The excavated archaeological materials are found at the National Szeckler Museum, The National Museum of Eastern Carpathians (both in Sf. Gheorghe) and the National History Museum of Transylvania (Cluj-Napoca).

4. The "Cetatea Fetii" – "The Girl's Fortress" – "Leánykavár" Eneolithic settlement belonging to the Cucuteni-Ariuşd Culture

G.P.S. coordinates: 45° 58'703" N; 25°51'346" E; Altitude 594 m.

Property: public; it belongs to the Bodoc Commune.

State of preservation: relatively good. Many deciduous trees and abundant vegetation grew on the surface of the site (Fig. 4/5, 6). The site was damaged by treasure hunters and wild animals, especially by wild boars.

The site is found on the left bank of the Olt River, at the bottom of the Bodoc Mountains, on an elevated hill, naturally protected on all sides. The "*fortress*" is found at about 1 km southeast of the "*În Dosul Cetății*" Eneolithic settlement and at about 700 m south of the salty mineral water spring (Fig. 4/7, 8).

The surface of the site is slightly inclined towards the west, it has a relatively trapezoidal shape, with the dimensions of 60 m (east–west) × 40 m (north–south). The outlines of the site are marked as it follows: at south by valley of the Suta brook (near which 3 mineral water springs are found) and by a forest road; at west by a forest road, the Braşov-Miercurea Ciuc railroad and by the Olt River; at north by a steep valley of a seasonal brook; at east by a deep valley.

The site can be accessed on a northwest direction, where it is tied to a saddle shaped neck of land that reaches its deepest point 10–15 m lower than the settlement's level, and on a southern direction, where the slope of the promontory is milder. The settlement is found at about 50 m higher than the Olt's river bank.

The settlement was first researched in 1910 by Ferencz László and J. Teutsch. The cultural layer, that is over 2.5 m thick, consists of a daub layer; between two layers it contains ashes and remains belonging to the bi-chrome and tri-chrome painted pottery culture of Cucuteni-Ariuşd type[8].

An excavation made by Zoltan Székely in the eastern part of the promontory revealed a stone wall, daubed with soil and many Dacian pottery fragments. Pottery fragments belonging to the Roman Period were also found here[9].

The archaeological materials excavated during the researches are deposited at the National Museum of Eastern Carpathians from Sfântu Gheorghe.

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[8] László 1911, 178; Monah & Cucoş, 1985, 125; László A. 1993, 41; Popovici 2000, 83.
[9] Cavruc 1998, 48.

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Another settlement belonging to the Cucuteni-Ariuşd Culture is mentioned to be found at the northern edge of the village, at about 2 km north of the "*În dosul Cetății*" settlement, on the right bank of the Olt River. It is found on the property of *Gy. Sántha*, on a 60 m wide hill, isolated on three sides and united with the Olt's terrace through a saddle broken by an artificial ditch[10].

This site couldn't be identified yet during the field surveys, since there is no evidence of material culture in the mentioned area, even if numberless field researches were made here. Since almost 100 years have passed since this point was discovered we don't exclude the possibility that the relief has suffered certain changes due to human interventions.

5. The Roman Camp from Olteni

G.P.S. coordinates: 45° 58'866" N; 25°50'741" E; Altitude 547 m (Fig. 7/2).

Property: public; it belongs to the Bodoc Commune (since the land on which the Camp is found was nationalised the old owners claim their rights now, based on the current legislation).

State of preservation: deteriorated. The walls are covered with abundant vegetation, and they became storage point for wastes. Unfortunately no preservation treatments or measures are applied to protect the few parts of the walls that were kept until today.

Most of the Camp's walls were destroyed by the constructions made in the 18th century and in 1827, when the Mikó Castle was built. The Camp was also affected when the Castle's annexes were built; these were finished at the beginning of the 20th century.

The Camp is found in the northern side of the village, on a high terrace placed on the right side of the Olt River. North of the Camp, in its immediate closeness, the Eneolithic "*În Dosul Cetății*" – "Behind the Fortress" Cucuteni – Ariuşd Culture settlement can be found.

The first excavations took place in 1946 and 1949, but researches on wider surfaces took place between 1968–1970 and 1987–1988. The dimensions of the Camp are of 142 × 92.5 m, it has an approximately trapezoidal shape, its shortest side facing east, towards the Olt River.

It is supposed that there were no towers at the rounded corners of the Camp. A gate was researched on the southern side of the Camp; this was flanked by two rectangular bastions. A rectangular tower was researched on the eastern side; its dimensions are of 3.5 × 3.5 m. A gate with two rectangular towers was revealed on the western side of the Camp.

[10] Monah & Cucoş, 1985, 125; László A. 1993, 41; Cavruc 1998, 48; Popovici 2000, 84.

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A rich archaeological material was found during the researches, consisting especially of both hand-made and wheel-made Roman pottery, bronze coins issued by the Roman Emperor Trajan, clay, iron, stone objects, etc. Dacian materials were also found, such as hand-made pottery (rush lights, pots etc.).

The Roman Camp from Olteni was an important point in the defence of the Roman Dacia's eastern border. It closed the road that crossed the Tuşnad Pass in the Olt Valley, in the southeast of the Province[11].

The archaeological materials found during the mentioned researches are deposited at the National Szeckler Museum from Sfântu Gheorghe.

6. The Post-Roman inhabitation from Olteni North *"Quarry"*

G.P.S. coordinates: 45° 59'731" N; 25°50'366" E; Altitude 563 m (Fig. 7/1).

Property: The surface of the site is separated into several private properties.

State of preservation: deteriorated. The surface of the site was affected by the agricultural works undertaken in the area, when the Sfântu Gheorghe-Tuşnad main gas pipe line was built and by the sand exploitation in the quarry.

The site was discovered and partially researched by a team of the Museum of Eastern Carpathians, formed of Dan Buzea and Marian Bobei.

The site occupies a terrace found on the right bank of the Olt River, and its limits are marked by the Olt River on the north and northeast, the DN-12 Braşov – Miercurea Ciuc on the east and by a hilly area situated at the foot of the Bodoc Mountains on the west. The surface of the site showed a mild slope towards the east, towards the Olt's valley.

In the autumn of 2003 a section (S.1) of 10 × 6 m was opened. Two archaeological complexes, consisting of two "waste" pits, were found at the level of the sterile soil (Pit 1 and Pit 2).

Judging by its characteristics, the archaeological material consisting of wheel-made pottery, found in the "waste" pits' infill, may belong to the Post-Roman Period (the 4th century, the Sântana de Mureş – Cerneahov Culture), while the hand-made pottery seems to be Dacian.

Since Sfântu Gheorghe-Tuşnad crossed the surface where the sand quarry was to be opened, the main gas pipeline the quarry's manager had to stop all exploitation procedures and soon faced bankruptcy. Thus the archaeological researches consisted only of researching the two previously mentioned complexes.

The excavated archaeological materials are deposited at the National Museum of Eastern Carpathians.

[11] * * *, 1960, 351; Székely 1967, 138; Székely 1993, 279–282; Cavruc 1998, 49.

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7. Olteni East *"Canton CFR" – "C.F.R. Watchman's cabin"*

G.P.S. coordinates: 45° 58'793" N; 25°51'265" E; Altitude 567 m (Fig. 7/3, 4).

Property: the surface of the site is private property.

State of preservation: relatively good. The site was affected by the agricultural works undertaken in the area.

The settlement was discovered by a team of the National Museum of Eastern Carpathians composed of Dan Buzea and Ugron Kinga, in June 2006.

The surface of the site shows a mild slope towards the south, north and west. The site is found on a terrace placed on the left bank of the Olt River and it is limited towards the east by a forest road and the Bodoc Mountains and towards the west by the Braşov – Miercurea Ciuc railroad. The settlement is found at about 2 km northeast of the Olteni South "*The Sand Quarry*" Site A and at about 1.5 km southeast of the Olteni North "*Quarry*", both these sites carrying traces of Post-Roman inhabitation.

On the surface of the terrain we found archaeological materials spread on an area of 60 m (north-south) × 30 m (east-west); these consisted of: hand-made and wheel-made pottery, daub fragments with dross traces, processed stones and animal bone remains.

Judging by its characteristics the archaeological material found at the surface may belong to a Second Iron Age inhabitation (the Dacian civilization of the 1st century B.C. – the 1st century) but as well to a Post-Roman Period inhabitation (the 4th century, the Sântana de Mureş – Cerneahov Culture).

The excavated archaeological materials are deposited at the National Museum of Eastern Carpathians.

8. The *"Cetatea Heretz" – "The Heretz Fortress" – "Heretz var"* Early Medieval inhabitation

Property: public; it belongs to the Bodoc Commune.

State of preservation: deteriorated. It was damaged by treasure hunters and by the many trees that grew on its surface.

The fortress is situated between Olteni village and Malnaş Commune, on the top of a hill called by the natives "Vârful Cetății" – "The Top of the Fortress". Being found at 706 metres high from datum line, the fortress occupies a dominating position on the left bank of the Olt River (Fig. 7/7).

At the surface of the terrain one can observe parts of the medieval walls. It is an early medieval fortress, of big dimensions, and it seems to have been built on

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the place of an older Dacian settlement. No archaeological researches were conducted in order to establish the accurate dating of the monument[12].

The position of this fortress offered a good control over the road that led to the Tuşnad Pass that connects the Sfântu Gheorghe Valley to the Ciucului Depression.

A few considerations regarding the prehistoric inhabitancies found close to the salty mineral water sources

The Braşov Valley is very poor in natural salt sources, compared to the neighbouring areas from Transylvania (the Homoroade Valley), Muntenia (the Prahova Valley and the Buzău Sub-Carpathians) and Sub-Carpathian Moldova. Only a few salty mineral water springs are known for this area. Two of them are found nearby Olteni village, one on the left bank of the Olt river (the salty mineral water spring) and one on its right bank (the slightly slated mineral water spring). The archaeological sites are grouped tightly around these salty mineral water springs, and this could be an indirect proof of the fact that these modest salt water resources found here attracted people since ancient times, from prehistory to Post-Roman Period[13].

The presence of the salty mineral water springs also explains the density of archaeological objectives on a relatively small area, of about 5 sq km; the archaeological findings mentioned for this area belong to different periods: the Late Neolithic (*The Linear Pottery Culture with musical note heads*); the early Eneolithic (*Boian – Giuleşti and Precucuteni I Cultures*); the Late Eneolithic (*the Cucuteni-Ariuşd Culture*); the Middle Bronze Age (*Wietenberg Culture*); the Late Bronze Age (the *Noua Culture*); the Second Iron Age (the Gaeto-Dacian Culture); the Roman Period (the Roman Camp); the Post-Roman Period (the *Sântana de Mureş-Cerneahov Culture*); the medieval period (the Heretz Fortress) and the modern period (Fig. 1/2).

The density of salt sources in Transylvania, as well as the fact that this area is surrounded at south, east and north by the sub-Carpathian saliferous areas, creates a series of difficulties in finding archaeological evidence of salt exploitation. The natural salt sources that were accessible for pre-industrial exploitation are spread almost in all Transylvania. Only a few fragments were found until now than can be interpreted as being *briquetage*. That is rather because this area occupies the central part of the Carpathian saliferous basin, and not because of the poor state of the archaeological researches. The *briquetage* were used to crystallize the brine in

[12] Cavruc 1998, 49.
[13] Cavruc & Buzea, 2006, 66–67.

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order to carry the salt pieces thus obtained on relatively large distances, in those territories that were poor in salt resources[14].

The Late Bronze Age (the 2nd millennium B.C.)

The archaeological vestiges from Transylvania that seem to point towards the exploitation of salt water in this area were found in the Olteni South "*The Sand Quarry*" – Site A and Zoltan "*Nisipărie*" sites, in several complexes that belong to the Late Bronze Age inhabitation. The archaeological researches revealed the remains of a type of large clay installations that could have been used during the procedures of obtaining salt out of brine with the help of *briquetage*.

The Late Bronze Age in southern Transylvania is represented by the Noua Culture that is partially contemporary to the last manifestations of the Wietenberg Culture inhabitation and it directly precedes the beginning of the Hallstatt. The most important discoveries belonging to this culture were made at Zoltan (settlement) and Brăduț (ritual complex)[15].

The density of the Noua Culture sites in southeastern Transylvania is much smaller than in Moldova. Only about 33 archaeological sites belonging to it are known on the territory of Covasna and Harghita counties[16].

The *Noua Culture* notion, which characterises the final stage of the Bronze Age in most of the Carpathian-Danube region, was introduced in the specialised literature in 1934, by Ion Nestor, who named it after a discovery (the inventory of a necropolis) made in 1901 by D. Bârsanu at Noua (suburb of Braşov city) and researched in the same year by J. Teutsch[17].

In its early stage the Noua Culture offers a series of elements which prove that the Carpatho-Danubian cultures contributed at its formation (the Monteoru, Costişa, Komarov, Tei, Wietenberg). At the same time, regarded on the whole, the Noua Culture is very different of all the Middle Bronze Age cultures, both in the area it is spread on and in the bordering areas. Among these differences we have to mention the impressive growth in numbers of the settlements, the widely spread ash traces and the abundance of animal bones in the settlements.

The discovery from Olteni South that belongs to the Noua Culture shows tight connections with the Zoltan "*Nisipărie*", which is one of the most researched stations belonging to the Bronze Age in Transylvania and also the most representative site for the Noua Culture in this province.

The Zoltan "Nisipărie"site is found at about 8 km northeast of Sfântu Gheorghe (Covasna County), at the northern border of the Zoltan – Étfalva village, Ghidfalău Commune; it is placed on a high terrace of the Olt river, at 500 m east of

[14] Cavruc *et alii*, 2004, 100.
[15] Cavruc 1998, 25.
[16] Cavruc 2003, 29.
[17] Florescu 1995, 206.

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its river bed; this prehistoric site was discovered and partially researched in 1971 by dr. Székely Zoltán[18]. The Olteni South "*Sand Quarry*" is found 5 km northwest of the Zoltan settlement.

Both sites are place on high, non-floodable terraces, found nearby the Olt River. Regarding their surface, the remains of material culture were spread on an area of 15,000 square metres, at Zoltan, and on an area of 16,000–20,000 square metres at Olteni South, Site A.

The cultural stratum is poor in both settlements, except the "ash pan" found in the southern part of the Zoltan settlement; it consists of a 3 m thick layer of ash that piled up through successive deposits and burnings; it was very rich in material culture remains.

The number of "*waste*" pits found at Zoltan is of 50 (but their number is certainly much higher, since the central area of the settlement was researched only in three archaeological sections) and at Olteni of 119 (these are concentrated towards the edge of the terrace). In both settlements most pits were *bell shaped* in section (they had circular opening, the walls were oblique towards the flat bottom) and their infill consisted of archaeological materials and burned remains.

In a few "*waste*" pits from Olteni – Site A and Zoltan "Nisipărie" we found agglomerations of fragments belonging to massive vessels made of porous paste (Fig. 6/5–8). Although because of their fragmental nature none of them was restored, judging by the found fragments we may conclude that they were composed of oval cups (60 × 40 cm opening, 20 cm high), spherical bottom and high pedestals, which looked like massive legs with circular section and sharpened ends, or like massive vertical plates placed in a cross (Fig. 7/1–4). Very good analogies were found in three settlements belonging to the Coslogeni Culture (a cultural entity related to Noua, dated in the same period) from Bărăgan (Fig. 7/5).

Surprisingly these vessels show similitude with the *briquetage* found in southeastern England, belonging to the Roman and Post-Roman Britain period. These last ones were used to obtain salt from sea water, as it was proved by the analyses conducted by the British specialists.

Thus, the interpretation that the vessels of this type belonging to the Noua and Coslogeni Cultures may have been used to evaporate salty water to obtain solid salt is at least plausible, considering the fact that they were found only in those areas where salty water is found, and also that they resemble so much with the *briquetage* found in England. This interpretation will, of course, remain purely hypothetical, until special analyses will be conducted[19].

The Late Neolithic, the early and Late Eneolithic (the 6th–5th millenniums B.C.)

The field observations that were outlined after the preventive archaeological researches in Site B, Olteni "Sand quarry" took place reveal a dwelling that

[18] Cavruc V. & Cavruc G., 1997, 157; Cavruc 2001, 71; Cavruc 2004, 265–275.
[19] Buzea & Cavruc, 2006, 67 Fig. 71–73.

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belongs to the Developed Neolithic inhabitation, to the *Linear Pottery Culture with Musical Notes*, and two dwellings belonging to the Early Eneolithic Period, to the *Boian-Giuleşti* and *Precucuteni I Cultures*.

Until now we couldn't establish doubtless conclusions regarding the chronological relation between the two inhabitations of the Early Eneolithic Period (Boian and Precucuteni I). We notice the fact that the archaeological materials revealed in the archaeological complexes are mixed up. It is quite possible that the Precucuteni Culture in southeastern Transylvania was born of the old fund of linear pottery culture with musical notes, with influences belonging to the Boian Culture.

The expansion of the Boian Culture communities towards northern areas begun at the level of the Giuleşti phase, and thus large areas of southeastern Transylvania and Moldavia were occupied. Here they met communities of Late Linear Pottery Culture that were at the beginning of the late phase of the large central-European complex. After their contact a new synthesis was born, on both sides of the Oriental Carpathians, the *Precucuteni Culture*[20].

The communities of the Linear Pottery Culture with Musical Notes played an important role in the forming of the *Boian*, *Turdaş*, *Iclod* and *Precucuteni* Cultures[21]. The *Boian Culture* is known in southeastern Transylvania and superposes the inhabitancy space of the *Linear Pottery Culture*. Materials belonging to this culture were discovered in 16 stations of Transylvania[22].

There are two main components that set the foundation of the *Precucuteni* Culture: *the Linear Pottery Culture with Musical Notes* and the second stage of the *Boian* Culture (*Giuleşti*). There is only one place where the bearers of these two cultures could have met: the southeast of Transylvania, the only area where settlements belonging to both cultures were identified[23]. In one stage of the researches some said that it was born in Moldova, on a foundation of the Musical Note Pottery, to which southern elements were then added, such as the *Boian – Giuleşti* type.

In the archaeological complexes belonging to the Boian – Giuleşti and Precucuteni I Cultures researched at Olteni "Sand Quarry" – Site B we found pottery fragments that were interpreted as being *briquetage* fragments – small clay vessels, with a pedestal and conical cup, somewhat similar to those belonging to the Cucuteni Culture from Moldova, found at Cacica, Solca and Lunca, used to crystallize brine and obtain solid salt in the shape of pretty small conical cakes[24].

The *Cucuteni* Culture is an integrant part of the Cucuteni-Tripolie Cultural Complex, and it represents one of the last outstanding civilizations of the

[20] * * *, 2001, 147.
[21] Luca 2006, 34.
[22] Comşa 1974, 32–36; Maxim 1999, 98; Székely Z. 2000, 152.
[23] Marinescu–Bîlcu 1974, 109–131; Dumitrescu & Vulpe, 1988, 35.
[24] Buzea & Cavruc, 2006, 67.

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southeastern Eneolithic/Calcholithic. Lasting over a millennium (about 4600–3500 CAL B.C.) it generated a civilization with outstanding characteristic features that occupied a vast territory, including southeastern Transylvania, almost whole Moldova and a part of Ukraine[25].

The most important settlements, that have a vertical or horizontal stratigraphy that proves long-term inhabitancy, are found on the upper course of the Olt River, on the upper course of the Negru River and an isolated one is found on the Mureş River (on the territory of Tg. Mureş city). According to the Archaeological Repertoires of Covasna, Harghita, Braşov and Mureş counties the number of Cucuteni-Ariuşd type settlements is of about 40.

The "*pair settlements*" are quite known for this culture, placed on both sides of a river, at about 1–2 km away of each other, as for example those from Olteni (Bodoc Commune, Covasna County) "*The Girl's Fortress*" – Olteni "*Behind the Fortress*" (Fig. 8/7, 8).

There are three settlements belonging to the Cucuteni-Ariuşd Culture mentioned right nearby the salty mineral water springs[26]. The salty mineral water was probably used by the bearers of the Cucuteni-Ariuşd Culture for household needs, preservation of aliments and for domestic animal breeding.

These salty mineral water springs found nearby the Cucuteni-Ariuşd settlements will be presented in an ample study dedicated to the salty mineral water sources found in southeastern and eastern Transylvania.

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[25] Mantu *et alii*, 1999, 13.
[26] Buzea 2006, 82–85.

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GENERAL CATEGORIES OF FACTORS THAT INDUCE PATHOLOGY IN THE NEOLITHIC TIMES OF ROMANIA

CATEGORII GENERALE DE FACTORI CARE INDUC PATOLOGIA ÎN PERIOADA NEOLITICĂ DIN ROMÂNIA

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Cuvinte-cheie: patologie, situri, factori determinanți, neolitic, România.
Rezumat: Lucrarea se referă la aspectele patologice identificate în necropole sau situri din România, fiind focalizată asupra factorilor care determină o astfel de patologie. Iată de ce, cronologia nu a reprezentat un element important în circumstanțele date. Am ales, de asemenea, unele dintre cazurile cele mai interesante, fără a avea intenția de a neglija pe cele obișnuite. Concluzia acestui studiu a fost acela că patologia este determinată de factori interni, externi, dar şi de interacțiunea dintre corp şi mediu, fără a exista o delimitare strictă a lor. Dar, a fost luată în considerare influența factorilor predominanți. S-a putut afla, de asemenea, că, în concordanță cu diversele aspecte patologice, remediile puteau fi diferite şi, ca urmare, astfel de condiții reprezintă şi un indicator al nivelului socio-cultural şi economic al societății în care a trăit individul respectiv.

Key words: pathology, sites, determinant factors, Neolithic, Romania.
Abstract: The paper refers to the pathology found in the necropolises or sites from Romania and focuses upon the factors that induce pathology. This is why chronology was not an important element in these circumstances. We have also chosen some of the most interesting cases, without any intention of neglecting the common ones. The conclusion of this study was that the pathology is determined by inner or outer factors, as well as by the interaction between the body and milieu, without the existence of a very strict delimitation between them. Yet, the influence of the prevailing factors was taken into account. It could be also found that, according to the various pathological aspects, the remedies could be different and, therefore, such conditions are also indicators for the socio-cultural and economical level of the society to which the individual had belonged.

Pathological aspects are consequences of the interaction between hereditary and non-hereditary factors, the latter mostly coming from the natural, cultural, or social environment. Generally, any individual has the capacity of coping with the aggression of the surrounding world. Of course, this occurs in the limits of one's own genetic stock. Nature operates a selection of the characteristics which provide advantages to that human being, in order to assure his surviving in a certain natural milieu. Still, in certain situations, when the body has no ability to overcome the bad influences exerted upon it, as a consequence, a series of negative effects appear,

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which result in the unbalance of the whole system or just of a limited part of it. Its reaction is gradual, being influenced by the nature and intensity of the aggressive factor. This is why during the evolution of man a continuous reshaping of his body can be noticed, in terms of an adaptation to the conditions, in permanent change.

For the archaic populations, the information concerning pathology is fairly scarce, given that we can analyze just the skeletons (entirely or partly preserved). Not all the maladies affect the bone system. Thus, it is evident that, in many situations, even if the respective individual had died due to an illness, the aspect of his skeleton is the one specific to an individual in good health condition. Besides, an illness cannot be restricted to a certain time span.

The factors that initiated the diverse pathological processes were either endogenous, exogenous, or a mixture of the two.

The endogenous factors were mainly the metabolic disturbances, but those could be biased as well by diet or other factors. In fact, the structure of the bony tissue could be modified in connection with the individual nutrition mode and metabolic changes[1].

The exogenous factors could come out of the environment or out of the socio-economic conditions. Often, the illnesses appeared by a synchronous action, both of exogenous and endogenous factors (i.e. dirt and poor immunity).

We should mention here that an illness could affect either the entire skeleton or could have had consequences confined just to certain parts of it.

1. Endogenous factors

Systemic damages

A very interesting case, and a consequence of a neuro-endocrine disorder, was the dwarfism case discovered at Popina-Borduşani, belonging to the Gumelnița culture and measuring a height of 75 cm[2].

A serious problem must have been the osteosarcoma detected upon the right humerus of an individual from Valea Orbului (Boian Culture)[3]. As studies document today, osteosarcoma is the best understood primary tumour and, at the same time, the most aggressive, representing 22–25% of the bone primary tumours. It usually appears during the growth period (in the second decade of life), more frequent in males than in females. Most often it is located in the metaphyseal

[1] Herrmann, 1977, 6, 101.
[2] Bălteanu & Botezatu, 1998, 7.
[3] Bălteanu & Botezatu, *op.cit.*, 6–8.

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region of the long bones, maxilla and mandible, and it seldom has an extra-bone location (uterus, breast…)[4]. In this case, there is nothing strange about the position of the mentioned tumour. Of course, at that time such a disease could not be cured. We should mention here that osteosarcoma has hormonal, genetic, physical, and traumatic factors involved in the ethiology of the disease. Out of the genetic ones, we consider worth stressing that a bigger incidence of the illness appears in the case of twins, and it results from genetic suppression.

The secondary tumours appear in the third decade of life. This kind of tumours is more frequent than the primary ones, being often carcinoma metastases. The metastases affect mostly the ilium bones, spine, ribs, and skull[5].

Since we have presented here the influence of some genetic factors, we could also mention the presence of an apical (lambdatic) bone in skeletons nos. 1 and 5 from Dridu, belonging to the Gumelnița Culture[6]. On the skull of skeleton no. 5 was also observed the asymmetric disposition of the mastoid apophyses, out of which the right was about twice as thickened on its top as compared to the left, as a result of the strong insertion of the digastric muscles[7].

In the site of Vărăşti (Gumelnița Culture), sector F, square 2 of the necropolis (1961), a bone awl was discovered by the archaeologist Eugen Comşa. It was made of a human bone, namely a right ulna, belonging to a possible adult individual, whose age could not be assessed. The bone had a congenital aplasia on its lower third. The proximal part of the ulna was destroyed during the excavations and the remaining fragment (length of 317 mm) began right beneath tuberosity. The diaphysis had its compact layer significantly thinned. It got thinner and thinner, and it ended in a rugged blunt. The interosseous crest had a small rugosity and enthosopathies. As this was the only bone found, it was presumed the achromelic and partial mesomelic ectromely (hemimely) for the entire right arm[8].

2. Exogenous factors

Out of those which had relevance for pathology, the infection agents played a significant role. The infections that occurred in such cases appeared with a fairly low frequency on the bones, and they could act either at systemic level or at a local

[4] Georgescu *et alii*, 1995, 15.
[5] *Ibidem*, 19–20.
[6] Necrasov & Cristesco, 1961, 54.
[7] *Ibidem*, 56.
[8] Mirițoiu & Soficaru, *op.cit.*, 2002, 19.

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one, the same like the endogenous factors. Yet, for the Neolithic skeleton series there are no published such situations, except those with a local incidence (Sfântu Gheorghe-Bedehaza).

Local injuries

Here we could mention the trauma, out of which the fractures with various locations consolidated in anatomical position or in a vicious one were more frequent. A very defective consolidation of a tibial fracture we could find in a skeleton from burial no. 1 discovered at Ripiceni, in a Bronze Age site (Fig. 1). Such trauma we find in big cemeteries, like Valea Orbului, but in other series as well. The most interesting ones are those located on the skull, one such case being found on a skull from Trestiana (M.6)[9]. Another interesting situation was found at Băile Herculane "Peştera Hoţilor" (in a cultural mixture of Sălcuţa and Tisza cultures), in a ritual complex, that also comprised a skull, among other human bones, the former bearing traces of violence upon its left parietal, which resulted in extensive detachment of the skull base, temporal bone, and occiput[10]. Also an awkward situation was found in the site from Lumea Nouă (Foeni cultural Group), where, besides human bones without anatomical connection, thrown at random, five skull calottes had been found. All of them bore traces of violent blows[11] (Figs. 2, 3). If for the Bronze Age we have certain cases of trephination, for the Neolithic time we have such an example at Cârcea[12], but also presumptions of such interventions (Apold[13], Ceamurlia[14], Trestiana – M.4[15]), just the last one being ascertained by anthropologists. We should mention again that, sometimes, skull trephination was also used for purposes involving magic.

A very interesting situation is the trephination found upon a long bone of a child discovered at Hârşova (Gumelniţa Culture) and also attested by radiographic investigation. This case was considered to be a human sacrifice, but the mentioned intervention might have had a therapeutic purpose, given the numerous osseous trauma found on the periosteum of the entire limb[16].

[9] Necraov & Antoniu, 1979, 21.
[10] Nicolăescu-Plopşor & Wolski, 1974, 4.
[11] Panaitescu *et alii*, 2008, 263–267.
[12] Ion *et alii*, 2009, p. 55.
[13] Maximilian *et alii*, *op.cit.*, 132; Milcu & Maximilian, 1967, 291. We could not find whether the practice refered to a find made in Apold was published in detail in another publication.
[14] Berciu, 1966, 133.
[15] Necrasov & Antoniu, *op.cit.*, 21.
[16] Bălteanu & Botezatu, *op.cit.*, 7.

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Fig. 1 – Ill consolidated tibial fracture of skeleton in burial no. 1 – Yamnaja Culture (Bronze Age).

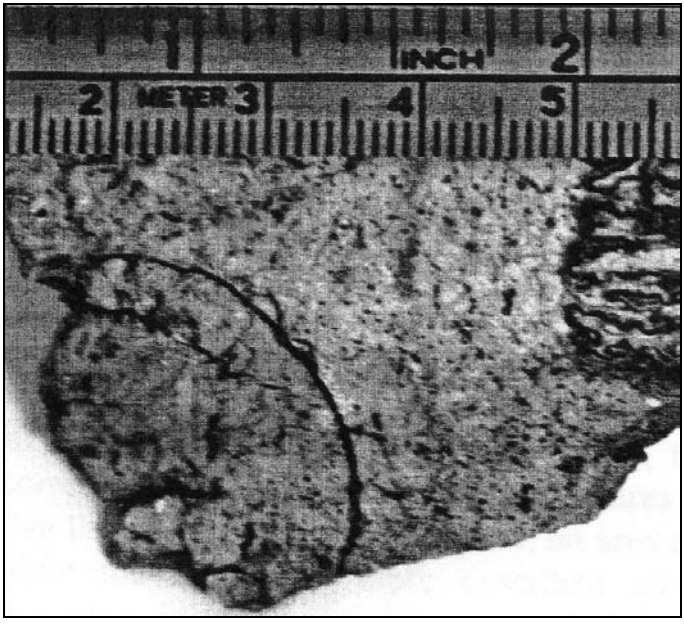

Fig. 2 – Depressed fracture on skull B from Lumea Nouă
(apud Panaitescu *et alii*, 2008, p. 264, Fig. 4).

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Fig. 3 – Detail of depressed fracture on skull D from Lumea Nouă (apud Panaitescu *et alii*, 2008, p. 266, Fig. 8).

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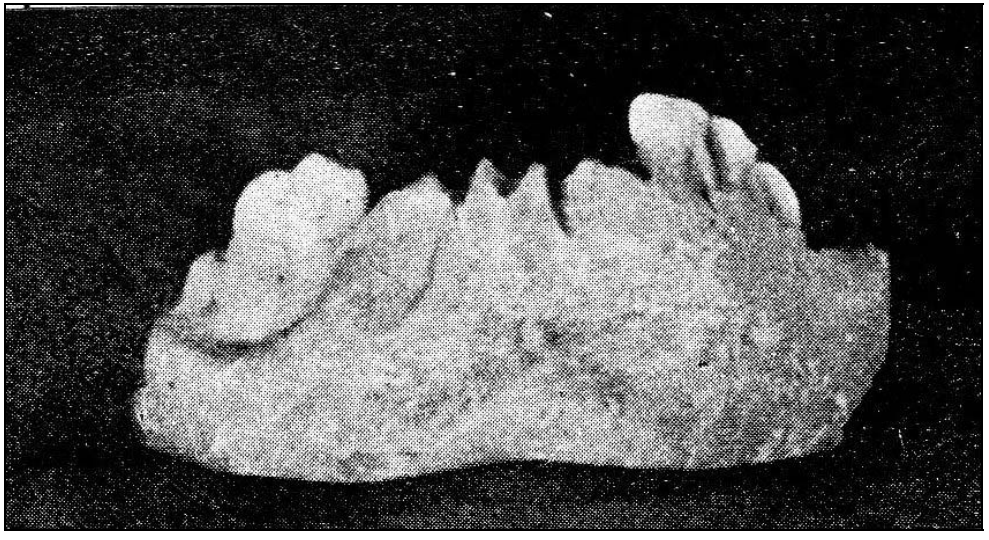

Fig. 4 – Defect upon a child mandible from Aldeni
(apud O. Necrasov *et alii*, 1958, Pl VII, Fig. 2).

Interaction between the endogenous and exogenous factors

Most often, these have influences upon the entire system.

Food deficiencies had significant consequences upon the whole body. They were well represented in the case of the dental-maxillary system or of the bones. In that sense, osteoporosis is well known to appear as a result of insufficient calcium in the body, either as a diet deficiency or as a metabolic disturbance. It often appeared on aged individuals. One of its consequences, when being in an advanced stage, was the enfeebled bone tissues.

In case of dental disease, it is well known that teeth have a strong genetic determination concerning their dimensions and shape. Studies confirm that 54–78% of the tooth variation in size is genetically determined[17]. Yet, during the life of an individual, depending upon the environment where he lives, the teeth can adapt to the food conditions and can be also "shaped" by the lack of various chemical elements that affect their enamel or pulp.

Beginning with the Neolithic, man had faced the tendency of some teeth completely disappearing (M.3, P.2 and I.2)[18].

[17] y'Edynak, 1989, 21.

[18] For the absence of M. 3 see, for instance, skeleton no. 1, trench 1 from Traian, Cucuteni Culture (Bacău County), which belonged to a male individual, at the age of 25 years in Necrasov &

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Stomatologists who worked with anthropologists detected some interesting aspects regarding the caries, out of which we will mention just a few. Due to the phylogenetic reduction of the dental arc and the associated trend of teeth crowding, some other phenomena could be observed. The first one refers to the decrease in teeth grow. The second one shows that the contact points existing during the Pleistocene had become contact zones in the Neolithic due to the previously mentioned phenomenon[19]. This is how the carious process but also parodontopathies and alveolus pioreea had been favoured in these areas during the Neolithic times of Romania and elsewhere.

Another aspect worth mentioning here is the disappearance of the vestibular bossa in the same Neolithic period, which made possible not only a stronger mechanical stress upon the teeth during mastication but also a violent reaction of the paradontium, which gets in direct contact with the food, inducing inflammatory phenomena. With time, towards the present epoch, a new accommodation and adaptation to the new conditions appeared and another balance had been reached[20].

In fact, the Neolithic skeleton series had displayed a differential degree of dental pathology, most likely in connection to their genetic stock, their habitat conditions (in many cases associated with the lack of certain oligoelements in water or soil), way of life, and food habits.

Regarding the most important factors that could induce the carious process, in older studies two main trends of interpretation could be observed: one was focused upon the physical-chemical factors, while the second considered important the nutritional ones[21]. In fact, the influence of the living conditions[22] and food habits had to be also added to them, being important elements and exerting a strong influence upon the dental-maxillary system.

In the series of Cernavodă, for instance, but also in the smaller cemetery from Chirnogi, no carious processes could be identified. On the other hand, in the series from Cernica, 75% of the men and 80% of the women were affected by caries. Such an ailment appeared also in the necropolis of Dridu (Gumelnița Culture) on skeleton no. 4, (lower P.2, left, for instance), or skeleton no. 5 on upper P.2 and M.1, but also with upper left M.1[23]. Three other carious processes were found on P.2, M.1 upper right and M.1 upper left of skeleton no. 6. Upon the maxillary of the last mentioned individual could also be observed the existence of an extra tooth, which had started its eruption. It was placed upon the palate, right behind the

Nicolăescu-Plopşor, *Studiu antropologic al scheletelor deshumate la Traian în campania de săpături din 1956*, Materiale, V, 1959, 209.

[19] Firu, 1963, 149.

[20] Firu *et alii*, 1965, 200; Firu, *op.cit.*, 155.

[21] Firu, *op.cit*., 146.

[22] Firu *et alii*, *op.cit.*, 192.

[23] Necrasov & Cristescu, 1961, 55, 57, 59.

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dental arc. It was 3 mm away from the alveolus of the left canine, with a left to right and rear-front position, reaching between the alveoli of the left incisors, piercing the one of I.2 and deviating I.1. Its shape, but also its position, pointed to the existence of a supplementary canine. As the normal incisors and canine on that maxilla side were lost *post mortem*, it was not possible to establish the changes induced by the presence of that supernumerary tooth[24].

In skeleton no. 4 from Trestiana (Vaslui County), belonging to the Criş Culture, a parodontosis phenomenon could be observed, which induced the loss of many teeth[25].

Also in the Criş culture, but in the site from Sfântu Gheorghe-Bedehaza, was observed the loss of a 3rd molar. The appearance of the bone did not show the existence of an inflammatory process. Yet, the radiograph made upon the mandible pointed out the existence of a condensed osteitis on the surface of the bone, a fact that enabled the anthropologists to presume the accidental evulsion of a healthy tooth long before the death of the individual, a female aged at 55-60 years[26]. Lost teeth could also be observed upon the mandible of skeleton 4 from Dridu (Gumelnița Culture) (M.1 left)[27].

On a fragmentary child mandible discovered in the site of Aldeni (Cultural Aspect Aldeni), an oval, irregular depression could be observed in the region of P.2 and M.1 permanent dentition on the right half of the horizontal branch (Fig. 4). As the bony tissue displayed no specific traits of a malign tumour, it was presumed that a benign tumour had affected the soft tissues on that level. By compression, that tumour had induced some damages into the development of the bone itself and dentition upon the mandible. A certain asymmetry could be also noticed between the two halves of the mandible. With respect to dental changes, on the left side of the mandible it could be observed that I.2 was missing, while the P. 1, P.2 and C were still enclosed in the bone, and M.1 and M2 were in the process of eruption. In turn, on the right half, C was still enclosed, but P.2 and M.1 were fully erupted and functional, a fact that was explained by the compressive action of the tumour, which favoured the loss of the milk dentition[28].

Regarding the post-cranial skeleton, we could observe the existence of exostoses beginning even with the Criş Culture (the mature woman of about 30 years, with one compressed vertebra body in the lumbar region, but also with exostoses on another one in the same region[29]) in Early Neolithic times. Some

[24] Necrasov & Cristescu, *op.cit.*, 56.
[25] Necrasov & Antoniu, *op.cit.*, 21.
[26] Rusu & Mareş, 1956, 35.
[27] Necrasov & Cristescu, *op.cit.*, 55.
[28] Necrasov *et alii*, 9–10.
[29] Necrasov, *op.cit.*, 14.

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other cases could be mentioned in the Cucuteni Culture, where two of its few skeletons studied by now displayed exostoses on vertebrae, especially on the lumbar part of spine (i.e. male mature individual No. 1 in trench Z and female 25 years old individual no. 1 in trench 1) from Traian (Bacău County[30]). These are a result of the interaction of the body with the environment, being influenced by the microclimate but also by the mechanical stress that an individual undergoes and increasing in incidence according to the age of the subject.

Remedies and treatments

The curing of ill people was in direct connection with their view of the human body, which was evidently different from the one in our days. At that level of knowledge, man depended upon the environment and had to obey the natural powers, considering that he was possessed by various divinities of good or evil kind. For instance, when some of the good ones were discontent by the behaviour or actions done by the individual or community, they used to give signs that showed that.

As to ill people, it is possible that their tribe often considered them to be haunted by malefic spirits, which had to be overcome by a series of practices and treatments. For certain, there were known healing herbs used in recipes which were empirically improved, just like the practices. Often, there was associated knowledge which certainly helped heal an ill person with dances and ritual songs, which mainly exerted an influence upon the psychical condition of the individual. All these were done by the tribe shaman. Most often, he assured a connection with the divinities, thus facilitating the communication between two worlds – the real, concrete one and the one of the spirits – being a priest at the same time. His role in curing people made appropriate the usage of practices which were meant to prevent the evil. In that sense, amulets were also made, with an apotropaic role and being probably worn with a preventive scope. Usually, they were made out of various materials (teeth or animal bones, little stones, etc.) but, in human beliefs, probably conferring a special significance and power. Even if not doing it consciously, the magician had combined the empirical medical knowledge resulting from the used remedies with the mystical ones. This is why we give below the scheme adapted after Acad. Radu Iftimovici regarding the mode of interpretation of the illness and treatment[31].

[30] Necrasov & Nicolăescu-Plopşor, 1959, 204, 211.

[31] The mentioned author had conceived a table regarding the Egyptians, as concerns "Views and interpretations given to the origin of dieseases. Principles of control", which we had adapted for the populations we study here (R. Iftimovici, *Istoria medicinei*, Bucureşti, 1994, 28).

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Way of conceiving the phenomenon, thinking about it:	The view upon the illness	Attitude concerning the spirits	The person who did the treatment
mystically	unreal	subordination	magician/shaman
empirically	real	equal absent	magician/shaman or other therapist
mixed	mixed	resulted by combining the up mentioned two	magician/shaman

Regarding the practices which were used for the treatment of the ill person, they covered various aspects. Other procedures were applied not for healing the ill person, but in magical-religious purpose. In this sense, there are known examples from other cultural ranges, in which were done perforations, cuts, or dental extractions[32].

Conclusions and discussions

The above mentioned classification of the factors that make illness possible is not a strict delimitation of those categories. In fact, in natural conditions even what we called endogenous factors could indirectly result from the more or less extensive influence of external ones. Yet, we have used it because we consider it more relevant for the consequences of such interactions in the micro- or macro-environment of the body, but also as concerns their weight when considering their influence upon the body.

In an intense study performed by Romanian anthropologists upon series dated back in the Neolithic times and subsequent periods, it was found that the more frequent ailments in Romania were the caries and lesions of the spine and joints of the long bones. Additionally, a correlation was found between the caries and the disease of the spine and joints[33].

If we want to discuss the ailments and draw some conclusions, we should consider the ailments according to their location on the skull or post-cranial skeleton and also according to their complexity or less significant impact upon the individual.

As we stated above, the carious process had a regional differentiation, probably according to the way of life and food customs of the various tribes.

It is worth stressing here that the presence of tumours (no matter if malign or benign) in prehistoric samples from Romania is rare. This is why, the existence of such a case at Aldeni or Valea Orbului is noteworthy, even if we think just about the information for the history of medicine.

[32] Firu, *op.cit.*, 145–158; Brothwell, *op.cit.*, 120.
[33] Bălteanu & Botezatu, *op.cit.*, 6.

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A singular case is the ectromely on the ulna from Vărăşti. This is a rare pathological condition even in our days, so the find of a skeleton with such an ailment is most beneficial.

The ritual complex of Băile Herculane could show, in a symbolical manner, the human offering made to a divinity, or just the use of an ancestor killed in combat for being the messenger of a community for the same mentioned divinity.

Regarding the fractures, we could say that they had various election zones and frequency along various time sequences, according to the different way of life that people led[34]. Of course, they varied, in the cases inflicted by conflicts, in close connection to the weapon used in combat. In close connection to the pathological conditions, the medical science had also developed, in order to assure the successful healing of the patients, but also for maintaining a good functionality of the society, as it concerns labour force, protection, and others.

In short, we could say that pathological conditions display not only the health status of a population but also, indirectly, the respective socio-cultural and economical level.

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[34] Nicolăescu-Plopşor &. Floru, 1963, 171.

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THE ARCHAEOLOGICAL AND ANTHROPOLOGICAL STUDY OF THE BURIAL FROM BANCA GARĂ – *ŞAPTE CASE*, VASLUI COUNTY, ROMANIA. ZHIVOTILOVKA – VOLCHANSK – BURSUCENI GROUP

STUDIUL ARHEOLOGIC ŞI ANTROPOLOGIC AL MORMÂNTULUI DE LA BANCA GARĂ – *ŞAPTE CASE*, JUDEŢUL VASLUI, ROMÂNIA. GRUPUL ZHIVOTILOVKA – VOLCHANSK – BURSUCENI

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Cuvinte-cheie: antropologie, Banca Gară – *Şapte Case*, Bronzul timpuriu, grupul Zhivotilovka – Volchansk – Bursuceni, mormânt de înhumație.

Rezumat: Săpăturile arheologice realizate în satul Banca Gară – *Şapte Case* (jud. Vaslui) au surprins şase morminte de înhumație, care, în urma analizei inventarului funerar, au fost datate în perioade de timp diferite. În cazul M6, încadrarea cronologică a acestuia se leagă de Bronzul Timpuriu, înscriindu-se în arhitectura mormintelor cu groapă şi nişă. Inventarul funerar cuprinde trei vase, cu analogii în mediul horodiştean anterior, iar practica funerară se înscrie în specificul mormintelor tumulare anterioare fenomenului pre-Jamnaia. Mormântul conține un schelet în poziție chircită orientat nord-sud, care a aparținut unui individ de sex masculin şi de vârstă relativ tânără (30–35 ani). Analiza biomorfologică (limitată de absența craniului facial) surprinde elemente caracteristice tipului protoeuropoid.

Key words: anthropology, Banca Gară – *Şapte Case*, Early Bronze Age, Zhivotilovka – Volchansk – Bursuceni group, inhumation burial.

Abstract: The archaeological diggings performed in the village of Banca Gară – *Şapte Case* (the county of Vaslui) revealed six inhumation burials, dated – according to the analysis of the funeral inventory – in different periods of time, as follows. B6, dated to the Early Bronze Age, shows the architecture of the burials with pit and niche. The funeral inventory includes three vessels – showing analogies with the previous Horodiştea framework, while the funerary practice is specific to the tumular tombs preceding the pre-Yamnaia phenomenon. The burial shelters a skeleton, found in crouched position, with north-south positioning, who belonged to a relatively young

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(30–35 year old) male. The biomorphological analysis (incomplete, in the absence of the facial skull) has evidenced elements characteristic to the proto-Europoid type.

The systematic archeological excavations carried out on the site of Banca Gară (Banca commune, Vaslui County), the *Şapte Case* point, located in Southern Moldavia, on the left bank of Bârlad river and on the left side of the Iassy – Bucharest road, 12 kms north of Bârlad city, resulted also in the discovery of six burials from different periods. The *Şapte Case* point was first time reported in 1981, when the first salvage excavation was also carried out. The damming works, which were highly required for the protection of the area, due to the need of preventing the consequences of the ageing of watercourse network in Moldavia between the Sireth, Pruth and Bârlad rivers, had a damaging effect on the site. The salvage excavations carried out in the river valley (between the two walls), as well as the systematic ones, which were carried out mostly on the right slope of the river valley between 1981 and 1989, with two interruptions in 1984 and 1987, resulted in unearthing an area of 3400 m², roughly half the surface of the ancient settlement, and in discovering of 142 archeological features, from various periods. The most important were the finds pertaining to the Dacian-Roman settlement, which outlived the withdrawal of the Roman authorities from Dacia and Northern Moesia (274–275 AD), as well as those of the settlement dated in the 7th–10th centuries.

Six burials were also investigated within the excavated surface: one dated in the Early Bronze Age, a Sarmatian one, two burials dated in the 4th century and two from 10th–13th centuries, which are already reported[1]. The latter were excavated in 1981; B.1 was located in sector A and B.2 in sector B (ch. 7–8). Both were investigated after the dam works affected them. Two undisturbed burials from 4th century were found in sector A, in 1983 and 1986 respectively, *i.e.* B3 and B4 (ch. 20 and 66). The fifth burial, B5 (ch. 76), of the Sarmatian type, was found in 1988, in the same sector. The last burial, B6 (ch. 118) was found in sector C and was dated in the Early Bronze Age. Its funerary custom belongs to the tumuli burials predating the advance of the bearers of Yamnaia Culture west of the Pruth river.

The presentation of the burial B6

The inhumation burial B6 (Fig. 1–3, ch. 118), found in 1988, in Sector C (S 17), as we already mentioned, it is dated in the transition period from the Eneolithic to the Bronze Age or in the Early Bronze Age (according to the chronology used by the Romanian archeology). There is no way of asserting if the burial had a tumulus raised on top of it, due to the conditions of its discovery. It

[1] Alaiba 1987, 235 etc.

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probably pertains to the pit-and-niche type of burials by means of its architecture. The pit is almost cylindrical (1.73–1.77 m in diameter), with a depth of 0.65–0.70 m from the actual treading level (Fig. 1; 2a). Starting from –0.78 m another, rectangular, pit takes shape (1.51 m by 1.93 m), which has a depth of 0.96–1.10 m (Fig. 2b). On its west side lays the skeleton, oriented north-south with a slight deviation, the skull towards north, in fetal position on its left side, its arms bent from the elbows. The small bones were hardly preserved at all, while the pelvic bones were shattered by the pressure of the earth. There were no traces of red ochre. On the ESE side of the burial, 0.60 m from it, three pots were found (Fig. 3), one whole and the other two as fragments: one wide-mouth **cratère**, with analogies in the preceding Horodiştea culture (Fig. 3/3), a funnel-shaped rim cup, with a conical excrescence on its shoulder (Fig. 3/4) and a mug with the handle stuck on its shoulder, at a sharp angle from under its rim (Fig. 3/5). The pots were finely crafted from a compact paste, mixed with ground potsherds and fired in a reducing atmosphere. They are grayish-brown in color with dark spots. Furthermore, near the burial a sandstone marble was found, showing four pinpricks (Fig. 3/2–2a). Another find of this type surfaced from the habitation layer (Fig. 3/1). A pot of very similar shape to the cup was discovered on the site of Roşcani, another one at Taraclia[2]. The angular handles will also be found in the environment of Komarov – Costişa – Ciomortan culture[3].

West of Pruth river, the analogies for the Banca Gară – *Şapte Case* complex are to be found in the Burials of Brailita (B19 ? and B20)[4], Corlăteni – *Dealul Stadole* (Botoşani county) B1, reported by E. Comşa[5], Lieşti – *Movila Arbănasu* (B22), reported by M. Brudiu[6]. The last one is probably the earliest one chronologically[7], by its painted pot in the style of Horodiştea – Gordineşti (but later than this stage, as proven by the small mug of ground shell and limestone mixed paste, grey with dark spots, with a small handle on its shoulder and decorated with a row of nail marks). This motif is known in the area of Precucuteni – Cucuteni pottery, as well as Cucuteni C (as on the pot found at Huşi – *Centrul Oraşului*)[8], *Horodiştea – Gordineşti (the pot found at Cucuteni – Cetățuie*[9] and the bowl found at Târpeşti – *Râpa lui Bodai*, Botoşani county[10].

By comparing the burial of Banca Gară – *Şapte Case* against the situations in the neighboring regions, we can assert that it is more or less similar to certain

[2] Manzura 1990, Fig. 3/10.
[3] Dumitroaia 2000, 152, Fig. 113/3.
[4] Harțuche & Anastasiu, 1959, 685, Fig. 8.
[5] Comşa 1982, 92–93.
[6] Information by courtesy of M. Brudiu.
[7] Manzura 1993, 23-24; see also *Idem*, Sava 1994, 143 etc.
[8] Alaiba & Merlan, 2001, 97–99, Fig. 3/4.
[9] Alaiba 2004, 298, Fig. 256/1; in M Petrescu-Dîmbovița *et alii*, 2004.
[10] Marinescu-Bîlcu 1981, Fig. 212/19.

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tumular tombs east of Pruth River. We will mention some of these: Costeşti (B.2/T2), Crasnoe (B.10/T9), Cazaclia, Kubej, Obileni, Taraclia, Tochile – *Raducani*[11]. West of Pruth River, the region is defined by the tumular tombs of Costeşti – Bursuceni – Taraclia[12]. The burial of Banca Gară – *Şapte Case* is also similar to the burials without Late Horodiştea painted pottery, such is the one of Bursuceni[13], within the group of Usatovo tumular tombs, out of which the late and the final were included in a separate horizon, the Zhivotilovka type or, as named by Yu. Rassamakin following its spread from the west bank of Pruth River to the Don River, Zhivotilovka – Volchansk – Bursuceni. This horizon cumulates the late elements of the so-called transition period from the Eneolithic to Bronze Age and the Early Bronze Age within the region Maikop – Novosvobodnoy, from the cultural groups of Usatovo – Folteşti and Horodiştea / Erbiceni – Gordineşti, as well as Spherical Amphorae and Funnel Beakers[14]. The funeral custom of the Banca Gară – *Şapte Case*, burial is also known from the tumular tombs predating the penetration of the land west of Pruth River by the Yamnaia Culture. The pre-Yamnaia burials are rare.

The anthropological analysis

The skeleton inside B6 belongs, following the anthropological analysis, to a young male individual (30–35 years old). It is incomplete and poorly preserved, and it is represented by bone fragments from both the cephalic and post-cephalic segments.

The skull was restored only as an incomplete cranial vault (without its basal region of the posterior half of the right parietal bone) whose study, extended also to the facial bone fragments, was limited to the morphological observations. From the biometric point of view only the length of the cranium could be established, which places it into the "over-long" category of the dimorphic scale (201 mm), which indicates, together with its width (upon visual assessment), a positively dolichocranic skull. In the same respect, its outline in the vertical norm is ovoid-ellipsoidal, while in the occipital norm is of "bombshell" shape. The height of the cranium seems to be a moderate one. The occipital is very convex, tall and with a weak outward occipital protuberance. The mastoid apophysis is strong and the supra-mastoid ridge is well-developed. At the level of the forehead, the bone ridging is evident only in the glabellar region.

At the level of the face, the significant width of the malar bone should be mentioned, as well as the *gonion* of a well-developed and "doubled-over" type.

[11] Petrenko 1991, 74–75.
[12] *Ibidem.*
[13] Kovaleva 1991, 66–67.
[14] Burtănescu 2003, 15 etc.

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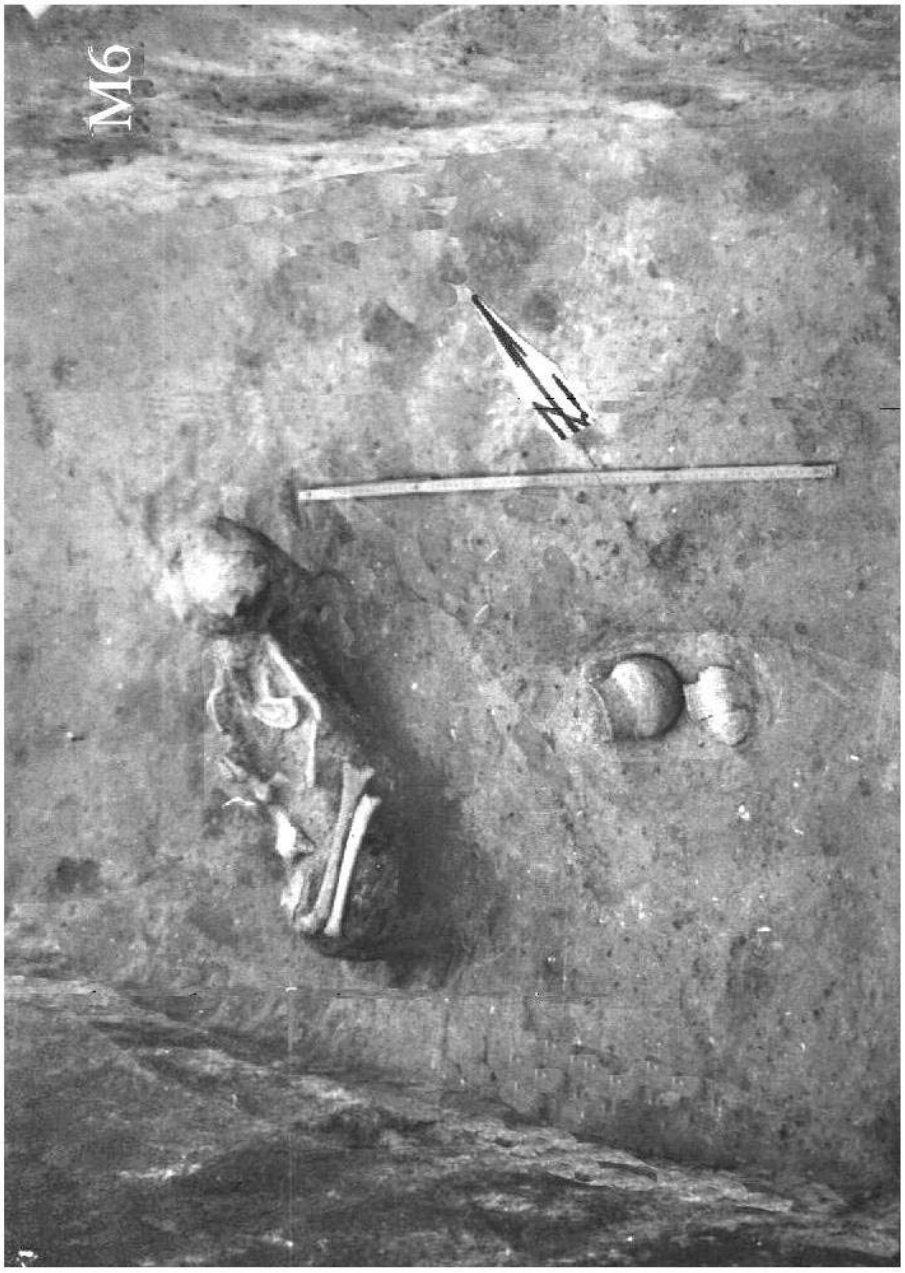

Fig. 1 – Banca Gară – *Şapte Case*. Inhumation burial, B6, ch. 118, photograph.

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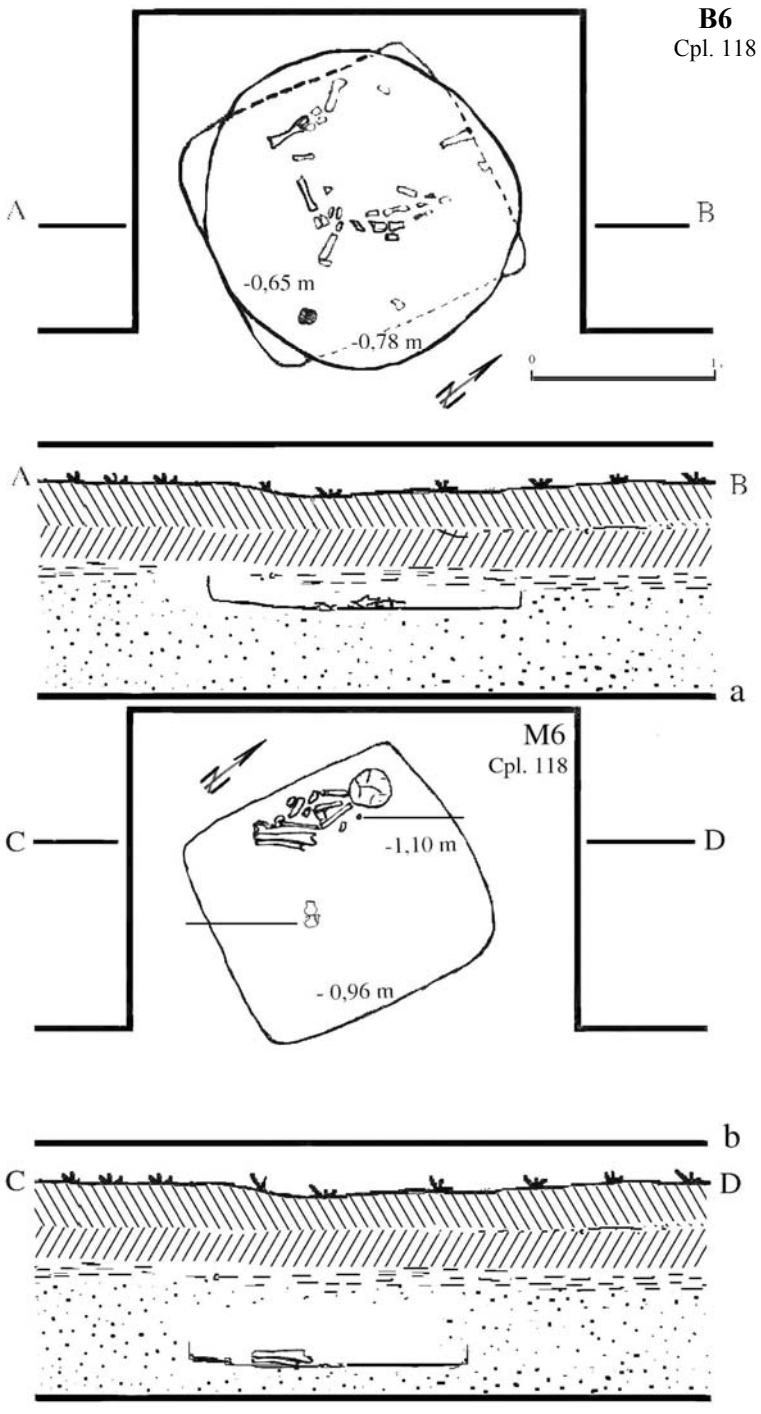

Fig. 2 – Banca Gară – *Şapte Case*. 1–2, Inhumation burial, B6. Plans and profiles. Životilovka – Volčansk – Bursuceni group.

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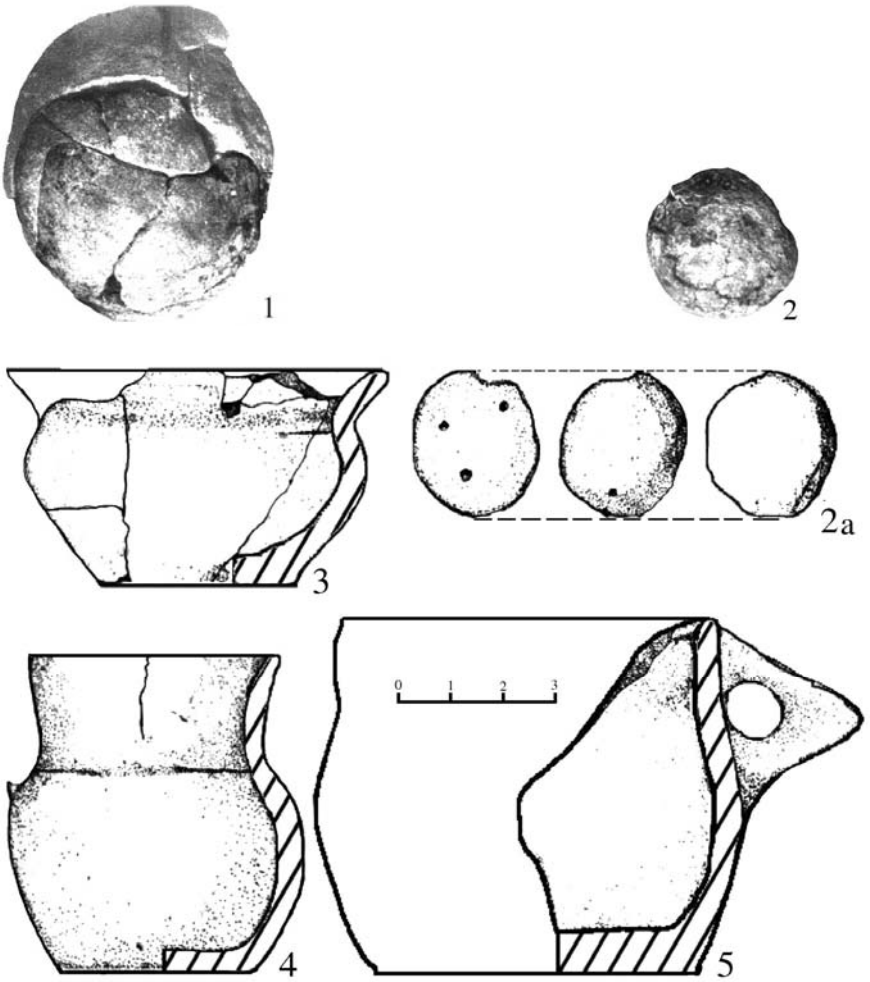

Fig. 3 – Banca Gară – *Şapte Case*. Inhumation burial, B6: 1–2 marbles; 3 cratère; 4 cup; 5 pitcher.

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In respect to the post-cephalic skeleton, its robust character must be mentioned, as well as the humerus of eurybrachial type (the cross-section index of 84.1).

As for the anthropologic type, we are reserved in asserting a certain type, due to the absence of the facial skeleton and the long bones (for calculating the body height). The strong dolichocranic appearance of the skull, the large width of the malar bone, as well as the obvious robustness of the skeleton are elements found within the structure of the proto-Europoid type. These features (especially the macro-dimensioning of the cranium on its length, the so-called "over-long" category) relate this skeleton to the certain ones from the complex of tumular tombs with red ochre of Drevne-Yamnaya type (the transition period), as the ones of Holboca tumuli, whose skeletons belong, most of them, to the proto-Europoid type[15]. Furthermore, it also shows analogies with certain skeletons from the Yamnaya burials of the second phase of Smeeni, especially the burial M16, by the longitudinal dimension of its cranium – also "over-long" (203 mm) – and by its ovoid-ellipsoidal shape[16]. The position of the corpses, bent over and laid on one side (on their left in this case, as mentioned above), was reportedly caused by the concerns regarding the revenants (by tying the body with ropes[17]) or by the hopes towards their reincarnation (by arranging the bodies in fetal position[18]).

Final considerations

The archaeological diggings performed in the village of Banca Gară – *Şapte Case* (the county of Vaslui) revealed 6 inhumation burials, dated – according to the analysis of the funeral inventory – in different periods of time, as follows. G 6, specific to the early Bronze Age, shows the architecture of the burials with pit and niche. The funeral inventory includes 3 vessels – evidencing analogies with the previous Horodiştea framework – while the funerary practice is specific to the tumular tombs, preceding the pre-Yamnaya phenomenon. The burial shelters a skeleton, found in crouched position, with north-south positioning, who belonged to a relatively young (30–35 year old) male. The biomorphological analysis (incomplete, in the absence of the facial skull) has evidenced elements characteristic to the proto-Europoid type.

[15] Necrasov & Cristescu, 1957, 73 etc.
[16] Necrasov *et alii,* 1964, 13–31; Kovaleva 1991, 66–67.
[17] Zugravu 1997, 328.
[18] Eliade 1981, 16.

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RADOVANU (BEZIRK CĂLĂRAŞI) UND MIRONEŞTI (BEZIRK GIURGIU), ZWEI GRABUNGSORTE AM RECHTEN ARGEŞ-UFER

RADOVANU (JUDEŢUL CĂLĂRAŞI) ŞI MIRONEŞTI (JUDEŢUL GIURGIU) DOUĂ SITURI DE PE MALUL DREPT AL ARGEŞULUI

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Cuvinte-cheie: Argeşul Inferior, Radovanu-*Gorgana a doua*, Radovanu-*Gorgana I*, Mironeşti-*Malul Roşu*, aşezări multistratificate.

Rezumat: Sunt prezentate, sintetic, investigațiile arheologice de pe raza localităților Radovanu şi Mironeşti, ambele situate pe malul drept şi înalt al terasei râului Argeş. Se insistă asupra cercetărilor din punctele Radovanu-*Gorgana a doua* şi *Gorgana I* şi Mironeşti-*Malul Roşu*. În toate cele trei puncte s-au descoperit fortificații, în primele două câte o *dava* getică (sec. I î.Chr.–I d. Chr.), iar în al treilea un şanț şi val din Hallstatt-ul Mijlociu, cultura Basarabi.

Schlüsselwörter: Argeş-Unterlauf, Radovanu-*Gorgana a doua*, Radovanu-*Gorgana I*, Mironeşti-*Malul Roşu*, mehrschichtige Befestigungen.

Zusammenfassung: In Kurzform werden die archäologischen Forschungen bei Radovanu und Mironeşti, beide Ortschaften auf der rechten Hochterrasse des Argeş-Ufers, präsentiert. Die Aufmerksamkeit wird haputsächlich den Punkten Radovanu-*Gorgana a doua* und *Gorgana I* und Mironeşti-*Malul Roşu* gewidmet. An all diesen drei Stellen wurden befestigte Siedlungen, im Fall der zwei ersten getische *Dava* (I. Jh. v.Chr.–I Jh. n.Chr.), im letzten eine mittelhallstattzeitliche Basarabi-Befestigung, entdeckt.

Flussabwärts von der bekannten getischen *Dava* Popeşti[1], und der neulich in die Fachliteratur eingegangene mittelbronzezeitliche Siedlung von Mogoşeşti[2], am Unterlauf des Argeş, liegen zwei für die archäologische Forschung wichtige

[1] Palincaş 1996; Palincaş 1997; Vulpe 1997, mit Lit.
[2] Schuster & Popa, 2000; Morintz & Schuster, 2004.

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Ortschaften. Näher (ungefähr 15 km) der Argeş-Mündung in die Donau, ist das Dorf Radovanu zu finden. Hier wurden entlang der letzten fast 50. Jahren mehrere Grabungen durchgeführt. So konnten, in einigen in unmittelbarer Nähe des prähistorischen Flussbettes, andere im Hinterland liegenden Punkten, wie „*La Muscalu*“, „*Coada Malului*“, „*Jidovescu*“, „*Valea Coadelor*“, „*Gorgana I*“ , „*Gorgana a doua*“, eine spät-äneolithische Boian-Gumelnița-Siedlung und deren Gräberfeld, bronzezeitliche, getische und frühmittelalterliche und mittelalterliche Ansiedlungen erforscht werden.

Seit 2004 wurden die Grabungen auf der „*Gorgana a doua*“, im Rahmen eines internationalen rumänisch-amerikanisch-bulgarischen Forschungsprojektes, neu aufgenommen[3]. Dieser Grabungsort befindet sich im süd-östlichen Teil des Dorfes, am ehemaligen rechten Ufer des Argeş-Flusses (heute fließt er etwa 2,8 km östlich davon entfernt). Es handelt sich um einen durch Erosion entstandenen, dreieckigen Sporn der Hochterrasse, der eine Fläche von ungefähr 4.000 m^2 einnimmt und 35/38 m über der Ortschaft liegt. Der Sporn ist an seiner süd-westlichen Seite durch einen 10 bis 22 m breiten (obere Grabenöffnung) und 10–12 tiefen Graben von der Terrasse getrennt. Wahrscheinlich war dieser Graben natürlichen Ursprungs, wurde aber später, von der bronzezeitlichen Bevölkerung oder, eher, von den Geten erweitert und vertieft.

Archäologische Forschungen wurden 1971–1973, 1975–1977, 1979 sowie 1984 durchgeführt. Heuer ist ungefährt 70% der Gesamtoberfläche durch mehrere Schnitte (25) und Grabungsflächen (20, von je 4,00 × 4,00 m Größe) untersucht worden. Ab 2006 ist das Grabungssystem mit Schnitten mit jenem mittels Flächen ersetzt worden[4]. Diese letztgenannten setzten das Studieren des ersten getischen Wohnniveau's, so dass in diesen nicht die archäologisch taube Erde erreicht wurde, zum Ziel. Bis 1984 galt das Interesse dem Südteil des Sporn. Nach 2004 widmeten wir die Grabungen dem Nordteil. Auf der gesamten derzeit ergrabenen Fläche folgten unter dem 0,10–0,55 m dicken *Humus* eine 0,90–1,00 m mächtige getische Schicht und abschließend eine im Durchschnitt 0,60 m dicke bronzezeitliche Ablagerung, die im Nordteil wesentlich dünner war, wie neusten durchgeführten Forschungen nahe legen. Es konnte auch eine mittelbronzezeitlicher Tei III-Bau untersucht werden. Weiter sind einige Boian- und Gumelnița-Scherben entdeckt worden.

Die getische Schicht (Abb. 2–3 = getische Gefäße) besteht aus zwei Wohnniveau, dem II.–I. Jh. v.Chr. angehörend. Das erste, tiefergelegene, hat eine durchschnittliche Dicke von 0,30 m, das zweite ungefähr 0,60/0,70 m. Die älteren Grabungen, so wie auch die neusten (2008), zeugten stellenweise von einem dritten Wohnniveau, das, leider, von den anthropischen Tätigkeiten (Ackerbau, Weinrebenzucht) massiv zerstört wurde.

[3] Schuster & Şerbănescu, 2007, mir älterer Literatur.
[4] Şerbănescu *et alii*, 2006; Şerbănescu *et alii*, 2007; Şerbănescu *et alii*, 2008.

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Abb. 1 – Radovanu-*Gorgana I*.

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Abb. 2 – Radovanu-*Gorgana a doua*. Getisches-Gefäß.

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Abb. 3 – Radovanu-*Gorgana a doua*. Getisches Gefäß.

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Abb. 4 – Radovanu-*Gorgana a doua*. Radovanu-Gefäß.

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Abb. 5 – Radovanu-*Gorgana a doua*. Radovanu-Gefäß.

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Abb. 6 – Radovanu-*Gorgana a doua*. Radovanu-Gefäß.

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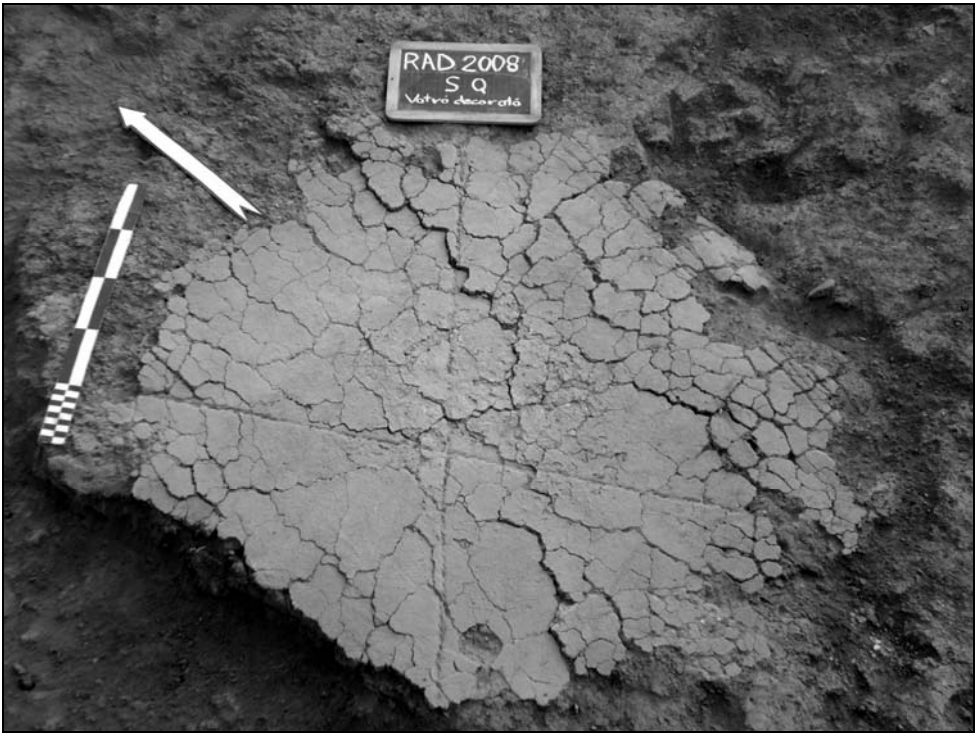

Abb. 7 – Radovanu-*Gorgana a doua*. Verzierte Feuerherd (2008).

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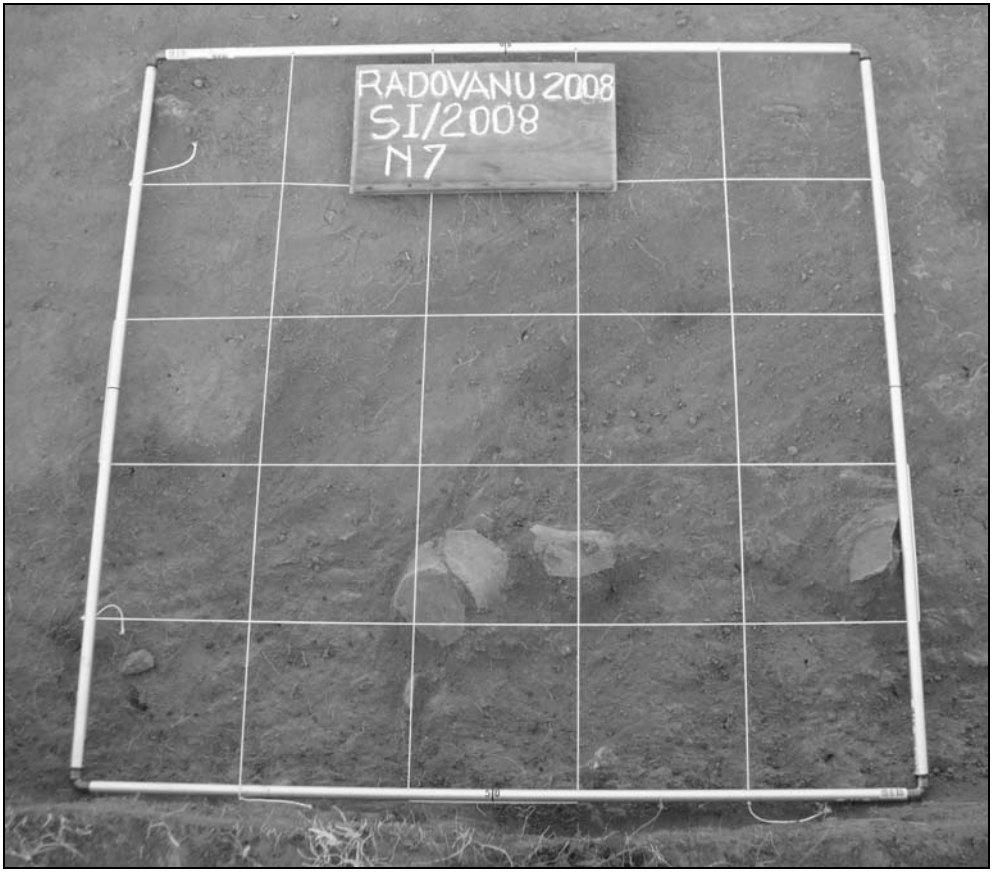

Abb. 8 – Radovanu-*Gorgana a doua*. Überreste eines getischen Hauses (2008).

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Abb. 9 – Radovanu-*Gorgana I*. Getischer Erdwall (2008).

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Abb. 10 – Radovanu-*Gorgana I*. Jamnaja-Grab unter dem getischen Erdwall (2008).

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Abb. 11 – Mironeşti-*Ruine*.

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Abb. 12 – Mironeşti-*Malul Roşu*.

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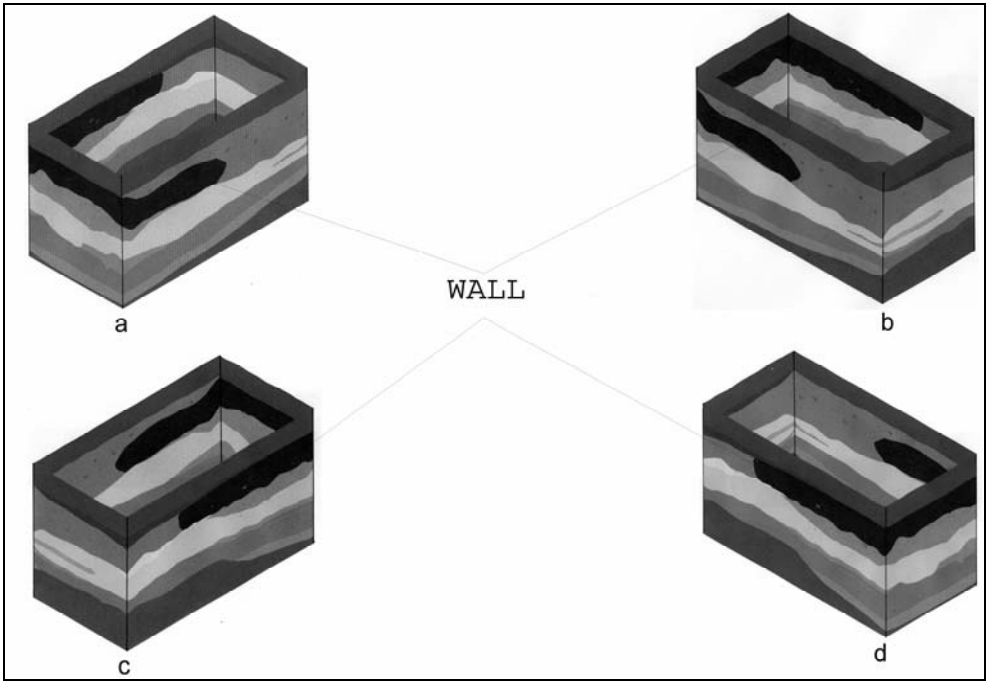

Abb. 13 – Mironeşti-*Malul Roşu*. 3D-Modell durch den Basarabi-Wall.

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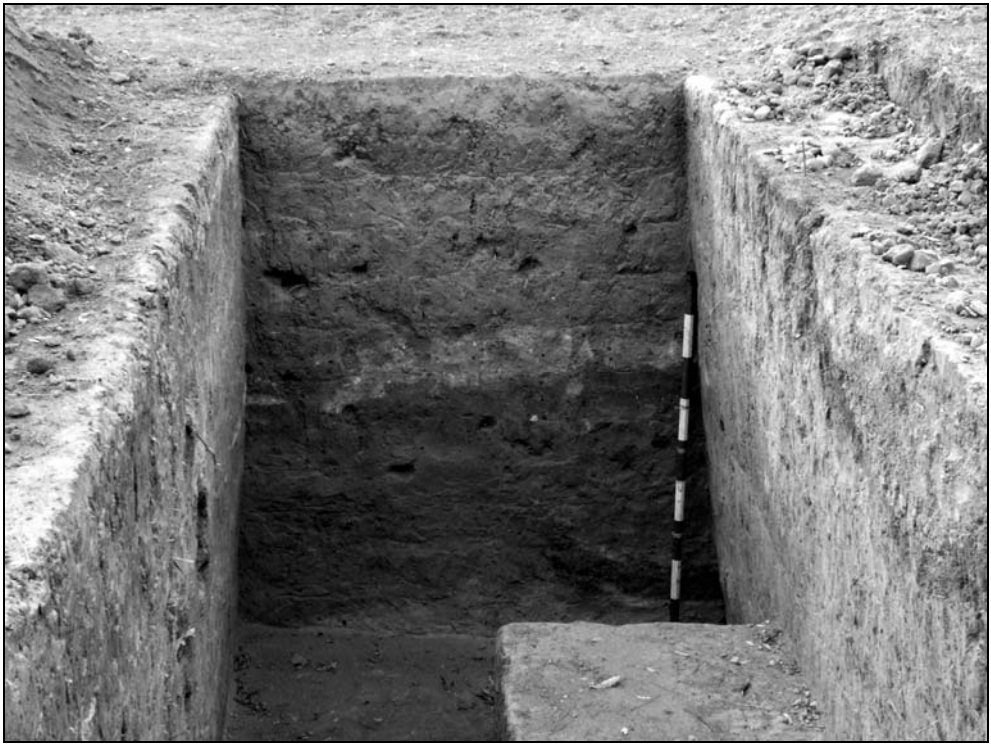

Abb. 14 – Mironeşti-*Malul Roşu*. Cernavodă II-Erdhaus (2008).

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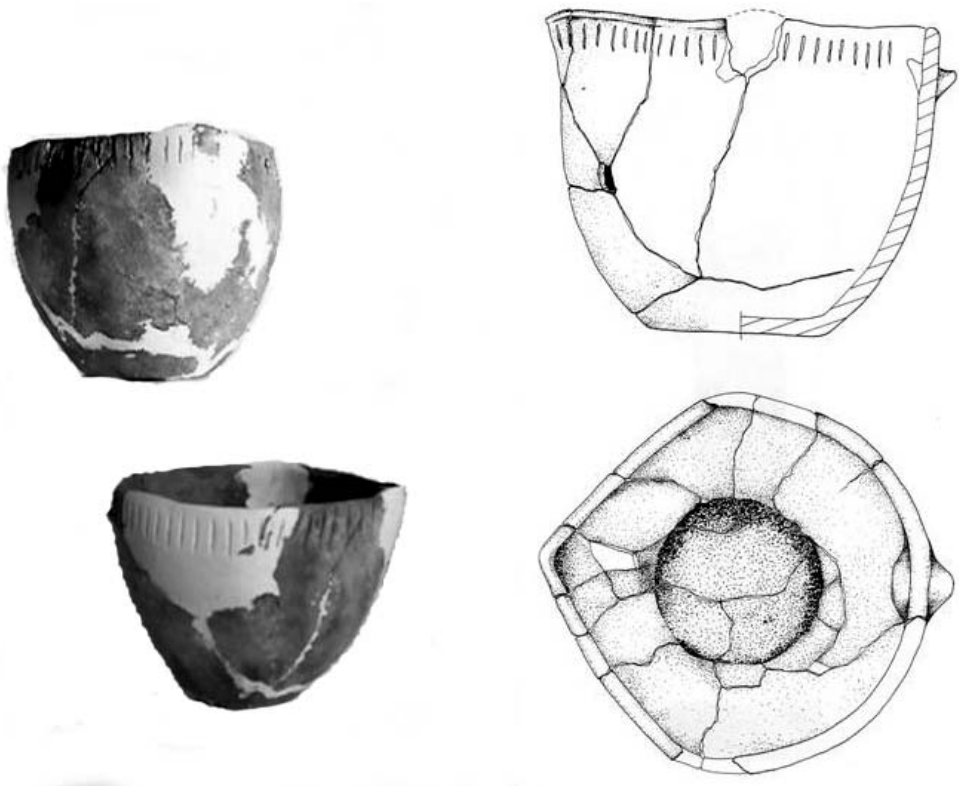

Abb. 15 – Mironeşti-*Malul Roşu*. Cernavodă I-Gefäβ.

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Heute ist leider wenig von dem getischen Abwehrsystem zu erkennen. Die ersten Grabungen erlaubten aber, das Erforschen eines in U-form angelegten Abwehrgrabens, welcher den ganzen Sporn umschlossen haben soll. Der Oberteil des Grabens hatte eine Öffnung von etwa 3,75–4,20 m und eine Tiefe von 3,20–3,80 m.

Dieser Graben mit Erdwall und Holzpalisade wurde von den ersten Geten die sich hier niederliessen erbaut. Wahrscheinlich, durch das Ansteigen der Bevölkerungszahl und aus uns unbekannten weiteren Gründen, gegen Ende dieser ursprünglichen Wohnetappe, verliert dieser Abwehrbau seine militärische Rolle und der Graben wird zugeschüttet. Davon sprach der Befund im *Schnitt XIX*, wo ein Feuerherd des zweiten Wohniveau's über dem ehemaligen Graben errichtet wurde.

Wenn wir für die Häuser des ersten Wohniveau's fast nichts wissen, da alle von den Geten selbst niedergelegt und geebnet wurden, so konnten in all den Grabungsjahren mehrere Bauten (26) des zweiten Wohniveau's erforscht werden. Auch für diese gibt es Schwierigkeiten in der Festlegung ihrer Ausmaβe, da die Bautechnik und die verwendeten Baumateriale (Holzgerüst, Ruttengeflechtung, gebrannter Lehmbewurf) uns keine klaren Grundrissspuren hinterlassen haben (Abb. 8). Eines der Häuser, mit zwei Feuerstellen ausgestattet, hatte die Rolle einer Metallbearbeitungswerkstatt. Ein weiteres, durch seinem mit Kreisen verzierten Herd und den Kultgruben, wird als Kulthaus betrachtet.

Dekorierte Herde sind keine Seltenheit in Radovanu-*Gorgana a doua*. Drei weitere, in und auβerhalb der Häusern wurden auch in den letzten Jahren, einschlieβlich 2008 (Abb. 7), gefunden[5]. Die Verzierung besteht aus Kreisen und oder Linien.

Sowohl für die erste als auch für die zweite Wohnschicht gibt es eine beträchtliche Anzahl von Gruben. Die meisten hatten die Funktion von Vorrats- oder Abfallgruben.

Im Südteil des Sporns konnten in den älteren Grabungen zehn ebenerdige spätbronzezeitliche, der Radovanu-Kultur angehörende (Abb. 4–6 = Radovanu-Gefäβe), Häuser erforscht werden. Auch in diesen Fällen sind die exakten Ausmaβen dieser Gebäude unklar. Das archäologische Material, hauptsächlich der gebrannte Lehmbewurf, bedeckte manchmal eine Fläche von 8,00–8,50 × 6,00–7,00 m. Die Schicht mit Lehmbewurf und Asche hatte nicht selten eine Dicke von 0,50–0,55 m und überlag in einigen Fällen eine weitere dünne, gelbe, hart gestampfte Lehmschicht, die sehr wahrscheinlich als Hausboden diente. Bei der Asche handelte es sich um die verbrannten Holz- und Schilfüberreste des Daches. Zu einem Haus gehörte eine oder mehrere Gruben. Diese letzten, meistens glockenförmig, beinhalteten Abfall oder dienten als Vorratsgruben. Manche der

[5] Şerbănescu *et alii*, 2009.

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Häuser waren mit Feuerstellen ausgestattet. Trotz ihres beschädigten Zustands glauben wir, dass sie rund oder oval waren. Sie wurden unmittelbar auf die Erde oder auf einem Steinbett gebaut.

Es ist möglich, dass die zwei spätbronzezeitlichen Gräben, die erforscht werden konnten, als Abwehrgraben gedient haben. Dies sei insbesondere der Fall für *Graben A*, der 2,00 m tief war, eine obere Spannweite von 5,00 m und eine U-förmige Sohle mit einer maximalen Breite von 2,50 aufweist, gültig.

Der spätbronzezeitliche Fundort von Radovanu, dem auch weitere zur Stelle gestellt werden können, die an der Donau, ihren Seen, in Bulgarien und am Argeş-Fluss entdeckt wurden, erlaubten schon vor mehr als 25 Jahren von einer neuen endbronzezeitlichen Kultur, die Radovanu-Kultur, im Unteren Donau-Raum zu sprechen. Diese Erscheinung war nach Sebastian Morintz und Valeriu Leahu zeitgleich mit der Tei V-Stufe. Allerdings spricht dieser letzte anstelle der Tei V-Stufe von der Fundenii Doamnei-Gruppe[6]. Dies steht nach ihm im Einklang mit der Schichtenlage in Popeşti, wo die zweite bronzezeitliche Schicht (Fundenii Doamnei) von der dritten (spät-Coslogeni = Radovanu) überlagert wird. Schuster ordnete die Funde der Radovanu-Kultur in einen breiteren Horizont des Mischtyps Tei-Coslogeni-Zimnicea-Plovdiv ein, der auf die Coslogeni-Kultur folgte[7].

Wenn in der Coslogeni-Zeit in breiten Gebieten Südosteuropas von wandernden Nomaden zu sprechen ist, die u.a. anhand des Auftretens der „*Barbarian*“ oder „*Grey Pottery*“ nachgewiesen werden können, so gilt dies nur eingeschränkt für die Radovanu-Kultur. Wahrscheinlich wurden nur der Raum Südost- und Mittelmunteniens, relativ nahe der Donau gelegen, und der zentrale Teil Nordbulgariens eingenommen. In der Dobrogea entwickelte sich die Babadag I-Kultur, in Südwestrumänien die Gruppe Zimnicea-Novgrad. Wahrscheinlich waren diese drei kulturellen Erscheinungen, zumindest teilweise, zeitgleich.

Unweit der „*Gorgana a doua*“, 1 km flussabwärts, liegt ein zweiter Terrassensporn, genannt „*Gorgana I*“, auf dem von den Geten eine zweite *Dava* gebaut wurde (Abb. 1). Leider hatte diese in den 80-ziger Jahren des vorigen Jahrhunderts unter dem Bau des Kannals Bucureşti-Donau sehr zu leiden. Heute steht der Erforschung nur 1/5 des Sporn.

Eugen Comşa führte hier die ersten Grabungen durch[8]. Ab 2006 widmete unser internationales Forschungsteam gleichzeitig mit den Arbeiten an der „*Gorgana a doua*“ auch diesen getischen Festungsüberesten die nötige Aufmerksamkeit zu[9]. Es wurde der Erdwall und die Abwehrgräben (zwei?)

[6] Leahu 2003.
[7] Schuster & Popa, 2000, 126.
[8] Comşa 1989.
[9] Şerbănescu *et alii*, 2007; 2008.

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angeschnitten. Unter dem Wall wurde eine sehr dünne Cernavodă I- und eine dickere Gumelnița A2-Schicht entdeckt.

Der Wall bestand aus mehrlagiger Anschichtung von Erde, manche Teile davon aus klebrigen gelben Lehm bestehend (Abb. 9). Die Nord-, d.h. die Innenseite des Walls wurde durch Auflegung von Steinplatten, die zurzeit teilweise zerstört teilweise heruntergerutscht sind, abgehärtet.

Im Jahr 2007 wurden mehrere Schnitte im Festungsinnenraum und auβerhalb der *Dava* angelegt. In der Festung wurden, in einer der geöffneten Flächen, die Spuren eines ebenerdigen Hauses gefunden. Diese Tatsache zeugt davon, dass auch diese *Dava* bewohnt und nicht auβschliesslich als Zufluchtbefestigung benützt wurde. Auch neben dem Wall, im Inneren der Festung, wurden im Frühjahr die unteren Teile von drei groβen Vorratsgefässen entdeckt.

Desgleichen im Inneren der Festung, in unmittelbarer Nähe des Erdwalls, konnte 2008 ein Erdhaus mit einem Backofen erforscht werden. Sehr interressant ist auch, dass unter dem Wall eine Gumelnița-Behausung, die ihrerseits durch ein Jamnaja-Grab gestört war, gefunden wurde (Abb. 10). Die Ausrichtung des Gerüsts, welches auf dem Rücken lag, war Nord-Süd. Das wahrscheinliche Alter des Mannes war rund um 40. Jahre.

Die Auβerhalb der *Dava* angelegten Grabungsschnitte, führten zum Entdecken von Gumelnița- und mittelbronzezeitlicher (Tei) und seltener getischen Keramik. Auf der Terrasse wurden 2009 die Überreste eines Cernavodă I-Hauses gefunden.

*

Die 1988 in Mironeşti, Bezirk Giurgiu, begonnen Grabungen, führten bis 2008 zur Erforschung mehrerer Stellen mit archäologischen Spuren[10]. Diese liegen alle, genauso wie Radovanu-*Gorgana a doua* und *Gorgana I*, am rechten Argeş-Ufer. Ausser dem Punkt „*În Vale*“, welcher tief in einem Bachtal, dass in die Flussebene mündet, sind die weiteren „*Coastă*”, „*La Panait*“, „*La Ruine*“, „*Conac*“, „*Malul Roşu*“ auf der Hochterrasse (75–83 m über dem Meeresspiegel) zu finden.

Im Grabungspunkt „*La Ruine*“ konnte ein mittelalterliches Gehöft (Abb. 11) und eine getische Abfallgrube[11], in „*În Vale*“ ein frühmittelalterliches Dridu-Haus (mit zwei Feuerstellen) und ein Sântana de Mureş-Keramikofen erforscht werden[12]. Im Falle der Punkte „*Coastă*“ und „*La Panait*“ handelt es sich um mittelbronzezeitliche Tei III-, bzw. für die erstgenannte Stelle, auch getische Siedlungen[13]. Im Falle der bronzezeitlichen Spuren reden wir von der III. Stufe der

[10] Schuster *et alii*, 2005a; Schuster *et alii*, 2005b; Schuster *et alii*, 2008a; Schuster *et alii*, 2008b; Schuster & Popa, 2008, mit Literatur.
[11] Schuster & Popa, 2008, 28–29.
[12] *Ibidem*, 29–32.
[13] Sîrbu *et alii*, 1997; Schuster & Popa, 2008, 25–28.

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Tei-Kultur. Es konnten insgesamt zwei Häuser, eine Steinbearbeitungswerkstatt und eine Abfallgrube ans Tageslicht gefördert werden. Für die getische Periode ist ein ebenerdiges Haus studiert worden. Nicht zu vergessen ist auch der Punkt „*Conac*“, wo bronze-, früheisenzeitliche (Hallstattkeramik mit Kanneluren und Basarabi-Ware) und getische Spuren geortet wurden[14].

Archäologisch am reichsten erwiesen sich die Grabungen im Punkt „*Malul Roşu*“ Abb. 12). Hier wurde spärliche Brăteşti (Endäneolithikum), Glina- (Frühbronzezeit), Tei- (Mittelbronzezeit), Coslogeni- (Spätbronzezeit), Radovanu- (Endbronzezeit) und getische Keramikscherben gefunden.

Nennenswert sind aber die Komplexe der Cernavodă I-, Cernavodă III-, Cernavodă II- und Basarabi-Kultur. Für Cernavodă I ist eine Abfallgrube, die u.a. ein ganzes Gefäβ beherbergte, zu nennen (Abb. 15).

In den Jahren 2005 und 2006 konnten drei Häuser der Cernavodă III-Kultur (*Haus Nr. 2*, *Nr. 3* und *Nr. 4*) erforscht werden[15]. Leider sind die Anhaltspunkte für deren Form (möglich rechteckig oder oval) und Ausmaβen unklar.

Die Funde für die Cernavodă II-Kultur erwiesen sich viel reicher. Ein erstes Haus (*Nr. 1*) wurde 2002 analysiert[16]. Auch in diesem Fall war das Festlegen der Grundrissform und der Ausmaβe ein Fehlversuch. Es konnten nur einige Flecken des gestampften Fussbodens identifiziert werden. Viel versprechender scheint die in den Jahren 2008–2009 teilweise freigelegte Erdwohnung zu sein (Abb. 14). Es muss aber in Zukunft die Forschungsoberfläche erweitert werden. Eine wahrscheinliche Abfallgrube wurde 2006 und ein Jahr später ein äusserer Feuerherd ausgegraben[17].

Obwohl an der Oberfläche des Sporn bei „*Malul Roşu*“ recht wenig zu erkennen ist, viel mehr ist am Satellitenbild zu sehen[18], waren wir schon am Beginn der Forschungen (1989) der Meinung, dass es sich in diesem Punkt um eine befestigte Siedlung handelt. Den Beispielen von Popeşti und Radovanu-*Gorgana a doua* und *Gorgana I* nachgehend, dachten wir an eine getische *Dava*.

Unsere Arbeitshypothese entpuppte sich 2007–2008 als falsch. Denn durch den *Schnitt 17* konnten wir den durch Feuer erhätteten Erdwall anschneiden[19]. Dieser erwies sich als der Basarabi-Kultur angehörend (Abb. 13). Er wurde auf ein dünnes Steinbett (0,08–0,13 m) erbaut. Darüber wurden zwei Erdschichten aufgelegt. Die untere, aus grauer, roter und oranger Erde bestehend, war 0,90–1,10 m, die obere, aus rotgebranntem Lehm, 0,80–0,90 m dick.

[14] Schuster & Popa, 2008, 33–35.
[15] *Ibidem*, 37-38 und Abb. 20.
[16] *Ibidem*, 37 und Taf. IX/2.
[17] *Ibidem*, 38–39 und Abb. 18, 30–33.
[18] *Ibidem*, Abb. 7.
[19] *Ibidem*, 39 und Abb. 24–65.

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In beiden dieser Schichten, als auch unter dem Steinbett, sind Cernavodă III- und Cernavodă II-Scherben entdeckt worden. Das war der maβgebende Beweis, dass der Wall jünger als diese kulturellen Erscheinungen und älter als das getische Niveau war.

Für die Basarabi-Kultur sind weiter eine Kultgrube im Jahr 2007–2009 und ein wahrscheinliches ebenerdiges Haus im Jahr 2008 gefunden worden.

*

Die Grabungen in Radovanu und Mironeşti ermöglichten, so wie zu erkennen war, das Entdecken von interessanten und kulturwichtigen Funden. Es wurde erneut bekräftigt, dass der Argeş-Unterlauf von den Gemeinschaften der Ur- und Frügeschichte als wertvolles wirtschaftliches Hinterland erkannt wurde. Nicht nur von denen die seβhaft waren (Gumelnița-, Tei-, Radovanu-, Basarabi-Kultur, Geten), sondern auch die die eine vorwiegend nomadische Lebensweise führten (Jamnaja).

Die Brăteşti-Scherben in Mironeşti-*Malul Roşu* zeugen davon, dass eine Gruppe dieser Kultur bis in die Nähe der Donau nach Süden vorgedrungen ist. Die Häuser und Gruben der Cernavodă I- und Cernavodă III-Kulturen lassen uns erkenen, dass die Gemeinschaften dieser kulturellen Erscheinungen nicht nur die Donau-Ebene bevorzugt haben, sondern auch ins Innland eingedrungen sind. Und die Komplexe der Cernavodă II-Kultur schieben die Westgrenze dieser Äuβerung bis an den Argeş.

Wenn die befestigte Basarabi-Siedlung schon seit längeren bekannt war, so beweist der Fund des Walls in Mironeşti-*Malul Roşu*, dass die Problematik dieser Kultur in Mittelmuntenien besser zu durchdenken sei.

Die zwei getischen Festungen in Radovanu-*Gorgana a doua* und *Gorgana I* werfen ein stärkeres Licht auf die politische, administrative und wirtschaftliche Lage in den Gebieten, die an die Donau grenzten. Wahrscheinlich nach dem Fall/Verlassen dieser zwei *Dava* verlegt sich der Schwerpunkt auf die Befestigung von Popeşti-*Nucet*. Diese lag desgleichen am Argeş, aber etwas entfernter von der römischen Grenze an der Donau, und hatte dadurch eine geschütztere Position.

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THE PALEOEUROPOID ANTHROPOLOGICAL TYPE, AS A PRINCIPAL COMPONENT OF THE ACTUAL ROMANIAN POPULATION OF THE WESTERN CARPATHIANS

TIPUL ANTROPOLOGIC PALEUROPOID, CA O COMPONENTĂ PRINCIPALĂ A POPULAŢIEI ROMÂNEŞTI ACTUALE DIN CARPAŢII OCCIDENTALI

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Cuvinte-cheie: antropologie, metodologie complexă, variante structurale, Carpații Occidentali din România, populație.

Rezumat: În decursul câtorva expediții antropologice efectuate pe populații din Carpații Occidentali din România, au fost descoperite unele variante structurale ale modelelor arhaice (Brünn-Combe Capelle şi Crô-Magnon-Oberkassel), în mod special în zone izolate. Folosind o metodologie complexă (somatometrie, somatoscopie, fotostereotomie, tabele genealogice individuale şi tabele genealogice de arhivă) şi analiza ei exhaustivă, cladogramele şi dendrogramele, am reuşit să stabilim gradele de relație dintre comunitățile umane. Concluzia finală a fost aceea că, în regiunea menționată, nu s-au produs amestecuri străine semnificative, care să modifice compoziția genetică a acelor populații. Acest fapt a fost determinat de protecția naturală a acelor zone, care a permis păstrarea tipului paleuropoid, care este unul dintre primele găsite vreodată în istoria Europei.

Key words: anthropology, complex methodology, structural variants, Western Carpathians of Romania, population.

Abstract: During several anthropological expeditions to study the population of the Romanian Western Carpathians, some structural variants of the archaic models (Brünn-Combe Capelle and Crô-Magnon-Oberkässel) were detected, especially in isolated areas. By using a complex methodology (somatometry, somatoscopy, photostereotomy, individual genealogical tables, and archive genealogical tables) and its exhaustive analysis, cladograms and dendrograms enabled us to establish the degrees of relatedness between the human communities. It was concluded that in the region under discussion there was no significant mixing to modify the genetic composition of the local population. This was caused by the natural isolation of those areas, which enabled the preservation of the Paleoeuropoid type – one of the oldest in Europe.

The attention of historians and anthropologists focuses on the ancient and recent historical conjuncture, as well as on public perceptions about the Romanian population of Transylvania. This has led to a concentration of systematic anthropological research, especially concerning the human habitation of the

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Western Carpathians. Because of their isolated characteristics, with refuge and survival zones, the Western Carpathians provide the most valid anthropological information, able to prove the origin and continuity of the local population. This topic was chosen because the western Transylvanian region was the main centre of the Dacian and Dacian-Roman populations, and being a refuge territory in a mountainous habitat it was intimately related to their ethnogenesis.

During several historical periods the autochthonous population of the Western Carpathians was the subject of repeated aggression. The reasons were its mineral resources, especially gold and silver. There were strong temptations that attracted, over millennia, foreign dominations, more or less persistent, culminating in the Roman occupation, which was decisive for the formation and perpetuation of the Romanian ethnos.

The history of the past millennium is sufficient to demonstrate the intensive resistance of the local population for the preservation of its ethnic specificity, under much foreign domination.

Our anthropological team studied the following ethnographical areas:

– Arieş basin, including Moţ County:

– White Criş basin, including Zarand Country;

– Black Criş basin, including Bihor Country.

In the course of several anthropological expeditions in these Western Carpathian regions, we were also able to establish ethnic-demic effects due to the settling of a Transylvanian demic substratum overlaid on another, older, autochthonous population. We used various anthropological and historical criteria for the Romanian communities studied during the project. These were optimal, satisfying the theoretical prerequisites of autochthony and representative of the subjects analyzed. These people were studied in accordance with an intensive anthropological programme that included the following methods:

- somatometry;
- somatoscopy;
- photostereotomy;
- genealogical tables (individual);
- genealogical tables extracted from the archives, where available, were also taken into account.

The purpose of this intensive somatometric research was to obtain some characteristic parameters of the population, including average values for anthropometric data, as well as statistical indicators, like the correlation ratio, among this somatometric dimension. These conclusions allowed the construction of a somatological image.

Such images are specific to each community, dependant upon the simultaneous presence, mathematically determined, of some complexes of

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characters, or, of certain kinds of mathematical relations with the set of somatometric features of the group.

The identification of as many characters as possible provides a base for the application of those analyses or discriminatory examinations (for instance, the identification of descendants) where the studied features must comply with the condition of not being correlated with the other characters involved.

Exhaustive analysis of the correlation ratios of the somatometric characters, continued with the construction of cladograms or dendrograms, which established the degrees of relatedness between the human communities.

The cladogram configuration shows a genetic relationship among the human communities of the Western Carpathian villages. That means there were no important foreign mixtures that could modify the genetic composition of those populations.

Moreover, the crest of the Bihor Mountains did not genetically separate the two historical regions: on the one hand Moț and Zarand counties and, on the other hand, the Bihor terriories. This proves that the genetic influences occurred along the valleys, but also via the mountainous routes of communication, which allowed contacts to be established among these populations and helped them to know one another better.

As part of such contacts, we have to mention as an important mechanism of genetic exchange, the mixing effect determined by the traditional meetings that are characteristic of those regions, such as "The maids' fair from the Găina Mountain" and other traditional fairs, like the "Data from Călineasa".

Even if the "genetic renewals" became less significant and important with the time, we must not forget that the anthropological profile of the population studied by us is the result of millennia of admixture, secured by repeated annual meetings of reunion and genetic contacts.

The anthropological features of the population imply the persistence of some basic anthropological components that were very intensely mixed.

We avoid, in this context, the use of 'race' or 'anthropological type'. We prefer to use the term 'structural variants', which are the result of the predominance of some archaic models, to which morphological components have been added as a result of subsequent mixing and evolution.

The anthropological composition of a certain population can be revealed as a coherent picture by means of a special structural analysis. In this picture we can observe markers of historical evolution. Therefore, in territories with an efficient natural protection, we established the existence of Paleoeuropoid components that in European anthropology are called Brünn-Combe Capelle and Crô-Magnon-Oberkässel. These two structural models are the first ones that are known in European human history. Their presence in the more protected refuge regions of

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the Western Carpathians, in less mixed variants, pleads for the archaic features of those populations, which go back up to the Upper Paleolithic. Through subsequent intrusions, they came to include other human structural components.

In order to situate the genuine Romanian population of the Western Carpathian Mountains in its European anthropological context, we created some structural anthropological models, which were analyzed by means of a contingency table in order to test their statistical validity. In this way, we obtained statistical results for the two oldest European structures attested in the anthropological history of Europe, from the Upper Paleolithic to the Mesolithic and up to the present day. These two old European variants, from a historical and evolutionary point of view, are known as Brünn-Combe Capelle and Crô-Magnon-Oberkässel; they can be observed, even today in the Alpine regions of Europe, and as far as the far north of Scandinavia.

The anthropological structures predominant in the Western Carpathians and neighbouring territories demonstrated the antiquity and homogeneity of this population and the later admixture of the North Mediterranean and Alpine-Dinaroid structures, in various proportions.

Also, it seems that other European migratory populations, such as the Goths or Slavs, enriched the basic structure of the Brünn-Crô-Magnon and Nordic components. It was the same migration process that accounted for the migration of the Dinaric-Mediterranean forms.

We chose the Romanian people from the Western Carpathians for our study primarily because they were minimally affected by the eastern and southern migrations at the beginning of the first millennium.

The Alpine variant, which is considered by anthropologists to be the result of the adaptation of the Crô-Magnoid structure to a milder climate, is present in the Western Carpathians as well.

The Dinaric variant is, most probably, the result of a cross-mountain migration of population from southern Europe. The Mediterranean variant, as a component of the Neolithic migration became stronger after the Roman colonisation. Thus, in the gold centres of Abrud and Roşia Montană, the Mediterranean-Dinaric variants are more frequent and more characteristic.

The Nordic variant is a result of the migration of the Indo-European populations, Thracian-Dacians, Celtic and Germanic communities and, later, the Slavic peoples.

Of great heuristical interest is the comparative study of the populations situated in the Central European area, that is between the Carpathians and the Massif Central of France, an area that includes Austria and south and central Germany.

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The ethnic-anthropological-geographical characteristics of this area of distribution present many common features. This proves there was local evolution, which is not only similar but also corresponds organically to the ethnic evolutions in analogical and homological circumstances.

Another view of the intra- and peri-mountainous zone of Europe permits a profound observation about the typogenesis and structural evolution of the continental European populations, in spite of the linguistic barriers. This confirmed our belief in the evolution in time and space of certain populations, not very different from the anthropological features of the Romanian people.

The population from the valleys situated in the Arieşul Mare, Arieşul Mic and Crişul Alb basins that were the object of the present study are characterized by an anthropological polytype, in which are included, in order of frequency of their appearance, the following components:

a) eurymorphic type, partly extremely gracilized (Crô-Magnon, Alpine);

b) leptomorphic type (old, partly gracilized (Brünn-Combe Capelle-Trönder);

c) nordic leptomorphic type, reminiscent of the immigrant Neolithic populations (Danubian) or of the Indo-European populations (The "Corded" type);

d) mixomorphic type of south-eastern origin (Dinaric)

e) mixomorphic type of north-eastern origin (eastern Baltic and Neo-Danubian) or East-Europid;

f) leptomorphic type of southern origin (Mediterranean).

Sporadic features of another provenance (Central Asia or Inner Asia) are less frequent.

Conclusions

1. The presence of the old eurymorphic and old leptomorphic types in relatively isolated zones pleads for their local origin and continuity.

2. The presence of the mentioned forms in the regions that are far from the areas of gold exploitation accounts for the continuity of traits of a very archaic population, because the Dacian ethnic group had as its main features two anthropological components, the robust eurymorphic Crô-Magnon and the robust leptomorphic local one (Brünn-Combe Capelle).

3. The presence in the region of gold exploitation of the Dinaric and the Mediterranean types, somatologically attested at Bucium, Cărpiniş and Bucuresci, argues for continuity of a population with Dalmatian-Epirotic elements, colonized there by the Romans, for mining purposes.

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If the native populations from the Western Carpathians had left the Balkan Peninsula together with the Roman administration, an infiltration of the Romanians during the Middle Ages would not account for the geographical distribution of the anthropological variants in the different subzones of the Western Carpathians, which are in accordance with the historical data and with the estimated distribution resulting from our data.

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CĂLUŞUL, ÎNTRE RITUAL ŞI SPECTACOL

THE "CĂLUŞUL" CUSTOM, BETWEEN RITUAL AND SHOW

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Cuvinte-cheie: obicei arhaic, origine indo-europeană, Căluș, dans, ritual, tradiție.
Rezumat: Căluşul, direct dependent de cadrul istoric, economic, social, cât şi de mentalitatea colectivă, prezintă, în contemporaneitate, stadii de evoluție diferite. În general însă, chiar dacă în anumite zone se mai păstrează urme ale unor practici rituale, ele şi-au pierdut reala semnificație, rămânând ca elemente pur spectaculare şi fiind practicate doar în virtutea tradiției, uneori cu un pronunțat conținut comic. Este urmărită *supraviețuirea* obiceiului în zilele noastre, surprinderea semnificațiilor şi funcționalității la nivel social şi economic, precum şi încercările de a-l integra în realitatea actuală.

Key words: archaic custom, indo-european origin, Căluş, dance, ritual, tradition.
Abstract: The Căluş custom and dance, directly depending upon the historic, economic and social background, but also upon the collective mentality, faces several different stages of evolution in the contemporary times. Yet, generally, even if in certain regions traces of some ritual practices are still preserved, they have lost their real significance, being still maintainted just as purely spectacular elements and being practiced only in the virtue of tradition, sometimes with an emphasized comical content. The survival of this custom is being tracked in our days, detecting its social and economic significance and functionality, as well as the trials of its integration into the recent reality.

O caracteristică comună tuturor obiceiurilor este mobilitatea, acestea aflându-se într-un permanent proces de transformare şi autoreglare. Ritmul acestui proces, reflex al evoluției istorice şi al schimbărilor intervenite în domeniul ideologiei, a fost insesizabil o perioadă îndelungată, lent apoi, pentru ca după al Doilea Război Mondial să fie din ce în ce mai intens, în proporții mai mari, „forța de înnoire dominând incontestabil forța de păstrare a tradiției"[1].

În general, obiceiurile tradiționale şi-au menținut structura de bază, principalele momente de desfăşurare şi succesiunea lor, transformările producându-se, în principal, la nivelul sensurilor primare, datorită unor necesități funcționale şi de semnificație, prin estomparea, dispariția, modificarea sau impunerea unor elemente şi motive. Astfel, ele şi-au pierdut tot mai mult din valențele rituale originare, desacralizându-se. Acest proces de transformare nu se

[1] Pop 1971, 353.

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reduce însă numai la eliminarea credinţelor şi practicilor superstiţioase, la atenuarea dominantei rituale. Totodată, are loc o accentuare sau o revalorificare a elementelor ceremoniale şi, în ultimă instanţă, a celor artistice. După cum remarca Mihai Pop, obiceiurile „au trecut treptat de pe planul cu dominantă rituală, sacrală, pe planul cu dominantă ceremonială şi trec astăzi pe planul de spectacol”[2].

În momentul în care credinţa în puterea şi eficacitatea unui ritual s-a diminuat, semnificaţia sa rituală dispare în mod gradat, iar însemnătatea ca fenomen artistic, ca spectacol devine dominantă. Când credinţa în puterea şi eficienţa ritualului rămâne intactă, pe de altă parte, funcţia sa de bază continuă să existe deşi cadrul sau componentele sale sunt alterate[3].

Toate aceste mutaţii care s-au petrecut în evoluţia culturii populare în general şi a obiceiurilor tradiţionale în special, nu au afectat însă elasticitatea şi coerenţa întregului sistem. Deşi golite de fondul lor magic ritual, sacral, majoritatea obiceiurilor au rămas statornice prin funcţia lor fundamentală, aceea de a ritma existenţa individului şi colectivităţii[4].

Analizând mutaţiile structural-funcţionale ale obiceiurilor, Germina Comanici aprecia că motivaţia actuală a acestora este tot mai voalată, iar ştergerea treptată a funcţiei rituale se compensează prin accentuarea polivalentă a ludicului, a jocului. În acest context, performarea se realizează fără o ideaţie explicativă, ci rutinar în virtutea puterii de conservare şi inerţie a tradiţiei „aşa e obiceiul”, a prestigiului social, al repetării faptelor de cultură „aşa am apucat din bătrâni”[5].

De asemenea, Petru Caraman concluziona: „nu putem să nu constatăm că năruirea unui întreg edificiu de credinţe mistice – de natură religioasă ori magică sau în acelaşi timp şi de una şi de alta, indisolubil întreţesute – care are loc astăzi pe o scară foarte largă în masele populare, antrenează în mod inexorabil năruirea a o serie de produse artistico-folclorice sau artistice – etnografice, deoarece credinţele respective erau chiar sursa din care acele creaţiuni au luat naştere”[6].

Similar oricărui alt fapt cultural, Căluşul, ca realitate istorică, este determinat de condiţiile socio-economice şi psiho-sociale în care a existat şi a evoluat în raport cu aceste coordonate[7]. Permanenţa lui se datorează unui mecanism de autoreglare care a provocat deplasarea mesajului de la nivelul ritual spre nivelul distractiv şi artistic. Cu cât ne apropiem de zilele noastre se observă o deplasare a funcţiei lui din planul ritual, în care accentul se punea pe credinţa în eficacitatea actelor performate, în cel ceremonial, în care factorul determinant al recreării îl constituie respectarea tradiţiei, şi în cel spectacular, în care este receptat ca un produs artistic.

[2] *Idem*, 1999, 206.
[3] Giurchescu şi Bloland, 1995, 14.
[4] Comănici 1989, 152–153.
[5] *Ibidem*, 154–155.
[6] Caraman 1994, 90.
[7] Pop, *op. cit.*, 16.

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El constituie totodată cel mai evident exemplu de trecere al unui obicei de la rit la ceremonial şi apoi la spectacol. Forma sa actuală, în funcţie de contextul social local sau general în care este performat, reuneşte într-un tot coerent cele trei funcţii care altădată erau distincte[8]. Trebuie să precizăm că între rit şi spectacol nu este un raport de opoziţie şi nici de anterioritate. Elementele de spectacol nu sunt adăugate la ritual, ci mai curând conţinute de acesta[9].

Începuturile demagizării şi desemantizării Căluşului nu sunt, aşa cum ar părea, de dată recentă. Deşi nu poate fi cunoscut cu exactitate momentul în care funcţiile şi sensurile magice sau rituale ale Căluşului au început să se estompeze, putem însă, cu uşurinţă, remarca deosebirile apărute între primele descrieri ale obiceiului (Cantemir şi Sulzer) şi modul de manifestare observat în secolul nostru. Evoluţia Căluşului arată nu numai treptata sa demitizare sau restrângerea semnificativă a ariei de răspândire, dar şi o sensibilă transformare la nivelul formei, cu îndepărtarea unor elemente şi încorporarea altora.

În regiunile unde Căluşul a avut o structură simplă şi legată strâns de funcţia sa vindecătoare, pierderea semnificaţiei rituale a fost urmată de dezintegrarea sa progresivă, şi aceasta pentru că nici un alt mijloc de expresie nu a existat pentru a prelua noi înţelesuri[10]. Pe de altă parte, în zonele în care obiceiul a avut o structură complexă şi elemente de expresie cu valoare artistică (dans, muzică, costum, scenete comice), participanţii au putut alege dintr-o gamă largă de semnificaţii şi modalităţi de expresie pentru a realiza trecerea de la ritual la spectacol. Capacitatea Căluşului de a se transforma se datorează caracterului său polisemic, ceea ce i-a asigurat supravieţuirea într-o societate în continuă schimbare.

În timp, Căluşul, ca orice alt obicei, a devenit atât de formalizat, încât unele din sensurile sale iniţiale au devenit neînţelese chiar şi pentru participanţi. Elemente ale obiceiului au fost eliminate, iar rămăşiţele, odată funcţionale, au devenit practici nu doar obscure ci câteodată absurde, fără nici o legătură cu sensul primar, exceptând vagi referinţe că ar fi aducătoare de noroc. Vechile sensuri magice de iniţiere, fertilitate, fecunditate au fost aproape în totalitate uitate, iar rostul lui vindecător nu mai este necesar a fi îndeplinit, nemaifiind cazuri de „*luare în căluş*”[11]. Simbolurile rituale: steagul, pelinul, usturoiul, masca de cal, ciocul din blană de iepure, beţele căluşarilor, falusul din lemn al Mutului, au devenit, prin pierderea semnificaţiei lor rituale, simple obiecte de recuzită, necesare punerii în scenă a spectacolului susţinut de căluşari. La fel ca şi acestea, şi accesoriile costumului: pinteni, clopoţei, zurgălăi, ciucuri şi-au pierdut sensul lor iniţial. Pentru cei care asistă la specatcolul Căluşului, ele sunt obiecte de podoabă, care

[8] Giurchescu 1984, 84; Giurchescu şi Bloland, *op. cit.*, 14.
[9] Giurchescu 1984, 84.
[10] *Idem*, 2001, 112.
[11] Pop 1998, 85.

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dau un aspect particular costumului purtat de dansatorii căluşari. O urmă a unui rit de iniţiere în zilele noastre se produce ca o acţiune comică: un căluşar, care se presupune că a încălcat regulile, este cărat pe umeri de alţi doi în timp ce Vătaful îl loveşte la tălpi cu unul din beţele dansatorilor[12].

În satele unde Căluşul se mai păstrează încă, el se performează în virtutea tradiţiei, ţăranii şi chiar căluşarii motivând că: „aşa s-a pomenit", „aşa e bine să se facă", „e obicei din bătrâni, din moşi strămoşi". Dar, în acelaşi timp, Căluşul este recreat şi pentru că îi sunt apreciate valenţele artistice, spectaculozitatea şi frumuseţea jocurilor, virtuozitatea dansatorilor şi chiar pentru comicul unor scene.

În Banat şi Transilvania (pe valea Mureşului), desacralizarea şi dezagregarea Căluşului a debutat ceva mai devreme, în primele decenii ale secolului al XX-lea, fiind totodată mai profundă şi mai rapidă. În aceste zone, latura artistico-coregrafică a căpătat un rol preponderent, iar semnificaţia străveche s-a pierdut, păstrându-se astăzi doar ca un joc de virtuozitate. El nu mai reprezintă decât un fapt artistic, executat într-un context ce nu mai are nimic în comun cu cel originar. Faptul că de aproape un secol este performat în aceste circumstanţe diferite, dovedeşte că şi-a creat deja o nouă tradiţie[13].

În sudul Olteniei şi în Muntenia, procesul de desacralizare, de disoluţie a ritului vindecării a fost mult mai lent, schimbările de semnificaţie, funcţionale şi structurale devenind profunde abia începând cu a doua jumătate a secolului al XX-lea sau, izolat, chiar mai târziu (Castranova, Amărăştii de Sus, Amărăştii de Jos)[14].

Mihai Pop, analizând jocul căluşarilor din Bârca şi Giurgiţa în vara anului 1958, nota că schimbarea de funcţie şi dezagregarea vechiului conţinut, se poate observa cu uşurinţă din câteva aspecte formale: nu s-au respectat cifrele fatidice în alcătuirea cetei, unii căluşari au lipsit zile întregi de la joc, fiind duşi la lucru şi revenind doar după ce şi-au terminat treaba. Nici sătenii şi nici căluşarii nu mai respectau zilele oprite, nemaifiind stăpâniţi de teama că încălcarea interdicţiei le-ar putea aduce nenorociri, nu se mai practica obiceiul în toate zilele îndătinate şi nu toată lumea primea Căluşul[15].

Fenomenul de tranziţie vizibil în Căluş, transformarea dintr-un act magic şi ritual într-un spectacol este un proces ce poate fi întâlnit şi în prezent. În unele sate, partea de ceremonial continuă încă să domine, ceea ce face să transpară vechile rosturi rituale ale obiceiului ascunse în spatele codurilor ceremoniale sau ale celor artistice[16], în timp ce în altele, el este privit ca un simplu spectacol, ce pune accent pe expresiile formale, dar nici una nu o exclude pe cealaltă.

[12] Giurchescu şi Bloland, *op. cit.*, 42.
[13] Larionescu 2002, 25.
[14] *Ibidem.*, 23.
[15] Pop, *op. cit.*, 85.
[16] Satele din sudul Olteniei (Dolj, Olt, Teleorman) şi din Muntenia (Ilfov, Ialomiţa, Vlaşca, Argeş).

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Horia Barbu Oprişan remarca: „Sub ochii noştri Căluşarii pierd din puritatea şi caracterele originare. Asistăm la un proces de destrămare a Căluşarilor şi simultan la unul de alterare totală. Nu mai au desfăşurarea spectaculoasă şi integrală de altă dată. Ca spectacol în sine au sărăcit. S-au înjumătăţit. Ceremonialul de altă dată al constituirii Căluşului, Legământul şi toate celelalte acţiuni care-l pregăteau după un rit străvechi, plin de farmec, mister şi fabulos, nu se mai fac. Elementul etnografic şi folcloric care constituia caracteristica Căluşului, acela care îl lega de trecutul îndepărtat, de originile sale milenare, nu mai există. Astăzi, Căluşarii dau o reprezentaţie pe scena Căminului şi, dacă mai au timp, fac un joc în sat, în centru. Aceştia sunt nişte căluşari stilizaţi”[17]. Pentru a continua: „Din spectacolul complex de altă dată, îmbrăcat în haina etnografică ce-i da atâta farmec, mister şi originalitate, n-a mai ramas decat jocul. Chiar jocul a luat forma care nu mai ţine de folclor decât printr-o interpretare foarte elastică. Astăzi, Căluşarii sunt un spectacol care se numeşte exhibiţionism coregrafic. Nu mai sunt Căluşarii de odinioară. Acum se fac Căluşari numai cu numele. Oficialităţile au jucat un rol negativ în acest proces de degradare şi distrugere. L-au grăbit”[18].

Alături de acest Căluş practicat în sat şi, deşi demitizat, rămas ancorat în tradiţie şi păstrând încă din aura sa misterioasă, mai putem vorbi de o altă „etapă” a evoluţiei obiceiului, prin excelenţă coregrafică şi care nu mai are nici o legătură cu conţinutul său ritual.

Datorită frumuseţii, virtuozităţii, dar şi caracterului pronunţat competitiv al dansurilor sale, Căluşul a trecut uşor şi cu succes pe scenă. În condiţiile actuale, dansul, după cum semnala Anca Giurchescu, s-a desprins treptat de obicei, devenind o manifestare de sine stătătoare în care funcţia predominantă este cea de spectacol. Acest proces nu este unul recent, el începând să se afirme mai puternic însă după primul război mondial, iar astăzi asistăm la o accentuată intensificare a sa[19].

Practicarea tot mai răspândită a Căluşului ca divertisment şi performanţă prezintă însă consecinţe negative, hotărâtoare asupra a ceea ce a mai rămas din modul său tradiţional de desfăşurare, prin limitarea sau ştergerea oricăror urme de conţinut ritual[20], dar şi prin îmbogăţirea cu noi elemente a părţii spectaculare a obiceiului ori prin perfecţionarea unor forme mai puţin cunoscute. Mai mult decât atât, astăzi, în numeroase localităţi, obiceiul, redus la componentele sale coregrafice şi muzicale, este executat doar ca spectacol scenic.

În principal, performanţa scenică acordă o mai mare pondere elementelor spectaculare, necesitatea de a suscita continuu interesul publicului, de a-l

[17] Oprişan 1969, 17.
[18] *Ibidem*, 100.
[19] Giurchescu 2004, 25, nota 26.
[20] Se cunosc nenumărate cazuri în care căluşarii joacă în sat fără a ridica şi a îngropa Steagul.

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impresiona afectiv, de a-l capta, determină o selectare chiar a conţinutului de mişcare al dansurilor, potenţarea efectelor ritmice sonore, accelerarea tempoului de execuţie şi creşterea dinamicii pe seama creşterii intensităţii în execuţia mişcării, ca şi a folosirii, uneori exagerate, a strigăturilor care subliniază şi susţin totodată momentele de înaltă tensiune[21].

Eliberate de restricţiile regulilor rituale, dansul, muzica, costumele şi scheciurile dramatice au devenit libere să dezvolte linii inovative şi artistice. Între modul tradiţional de desfăşurare al obiceiului şi reprezentarea pe scenă există o serie de diferenţe esenţiale, structurale şi funcţionale:

1. Raportul dintre coordonatele temporale şi obicei este schimbat. Jocurile căluşăreşti sunt executate ca spectacol pe tot parcursul anului fără a se ţine cont aproape deloc de datele tradiţionale în care ritualul era îndeplinit. De asemenea, un alt element al schimbării raportului dintre obicei şi timp în cadrul obiceiului-spectacol este cel al duratei. În condiţiile scenizării nici durata reală a obiceiului şi nici secvenţele ceremoniale nu pot fi păstrate. Sunt selecţionate, de cele mai multe ori pe baza unor criterii subiectiv-estetice, numai acele părţi care sunt semnificative pentru spectacol, ceea ce duce la golirea lui de sens. Aşadar, după cum concluziona Mihai Pop: „Prezentarea obiceiului sub formă de spectacol necesită deci adaptarea lor la noi coordonate temporale. [...] Spectacolele au criterii temporale proprii, durată limitată şi nu se reiterează, ci se reiau în cu totul alte condiţii”[22].

2. Tradiţional, obiceiul se desfăşoară în locuri marcate: la răscruce, între hotare, în curţile oamenilor etc. Dincolo însă de conotaţiile speciale ale fiecărui loc, acestea nu au nici limitele şi nici organizarea scenică în care se performează în mod obişnuit spectacolele, oferind o variabilitate mult mai mare.

Un alt aspect deosebit de important în raport cu coordonatele spaţiale este contactul dintre cei care performează obiceiul şi cei care îl receptează. Tradiţional, acest contact este foarte strâns, în aşa fel încât se poate spune că cei pentru care se face obiceiul participă în unele momente efectiv la acesta (Hora Căluşului). Nu numai distanţa este alta, ci şi calitatea participării[23].

3. Numărul participanţilor, în trecut fix, poate varia fără limită în condiţiile spectacolului scenic. De asemenea, formaţiile artistice de Căluş au în componenţă de multe ori femei şi copii[24].

4. Modificarea funcţionalităţii dansului de la ritual la spectacol aduce o serie de transformări şi în modul de desfăşurare, structura şi stilul de execuţie a dansurilor. Anca Giurchescu le amintea pe cele mai semnificative:

[21] Giurchescu 1971, 371.
[22] Pop 1999, 211.
[23] *Ibidem*, 213.
[24] Rolul lor este numai unul exclusiv artistic, neparticipând la actele de ceremonial, la *Legarea Steagului* sau la prestarea *Jurământului*, acolo unde acestea se mai păstrează.

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a. Modificările în suita dansurilor căluşăreşti se manifestă fie prin inversarea succesiunii dansurilor, fie prin treptata dispariţie a unora din ele. Dispar în special dansurile cu funcţie rituală predominantă şi care nu conţin elemente spectaculare deosebite. În unele cazuri, pentru mărirea gradului de spectaculozitate al manifestării, dansurilor căluşăreşti li se adaugă creaţii coregrafice preluate din repertoriul curent al Horei Satului[25].

De obicei, forma dansului a devenit o alternare a *plimbării* sau segmente de mers şi *mişcări* pe loc. În scopul creării unui anumit ritm şi a intensificării tensiunii spectacolului scenic, din repertoriul de *mişcări* şi *plimbări* existente sunt selecţionate doar cele ce au un grad mai mare de spectaculozitate, succesiunea lor fiind impusă de principiul creşterii dinamice. Dansurile se transformă continuu, evoluând spre forme cristalizate de mare virtuozitate şi capătă valoarea unei manifestări artistice de sine stătătoare.

Formaţia dansurilor, iniţial cerc sau semicerc, se modifică, desenul coregrafic descriind formele geometrice cele mai diverse. În execuţie creşte omogenitatea, viteza şi amplitudinea mişcărilor. Sunt eliminate sau mult atenuate elementele expresive, acţiunile mimice şi gestuale, deoarece ele şi-au pierdut aproape total semnificaţia rituală[26].

b. Crearea de noi variante reprezintă modul tipic de înnoire a dansurilor căluşăreşti. Elaborarea de noi *mişcări* sau *plimbări*, pe baza unor procedee tradiţionale, foloseşte ca material cinetic motive existente în Căluş sau motive *străine* aparţinând altor dansuri de virtuozitate. În orice caz se observă că noile variante urmăresc în primul rând accentuarea componentei artistice – spectaculare a dansului.

c. Transformarea dansului în condiţiile spectacolului scenic a impus modificări esenţiale în desfăşurarea şi modul de prezentare a dansului. Căluşarii, odată întruchipări ale unor forţe supranaturale şi participanţi direcţi la actul ritual, devin simpli actori pentru un anumit public[27]. În această nouă situaţie dansatorii nu mai execută întreaga gamă de mişcări în scopul vindecării bolii sau a invocării fertilităţii, ci oferă celor din jur un spectacol ce pune în valoare virtuozitatea individuală. Jucătorii, fără a mai fi în timpul dansului apăsaţi de sensul său magic, capătă treptat o poziţie obiectivă, activă, creatoare faţă de jocul al cărui interpreţi sunt, caută să-l facă cât mai spectaculos, îi organizează mişcările şi chiar îl îmbogăţesc cu figuri noi, de mare virtuozitate ce nu mai au nici o corespondenţă cu vechiul ritual[28].

[25] Giurchescu 2004, 23–24.
[26] *Ibidem*, 24.
[27] *Ibidem*.
[28] Giurchescu 1960, 67.

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Cercetările de teren privind Căluşul demonstrează inegala formă de conservare, deci de performare a obiceiului. Dacă în multe localităţi, altădată cu veche tradiţie, obiceiul a putut fi doar reconstituit, într-o localitate cum este Costeşti (jud. Argeş) având atributele administrative, culturale şi sociale ale unui centru urban, Căluşul se prezenta, în ultimele decenii ale secolului al XX-lea, nu numai ca un joc de virtuozitate şi pitoresc, realizat de echipa Căminului Cultural, ci ca un obicei complex, actualizat an de an, ce îşi păstrează elementele tradiţionale de structură, mobilizând cu acelaşi interes grupul de actanţi cât şi colectivitatea[29].

Pe de altă parte, în Transilvania situaţia este semnificativ diferită. Aici, deşi dispariţia Căluşului este aproape totală, rezultat al pierderii rostului său ritual, aceasta nu a însemnat şi părăsirea jocului de sorginte căluşerească. Jocurile de mare virtuozitate, ca de pildă *jocul fecioresc cu bâtă*, care a pendulat din contextul ritual în cel profan, au continuat să fie practicate curent[30]. Chiar dacă ceata căluşerească şi-a pierdut semnificaţiile rituale, ecourile ei s-au prelungit pe plan coregrafic. Astfel, mult timp elementele coregrafice de mare virtuozitate erau considerate ca „figuri căluşereşti", iar cei mai înzestraţi interpreţi ai jocului fecioresc erau comparaţi cu căluşarii. În ultimă instanţă se poate afirma că, pierzându-şi individualitatea, jocul căluşeresc şi-a transferat virtuţile către jocul fecioresc[31].

Evoluţia Căluşului:

Evoluţie	Locul desfăşurării	Timp / Durata
Ritual	Sat	Rusalii / 3, 6, 7, 10 zile
Ritual	Oraş (căluşari dansând pe străzi, în pieţe)	Rusalii / 3 zile sau cât hotărau membrii cetei
Pe scenă, cu elemente de ritual	Festivalurile Căluşului (o scenizare a ritualului)	Rusalii sau oricând vara / cât era necesar spectacolului
Pe scenă, fără elemente de ritual	Oriunde	În orice perioadă / cât era necesar spectacolului

Includerea Căluşului, de către UNESCO, la sfârşitul anului 2005 pe lista patrimoniului imaterial universal constituie, ca şi pentru monumentele istorice înscrise pe listă similară, o şansă pentru supravieţuirea sa. Recunoaşterea vine într-un moment în care, acolo unde nu a dispărut deja, obiceiul este transformat într-un produs comercial, de scenă, tot mai puţin autentic şi viu.

Potrivit lui Koichiro Matsuura, directorul general al UNESCO, aceste capodopere au fost alese de un juriu internaţional format din 18 membri, dintr-un total de 64 de candidaturi naţionale şi multinaţionale înaintate organizaţiei pentru proclamarea bienală. Ea are loc pentru a treia oara, după sesiunile din 2001 şi 2003,

[29] Comănici 1980, 135–142.
[30] Costea 1996, 65.
[31] *Ibidem*.

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şi este menită să evidenţieze obiceiuri şi tradiţii, muzică, dansuri, ritualuri, mitologie, cunoştinţe şi practici, meşteşuguri tradiţionale, precum şi spaţii culturale.

Alegerea membrilor UNESCO nu a fost întâmplătoare. Căluşul, ca formă particulară, perfect individualizată apare doar în spaţiul românesc şi poartă pecetea unei originalităţi incontestabile. De asemenea, obiceiul s-a făcut remarcat încă din Evul Mediu datorită caracterului spectaculos al dansurilor sale. Datorită acestor valenţe, Căluşul a ajuns sa fie recunoscut drept un simbol identitar, o notă distinctivă a românilor[32].

Cu această funcţie, el este menţionat pentru prima dată de austriacul Franz Joseph Sulzer în lucrarea *Geschichte des Transalpinischen Daciens,* publicată la Viena în 1782.

Pentru secolul al XIX-lea informaţiile despre Căluş sunt în special din Transilvania. Aşa cum am mai arătat, reprezentanţii Şcolii Ardelene au căutat să găsească în această practică argumente ale latinităţii poporului român, considerându-l o rămăşiţă a colli-salii-lor romane[33]. Demonstrarea originii latine a românilor era un argument indiscutabil în lupta lor pentru unire şi independenţă.

Obiceiul a fost revitalizat apoi de către Asociaţia pentru Cultură Naţională a Românilor din Transilvania (ASTRA), dar el a fost mutat în timpul sărbătorilor de Crăciun şi An Nou. ASTRA şi-a asumat lansarea dansului de Căluş ca emblemă a românilor prezentând acest obicei în spectacole.

O formă stilizată a dansului Căluşului a început să fie executată la diferite ocazii festive în Transilvania. Pentru prima dată, a fost valorificat scenic la 13 iunie 1885 când, la îndemnul lui George Barițiu, Ştefan Emilian şi Iacob Mureşan au fost aduşi la Braşov jucătorii Ion Căluşeriu şi Simion Ciugudeanu din Arieş. Pe baza dansului învăţat de la ei, a fost creat jocul *Romanul (Căluşerul), Bătuta (Bătuta Căluşerilor)* şi *(Banu Mărăcine)*[34], jucate apoi în Transilvania la toate manifestările culturale româneşti şi răspândite, într-o formă nouă, şi la sate. Prin reintrarea în mediul folcloric aceste dansuri s-au diversificat într-un număr mare de variante.

Mai putem aminti pentru secolul al XIX-lea descrierea realizată de Dosza Daniil. Deşi autorul, în lucrarea istorică *Kornis Ilona*, plasează desfăşurarea jocurilor căluşereşti în vremea lui Mihai Viteazu ca un element necesar contextului dramatic, semnificativ pentru noi este însă că în Transilvania la jumătatea veacului al XIX-lea, Căluşerul era considerat un obicei specific al românilor, demn de a fi executat la ocaziile importante. Descrierea este inspirată fără îndoială de cunoaşterea de către scriitor a acestui dans din repertoriul cetelor transilvănene aşa cum se înfăţişa el în secolul al XIX-lea[35].

[32] Ghinoiu 1997, 40.
[33] Giurchescu 1992, 37.
[34] Breazu 1945, IX–XI.
[35] Burada 1975.

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Anca Giurchescu analizând comparativ Căluşul din Câmpia Dunării şi Căluşerul din Transilvania, constata că stadiul avansat al deritualizării acestuia din urmă şi *migrarea* lui în cadrul obiceiurilor de iarnă are motivaţii istorice şi cultural-politice: „Ca o tendinţă generală în estul şi sud-estul Europei, elitele culturale, căutând simboluri ale identităţii naţionale, s-au orientat înspre tradiţiile dansurilor populare. Astfel, la mijlocul secolului al XIX-lea, românii au ales Căluşerul ca un simbol al identităţii naţionale”[36].

Dintr-o perspectivă romantică, Căluşerul a fost interpretat ca o afirmare a rădăcinilor latine ale românilor. Variantele stilizate interpretate în cadrul urban au fost apoi din nou „folclorizate” şi integrate în repertoriul cetei de feciori, datorită calităţilor artistice.

Dansul căluşerilor este o prezenţă permanentă în viaţa culturală a Transilvaniei de dinainte de primul război mondial, o manifestare artistică prin care românii îşi afirmă virtuţile naţionale proprii faţă de celelalte popoare din Austro-Ungaria[37]. Se poate vorbi de o *renaştere* a dansului popular în sensul că în această perioadă şi în acest mod el a devenit unul din instrumentele de luptă ale românilor pentru păstrarea conştiinţei naţionale şi a ideilor de unitate etnică şi spiritualitate latină[38].

Ritualul, cu tot alaiul practicilor sale magice, a rămas în sat, legat de sărbătoarea Rusaliilor, în vreme ce spectacolul detaşat de ritual, a strălucit în acelaşi timp pe scenă, în orice moment al anului[39]. Căluşul a avut aşadar, un timp îndelungat, o dublă viaţă. Încetul cu încetul însă, în conştiinţa populară credinţa în miracole şi magie s-a diminuat. Ritualul s-a estompat şi a dispărut, iar scena a făcut să se îmbogăţească partea lui spectaculară. În evoluţia culturii populare în general, a obiceiurilor tradiţionale în special, s-a produs un proces de mutaţie funcţională treptată. Datorită transformărilor din societate au rămas vii practicile care au avut posibilitatea să se golească de fondul magic, ritual şi sacral, schimbându-şi funcţia şi accentuându-şi valenţele ceremoniale şi artistice, trecând în sfera spectacolului[40].

Faptul că din primele decenii ale sec. al XX-lea căluşarii argeşeni au reprezentat România în confruntările europene a stimulat în mod evident dezvoltarea obiceiului ca spectacol[41]. Echipa Căluşarilor din Pădureţi (Argeş) obţine marele premiu în 1935 la concursul de la Londra, organizat de International Folk Music Council. Harry Brauner povesteşte triumful înregistrat în arena Albert Hall: „Bătând din palme sacadat, miile de spectatori strigau: „Hălăisa! Hălăişa!”. Ocolind încă o dată în sărituri mari arena, Căluşarii părăsiră sala în aclamaţiile unui public aproape isterizat”[42].

[36] Giurchescu *op. cit.*, 37.
[37] Pop, *op. cit.*, 118.
[38] Bucşan 1982, 89.
[39] Moldoveanu 1979, 179.
[40] *Ibidem*, 180.
[41] Pop 1938.
[42] Brauner 1979, 56.

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Există suficiente informații ce atestă că până în anii 1940–1950 nu se putea vorbi despre un Căluş şlefuit şi încărcat de elemente valoroase stilistic în multe din zonele şi satele care azi cuceresc aplauzele publicului. În perioada comunistă, Căluşul a fost redus la un dans practicat de bărbați şi prezentat în spectacole sau la evenimente oficiale. În timpul perioadei *revoluționare* a regimului comunist (1950–1960), obiceiul a fost trecut în plan secund, datorită atât conținutului *mistic* al obiceiului, cât şi datorită mesajului puternic naționalist pe care îl căpătase. Începând însă de la jumătatea deceniului al şaselea, odată cu schimbarea mesajului naționalist al partidului, Căluşul a fost revigorat, devenind chiar o parte obligatorie a spectacolelor scenice populare. El a câştigat prestigiu printre alte tradiții populare româneşti, dar cu prețul transformării sale, doar dansul fiind reprezentat pe scenă în cadrul „Cântării României". Chiar dacă regimul comunist l-a desacralizat şi l-a rupt de contextul său tradițional oferindu-i o nouă identitate, totuşi l-a păstrat ca marcă identitară şi i-a asigurat prin aceasta supraviețuirea.

În sate, obiceiul a continuat să fie practicat într-o formă destul de apropiată de cea originară. Semnificativ este faptul că aceiaşi oameni jucau dansul şi pe scenă. Cercetările efectuate de specialişti în județele Olt, Argeş, Giurgiu, Brăila, Teleorman, Vâlcea au relevat existența mai multor centre de conservare şi transmitere a acestui obicei. O situație excepțională se întâlneşte în unele sate din județul Olt unde se găsesc trei generații de Căluşari.

Nu putem să vorbim de istoria recentă a Căluşului fără să ne referim la festivalul organizat în județul Olt, la Caracal, din 1969. Această manifestare anuală are scopul de a asigura întâlnirea grupurilor care păstrează tradiția Căluşului. La festival participă cete autentice de căluşari şi ansambluri profesioniste conduse de un coregraf care insistă asupra frumuseții şi spectaculozității dansului[43].

Migrația spre centrele industriale din perioada comunistă a dus la depopularea satelor. În anii '90 ai secolului trecut am asistat la un fenomen de reîntoarcere, ceea ce a dus din punct de vedere social la apariția unor probleme de reconversie profesională şi reintegrare culturală. Totuşi, ca un aspect pozitiv poate fi menționat faptul că mulți bărbați şi copii au fost inițiați în această perioadă în practicarea ritualului. În Muntenia şi Oltenia, în prezent se desfăşoară un proces similar celui din Transilvania de la jumătatea veacului al XIX-lea, deşi lipsit de motivația națională, de readucere a Căluşului, în special a dansurilor căluşăreşti, de pe scenă în sat, de refolclorizare a sa.

În contextul executării pe scena festivalurilor naționale sau internaționale şi competițiilor, Căluşul este prezentat fie ca un dans, fie ca un „ritual" stilizat.

[43] De obicei, festivalurile Căluşului erau programate în aceeaşi perioadă cu ritualul şi ca o încercare de a-l substitui. Aceste tentative, în unele cazuri însă, erau sortite eşecului. Astfel, în satul Optaşi, jud. Olt, erau pregătite două echipe de căluşari, una pentru a merge la festival şi cealaltă continuatoare a ritualului în forma tradițională.

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Versiunea de scenă pune accentul pe virtuozitatea şi calităţile dansului. În prezent această versiune este folosită pentru a înlocui Căluşul tradiţional, care este, prin comparaţie, foarte sărac şi mai puţin artistic. În diferite moduri Căluşul este folosit, câteodată exagerat, de mijloacele media ca un simbol al unităţii şi vitalităţii culturii române[44].

În prezent, în contextul mondializării şi reformelor structurale ale societăţii româneşti este necesar a se conserva, păstra şi promova Căluşul. Însă, cum s-a văzut, componentele coregrafice au devenit dominante. De altfel, obiceiul este în pericol de a pierde sensurile sale primordiale: elementele magico-rituale de stimulare a fertilităţii, iniţierea militară, funcţiile apotropaice, cultul cabalin. Instituţia pe care el se bazează – comunitatea masculină – nu mai are aceeaşi coeziune şi funcţionalitate. Pe de altă parte, tânăra generaţie nu-l mai percepe ca pe o valoare identitară definitorie şi nu mai înţelege multiplele semnificaţii ancestrale, acceptându-l totuşi ca un spectacol.

Fondul mitico-ritual al Căluşului, vizibil în structurile ceremoniale este în prezent în pericol de dispariţie.

Pentru a împiedica aceasta, ar trebui luate o serie de măsuri:

- imortalizarea fenomenului în documente foto, audio, video;
- susţinerea şi încurajarea transmiterii tradiţiilor de la o generaţie la alta;
- necesitatea circulaţiei libere în format digital a informaţiilor şi materialelor care există deja în arhive prin realizarea unui portal web poliglot;
- publicarea de sinteze şi studii;
- revigorarea şi revitalizarea obiceiului în regiunile unde acesta se practica pe baza înregistrărilor existente.

Acestea sunt totodată şi câteva din obiectivele „Comisiei Naţionale pentru Salvgardarea Capodoperei Patrimoniului Cultural Imaterial „Tradiţia Căluşului” ” care a luat fiinţă printr-un ordin dat de Ministerul Culturii şi Cultelor în urma introducerii obiceiului pe lista Unesco. Această comisie, condusă de prof. dr. Ion Ghinoiu, a elaborat un Program Naţional de Salvgardare.

Prin valorificarea datelor arhivate se va putea realiza revitalizarea fundamentului de credinţe şi practici şi, totodată, o punere în scenă adecvată pentru a nu se pierde valoarea sa şi a i se conferi în viitor un loc distinct în cultura universală.

Motto-ul Concursului Naţional al Copiilor „Căluşul românesc” desfăşurat la Slatina sintetizează cel mai bine ceea ce este în prezent şi cum este perceput obiceiul: „Căluşul a devenit sărbătoare. Este cea mai înaltă valoare artistică a folclorului românesc. Este simbolul românesc pe scenele lumii, iar secătuirea lui ar fi un păcat naţional”. Aşadar, putem concluziona că „fără a ignora universalitatea

[44] Giurchescu şi Bloland, *op. cit.*, 58.

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valorică şi semantică a Căluşului, românii socotesc dansul şi uneori obiceiul acesta ca fiind emblema lor prin excelenţă, emblemă ce îi racordează deopotrivă la istorie şi la mit"[45].

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EARLY EURO-PONTIC CULTURE AMBIENCE AND PATTERN. IN MEMORY OF EUGEN COMŞA. VERSITA. LONDON

Compiled and edited by Lolita NIKOLOVA,
Alexandra COMŞA and Marco MERLINI (in print)

This scholarly book offers new approaches to archaeology of Eurasia, in particular the Western Pontic region. It is dedicated to the prominent Romanian scholar Eugen Comşa, who departed shortly after we celebrated globally his 85th birth anniversary in September 2008. The selected contributions were either submitted especially for the volume or were initially presented at the 13th Annual Conference of the European Association of Archaeologists in Zadar, Croatia (September 2007).

Key words: ancient music, Bronze Age, Chalcolithic, Circumpontica, Copper Age, Early Iron Age, Eurasia, Neolithic, neolithization, phalerae, prehistoric burial rites, prehistoric chronology, Prehistory, Romanian Prehistory, Tărtăria tablets, wealth.

Authors: Vîtalie Bârca, John Chapman, Tinaig Clodoré-Tissot, Alexandra Comşa, Adam N. Crnobrnja, Branimira Dimitrova, Pavel M. Dolukhanov, Bisserka Gaydarska, Dragoş Gheorghiu, Tom Higham, Noah V. Honch, Anastasia Hourmouziadi, Fotis Ifantidis, Giorgi Leon Kavtaradze, Cornelia-Magda Lazarovici, Gheorghe Lazarovici, Sabin Adrian Luca, Marco Merlini, Alexandru Morintz, Lolita Nikolova, Cătălin Nicolae Pătroi, Cristian Schuster, Cătălina Semuc, Michel Séfériadès, Zoran Simić, Valeriu Sîrbu, Vladimir Slavchev, Cosmin Suciu, Henrieta Todorova, Alenka Tomaž, Jak Yakar, and Yordan Yordanov.

The book starts by introducing Eugen Comşa as a scholar and a person. In the main section the scholarly works encompases a variety of research on Eurasian archaeology, with special reference to the Western Pontic region.

Anthropological (interpretive) archaeology is represented by new studies on the Neolithic production mode and on the theory of social status. A special research on building and combustion of prehistoric dwellings bridges the theoretical, applied and experimental archaeologies, bringing to light a synthesis of the recent state of research of this topic and original theoretical and field insights.

A large body of contributions approaches different problems of the chronological archaeology – from general chronological scheme updates (the Caucasus) to a detailed contextual analysis of the renowned Tărtăria Tablets. The interpretations of the data may result in discussions and revisions, but the editors

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preferred to keep the original thoughts and concepts of the authors as a stage in better understanding of Balkan Prehistory in terms of more detailed chronological sequence of cultural sets of evidence.

The field archaeology is represented by excavations in different parts of the Western Pontic region and includes general reports of new discoveries including gold finds from Cheile Turzii and brief excavation results from well-known sites like Dispilio.

The last group of archaeological approaches comprises essential contributions to the thematical archaeology – from updates to studying of hunter-gatherers in the Northwest Pontic Region and the Copper Age metallurgy to the prehistoric settlements and burial rites in the Dobroudja, Bronze Age musical instruments and phalerae from the 2nd – 1st century BC.

Since the authors share the best of their knowledge in very key fields of archaeology research of Western Pontica and beyond, the book may be seen as an essential new branch of the tree of academic knowledge on ancient Eurasia.

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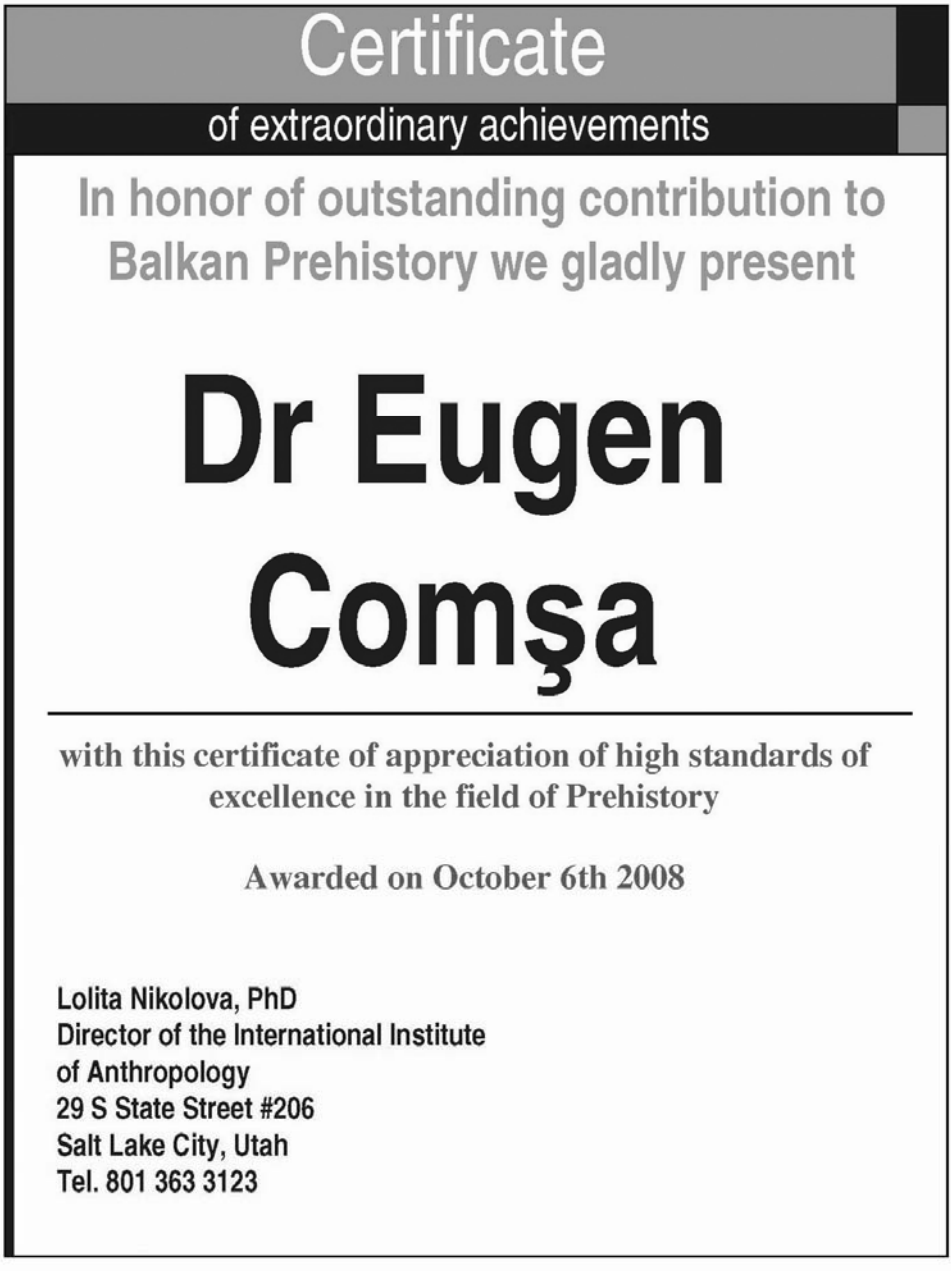

Certificate

of extraordinary achievements

In honor of outstanding contribution to Balkan Prehistory we gladly present

Dr Eugen Comşa

with this certificate of appreciation of high standards of excellence in the field of Prehistory

Awarded on October 6th 2008

Lolita Nikolova, PhD
Director of the International Institute
of Anthropology
29 S State Street #206
Salt Lake City, Utah
Tel. 801 363 3123

Fig. 1 – Certificate of extraordinary achievements.

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THE FIRST EXHIBITION
(SELECTIVE PICTURES)

RECONSTRUCTION IN THE FIELD AND THE MODEL OF A NEOLITHIC DWELLING FROM RADOVANU

PRIMA EXPOZIŢIE
(IMAGINI SELECTIVE)

RECONSTITUIREA IN TEREN ŞI MACHETA UNEI LOCUINŢE NEOLITICE DE LA RADOVANU

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Fig. 1 – Discussion about the Neolithic dwelling from Radovanu.

Fig. 2 – Preparation of the ground for the dwelling foundation.

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Fig. 3 – Raising the wooden structure of the dwelling.

Fig. 4 – Making the walls of adobe and daub.

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Fig. 5 – The final walls of the dwelling.

Fig. 6 – Domestic pottery inside the dwelling.

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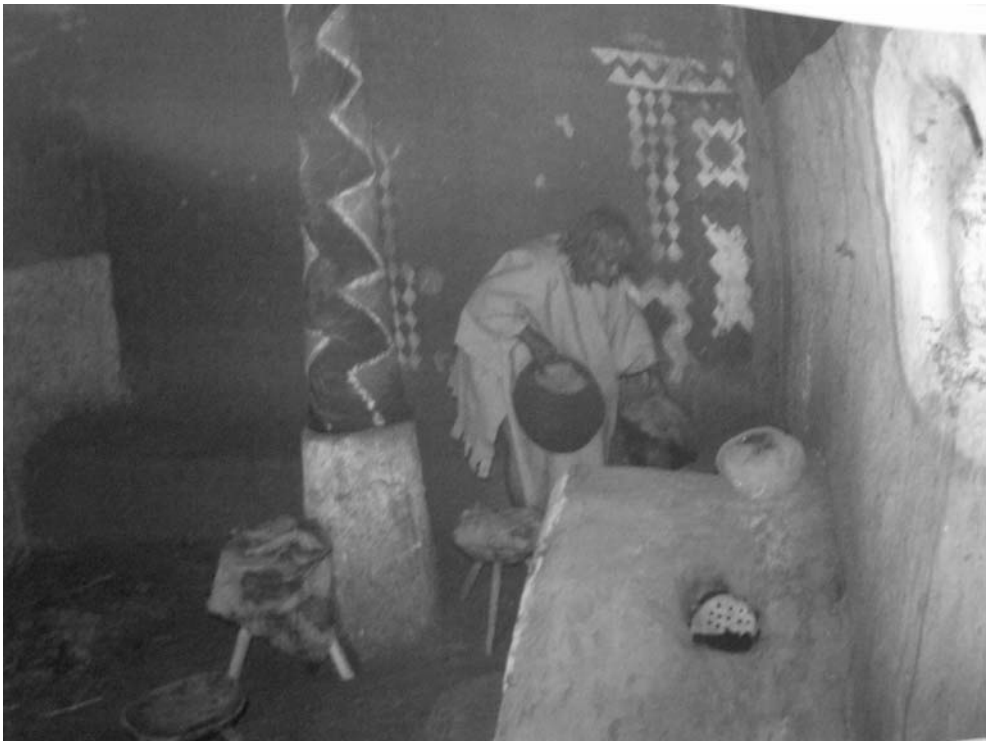

Fig. 7 – Woman preparing the food inside the dwelling.

Fig. 8 – The roof added to the structure.

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Fig. 9 – Decoration of the outside walls of the dwelling.

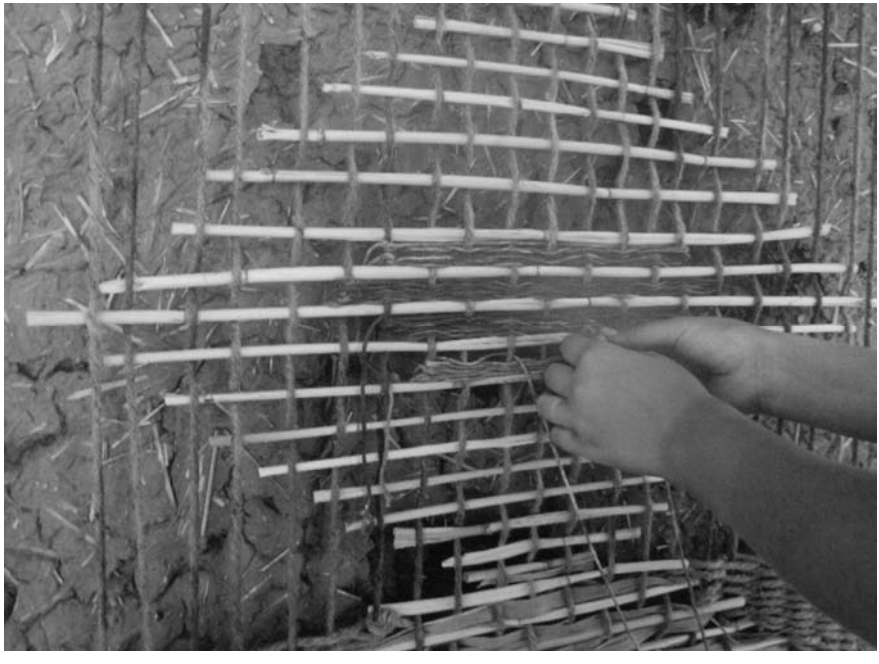

Fig. 10 – Initial phase of wall making.

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Fig. 11 – Final phase of making the walls of the dwelling.

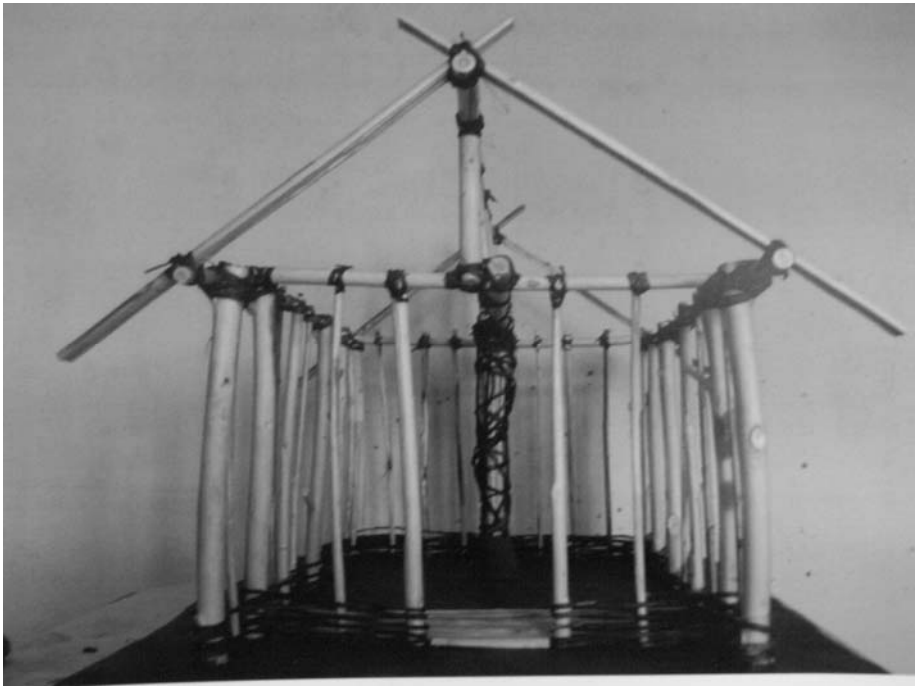

Fig. 12 – Preparation of the wooden structure of the model – first phase.

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Fig. 13 – Preparation of the wooden structure of de model – second phase.

Fig. 14 – Making the roof.

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Fig. 15 – Final structure of the roof.

Fig. 16 – The model of a Neolithic dwelling from Radovanu.

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THE SECOND EXHIBITION
(SELECTIVE PICTURES)

SYNTHESIS OF THE SPIRITUAL AREA
BY IRINA IONELIA-IONESCU

A DOUA EXPOZIŢIE
(IMAGINI SELECTIVE)

SINTEZĂ A SPAŢIULUI SPIRITUAL
DE IRINA IONELIA-IONESCU

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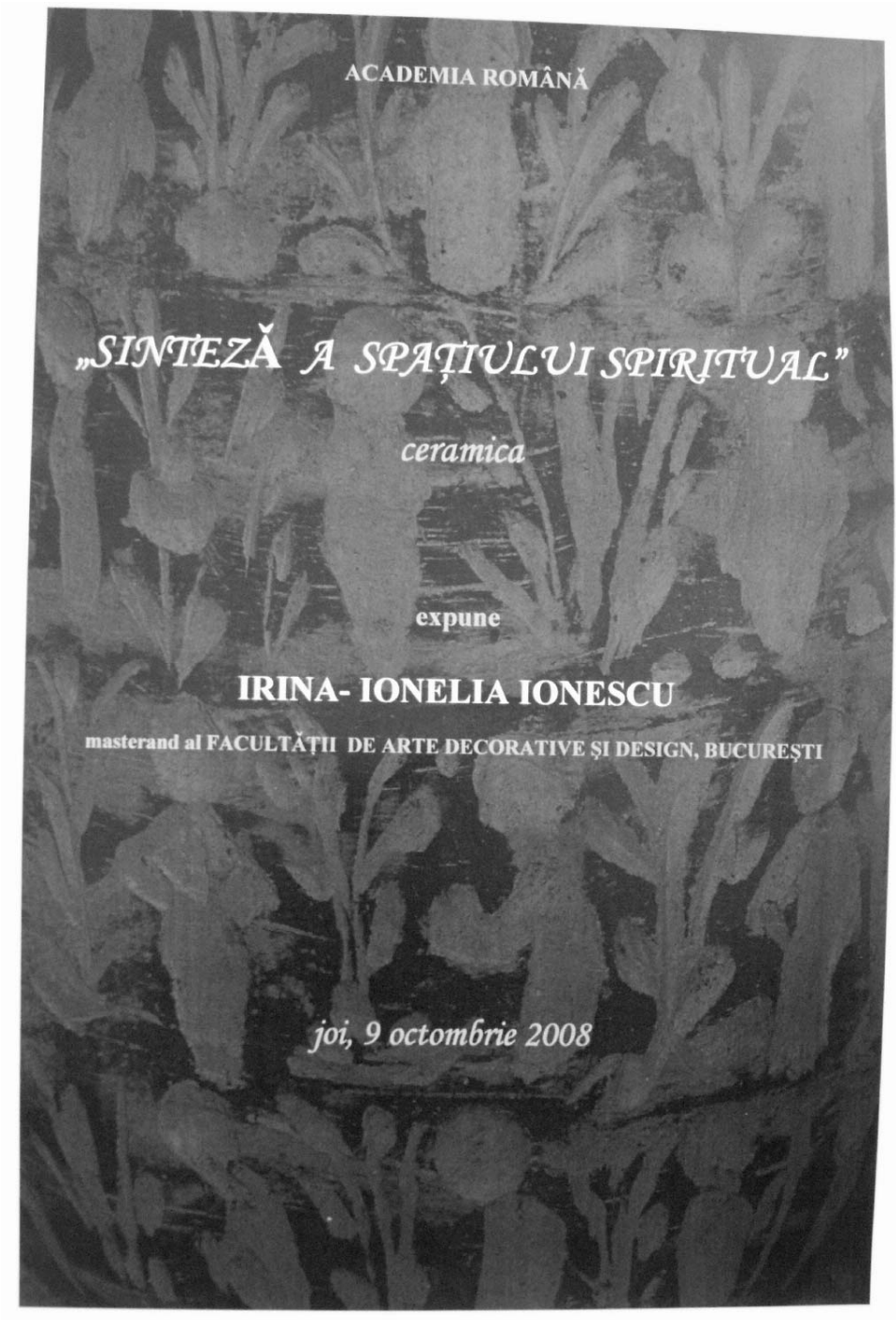

Fig. 1 – Poster of the exhibition.

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Fig. 2 – Modern interpretations of the space.

Fig. 3 – Another interpretation of the space.

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THE THIRD EXHIBITION
(SELECTIVE PICTURES)

EUGEN COMŞA. 63 YEARS OF ARCHAEOLOGY

A TREIA EXPOZIŢIE
(IMAGINI SELECTIVE)

EUGEN COMŞA. 63 DE ANI DE ARHEOLOGIE

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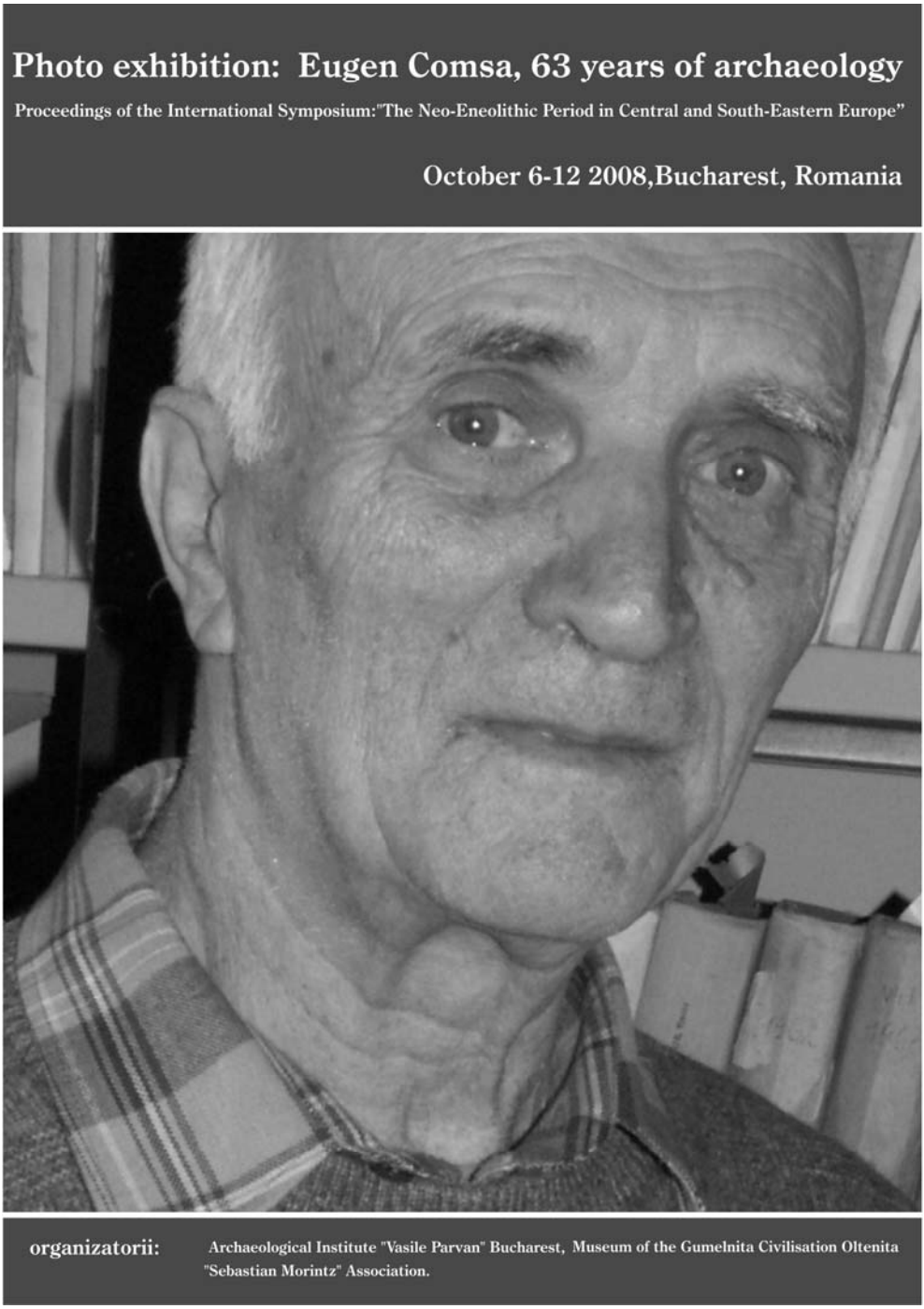

Fig. 1 – Poster of the third exhibition – Eugen Comşa,
63 years in the field of archaeology.

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Fig. 2 – General view of the exhibition.

Fig. 3 – Some of the books
published by Eugen Comșa.

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Fig. 4 – Manuscripts and drawings made by Eugen Comșa.

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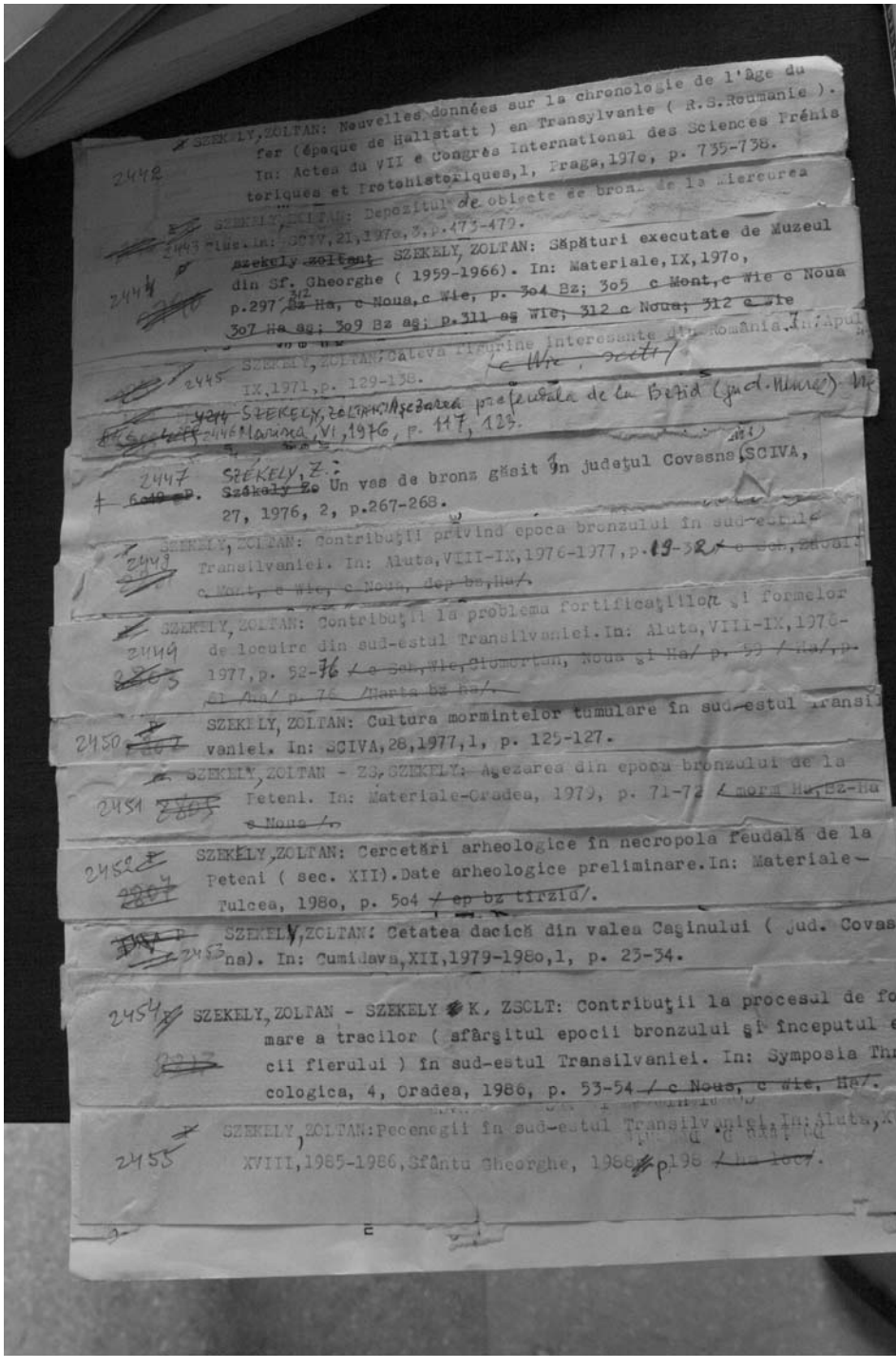

Fig. 5 – Page from one of the bibliographies conceived by Eugen Comșa, all made by hand without using the computer.

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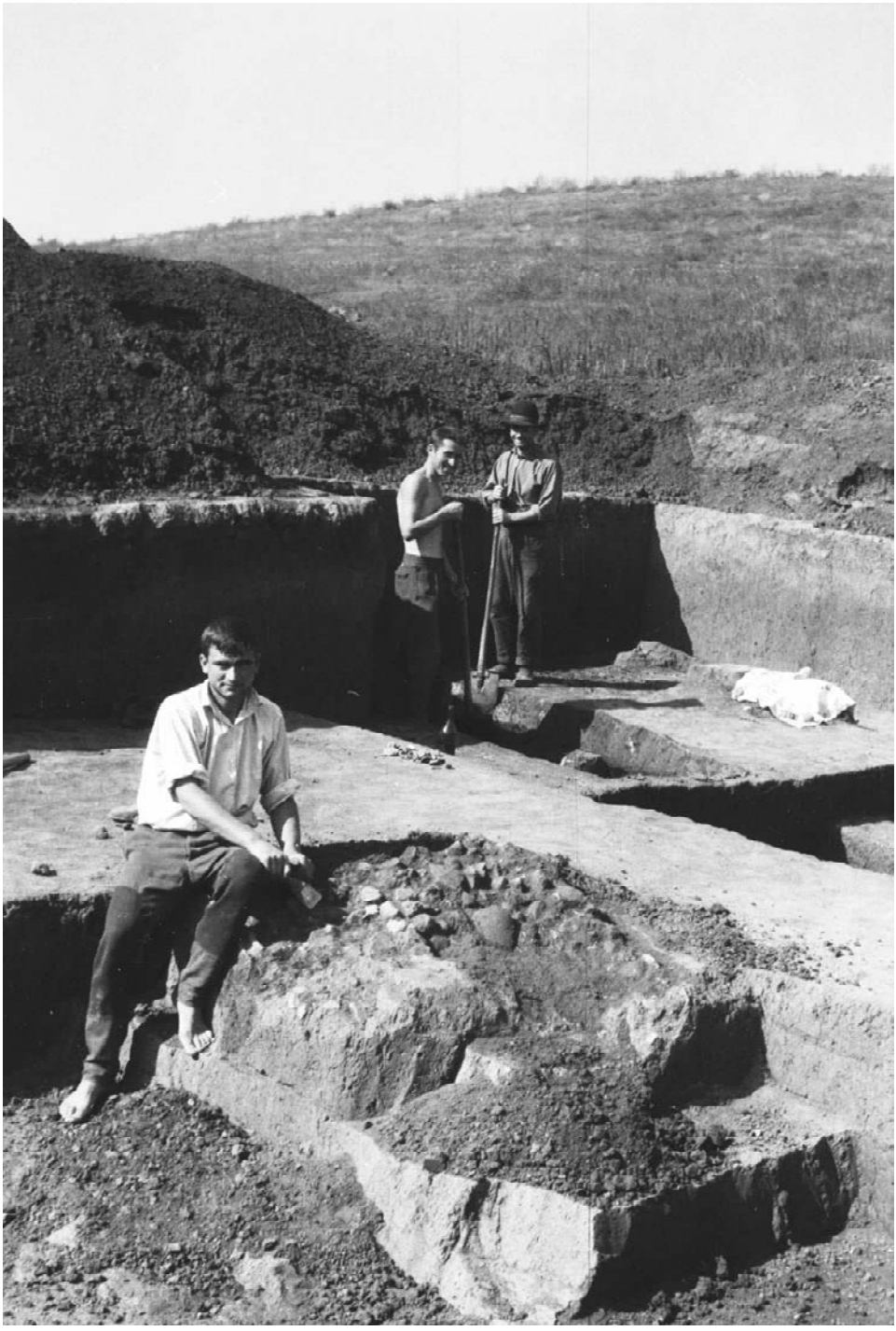

Fig. 6 – Excavation from Radovanu.

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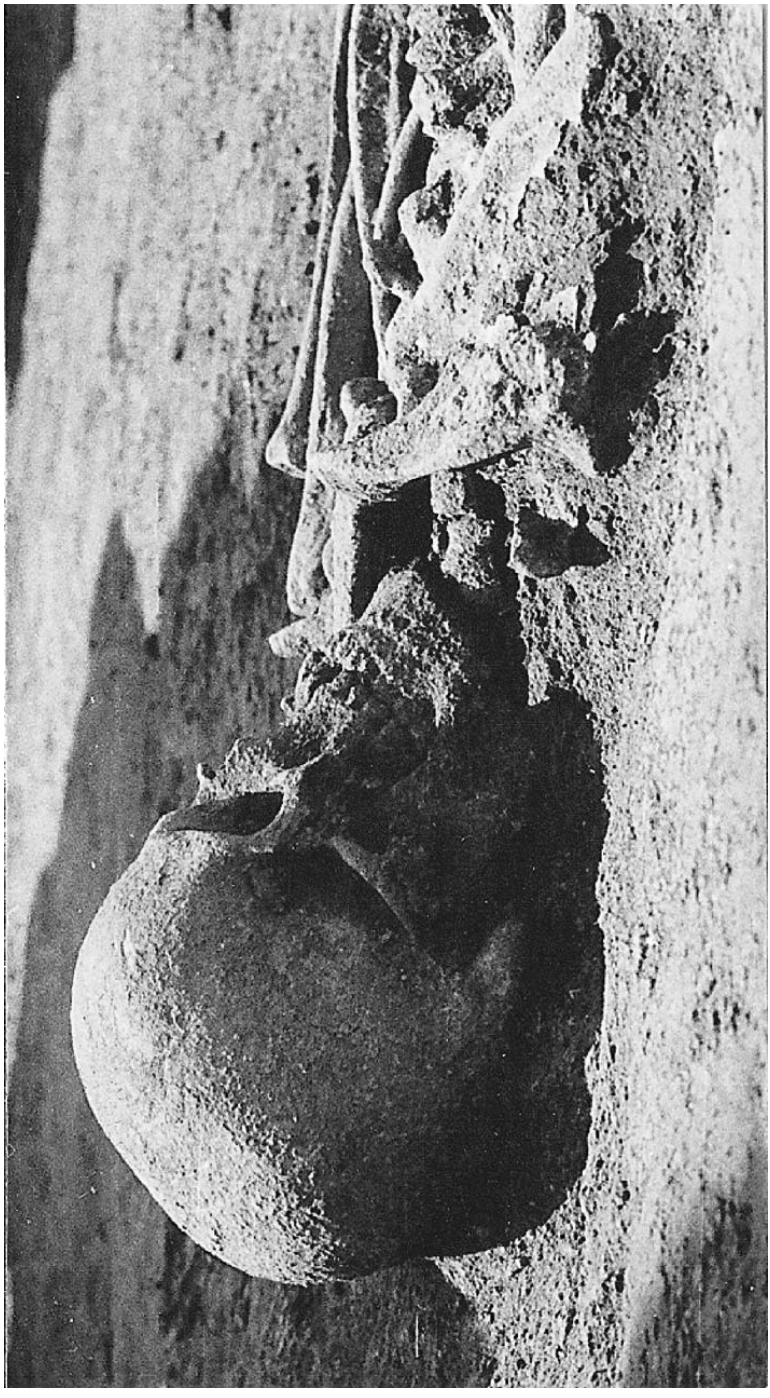

Fig. 7 – Skeleton discovered at Vărăşti – Grădiştea Ulmilor.

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Fig. 8 – Excavation from Vărăşti – Grădiştea Ulmilor.

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MAYOR'S SPEECH AT THE FESTIVITY OF AWARDING THE TITLE OF CITIZEN OF HONOR TO DR. EUGEN COMŞA

Dear Guests,

It is a great pleasure to us, the citizens of the Radovanu village, on whose behalf I speak, to be involved in such an important scientific meeting, like the symposium organized for the occasion of the 85th birth anniversary of Dr. Eugen Comşa.

Radovanu is a place where many vestiges had been uncovered, both by him and by other scholars, and the results of their investigations, as far as I know, had an important impact upon the scientific world, not only in Romania but also abroad.

Dr. Eugen Comşa had worked here for about 30 years, and he is well-known and esteemed by the people in our village. Due to the results of his activity as an archaeologist we had been visited by foreign specialists who wanted to see the sites discovered by him.

Our people worked at the excavations and witnessed a lot of new and interesting aspects from the Romanian history and especially prehistory.

We are proud to have a land full of history, full of vestiges, and we feel like being those who take further the heritage, the old and valuable traditions out of which some, we presume, are being preserved since very old times, even since Neolithic.

We find your presence here as a good oportunity to award the title of Citizen of Honor to Dr. Eugen Comşa for his accomplishments as an archaeologist, but mostly for his significant contribution in raising the prestige of our village and for popularizing the results of his research in many corners of the world.

DISCURSUL PRIMARULUI LA FESTIVITATEA DE ACORDARE A TITLULUI DE CETĂŢEAN DE ONOARE DOMNULUI DR. EUGEN COMŞA

Dragi Oaspeţi,

Este o mare plăcere pentru noi, cetăţenii localităţii Radovanu, în numele cărora vorbesc, să fim implicaţi într-o întrunire atât de importantă, cum este simpozionul organizat cu ocazia celei de-a 85 aniversări a dr. Eugen Comşa.

Radovanu este un loc unde au fost descoperite multe vestigii, atât de către dumnealui, cât şi de alţi specialişti, iar rezultatul cercetărilor lor, din câte ştiu, a avut un impact important asupra lumii ştiinţifice, nu numai din România, ci şi de peste hotare.

Dr. Eugen Comşa a lucrat aici circa 30 de ani şi este bine cunoscut şi stimat de către oamenii din localitatea noastră. Datorită rezultatelor activităţii sale ca arheolog am fost vizitaţi de către specialişti străini, care au dorit să vadă siturile pe care le-a descoperit.

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Oamenii noştri au lucrat la săpături şi au fost martorii unor noi şi interesante aspecte ale istoriei şi în special ale preistoriei româneşti.

Suntem mândri să avem un ţinut plin de istorie, plin de vestigii şi ne simţim ca fiind aceia care sunt continuatorii acestei moşteniri, a vechilor şi valoroaselor tradiţii dintre care unele, presupunem noi, sunt păstrate din timpuri străvechi, poate chiar din Neolitic.

Găsim prezenţa dumneavoastră aici ca o bună ocazie pentru a acorda titlul de Cetăţean de Onoare domnului Dr. Eugen Comşa, pentru realizările sale ca arheolog dar, în special, pentru contribuţia sa semnificativă la ridicarea prestigiului localităţii noastre şi pentru popularizarea rezultatelor cercetărilor sale în multe colţuri ale lumii.

Vasilica Dobrescu
Primarul localităţii Radovanu
11 octombrie 2008

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Fig. 1 – Diploma of *Citizen of Honour* of the Radovanu village.

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ARCHAEOLOGICAL SITES OF THE RADOVANU VILLAGE EXCAVATED BY EUGEN AND MARIA COMŞA

Alexandra COMŞA

Radovanu is one of the villages rich in archaeological vestiges from various time spans in the history of Romania. They deserve to be emphasized and completely valorified, as regards the scientific and cultural viewpoint.

"La Muscalu"

The complex from Radovanu, "La Muscalu", is the first and only site in Romania where four separate successive settlements were located, overlapped on the same site, belonging to communities of the same evolution phase of the Gumelnița Cuture – a fact that allowed the study of some important aspects in their historical succession.

The phase to which all four habitation levels belong is the transition from the Boian to the Gumelnița Culture, representing in fact the beginning of the latter civilization. The dominant presence of the Boian type elements is observed at the beginning of the respective phase. These elements gradually reduced their frequency in favour of the Gumelnița ones, which manifested themselves mostly at the end of the phase, when the Boian elements either completely disappeared, or got transformed. All these changes showed that we could face a local, normal evolution of a settlement without other, external influences.

The transformations gradually apeared, not only as concerns the material culture, but also the economic one, a fact that briefly imposed a sedentary way of life with important implications in all fields of the Neolithic people. For instance, changes in social organization are clearly shown by the modification of the general plan of those four settlements, as pointed out by excavations.

The starting point of the excavations undertaken in Valea Coadelor was provided by the surface investigation carried out in 1959 by Barbu Ionescu, at that time director of the Museum of Oltenița (which today is called the Museum of the Gumelnița Civilization). During those studies, he unearthed the remains of a Neolithic settlement at the site "La Muscalu". In that year, he excavated a trench, where ceramic fragments, tools, and remains of burnt adobe of an above-ground dwelling were found, all belonging to the transitional period from the Boian to the Gumelnița. The dwelling was cross-sectional, reaching to a depth of up to 0.80 m, where it was considered that virgin soil was detected (*i.e.* without any content of archaeological materials).

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At the beginning of the year 1960, knowing the concerns of Eugen Comşa for the Gumelniţa Culture, Barbu Ionescu offered Comşa the data of his find in order to resume the excavation, and this is how in the summer of that year Eugen Comşa on the site "La Muscalu", situated on the western side of the Valea Coadelor, about 1.5 km north of the Radovanu village.

Based upon the provided information, Dr. Eugen Comşa thought about a transversal cross-section through the middle of the settlement in order to establish its stratigraphy, the thickness of the cultural layer, and the features of the unearthed materials. He first dug a trench just 10 m long and 1.5 m wide, expecting that the cultural layer would end at –0.80 m, as initially presumed by Barbu Ionescu. In fact, the thickness of the layer turned out to be double the expected one, and after the four layers were delimited the trench was extended westwards.

Also at the "La Muscalu" site in 1961, in the area of the settlement belonging to the transitional period from the Boian to the Gumelniţa culture, the first funerary find was discovered. At the edge of the settlement, a fragmentary human bone was found, which was a part of a forearm. Subsequently, by the excavations undertaken on that site, Dr. Eugen Comşa discovered 25 burials of children and adults, with flexed skeletons on a side, without inventory. Some of the childen skeletons were unearthed near the dwellings, while the adult ones were disseminated outside the settlement, upon the neighboring terrace[6].

In 1961, a more simple and economic method was conceived for establishing the general plan of a settlement, namely the number of dwellings and their distribution in the field. It was created due to the fact that in 1960 such a dwelling had been entirely unearthed. Knowing that it had a rectangular shape, with dimensions of about 7×3.5 m and a long axis oriented north–south, and considering that probably the other dwellings had similar dimensions, some trenches with east–west direction were dug a perpendicularly upon the long axis of the dwellings, which had a width of 0.60 m and a space of 3 m between each trench. As a result of this method, any kind of dwelling remains with the above-mentioned dimensions could be detected in accordance with those established for the structure unearthed in the previous archaeological campaign. Therefore, parallel trenches were dug upon the entire surface of the terrace, corresponding to the inclination of the slope. The method prooved to be efficient, discovering all surfaces of burnt adobe as hints for the archaic dwellings. All dwellings were carefully disassembled and plotted upon the plan. Unlike the method employed by other archaeologists, who would have disassembled the dwelling remains and continued the digging according to the usual procedure, Dr. Eugen Comşa decided not to touch the remains, covering them with a thin layer of earth, in order to protect them until they were entirely unearthed in the archaeological campaing of the following year[7].

[6] Comşa 1998, 265.
[7] Comşa VIII, 1990, 8–9; *idem* 1998, 265–276; *idem* 1995, 257–268.

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Also in 1961, durring the terrace fittings that were in progress on the slopes of Valea Coadelor, a burial was discovered by accident. It was located on the north slope and was uncovered during the fifth terrace fitting (counting from the peak of the slope downwards), in a place situated about 100 m east of the wide path that crossed the vine yard and aproximately 1 km east of the village border.

The skeleton belonged to an adult individual that seemingly had a flexed position, having a skull with a WNW orientation. A small broze knife was found on the lower part of the chest area.

Based upon the analogies found for the bronze object, the burial could be precisely dated in the Early Iron age, namely in the 12th-11th centuries, being connected with a settlement from the same period, found on the high terrace of the Argeş river, a few hundred meters NE for the mentioned burial[8].

In 1962, all 12 dwellings were uncovered, and Dr. Eugen Comşa flied with a crop duster in order to take photos and make a black-and-white movie. The find from Radovanu was the first Neoliothic site that was entirely excavated in southern Romania and the first one where aerial photographs and films were made[9].

Also in that year was examined the assumption regarding the existence of a defense ditch, when Dr. Eugen Comşa considered worth it to investigate the earth distortion observed even in 1960. After excavating a trench in a perpendicular direction to it, it was found that the respective depression noticed on the surface of the terrain was natural, with a width reaching over 15 m on the upper part and 4 m in depth. Analizing the mentioned cross-section, it was established that ever since the establishing of the first community, dating back to the transitional period from the Boian to the Gumelnița culture, its members had intensely intervened on both slopes of the depression and mostly on the one near the settlement.

Also in 1962, Dr. Eugen Comşa tried to establish a method for identifying the location of the necropolis belonging to the settlement, taking into account the ground appropriate for such a destination. Considering the fact that the settlement was surrounded on three sides by rather steep slopes and that the people in ancient times could not easily transport the dead in good condition for burial in the valley, it was considered that the most favorable location for such a purpose would be the one on the nearby terrace, to the west. Thus, 11 parallel trenches (10×1 m, with 11 m between each) were excavated on that site, on a land strip situated along the defense ditch and small distance from it, to the west. Had they not led to the necropolis identification, some intermediate trenches would have been dug in order to make the uncovering of the burials possible.

[8] Comşa 1964, 127–129.
[9] Comşa 1990, 9; *idem* 1972, p. 39–54.

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During the excavation done for the necropolis identification, another interesting find was made. Beneath the remains of an above-ground construction, a big broken vessel was discovered. It contained 36 clay weights from a vertical loom. It was presumed that the mentioned structure was a weaving "workshop"[10].

In 1965, during the excavations undertaken on some Early Middle Ages vestiges on the gentle slope of Valea Coadelor, Dr. Maria Comşa did a sounding on the base of the terrace where the Neolithic settlement is located, and there she unearthed the traces of a ditch in which she found Neolithic ceramic fragments similar to those uncovered on the upper settlement[11]. Immediately, Dr. Eugen Comşa went there and made a survey that confirmed the dating established by Dr. Maria Comşa. At first sight, it seemed that there were two ditches: one located higher on the terrace, westwards from the settlement, and the second lower, east of it. The latter was over 3 m wide at the openning, and its depth could not be precisely established because, due to objective reasons, the activity had ceased. The route of the first ditch was checked by several surveys, observing a slightly different situation on the southern slope.

In 1969, during the ongoing reasearch at the early medieval complex on the slopes of the Valea Coadelor, Dr. Maria Comşa surveyed the eastern slope of the foothill studied by Dr. Eugen Comşa. She uncovered a second ditch of the Neolithic settlement in an oposite direction of the first, being the first such find in southern Romania. During the excavations at the early medieval complex on the northern slope of the valley, some other remains of Neolithic dwellings were uncovered, a fact that pointed out to the habitation that existed on that slope as well.

In 1968, after the ploughing of the surface corresponding to the defense ditch unearthed in 1962, the outline of the ditch was detected, distinguished by the contrast of its color to the surrounding soil. According to the archaeological data known at the time regarding settlements protected by defense ditches, this one should have opened to the southern and northern valley. Yet, the outline of this ditched arched to the north, and thus the ditch portion discovered by Dr. Maria Comşa was not an isolated one but a part of a unitary system.

After the first plane flight in 1970, Dr. Eugen Comşa started to dismantle the dwellings in level 1 in parallel to the uncovering of the dwellings in level 2. After that, he took another flight in 1970 in order to take photographs of level 2. Also in 1970 a sounding was done on the southern slope in order to confirm the existence of a defense ditch there too, leading to the conclusion that its outline had an oval shape[12].

[10] Comşa 1990, 9–10.
[11] Comşa 1972, 45; *idem* 1990, 10.
[12] Comşa 1990, 11–12, 69; *idem* 1997, 149.

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After the excavations carried out in the Vădastra site, archaeologist Dr. Corneliu Mateescu established the existence of two types of Neolithic ditches: enclosing ones, specific to the early and middle stages of the Neolithic period, and defending ones, specific to the Late Neolithic. The evolution of these ditches from one type towards another was mostly determined by inner causes, being fully connected and conditioned like those of the Neolithic settlement and dwelling types by the profound changes that emerged into the economic life of the communities. Also, the intensified digging and fitting of the defense ditches in the eastern regions of Romania, and partly in the south-eastern one, were also determined by outer causes. The Neolithic ditches from Radovanu are not exception to that rule.

As a result of the long-lasting research carried out on fortifications from the complex of Radovanu "La Muscalu", some series of important conclusions can be drawn regarding the transitional period from the Boian to the Gumelnița culture:

– Out of the four habitation levels, the first and the older ones were fortified;

– The oldest settlement was completely fortified by a ditch that followed an oval-shaped, irregular route whose upper part was up on the hill and reached up to the center of a natural dale, while its lower part passed close to the base of the hill, a distance of 60 m along the slope, measured from the margin of the ground occupied by dwellings; along the ditch can also be seen a deviation towards the outer side in the south-western side;

– The ditch was excavated in counter-slope in order to fully exploit the advantages of the terrain. Its outer wall was shorter, while the one situated towards the settlement was much taller. The method of building the ditch resulted either from taking it over from other communities with a long practice in making such fortifications (with improvements accumulation), or by its creation by the locals. It is worth mentioning that as of now there are no Neolithic ditches in Muntenia dug in counter-slope like this one.

– In Dr. Eugen Comșa's opinion, based upon the field observations, the ditch was "doubled" by the presence of a pallisade, at least on a part of its perimeter. It was made of thick, alligned logs (thrust at the depth of 0.50–0.60 m). The pallisade traces are to be found on the upper, western ditch, in its proximity, while in the east they were placed higher on the slope, about 10 m away from the ditch. Another observation related to the western part was the lack of care that would have prevented the ditch from being too close from them. They were found just a few meters away from the ditch and the pallisade, and they could have beeen easily arsoned by enemies;

– Due to objective reasons, it was not possible to solve the problem of the entrance to the settlement. It should have been established to solve the issue of the

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existence of an interrupted and fortified ditch, or whether its crossing was done on a bridge that could be lifted over the night or in case of perill;

– The digging of such a ditch doubled by a pallisade on a large surface had demanded a large effort from the entire community. For that time we should point out the fact that force was not wasted without purpose;

– The fact that the ditch completely surrounded the settlement is fully understandable, as the ditch assured the protection of its inhabitants in case of danger. No explanation could be found for the fact that on the eastern part instead of following the outline of the settlement, the ditch went down the slope towards the base of the hill. A possible explanation would be that on the sloped terrain, where no dwellings could be raised and where no ditch or pallisade existed, the cattle of the community could be sheltered at night;

– For level 3, a ditch of small dimensions bordered the settlement to the south. It is possible that the interruption noticed on level 4 could have corresponded to the same small ditch. On the southern and northern sides, there were no traces of this ditch;

– The fortifications from Radovanu closely follow the evolution of the category of ditches found on the entire territory of Muntenia. At first, the simple, enclosing ditches were found, having an oval or rounded shape, like the one investigated at Vădastra-"Măgura Fetelor". Another stage followed, during which the ditches were dug deeper, but we could not say for certain that their purpose was for defending. This time periodwas during the time of the Vidra phase of the Boian Culture. During the transitional period from the Boian to the Gumelnița Culture, considering the specific elements the ditch, we could say that the ditch with oval outline from Radovanu was undoubtedly a defense ditch. The small ditch indicated that during the mentioned time enclosing ditches were still dug . Surely, for all the studied settlements on the territory of Muntenia there was no certain rule regarding ditch digging being done according to terrain configuration, settlement dimensions, and the slopes and place chosen for settlement [13].

In 1972 began the dismantling of the dwellings from level 2. The surface of the settlement was parted into squares of 1 m^2 that, individually photographed from a certain height and then assembled and enhanced on a common scale, created a detailed image of each dwelling.This was also an original method established by the archaeologist Dr Eugen Comşa.

Simultaneously with the dismantling of the dwellings of level 2, a research was done on levels 3 and 4. In 1971 and 1972, despite the carefully performed excavations, no dwelling traces could be found in the investigated surfaces. Finally, in 1973, a series of dwellings belonging to level 3 were unearthed north of the settlement platform.

[13] Comşa 1997, 148–149.

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In the following years, the photographing and dismantling of the dwellings in level 2 continued, accompanied by soundings in the area of the necropolis where a few other Neolithic skeletons had been unearthed. Also, some children skeletons had been discovered among the dwellings of level 2.

After dismantling the dwellings in level 2, the dwellings of level 3 were unearthed, and then level 4 was studied. There were no habitation traces except in the north-eastern side. In the range of the settlement, in the soil without archaeological remains, some other child burials were found[14].

Level 3 pottery comprised vessels made of paste mixed with finely crushed shreds. There were three ceramic categories: common ware, with excized decoration, or made of fine, black paste. A pot was also discovered, which by its burning technique (with one red side and the other black) attested the existence of some contacts or indirect influcences from the west, from the Vinča Culture.

Dwelling 2 of level 3 had its walls painted inside with dark red color. On two sticking plaster fragments the painting was with blood red, above which a decoration painted with white-yellowish color was applied, distributed as parallel lines, with a thickness of a few milimeters.

On other clumps of sticking plasters other constructions elements of the dwellings had been identified: impressions of the rope used for binding the poles of the walls and impressions of the wigs on both sides, on one in a vertical and on the other in horizontal position. In the northern half of dwelling 3 a piece of sticking plaster was found, which had an arched surface, as if belonging to a column. On the oposite side of the arched element there were impressed traces of split logs. The mentioned item was probably fixed as a semicolumn on a wall.

Among the ceramic materials there were also fragmentary handles shaped as houses. Their roofs had two slopes with an angle of 45°. Using the results of the archaeological excavations regarding the Neolithic dwellings from Radovanu, a team from the Academy of Arts "Nicolae Grigorescu" (today the National Universiry of Arts "Nicolae Grigorescu") in Bucharest, under the coordination of University Professor Dr. Dragoş Gheorghiu, had subsequently done a reconstruction of such a dwelling, both in the field, in the creation camp from Vădastra, but also as a maquette, presented in photo exhibitions on numerous scientific meetings in Romania and abroad, with very successful results.

A burnt clay figurine was also found, out of which just the body was preserved, without head and arm fragments. A human foot, which had been a part of a figurine or a vessel, was also discovered.

The flint items were made of "balcanic" flint, other raw materials being more seldomly used. Some tools made of bone were also present.

Between dwellings 1 and 2 of level 3 was also found the burial of a little infant set in a flexed position on the left side, without inventory.

[14] Comşa 1990, 12.

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Regarding the plant tillage and vegetation of that time, some interesting observations were made in 1980 with the discovery of some well preserved and clear impressions of wheat ear upon a clump of burnt sticking plaster of a dwelling, as well as impressions of tree leaves uncovered in other campaigns. The impression of wheat ears is seldom found on sticking plaster, where straw traces are found most frequently. This fact led to the conclusion that a custom of that time could be documented, where first the wheat ears and then the straws were gathered.

Regarding animal breeding, the presence of bovid bones (in fragmentary condition, up to splinters) was identified mostly, followed by ovicaprines and pig. Pig mandibles, belonging both to some young individuals and to other adult ones, are evidence that the animals were not selected by age for sacrifice, as was usually done, for instance, at Măgura Cuneştilor, where just adult individuals were sacrificed.

There were also a few dog mandibles, as well as an impression of a paw upon a piece of sticking plaster.

Hunting was practiced to a smaller extend, and some of the captured species were: hare, stag, boar, red deer, fox, fitchew, and wild cat. The presence of the stag among the animal bone samples (7.22 %), represented not only by antler that might have been acquired also by exchanges among communities but also by other skeleton remains, indicated a different repartition of the Neolithic species, compared to the one of recent times and also the existence of abundant forests in the mentioned region. The absence of some wild bovids is also surprising.

The stag antlers had been used for making hoes. The bone remains of a crane also found in the settlement indicate the existence of a rich hydrographic reef in the region. An abundant quantity of shells has been recovered, a fact which points to their frequent use in the community nutrition, even if it was located 6-7 km away from the Argeş river and the Danube ponds.

There are also hints regarding fishing (sheat fish, carp). The fish bone sample is one of the richest in the Romanian Neolithic.

The excavations undertaken on the site “La Muscalu”, situated at the western end of the Coadelor Valley, also emphasized the fact that in the central portion of the settlement there were vestiges belonging to the Vidra phase of the Boian Cuture that formed a thin layer. Additionally, they showed by their strategic position, which provided a wide perspective, that the respective site was used by a modest community that inhabited the place for a period. Between that time and the period when another community inhabited that site for a longer time, in the transitional period from the Boian to the Gumelnița Culture, some time had passed, which had resulted in the deposition of a thin humus layer between those habitation levels. Before getting settled upon that site, the members of the transitional period had arsoned the vegetation, a fact established by the firing traces on the base of the massive culture layer of the mentioned time.

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The dwellings of the 3rd level had been destroyed by strong fire, provoked by an unexpected asault, and the people had left the settlement in a great hurry, leaving all the inventory of their dwellings on the site. A large number of broken pots, for instance, had been found beneath the remains of dwelling 3 of this level.

In 1978, during the investigation carried out in the complexes of the 3rd habitation level, a question was posed: Why, upon a relatively extended terrain enclosed by a ditch are there just four dwellings in its north-western side? To this, it could be also added that, evidently, the ditch had been dug out by the collective effort of a larger community than the one that could have lived in that area. A possible explanation provided by archaeologist Dr. Eugen Comşa was that the mentioned zone was just a part of a more extended complex, while the ground with all those four constructions served as a place of refuge for a larger community whose dwellings were probably raised upon open terrrain, on the smooth slope in the close proximity of the Valea Coadelor. Some series of dwellings had been discovered on that site by archaeologist Dr. Maria Comşa, but they were not investigated by systematic excavations[15].

Dwelling 2, discovered in level 2 (going downwards) of the settlement was studied in detail in 1982, and sticking plaster pieces of walls painted with red or white were found. The analysis of the respective clumps offered interesting conclusions. That dwelling had the inner walls painted with red and decorated with white. The red painting was not done directly upon the usual sticking plaster (made of clay mixed with a lot of straw), but on the wall covered with clay it was spread a very thin layer of 1–2 mm of white matter and, afterwards, the red paint had been applied. Above the dwelling entrance there were relief ornaments. Upon several clumps there was a straight, relief band with a width of about 5 cm and a height of aproximately 1 cm. This was a very important find, being the first one of this kind[16].

After researching these four, rectangular dwellings, arranged in parallel rows, it could be observed that, in fact, they were two dwellings and two annexes. It was conclusioned that the walls of the dwellings, based upon the observations done at Radovanu, were constructed the same way as the mountain dwellings, out of logs horizontally arranged and fitted at their ends. After raising the walls, a platform-floor was made.

The following are some additional conclusions:

– The people in the settlements corresponding to levels 2, 3, and 4 had their dwellings arranged in one or two rows; a graphical reconstruction of the disposal mode of the dwellings an their general aspect was conceived and published by the author of the excavations (Figs. 1 and 2);

[15] Comşa 1979, 31.
[16] Comşa 1992, 55–61.

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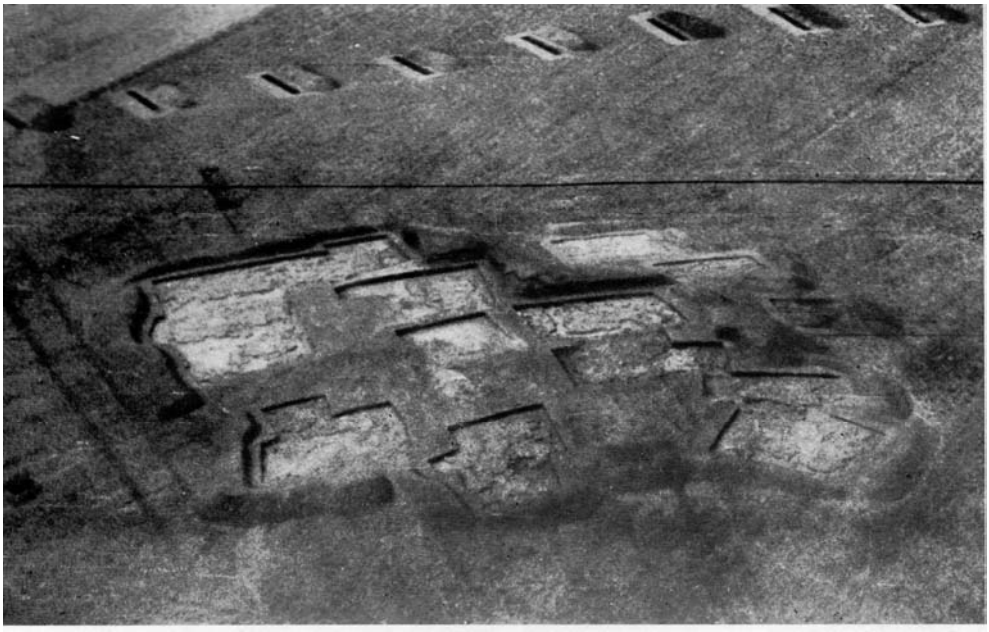

Fig. 1 – Aerial view of the site from Radovanu.

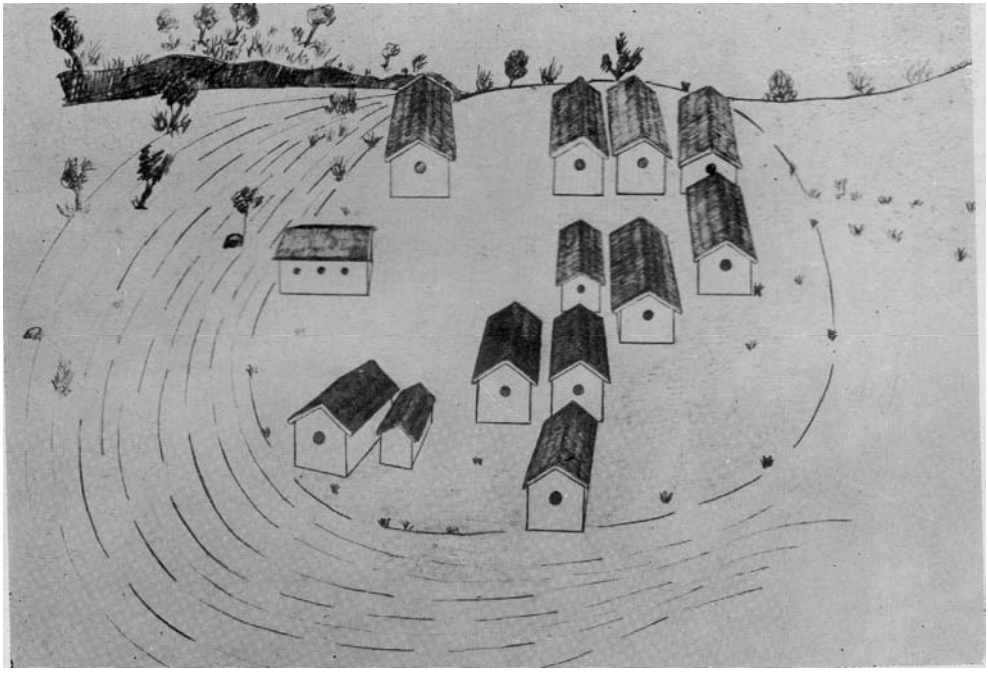

Fig. 2 – Reconstruction of one habitation level from Radovanu.

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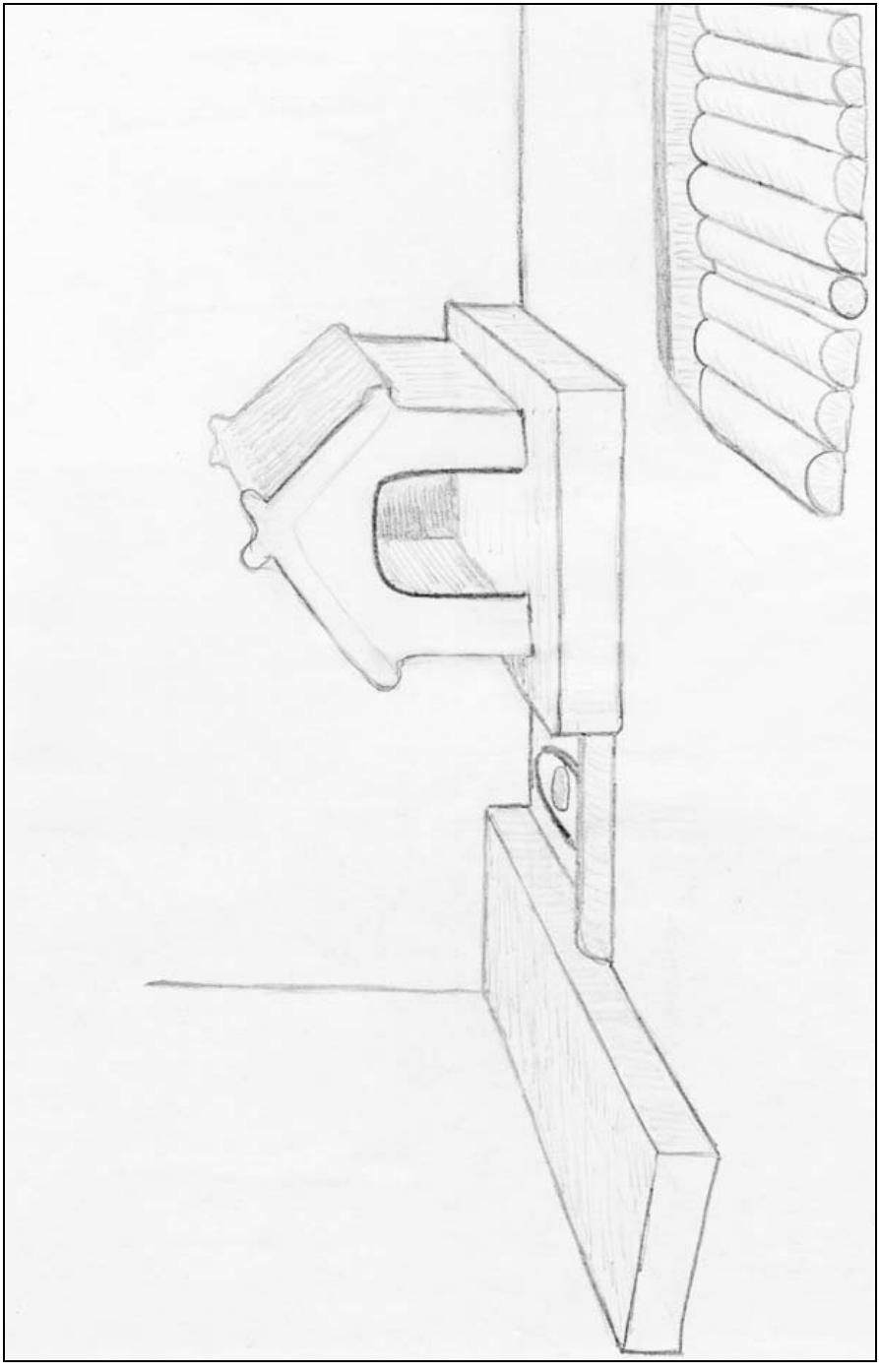

Fig. 3 – Reconstruction of an oven in a dwelling from Radovanu.

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– Their dwelling had a rectangular shape and was composed of a single room with platform floor an oven with a massive socle, situated on the eastern side and a short porch along the northern wall, as well as a grinder between the oven and the porch. A graphical reconstruction of such an oven was conceived and published by the author of the excavations (Fig. 3)

Out of the magical-religious manifestations found at the campaigns since 1978, a small group of objects should be mentioned. It consists of several miniature vesasels, an oval, undecorated plaque with its edges carefully smoothed, and a clay item that imitated the shape of an oval bread, smooth on one side and bulging on the other. A fragmentary zoomorphic figurine, made of clay was also found[17].

Through the study of the finds from Radovanu on the mentioned site, some important conclusions can be drawn and extended to the entire range of the Gumelnița Culture. If until then it was considered that the *tells* rendered continuous and long-lasting habitations, after the excavations undertaken there it was observed that they were represented in fact by successive and overlapped settlements, which reflect various "moments" from the evolution of the Gumelnița culture, meaning that it is possible that a settlement might not exhibit the entire evolution of the culture (i.e. all its phases and stages). The materials uncovered in other settlements entirely confirm this conclusion.

Also prior to the mentioned excavations, it was considered that the *tells* are isolated objects. In fact, in the majority of cases from the beginning to the end of the Gumelnița Culture, there could be found complexes comprising several parts:

1) "Open settlement" situated on sunny slopes or terraces;

2) Fortified (with a circular or oval ditch) settlement, sometimes with a pallisade, inside which the members of the community took refuge during threats;

3) Modest constructions that served as workshops for weaving or for creating tools and pottery;

4) Burial grounds[18].

The investigations from "La Muscalu" showed the existence of some systematization plans in the transitional period from the Boian to the Gumelnița culture and also the gradual changes that appeared in the socio-economic organization, as well as some demographic issues concerning the number of variations of the communities compound at that time and region, thus helping establish the density of the Neolithic population in that region.

During the research undertaken at Radovanu, on the site "La Muscalu" site, Dr. Eugen Comşa was concerned with the introduction of some modern methods of study, which could not be applied in Romania at that time due to the lack of necessary means for aerial photography, geomagnetic studies, dactiloscopic

[17] Comşa 1979, 33–34.
[18] Comşa 1990, 70–71, 113.

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determinations, and C.14 studies, and also with graphical reconstructions of an oven or of the dwellings location on the *tell* in various phases, done by himself, for instance).

Thus, big pieces of charcoals were searched in order to be used for a C.14 dating and, if possible, for dendrochronological determinations. In this last regard, it was taken into account that in the region of the analyzed settlements, in their period of existence, the forests had oak as a major presence. The existence of some pieces of wood that came from oak was confirmed by the sporo-olinical analyses performed upon samples taken from the excavation site.

Unlike those of other species the growing rings are clearly emphasized on these oak species. They form each year during vegetation time (namely, in spring and summer). The growing rings vary in their thickness, according to some internal and external causes. The main causes were relate to climate, e.g.: rainfall regime, temperature, and light exposure.

The charcoal samples can serve for the absolute dating of some sites or materials, when the so-called absolute dendrochronological scale is created for a certain zone or can be used as "bricks" by putting together various sequences in order to build up such a scalethrough long and meticulous work. These sequences can also provide valuable hints regarding the specific climate conditions in a certain period and time span.

For the respective period, based upon the analyzed samples of oak charcoal fragment taken out of levels 3 and 4 of the settlement, could be determined the existence of a normal rainfall regime, with the usual differences related to the seasons. No excessive drought could be detected there. Also, there were no damages produced by harmful factors or other reasons (shadow, for instance).

The sporo-polinic samples had been analyzed by Mrs. Madeleine Alexandru from the Institite of Geology in Bucharest on several samples taken by Dr. Eugen Comşa from the site of "La Muscalu" by using the maceration and density separation methods. Thus, some interesting aspects concerning the Neolithic vegetation in the region were established. Through the detailed study of the samples could be determined not only the existence of certain proportions between the tree or non-tree species, but also the relation between them, which indicates the position of the Radovanu site in the contact area between the steppe (up to 37%) and silvo-steppe (between 60–75%).

The presence of some mixed oak species and also of the lime-tree shows the presence of forests specific to the silvo-steppe areas that are still found in the Romanian Plain. The alder tree and willow, the last in the growing percentage from one habitation level to another, point to the presence of an azonal vegetation, which still exists in the Argeş river meadow where the Radovanu commune is situated.

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The pollen of cultivated cereals and other species like *Artemisia, Plantaginacee, Chenopodiacee, Polygonacee* etc. indicate the occupation of people that cultivated various plants. This fact was also confirmed by the charred grains uncovered inside one of the dwellings.

Considering the composition of the analyzed spectres, it could concluded that the investigated profile had belonged to the Subboreale time, a late warm period, relatively dry, which favored the mixed oak in the forests, but also of the *Compositae sp.* and Graminea in the steppe. The significant presence of pine pollen, together with the *Compositae sp*. confirm the existence of an extensive steppe and not of a colder climate, with coniferous forest, whose pollen is known to be being carried large distances from the mountains towards the plain[19]. These palinologial studies also confirmed the chronological assignment established by Dr. Eugen Comşa, whose research emphasized that the finds at the site "La Muscalu" belonged to the transitional period from the Boian to the Gumelniţa Culture, namely, they could be dated at the beginning of the first half of the 4th millenium B.C.

In the autumn of 1961, for the first time in Romania was performed a geophysical magnetometric prospection within an archaeological site, this investigation being done with the best equipment at that time. Thus, on August 2, 1961, measurements were taken in eight station sites. For the areas where no dwelling platforms existed, a decline of the parameters could be detected, while the perimeters evidently grew in the presence of such structures.

At the request of Dr. Eugen Comşa, a study was done concerning the effect that the presence of certain archaeological materials could exert upon the equipment, a fact of extreme importance during such investigations[20].

One of the most important scholar in rock studies, Prof. G. Stoicovici from the Babeş-Bolyai University in Cluj, had done mineralogic analises on pottery that was separated into categories, with the raw material also being considered. This expert had done a microscopical study on various flint (silex) types identified in the settlements, establishing certain differences regarding their composition, appearance, and pigmentation[21].

In 1972, a larger quantity of charcoal was found and carefully removed by Dr. Eugen Comşa with precautions against its contamination. He sent it to Germany for anaslyses regarding the C.14 dating, an exact dating of the settlement on the site "La Muscalu" site. The samples sent to the laboratory for C.14 analysis at Institut für Ur- und Frühgeschichte Berlin were fully examined by Dr. Hans Quita, who confirmed the conclusions and field observations of Dr. Eugen Comşa.

[19] Comşa 1990, 116–117
[20] *Ibidem* 118.
[21] *Ibidem* 120–121, 118–119.

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The settlement was dated at the beginning of the 4th millenium B.C., more precisely at 3900±70 a Chr.[22] The results of all analyses performed at the site "La Muscalu" site were included in specialized papers on both sides and communicated during various scientific meetings in Romania, Germany, or elsewhere.

"Pe Neguleasă"

At the bottom of Valea Coadelor (Coadelor Valley), at the site called "Pe Neguleasă", south-east of the Radovanu village, middle and late medieval traces were found during a survey undertaken by Dr. Eugen Comşa in 1960. Some ceramic fragmets, burnt adobe and some iron slag pieces had been recovered from the surface of the soil. Dr. Maria Comşa had done a sounding in that area, and some complexes of the 10th and later centuries (17th–18th) were found. Barbu Ionescu, who was director of the History Museum of Oltenița at that time, took part in the excavations initiated in 1960. The investigation was completed in 1968, and George Trohani also participated in that campaign, as a student.

Habitation was initiated in the valley, where once a creek used to flow into the Valea Coadelor lake (today drained) and continued up to the high terrace. On the lower terrace of the creek it was found the habitation of the 6th-7th centuries, partly overlapped bt the ones of the 8th-9th centuries. Upper on the base of the high terrace, there were dwellings of the 9th-10th centuries, while upper towards the middle of the slope, there were dwellingas of a village of the 15–17th centuries, reaching up to the middle 18th century. Over more than three hundred years of persistence, the village of the 15th–17th centuries was secluded from the valley by enclosure ditches. The cemetery of that village was in the valley, on the spot "Pe Neguleasă", partly overlapping the older habitation, of the 6th–7th and 8th-9th centuries. Along the Coadelor Valley, between the spots "Pe Neguleasă" and "Valea lui Petcu", on a distance of about 1 km extend, was found a settlement that began in the 6th century and continued until the 10th, innclusively. On that spot 12 archaeological campaigns were undertaken, in 1960–1961, 1964–1969, 1972–1973, 1975, 1978. The recentmost habitation level was represented by an above-ground house (house no. 1), while the older levels were represented by deepened dwellings. The research carried out in that part of the settlement had been completed in 1968.

Of great interest was the above-ground dwelling, respectively house no. 1, that comprised a single room (trapesium-shaped) with rounded corners, measuring almost 48 m^2. It had wooden structure, also built upon wood. The floor was made of battered clay. Towards the center of the floor, an oval-shaped, opened hearth

[22] *Ibidem* 115.

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was found (no. 1). Towards the north-eastern corner was found another hearth (no. 2), also with an oval shape.

Inside the dwelling various objects and pottery (bowls, dished, handled pots) were discovered. Among other metal items, there were two unique bivalve molds for buttons and adornments. Out of the second, just one valve was recovered. It the first mold served for making a single button, the preserved half of the second was used for ten different button patterns and pendants. It seems the hearth used by the craftsman was placed outside the dwelling, or more probably, if lead was used as raw material, then hearth no. 1 was used for smelting. The technique of the craftsman preserved very old traditions and practices during the first millenium A.D. and even before that.

The dwelling was dated to the second half of the 17th century or possibly the beginning of the 18th century. The buttons and their refined creation show that at Radovanu there was an evolved community that went beyond the village stage, achieving some features specific to an urban society[23].

Possibly on the same site was found and systematically excavated the necropolises of the 15th–17th centuries (1480–1690?). In Valea Luicii were found 159 burials of the 15th–17th centuries and others belonging to the 18th–19th centuries. About one third of the burials contained a coin (Turkish, Hungarian or issued by Ragusa town) intentionally placed in there. Given that in some burials there were no skeletons found and in others there were remnants belonging to two individuals (M.72 – twin newborn babies, M.82 – mother and a newborn baby), the series comprised 161 individuals of the 15–17th centuries and 14 of the 18th–19th centuries. Out of them, 76 (46.20%) were of children under the age of 14.

The remaining individuals had been separated into three groups based on their cephalic index and other features. In terms of typology, mediterranoids, nordoid, crômagnoid, and dinaroid elements were found.

Valea Luicii

The remains of 14 individuals discovered in Valea Luicii (18th–19th centuries) comprised 4 adults and 10 children, 5 of the latter being dead in their first year of life. In this case, the 4 adults had mediterranoid (M.8, female), mongoloid (M.10), or crômagnoid B (M.13, male) characteristics. M.7 could not be assigned to a certain anthropological type. The Radovanu series have closer resemblances with the series from Izvor (8th century) and Cernica (17th–18th centuries) and are considered a link between those two[24].

[23] M. Comşa 1986, 227–232.
[24] Popovici & Georgescu, 1975, 12, p. 9–16.

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"La Frații Dincă"

The first archaeologist who made a survey on the site named "La Frații Dincă" was Dr. Expectatus Bujor. According to the preliminary data obtained, he assigned the fortified settlement from Radovanu to the time span between the second half of the 2nd century B.C. and up to the middle of the 1st century A.D. Subsequently, through the studies undertaken by Dr. Sebastian Morintz and Dr. Done Şerbănescu, its dating was done in a more constrained time sequence, namely between 150 B.C. and 60 A.D., based upon pottery and coin analyses.

In 1967, while working already for several years on the Valea Coadelor, Dr. Maria Comşa was informed by the locals that there was a landslide at the site called "La Frații Dincă", and inside the wall a lot of burnt earth could be observed. Going there on the same day, Dr. Maria Comşa realized that at the site there still were preserved remains of an oven for pottery firing. Observing that the wall was not resitant and was about to fall, she imediately studied the oven remnants. It was situated on the slope north of the Getic-Dacian fortified fortress, in the wall at the periphery of the unfortified settlement that continued to the north and north-west from the above-mentioned dava[25], on the right by the road that connected Radovanu and Căscioarele villages. This road crossed the former ditch that separated the fortified settlement from the civilian one. The pottery-maker oven was situated on the slope of the high terrace, towards the village and before the access to the road toward the former ditch.

The conducted study pointed out the fact that the oven had a truncated shape, was dug into clay, and had a horizontal gridiron supported by a median wall. It had no pottery content. Within the fallen earth there were Bronze Age ceramic fragments but also pieces of Getic fruitstands. The oven was dated to the 1st century B.C., most probably in its first half[26].

"Gorgana a doua" "Ghergălău"

The mound was situated on the south-eastern side of the Radovanu commune and is in fact an erosion witness of the high terrace on the right bank of the Argeşului river. Some fragmentary Getic-Dacian pots were recovered during a survey carried out by Dr. Barbu Ionescu in 1930 along the Argeş terrace.

In 1971, after new surveys undertaken by Dr. Sebastian Morintz, Dr. Done Şerbănescu and Dr. Barbu Ionescu knew other Getic-Dacian fragmentary ceramics had been recovered, as well as some belonging to a new aspect from the end of the

[25] *Dava* is a term used for a certain type of fortified settlement belonging to the Getic-Dacian communities.

[26] M. Comşa 1986, p. 143–151.

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Bronze Age. In the periods 1971–1973, 1975–1977, 1979 and 1984, two cultural layers were identified, one of which belonging to the Bronze Age and the second one to the Getic-Dacian period. Sporadically, Boian shreds (Vidra phase) were also identified and recovered.

On the last site, 10 above-ground dwellings of the Bronze age were unearhed, bearing traces of the poles belonging to their structure. Domestic pits were also found, with refuse consisting of animal bones and fragmentary or seldom complete pottery.

Three main pottery categories were identified there: one crudely shaped with paste mixed with crushed ceramic fragments, a second category of carefully modelled ceramics with a better quality clay, and a third, fine one.

Some objects made of bone, horn or antler were also found. A local metalurgical activity was also suggested, as some casts for axes molding were discovered.

In the Bronze Age settlement two ditches were identified, whose functionality could not be established. Another ditch, belonging to the Getic-Dacian period, that delimited the respective settlement was located on the southern edge of the plateau.

In all probabilities, the Radovanu Culture represented the last manifestation of the Bronze Age in Southern Romania. This civilization had resulted from the ethno-cultural fusion of North-pontic, istro-pontic, and balkanic elements. When making a comparison with the Coslogeni Culture, another civilization that inhabited that area, the settlements and dwellings types, settlement inventory, and especially pottery were considered. These detailed analyses showed that in the complex from Radovanu the life standard was significantly higher as compared to the one in the Coslogeni Culture.

In the Getae-Dacian settlement, three habitation levels were delimited, out of which the upper one had been destroyed by tillage works. In the first habitation level was identified a ditch with an U-shape, situated at the margin of the settlement, with a depth of 3.20–3.80 m and following the outline of the terrace. The presence of a pallisade along the defending ditch could not be established with certainty. Subsequently, the use of the ditch ceased.

The dwellings of the second level were above ground, with one or sometimes two hearths usually placed towards the northern side.

The dwellings were covered with reed or straw. It seems that one of them (dwelling no. 1) had belonged to a jewelry maker, whose inventory was found near the hearth and consisted of a truncated bronze puncher with the relief image of Athena Parthenos, a small chisel with curved edge, a spoon for casting in molds, crucibles, and molds for casting metal bars. Remains from castings and slag were found outside the dwelling.

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The second dwelling was near the first one but to the south. It was a sanctuary, because a bulging hearth decorated with circles was discovered on its north-eastern side, and in its proximity were found cups with a special kind of foot used for religious ceremonies.

Around the dwellings there were pits with fragmentary pottery, whole pots, and also animal bones. A pit with a ritual character was found not far away from the cultic dwelling. Inside it there were two upsidedown vessels, which are a token of divinity, probably after establishing the residence location of the community.

In all levels of the Getic-Dacian habitation there were a large amount of Hellenistic ceramic fragments made of unstamped amphorae of Rhodos or "Cos" type, vessels decorated with black lustro (firnis) or paint, or in the first level, fragments of Hellenistic cups with relief decoration. Clay or metal objects (weaponry, spurs, a small fragment of an armour, coins) were found. The presence of some male anthropomorphic figurines was also observed.

The third level, as much as it was preserved, pointed to a sporadic habitation over small terrain. This level was dated to the 1st century B.C.

Based upon the elements that were used for dating, especially coins, it could be concluded that the dava from Radovanu existed and functioned between 150-ca. 60 B.C. It represented one of the economic, political, military and religious settlements of the Getic-Dacian world, together with other similar davae known in the Romanian Plain, like those from Zimnicea, Popeşti, Piscu Crăsani and Cârlomăneşti, with which it was partly contemporaneous.

Since 2004, the archaeological investigations have been resumed on the "Gorgana a doua", which was considered a representative site for the Bronze Age by its content of the Radovanu Culture, and also for the Late Iron Age by the existence there of a dava type settlement, which dated back to the 2nd-1st century B.C. In 2004 and 2005 a dwelling and materials specific to the Bronze Age were unearthed.

For the Getic period of the Late Iron Age, five fire dwellings were found, some of which with hearths. There were no traces of the fortification ditch, which was probably destroyed by the great land slides in the area. Two storage pots and Hellenistic imported pottery (Cos Pseudocos or Heraclea Pontica type amphorae, a drahma issued by the Apollonia town) were unearthed.

In 2006, surface dwellings were unearthed, two of which had hearths decorated with a cord in a precarious condition. Some of the structures had been excavated in the '70–80 of the past century, by Dr. Sebastian Morintz and Dr. Done Şerbănescu. Also at that time, there were found Getic-Dacian, Greek, and Roman coins[27].

[27] Şerbănescu 1987, 155.

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In 2007 "Gorgana unu" "Ghergălău" was dug, situated 150 m away from "Gorgana a doua", where a fortified Getic-Dacian complex was located, excavated in 1988 by Dr. Eugen Comşa. The defense ditch was cross-sectioned, and according to Dr. Eugen Comşa was propped by stone parapets and had a shallow foundation. One of those parapets was found during the excavations. The course of the wall was accompanied in close proximity by a defense ditch (sec. I a.Chr.)[28].

Valea Popii
(com. Radovanu)

At the edge of the cemetery, about 150 m left from the road Oltenița-Hereşti, on a foothill with a height of about 5 m, was identified long time ago a Getic-Dacian settlement. On the same site, in 1954, materials belonging to the Tei Culture (Bronze) were found. Between 14–21 November 1963 some soundings were done in order to establish the character of the settlements and to obtain new data about the previously signaled two cultures. They were carried out in the neighborhood of the house belonging to the inhabitant Vasile Arsene.

During the research was observed that the layer of archaeological materials had thickness of 0.60–0.80 m and that the upper part was disturbed by tillage works, up to a depth of 0.30–0.40 m. On the basis of the archaeological layer was found a relatively small quantity of ceramic fragments of the Tei Culture, along with a consistent deposition belonging to the Getae-Dacian culture. In this case, the remains of a partly deepened dwelling were found in addition to fragmentary pottery.

"Valea lui Petcu"

Between the mentioned site and Valea Coadelor, during 12 archaeological campaigns (1960–1961, 1964–1969, 1972–1973, 1975 şi 1978), Dr. Maria Comşa undertook systematic archaeological excavations in a settlement established in the 6th century A.D. and ending its existence in the 10th century A.D. The habitation started in the valley, where a long time ago ran a creek that no longer exists, and continued up to the middle of the higher terrace. On the lower terrace of the creek was found a habitation of the 5th-7th centuries, partly overlapped by the one in the 8th-9th centuries. Higher, at the base of the high terrace, there were dwellings of the 9th–10th centuries, and towards the middle of the slope there were village dwellings of the 15th–17th centuries. For about three hundred years, the village of the 15th–17th

[28] Şerbănescu *et alii,* 2008, 247–248.

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centuries was separated from the valley by enclosing ditches. Its cemetery was located in the village on the "Pe Neguleasa" site overlapping older habittions of the 6th–7th and 8th–9th centuries.

"Valea lui Petcu" 2

Between 1979–1981, Dr. Maria Comşa carried out excavations on the "Valea lui Petcu" 2 site, finding a series of complexes belonging to the Early Medieval times, with pottery consisting of amphorae-like pitchers of the second half of the 10th century and beginning of the 11th century, some of which bearing traces of painted decoration.

During the excavations in the pre-medieval settlement, begining with the 6th decade of the 20th century, Dr. Maria Comşa discovered two main dwelling types, namely, dug-in dwellings and above-ground ones, each with various variants.

In the campaign of 1983, 3 deepened and 4 above-ground dwellings were found. They contained different types of hearths and a certain quantity of pottery. Also uncovered were a large number of deepened and above-ground dwellings without fire installations, which represented appendices of the permanent habitation dwellings. The existence of three habitation levels in pit houses was also detected, the oldest being no. 3, which was dated to the first half of the 9th century, followed by no. 1, at the end of the 9th century, and no. 2, in the second half of that century. Regarding the houses, there were also two habitation levels. Slightly dug into the ground, houses 1, 3, and 4 were in the old one and dated back to the end of the 9th cenury and the beginning of the 10th, while the new one (house no. 2) dated back to the 10th century.

The habitation complexes had mostly belonged to the native old Romanian population. The pit house no. 3 and houses nos. 1–3 belong to the above-mentioned communities, while pit houses nos. 1, 2, and house 4 had belonged to people who came from the north-pontic region during the 9th century A.D. (towards its middle and end) and who came into contact with the local population and were assimilated in a relatively short period of time. The assimilation process is reflected in the organization mode of the inner space of the dwelling (the pit oven and cinder hearth). According to the known finds, old Romanian population lived at Radovanu in the 10th century[29].

Radovanu II

The Radovanu II Complex is situated about 4km away from the Radovanu village. It was found upon the high terrace of the Argeş river during surveys undertaken in 1961 by archaeologist Dr. Eugen Comşa. In a place out of which

[29] M. Comşa 1988–1989, 143–152; *eadem* Comşa 1985, p. 98.

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clay was extracted, a few ceramic fragments decorated with incisions and channeling were found along with flint microliths and a large number of fragmentary animal bone. Based upon the decoration motifs it was established that the materials had belonged to the Dudeşti Culture[30].

Another clay quarry, created in 1964, enabled the above-mentioned archaeologist to establish the existence on that site of a small settlement with aproximate dimensions of 100×30 m. A survey was done, and two habitation levels were identified. A large number of microliths of "balcanic" flint and other flint of grey-whitish color were discovered in the first. Two store axes and a flint core that used to be processed in order to obtain various items were found in different layers of the level.

The animal bones had belonged to bovids and ovines, pigs being less frequent. Fish bones and *Unio sp.* shells were also found.

The pottery was divided into three categories: domestic, a similar one involving a different treatment after shaping (a slip applied upon it that made it lustruous), and fine pottery. No figurines were found.

The first level was assigned to the Dudeşti Culture (Cernica phase), while the second (of Radovanu II type), with an above-ground dwelling on its base, belonged to a subsequent period. In order to establish the chronological position of the level, comparative typology of the pottery was used, consisting in a detailed comparison with the ceramics of other sites closely positioned in time and chronology, like those from Cernica, Bogata, and Greaca. This led to the conclusion that the mentioned level belonged to the Bolintineanu phase of the Boian Culture.

SITURI ARHEOLOGICE DE PE TERITORIUL LOCALITĂŢII RADOVANU UNDE AU EFECTUAT SĂPĂTURI EUGEN ŞI MARIA COMŞA

Alexandra COMŞA

Comuna Radovanu este una dintre localităţile cu bogate vestigii arheologice, din diverse perioade din istoria României. Acestea merită să fie puse in evidenţă şi valorificate cât mai complet, din punct de vedere ştiinţific şi cultural.

Punctul „La Muscalu"

Complexul de la Radovanu „La Muscalu" este primul şi singurul sit din România în cadrul căruia sunt reprezentate patru aşezări succesive, separate, suprapuse pe acelaşi loc, ale unor comunităţi din aceeaşi fază de evoluţie a unei culturi (Gumelniţa), ceea ce a permis studierea unor aspecte importante, în succesiunea lor istorică.

[30] Comşa 1965, 39.

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Faza căreia îi aparţin toate cele 4 niveluri de locuire este cea de tranziţie de la Cultura Boian la Cultura Gumelniţa, care reprezintă, de fapt, începutul ultimei civilizaţii menţionate. La începutul fazei respective s-a putut remarca prezenţa predominantă a elementelor de tip Boian care, treptat, şi-au redus frecvenţa, în favoarea celor de tip Gumelniţa, care se vor manifesta preponderent la sfârşitul fazei, când elementele Boian fie vor dispărea complet, fie se vor transforma. Toate aceste schimbări arată însă că este vorba de o evoluţie locală, normală, a unei aşezări, fără alte influenţe, din afară.

Transformările au apărut treptat, nu numai în ceea ce priveşte cultura materială, ci şi în viaţa economică, ceea ce a dus, în scurt timp, la un mod de trai sedentar, cu importante implicaţii în toate domeniile vieţii oamenilor neolitici. De exemplu, modificarea organizării sociale se reflectă clar în schimbarea planului general al celor 4 aşezări, aşa cum a fost evidenţiat prin săpături.

Punctul de plecare al săpăturilor desfăşurate în Valea Coadelor a fost dat de cercetările de suprafaţă întreprinse în anul 1959 de către Barbu Ionescu, directorul de atunci al Muzeului de istorie din Oltenita (actualmente Muzeul Civilizaţiei Gumelniţa), în cursul cărora a descoperit resturile unei aşezări neolitice în punctul „La Muscalu". În anul respectiv, el a efectuat o serie de sondaje modeste, sub forma unui şanţ, în care a găsit fragmente ceramice, unelte şi resturi de lipitură arsă ale unei locuinţe de suprafaţă, toate aparţinând perioadei de tranziţie de la Cultura Boian la Cultura Gumelniţa. Locuinţa a fost secţionată, mergându-se până la adâncimea de 0,80 m, unde s-a crezut ca s-a ajuns la pământul viu (= fără conţinut de materiale arheologice).

La începutul anului 1960, cunoscând preocupările Dr. Eugen Comşa pentru Cultura Gumelniţa, Barbu Ionescu i-a comunicat datele descoperirii sale, pentru a prelua acestă săpătură şi astfel, în vara anului respectiv, Dr. Eugen Comşa a efectuat un sondaj în punctul „La Muscalu", situat la capătul de vest al Văii Coadelor, la circa 1,5 km nord de localitatea Radovanu.

Bazându-se pe informaţiile primite, Dr. Eugen Comşa s-a gândit să traseze o secţiune transversală prin mijlocul aşezării, pentru a-i stabili stratigrafia, grosimea stratului de cultură, caracteristicile materialelor scoase la iveală. A trasat, mai întâi, un şanţ de numai 10 m lungime şi 1,5 m lăţime, având în vedere că se considera că stratul de cultură se termină la –0,80 m. S-a constatat că acesta avea o grosime dublă şi, după delimitarea celor 4 niveluri, şanţul a fost prelungit spre vest.

În anul 1961, în situl „La Muscalu", în zona aşezării aparţinând perioadei de tranziţie de la Cultura Boian la Cultura Gumelniţa, a fost făcută prima descoperire funerară. La marginea aşezării, s-a găsit un os fragmentar, care era o parte dintr-un antebraţ. Ulterior, săpăturile efectuate în acel loc de către Dr. Eugen Comşa au dus la descoperirea a 25 de morminte de copii şi adulţi, cu schelete chircite pe o parte, fără inventar. Unele dintre scheletele de copii au fost descoperite lângă locuinţe, în timp ce acelea de adulţi erau răspândite în afara aşezării, pe terasa învecinată[31].

În anul 1961 a fost concepută o metodă mai simplă şi mai economică de stabilire a planului general al aşezării, adică numărul locuinţelor şi distribuţia lor în teren. S-a pornit de la faptul că în 1960 fusese dezvelită în întregime o astfel de locuinţă. Ştiind că aceasta avea forma dreptunghiulară, cu dimensiuni de circa 7×3,5 m şi axul lung orientat pe direcţia nord-sud şi considerând că, probabil, şi celelalte locuinţe au avut dimensiuni similare, s-a procedat la trasarea unor şanţuri pe direcţia est–vest, pentru a fi perpendiculare pe axul lung al locuinţelor, ele având lăţimea de 0,60 m, la interval de 3 m. Ca rezultat al acestei metode, urmau să fie detectate orice fel de resturi de locuinţe, cu dimensiuni corespunzătoare celor stabilite pentru locuinţa descoperită în campania arheologică precedentă. Astfel, au fost săpate şanţuri paralele pe toată suprafaţa plaformei terasei, corespunzătoare înclinării pantei. Metoda s-a dovedit eficientă, fiind descoperite toate suprafeţele de lipitură arsă rămase ca indicii ale locuinţelor din vechime. Acestea au fost dezvelite cu grijă şi trecute în plan. Spre deosebire de metoda folosită de alţi arheologi, care ar fi demontat resturile de locuinţe şi ar fi continuat săpătura conform procedurii uzuale, Dr. Eugen Comşa a decis să nu se atingă de ele,

[31] Comşa 1998, 265.

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acoperindu-le cu un strat subțire de pământ, pentru a le proteja şi a dezvelit toate locuințele în campania anului următor[32].

Tot în anul 1961, în cursul lucrărilor de terasare, care se efectuau pe pantele Văii Coadelor, a fost găsit, întâmplător, un mormânt. Acesta se afla pe panta de nord şi a fost scos la iveală în timpul amenajării celei de a cincea terase (numărând de sus în jos), într-un loc situat la circa 100 m spre est de cărarea largă din cuprinsul viei şi aproximativ 1 km spre est de marginea satului.

Scheletul, aparținând unui adult, se pare că fusese depus în poziție chircită, cu craniul orientat spre VNV. Pe zona aflată în partea inferioară a pieptului, era depus un cuțitaş de bronz.

Pe baza analogiilor găsite pentru obiectul de bronz, mormântul a putut fi datat cu precizie în perioada timpurie a primei epoci a fierului, adică în secolele XII–XI a.Chr., fiind pus în legătură cu o aşezare din prima epocă a fierului, descoperită pe terasa înaltă a Argeşului, la câteva sute de metri spre NE de mormântul amintit[33].

Într-adevăr, în anul 1962, au fost dezvelite toate cele 12 locuințe şi, după terminarea acestei operații, Dr. Eugen Comşa a efectuat un zbor, folosind un avion utilitar, pentru a face fotografii şi un film cinematografic alb-negru[34].

Şantierul de la Radovanu a fost primul sit arheologic neolitic săpat integral din sudul României şi prima stațiune arheologică fotografiată şi filmată din avion.

Tot în anul respectiv a putut fi verificată supoziția privind prezența unui eventual şanț de apărare, când Dr. Eugen Comşa şi-a propus să secționeze albierea din teren observată încă din anul 1960. După efectuarea unui şanț perpendicular pe aceasta s-a constatat că depresiunea observată la suprafață corespunde unei albieri naturale, cu o lărgime de peste 15 m la partea superioară şi 4 m adâncime. Analizându-se secțiunea respectivă s-a constatat că, încă de la stabilirea primei comunități din faza de tranziție de la cultura Boian la cultura Gumelnița, membrii ei au acționat intens asupra ambelor pante ale albierii şi, mai cu seamă, asupra celei dinspre aşezare.

Tot în 1962, Dr. Eugen Comşa a încercat să stabilească o metodă de identificare a locului unde se afla necropola (cimitirul) aşezării, ținând cont de terenul pe care ar fi putut fi amplasată. Având în vedere faptul că aşezarea era înconjurată din trei părți cu pante destul de abrupte, iar oamenii din vechime nu ar fi putut transporta pe cei morți în astfel de condiții pentru a-i înmormânta undeva, în vale, s-a considerat că locul potrivit ar fi pe terasa alăturată, spre vest. Astfel, s-au săpat 11 şanțuri paralele (10×1 m la interval de 11 m), pe o fâşie de teren, situată în lungul şanțului de apărare, la mică distanță, spre vest. Dacă acestea nu ar fi dus la identificarea necropolei, atunci s-ar fi trasat alte şanțuri, intermediare, care să permită descoperirea mormintelor.

În timpul sondajelor pentru găsirea necropolei s-a mai făcut o altă descoperire interesantă. Sub dărâmăturile unei construcții modeste, de suprafață, s-a găsit un vas mare spart, în care se aflau 36 de greutăți de lut, provenind de la un război de țesut vertical. Se presupune că acea construcție a servit drept „atelier" de țesut[35].

În anul 1964, cu pilejul studierii unor obiective din perioada feudală timpurie, de pe panta lină a Văii Coadelor, Dr. Maria Comşa a efectuat un sondaj la poalele terasei unde se află aşezarea neolitică şi, la piciorul pantei, a descoperit urmele unui şanț, din umplutura căruia s-au scos fragmente ceramice neolitice, similare celor descoperite în aşezarea de sus[36]. Deplasându-se imediat la locul respectiv, Dr. Eugen Comşa a efectuat o cercetare, care a confirmat datarea făcută de Dr. Maria Comşa. La prima vedere, părea că este vorba de două şanțuri: unul aflat sus pe terasă, spre vest de aşezare, iar altul jos, spre est de ea. Acesta din urmă avea peste 3 m lățime la gură, iar adâncimea nu s-a putut stabili cu exactitate, căci, din motive obiective, activitatea a fost întreruptă.

[32] Comşa 1990, 8–9; Comşa 1998, 265–276; *idem* 1995, 257–268.
[33] Comşa 1964, 127–129.
[34] Comşa 1990, 9; *idem* 1972, 39–54.
[35] Comşa 1990, 9–10.
[36] Comşa 1972, 45; *idem* 1990, 10.

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Traseul primului şanţ a fost verificat prin mai multe sondaje, pe panta de sud fiind constatată o situaţie mai aparte.

În anul 1968, după ce s-a arat suprafaţa albiată corespunzătoare şanţului de apărare secţionat în 1962, s-a putut evidenţia conturul şanţului, care se distingea prin contrastul culorii sale faţă de solul din jur. După datele arheologice cunoscute până atunci, referitoare la aşezările cu şanţ de apărare, acesta ar fi trebuit să aibă deschideri către valea de sud şi cea de nord. Conturul acestui şanţ însă, se arcuia către nord şi astfel, porţiunea de şanţ descoperită de Dr. Maria Comşa nu era izolată, ci parte a unui sistem unitar.

În 1969, în timpul cercetării, care continua în complexul feudal timpuriu de pe pantele Văii Coadelor, Dr. Maria Comşa a efectuat sondaje pe panta de est a prelungirii terasei studiate de Dr. Eugen Comşa. În mod surprinzător, ea a descoperit un al doilea şanţ de apărare a aşezării neolitice, în direcţie opusă primului şanţ, fiind vorba despre prima descoperire de acest fel din sudul României. În timpul săpăturilor la complexul feudal timpuriu de pe panta de nord a văii s-au descoperit şi alte resturi de locuinţe neolitice, fapt care indică şi locuirea pantei respective.

După efectuarea primului zbor cu avionul, Dr. Eugen Comşa a trecut la demontarea locuinţelor din nivelul 1, mergând în paralel cu dezvelirea locuinţelor din nivelul 2. După terminarea acestei din urmă operaţii, a efectuat încă un zbor, în 1970, pentru a fotografia nivelul 2.

Tot în 1970 s-a făcut un sondaj, pe panta de sud, pentru a se confirma şi acolo prezenţa şanţului de apărare, astfel, constatându-se că acesta a avut contur de formă ovală[37].

În urma săpăturilor efectuate în situl de la Vădastra, arheologul Dr. Corneliu Mateescu a stabilit existenţa a două tipuri de şanţuri neolitice: de îngrădire, specifice perioadei timpurii şi mijlocii ale epocii neolitice şi cele de apărare, specifice pentru perioada neoliticului târziu. Evoluţia acestor şanţuri de la un tip la altul se datorează, în principal, unor cauze interne, fiind indisolubil legată şi condiţionată, ca şi aceea a tipurilor de aşezare şi de locuinţă din epoca neolitică, de schimbările profunde din domeniul activităţilor economice ale comunităţilor. De asemenea, intensificarea săpării şi amenajării şanţurilor de apărare din ţinuturile răsăritene ale ţării şi în parte a celor din sud-estul ei, se datoresc, în bună măsură, şi unor cauze externe. Şanţurile neolitice de la Radovanu nu fac excepţie de la această regulă.

În urma cercetărilor îndelungate efectuate pe fortificaţiile din cadrul complexului de la Radovanu „La Muscalu" s-au putut face o serie de precizări importante privind perioada de tranziţie de la Cultura Boian la Cultura Gumelniţa, cum ar fi:

– Dintre cele patru nivele de locuire, primele două, cele mai vechi, au avut fortificaţii;

– Aşezarea cea mai veche a fost fortificată în întregime, cu un şanţ având un traseu oval, neregulat, a cărui parte de sus era pe deal şi trecea pe lângă mijlocul unei vâlcele naturale, iar partea de jos trecea pe la baza dealului, la o distanţă de peste 60 m măsuraţi în pantă, faţă de marginea terenului ocupat de locuinţe; pe traseul şanţului s-a constat şi o abatere către exterior pe traseul său, în partea de sud-vest;

– Şanţul a fost săpat în contrapantă, pentru a folosi din plin avantajele terenului. Malul său exterior este mai scund, iar cel dinspre aşezare este mult mai înalt. O astfel de metodă de realizare a şanţului presupune fie preluarea sa de la alte comunităţi, având practică îndelungată în realizarea unor astfel de fortificaţii (cu acumulare de îmbunătăţiri), fie născocirea lui de către localnici. Este demn de menţionat că, până acum, nu se cunosc în Muntenia, alte şanţuri de apărare neolitice săpate în contrapantă.

– În opinia Dr. Eugen Comşa, pe baza datelor din teren, şanţul era „dublat" de prezenţa unei palisade, cel puţin pe o parte a traseului său. Aceasta era alcătuită din trunchiuri de copac groase, alăturate (înfipte la o adâncime de 0,50–0,60 m). Urmele eventualei palisade se regăsesc în porţiunea înaltă, vestică a şanţului, în poziţie alăturată lui, iar în cea de est ele sunt amplasate mai sus, pe pantă,

[37] Comşa 1990, 11–12, 69; *idem* 1997, 149.

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la circa 10 m distanță de șanț. Se remarcă, pentru partea de vest, de asemenea, lipsa grijii pentru a realiza șanțul la o distanță oarecare față de locuințe. Acestea, fiind doar la câțiva metri de șanț și de palisadă, puteau fi foarte ușor incendiate de vrăjmași;

– Din motive obiective, nu a fost posibil să se rezolve problema privind intrarea în așezare, adică, dacă în dreptul acesteia șanțul era întrerupt și întărit, sau trecerea se făcea peste un pod, care putea fi ridicat noaptea, sau în caz de pericol;

– Săparea unui astfel de șanț, dublat cu palisadă, pe o suprafață mare, a solicitat un efort deosebit din partea întregii comunități. Pentru perioada aceea, este bine știut că nu se iroseau forțele fără un scop anume;

– Dacă șanțul înconjura așezarea în întregime este explicabil, pentru că asigura protecția locuitorilor săi, în caz de primejdie. Nu s-a găsit o explicație pentru faptul că în partea de est, în loc să meargă de-a lungul așezării, șanțul coboară până la poalele dealului. O posibilă explicație pentru acest fapt ar fi aceea că, pe terenul situat în pantă, unde nu se puteau construi locuințe și unde nu era șanț sau palisadă, puteau fi adăpostite vitele comunității peste noapte.

– Pentru nivelul 3, așezarea era mărginită pe latura de sud (printr-un șanț de mici dimensiuni). Este posibil ca, și în partea sa de vest, în cazul întreruperii observate la nivelul 4, să corespundă aceluiași șanț mic. Pe laturile de sud și de nord nu s-au găsit urme ale acestui șanț;

– Fortificațiile de la Radovanu urmează îndeaproape evoluția acestor categorii de șanțuri de pe întreg cuprinsul Munteniei. La început, se plasează șanțurile simple de îngrădire, cu traseu oval sau rotund, așa cum a fost cercetat cel de la Vădastra – „Măgura Fetelor". A urmat o altă etapă, când șanțurile au fost făcute mai adânci, dar, nu se poate spune în mod cert că au servit pentru apărare. Acest moment se situa în faza Vidra a Culturii Boian. În perioada de tranziție de la Cultura Boian la Cultura Gumelnița, avându-se în vedere elementele sale specifice, se poate spune că șanțul cu traseu oval de la Radovanu a fost cu siguranță un șanț de apărare. Șanțul de dimensiuni mici indică faptul că în cursul perioadei amintite se mai făceau încă și șanțuri de îngrădire. Desigur, pentru toate așezările studiate de pe teritoriul Munteniei nu există o regulă anume pentru realizarea șanțurilor, acestea fiind făcute în concordanță cu configurația terenului, ținându-se seama de mărimea, pantele și locul ales pentru așezare[38].

În 1972 s-a început demontarea locuințelor din nivelul 2. Suprafața așezării a fost împărțită în carouri cu dimensiunea de câte 1 m^2, care, fotografiate individual la o anumită înălțime și apoi asamblate și mărite la o scară comună, alcătuiau o imagine de detaliu a fiecărei locuințe. Și aceasta reprezenta o metodă originală, stabilită de către arheologul Dr. Eugen Comșa.

Concomitent cu demontarea locuințelor din nivelul 2 s-a început cercetarea nivelelor 3 și 4. În anii 1971 și 1972, deși s-au efectuat săpături atente, nu s-au găsit urme de locuințe în suprafețele investigate. Abia în 1973, în nordul platformei așezării, au fost descoperite o serie de locuințe ale nivelului 3.

În anii care au urmat, s-au continuat lucrările de fotografiere și demontare a locuințelor din nivelul 2, dar și sondajele în zona necropolei, unde au fost descoperite alte câteva schelete neolitice. De asemenea, între locuințele nivelului 2, au fost găsite alte schelete de copii mici.

După demontarea locuințelor nivelului 2 s-au dezvelit locuințele nivelului 3 și apoi s-a studiat nivelul 4. Nu s-au găsit urme de locuire decât în partea de nord-est. În cuprinsul așezării însă, în pământul viu, s-au mai găsit câteva morminte de copil[39].

Ceramica nivelului 3 cuprindea vase făcute numai din pastă amestecată cu cioburi pisate mărunt. Existau trei categorii ceramice: de uz comun, cu decor excizat, din pastă fină (de culoare neagră). A fost descoperit și un vas care, prin metoda sa de ardere (cu o parte roșie și o parte neagră a

[38] Comșa 1997, 148–149.
[39] Comșa 1990, 12.

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vasului), atestă existența unor contacte, sau a unei influențe indirecte, venite dinspre vest, dinspre cultura Vinča.

Locuința 2 din nivelul 3 avea pereții pictați cu roșu închis, în interior. Pe două fragmente de lipitură s-a găsit fățuiala vopsită cu roșu crud, peste care s-a aplicat un decor pictat de culoare alb-gălbuie, sub formă de linii paralele, groase de câțiva milimeri.

Pe alți bulgări de lipitură s-au identificat alte elemente de construcție a locuinței: impresiuni ale frânghiei cu care s-au legat gardelele din pereți, pe un altul impresiuni ale nuielelor pe ambele fețe, pe o parte verticale și pe alta orizontale.

În jumătatea de nord a locuinței 3 s-a găsit o bucată de lipitură arsă, cu suprafața arcuită, ca și cum ar proveni dintr-o coloană. Pe partea opusă arcuirii erau imprimate urme de bușteni despicați. Piesa a fost probabil fixată ca semicoloană pe un perete.

Printre materialele ceramice se aflau și apucătoare (mânere) fragmentare, în formă de căsuță. Acoperișul acestora avea două ape, cu înclinare de 45°. Folosindu-se de datele rezultate din aceste săpături arheologice referitoare la locuințele neolitice, un colectiv de la Academia de Arte „Nicolae Grigorescu" (actualmente Universitatea Națională de Arte) din București, sub coordonarea Prof. Univ. Dr. Dragoș Gheorghiu, au făcut, ulterior, o reconstituire a unei astfel de locuințe, atât în teren, la tabăra de creație de la Vădastra, cât și sub forma unei machete, acestea fiind prezentate sub forma unor expoziții de fotografii la numeroase întruniri științifice din țară și de peste hotare, unde au avut un deosebit succes.

S-a găsit și o figurină de lut ars, din care s-a păstrat numai corpul, fără cap și o porțiune de braț. S-a găsit și laba unui picior uman, care făcea parte fie dintr-o figurină, fie dintr-un vas.

Piesele de silex s-au făcut din silex „balcanic", alte materii prime fiind folosite mai rar. Apar și unele unelte din os.

Între locuințele 1 și 2 ale nivelului 3 a fost descoperit și mormântul unui copil mic, depus în poziție chircită pe partea stângă, fără inventar.

Referitor la cultivarea plantelor și la vegetația de atunci, în anul 1980 s-au făcut o serie de observații interesante, prin descoperirea unor impresiuni bine păstrate și clare de spic de grâu pe un bulgăre de lipitură de la o locuință, dar și a unor impresiuni de frunze de copac, descoperite în alte campanii. Impresiunile de spice se găsesc rar pe lipitură, aici apărând frecvent urme de paie. Acest fapt a dus la concluzia că este vorba despre un obicei al perioadei respective, când se strângeau mai întâi spicele și, ulterior, erau adunate și paiele.

În ceea ce privește creșterea animalelor, se constată preponderent prezența oaselor de bovine (în stare fragmentară, până la aschii), urmate de ovicaprine și porc. Mandibulele de porc, aparținând atât unor indivizi tineri, cât și altora, adulți, dovedesc că nu se făcea o sacrificare selectivă după vârste, așa cum se făcea, de exemplu, la Măgura Cuneștilor, unde erau sacrificați numai indivizii adulți.

S-au găsit mai multe mandibule de câine, dar și amprenta unei labe de acest fel, imprimată pe o bucată de lipitură.

Vânătoarea era practicată în mai mică măsură, fiind astfel capturate specii ca: iepurele, cerbul, apoi mistrețul, vulpea, căprioara, dihorul și pisica sălbatică. Prezența cerbului în cadrul eșantioanelor de oase provenind de la animale (7,22%), acesta fiind reprezentat nu numai prin coarne, care ar fi putut proveni din schimburi între comunități, ci și prin alte resturi ale scheletului, indică nu numai o repartiție deosebită în epoca neolitică a acestei specii, comparativ cu perioada actuală, ci și o abundență a pădurii în regiunea analizată. Este suprinzătoare absența bovideelor sălbatice.

Coarnele de cerb au fost întrebuințate la confecționarea unor săpăligi. Resturile de oase de cocostârc găsite tot în așezare indică o bogată rețea hidrografică în zonă. Au fost găsite din abundență și cochilii de scoici, care indică folosirea lor frecventă în alimentația comunității, deși aceasta era situată la 6-7 km de Argeș și de bălțile Dunării.

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Există, de asemenea, indicii privind pescuitul (somn, crap). Lotul de oase de peşte este unul dintre cele mai bogate din neoliticul românesc.

Săpăturile efectuate în punctul „La Muscalu", situat la capătul de vest al Văii Coadelor au evidenţiat şi faptul că în porţiunea centrală a aşezării se aflau vestigii ale fazei Vidra a culturii Boian, formând un strat subţire.

Acestea au arătat că, prin poziţia sa strategică, ce oferea un câmp vizual larg, locul respectiv a fost folosit de către o comunitate modestă, care a locuit un timp pe această prelungire de terasă. Între acea perioadă şi momentul stabilirii mai îndelungate a unei comunităţi din faza de tranziţie de la cultura Boian la cultura Gumelniţa a trecut un interval de timp, care a dus la formarea unui strat subţire de humus între cele două perioade de locuire.

Înainte de stabilirea lor pe locul respectiv, membrii comunităţilor din faza de tranziţie au incendiat vegetaţia, pentru a curăţa zona, fapt stabilit pe baza prezenţei urmelor de arsură de la baza nivelului masiv de cultură al fazei amintite.

Locuinţele nivelului 3 au fost distruse de un incendiu puternic, provocat de un atac neaşteptat, astfel încât locuitorii au părăsit în grabă aşezarea, lăsând tot inventarul locuinţelor pe loc. Numeroase vase sparte au fost găsite, de exemplu, sub dărâmăturile locuinţei 3 din nivelul menţionat.

În anul 1978, în timpul studierii complexelor din nivelul 3 de locuire, s-a pus întrebarea: de ce pe o suprafaţă relativ întinsă, înconjurată cu un şanţ de jur împrejur apar doar patru locuinţe, în partea sa de nord-vest? La aceasta se adaugă şi faptul că, în mod evident, şanţul fusese săpat printr-un efort colectiv, datorat unei comunităţi mult mai mari decât cea care ar fi putut locui pe acel teritoriu. O explicaţie posibilă, oferită de arheologul Dr. Eugen Comşa ar fi aceea că zona respectivă reprezenta doar o parte a unui complex, iar terenul cu cele patru construcţii avea rolul de loc de refugiu pentru o comunitate mai mare, ale cărei locuinţe au existat probabil pe teren deschis, pe panta lină din imediata apropiere a Văii Coadelor. O serie de astfel de locuinţe au fost descoperite în acel loc de către arheologul Dr. Maria Comşa, dar nu au fost cercetate prin săpături sistematice[40].

Locuinţa 2, descoperită în nivelul 2 (de jos în sus) al aşezării a fost studiată amănunţit în anul 1982, găsindu-se bucăţi de lipitură din pereţii acesteia, vopsiţi cu roşu sau alb. Concluziile rezultate din analiza bulgărilor respectivi au fost deosebit de interesante. Acea locuinţă a avut pereţii din interior vopsiţi cu roşu şi pictaţi cu culoare albă. Vopsirea cu roşu nu se făcea direct pe lipitura obişnuită (din lut cu multe paie) ci, pe peretele cu lipitură, feţuit după uscare, se întindea un strat foarte subţire, de 1–2 mm de tencuială de culoare albicioasă şi, abia după aceea, se aplica vopseaua roşie. În dreptul intrării în locuinţă existau ornamente în relief. Pe mai mulţi bulgări apare o bandă dreaptă, în relief, lată de circa 5 cm şi înaltă de aproximativ 1 cm. Aceasta a fost o descoperire foarte importantă, fiind prima de acest tip[41].

În urma studierii celor patru locuinţe, de formă rectangulară, dispuse paralel, s-a constatat că ele erau de fapt două locuinţe şi două anexe. Pereţii locuinţelor, pe baza observaţiilor făcute la Radovanu, s-a constatat că nu erau făcuţi din paiantă, ci, la fel ca şi casele de munte, din buşteni dispuşi orizontal şi îmbinaţi la extemităţi. După ridicarea pereţilor se făcea podeaua platformă.

Alte concluzii importante ar fi următoarele:

- oamenii din aşezările corespunzătoare nivelelor 2, 3 şi 4 aveau locuinţele dispuse într-un şir sau două, paralele; o reconstituire grafică a modului de dispunere a locuinţelor şi a aspectului lor general a fost făcută şi publicată de către autorul săpăturilor, inclusiv imaginile lor aeriene (Fig. 1 şi 2);
- locuinţa lor, de formă rectangulară, se compunea dintr-o singură încăpere, cu podea-platformă, având un cuptor cu soclu masiv, situat pe laura de est şi o prispă scundă de-a lungul peretelui de nord. O reconstituire grafică a unui cuptor neolitic a fost făcută şi publicată de către autorul săpăturilor, pe baza datelor obţinute în teren (Fig. 3);

[40] Comşa 1979, 31.
[41] Comşa 1992, 55–61.

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Din domeniul manifestărior magico-religioase, tot în campania anului 1978, poate fi menționat un grup mic de obiecte, format din câteva vase în miniatură, o placă ovală, neornamentată, cu marginile netezite cu grijă şi o piesă de lut, care parcă ar imita forma unei pâini ovale, netedă pe o parte şi bombată pe cealaltă. S-a mai găsit şi o figurină zoomorfă fragmentară de lut[42].

Prin studiul descoperirilor de la Radovanu, din punctul menționat, s-au putut trage o serie de concluzii importante, care pot fi extinse la nivelul întregului areal al Culturii Gumelnița.

Dacă până atunci se considera că *tell*-urile (movile) erau locuiri continue şi de durată, după săpăturile efectuate s-a constatat că acestea sunt reprezentate, de fapt, de o serie de aşezări succesive şi suprapuse, care reflectă diferite „momente" din evoluția Culturii Gumelnița, ceea ce înseamnă că nu este posibil ca în fiecare aşezare să fie reprezentată întreaga evoluție a culturii (respectiv toate fazele şi etapele acesteia). Materialele descoperite în alte aşezări confirmă pe deplin această concluzie.

Tot până la săpăturile amintite, se considera că *tell*-urile sunt obiective izolate. În realitate, în majoritatea cazurilor, de la începutul şi până la sfârşitul Culturii Gumelnița, a fost vorba de complexe alcătuite din mai multe părți:

1. aşezarea „deschisă", situată pe pante însorite sau pe terase;
2. aşezarea întărită cu şanț de apărare (circular sau oval), eventual cu palisadă, în care se refugiau, la nevoie, locuitorii comunității;
3. construcții modeste care serveau drept ateliere pentru țesut sau pentru realizarea uneltelor, sau ceramicii;
4. terenul necropolei[43].

Cercetările de la Radovanu „La Muscalu" au făcut posibilă dovedirea existenței unor planuri de sistematizare în cursul fazei de tranziție de la Cultura Boian la Cultura Gumelnița şi modificările treptate apărute în organizarea social-economică, la fel ca şi punerea unor probleme demografice, în privința schimbărilor numerice ale componenței comunităților din acea vreme şi regiune, ca şi încercarea modestă de precizare a densității populației neolitice din regiunea respectivă.

Alte aspecte interesante se referă la studiul necropolei. Rezultatele analizelor antropologice nu au fost publicate până acum. Totuşi, unele aspecte ale ritualului funerar au fost stabilite de către arheologul Dr. Eugen Comşa. Astfel, s-a constatat că membrii comunității practicau numai ritul înhumației în poziție chircită, pe partea stângă, mai rar, pe cea dreaptă, aceasta fiind asigurată prin legarea cadavrului. Acest obicei este sigur pentru chircirea accentuată. Prin analogie cu obiceiurile cercetate de etnografi, se mai poate spune că, după legare, cadavrul era introdus într-un fel de sac şi, abia după aceea, depus în groapă. De regulă, acest lucru se făcea cu grijă dar, în cazul unor cadavre legate strâns, acestea au fost puse cu fața în jos, în loc să fie depuse pe o parte. Din cele 26 de morminte, doar trei au avut inventar funerar modest şi anume: pe un schelet de copil s-au gasit mai multe mărgele din cochilii de scoici *Dentalium*, la unul de adult se afla o piesă de silex şi la un al treilea, aflat în poziție nefirească, s-a pus un văscior bitronconic, între humerusul şi antebrațul drept.

Pe parcursul cercetărilor efectuate la Radovanu, în punctul „La Muscalu", Dr. Eugen Comşa a fost preocupat de introducerea unor metode moderne de studiu, dintre care unele nu se puteau aplica în România, din lipsa mijloacelor necesare pentru fotografie aeriană, studii geomagnetice, determinări dactiloscopice şi C.14, ca şi spre exemplu, de efectuarea reconstituirii unui cuptor şi a locuințelor amplasate pe *tell* în diferite nivele.

Astfel, s-au căutat bucăți mai mari de cărbune, care să poată fi folosite pentru datarea cu C.14 şi eventual pentru măsurători dendrocronologice. În această ultimă privință, s-a avut în vedere faptul că, în zona aşezărilor studiate, în perioada corespunzătoare lor, pădurile erau caracterizate prin prezența masivă a stejarului. Prezența unor mici cărbuni, care proveneau cu siguranță din stejar, a fost confirmată prin analizele sporo-polinice efectuate pe probe provenind din săpătură.

[42] Comşa 1979, 33–34.
[43] Comşa 1990, 70–71, 113.

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Spre deosebire de alte specii, inelele de creştere sunt foarte clar evidenţiate la această specie. Ele se formează în fiecare an, în perioada vegetativă (adică primăvara şi vara). Inelele de creştere se deosebesc între ele ca grosime, în funcţie de diverse cauze interne şi externe. Principalele cauze însă sunt cele din domeniul climei, anume: regimul de precipitaţii, temperatura şi cantitatea de lumină din fiecare an.

Probele de cărbune pot servi ca elemente pentru datarea absolută a unor situri sau a unor materiale, atunci când, pentru o anumită zonă, este realizată aşa numita scară dendrocronologică absolută, sau pot servi drept „cărămizi" prin alăturarea secvenţelor, pentru alcătuirea, prin muncă îndelungată şi migăloasă, a scării respective. De asemenea, secvenţele pot oferi indicii preţioase, indubitabile, referitoare la condiţiile specifice de climă, dintr-o anumită perioadă şi regiune.

Pentru perioada respectivă, pe baza probelor analizate, prin fragmente de cărbune de stejar recoltate din nivelele 3 şi 4 ale aşezării, s-a constatat existenţa unui regim normal, în ceea ce priveşte ploile şi uscăciunea, cu deosebirile fireşti, legate de anotimp. Nu s-a identificat un regim excesiv de secetă. De asemenea, nu s-au găsit daune provocate de dăunători sau determinate de alte motive (de exemplu prin umbrire).

Analizele sporo-polinice de detaliu au fost executate prin metoda macerației şi separației prin densitate, de către doamna Madeleine Alexandru, de la Institutul de Geologie din Bucureşti, pe mai multe probe recoltate de Dr. Eugen Comşa din staţiunea „La Muscalu". Au rezultat o serie de aspecte interesante, referitoare la vegetaţia din zonă în perioada neolitică.

Prin studiul amănunţit al probelor, au rezultat nu numai anumite proporţii existente în cadrul speciilor arboricole, dar şi între cele nearboricole. Relaţia dintre vegetaţia arboricolă şi cea nearboricolă indică situarea sitului arheologic de la Radovanu în zona de contact a stepei (până la 37%) cu silvo-stepa (între 60–75%).

Prezenţa unor stejărişuri mixte, dar şi a teiului, arată existenţa unor păduri caracteristice zonei de silvo-stepă, care se întâlnesc şi astăzi în Câmpia Română.

Prezenţa arinului şi a salciei, ultima în creştere constantă de la un nivel de locuire la altul, indică existenţa unei vegetaţii azonale, care se regăseşte în cea actuală din lunca Argeşului, unde este situată comuna la care ne referim.

Prezenţa polenului de graminee cultivate, dar şi a unor specii de plante ca: *Artemisia, Plataginacee, Chenopodiacee, Polygonacee* etc., arată preocuparea oamenilor pentru cultivarea plantelor. Acest fapt este confirmat şi de descoperirea unor grâne carbonizate în incinta uneia dintre locuinţe.

Având în vedere compoziţia spectrelor analizate, s-a tras concluzia că profilul cercetat aparţine perioadei subboreale, perioadă caldă târzie, relativ mai ucată, care a favorizat dezvoltarea stejărişurilor mixte în păduri, dar şi a compositelor şi gramineelor în stepă. Participarea semnificativă a polenului de pin alături de composite confirmă existenţa unei stepe extinse, şi nu a unei clime mai reci, cu păduri de conifere, cunoscut fiind faptul că acest polen este purtat la mari distanţe, dinspre zona montană către câmpie[44].

Aceste studii palinologice au confirmat şi încadrarea cronologică efectuată prin cercetările Dr. Eugen Comşa, care au arătat apartenenţa descoperirilor din punctul „La Muscalu" la perioada de tranziţie de la Cultura Boian la Cultura Gumelniţa, adică la începutul primei jumătăţi a mileniului IV a.Chr.

În toamna anului 1961, s-a efectuat pentru prima dată în ţara noastră, o prospecţiune magnetometrică geofizică, într-o aşezare arheologică, aceasta fiind realizată cu aparatură de ultimul tip la vremea respectivă.

Astfel, în ziua de 2 august 1961, s-au efectuat măsurători în opt puncte de staţie. Ca rezultat al acestora, pentru zonele unde nu se aflau platforme de locuinţe se observa o scădere a parametrilor, aceştia crescând în mod evident, în cazul prezenţei lor.

[44] Comşa 1990, 116–117.

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De asemenea, la solicitarea Dr. Eugen Comşa s-a făcut şi un mic studiu privind modul cum sunt influenţate aparatele, mai mult sau mai puţin, de prezenţa anumitor materiale arheologice, fapt deosebit de important în timpul executării unor astfel de măsurători[45].

Prof. univ. Dr. G. Stoicovici de la Universitatea Babeş-Bolyai din Cluj a executat şi analize mineralogice asupra ceramicii, care a fost clasificată, astfel, în mai multe categorii, avându-se în vedere materia primă din care fuseseră confecţionate. Totodată, acelaşi specialist, a efectuat un studiu la microscop asupra diferitelor tipuri de silex identificate în aşezare, stabilindu-se şi diferenţele dintre ele, referitoare la compoziţie, aspect şi pigmenţi[46].

În 1972 s-a reuşit şi descoperirea unei cantităţi mai mari de cărbune, pe care Dr. Eugen Comşa l-a prelevat cu grijă, pentru a nu-l contamina şi l-a trimis în Germania pentru analize de carbon 14, în vederea datării exacte a aşezării din punctul „La Muscalu". Probele neputând fi studiate în România, au fost trimise la laboratorul pentru analizele carbonului 14 de la Institutul de Pre- şi Protoistorie de la Berlin, unde au fost studiate în detaliu. Dr. Hans Quita a confirmat observaţiile şi constatările din teren efectuate de către arheologul Dr. Eugen Comşa. Aşezarea a fost datată la începutul mileniului al IV-lea a.Chr., mai precis în anul 3900±70 a.Chr.[47]

Rezultatele tuturor analizelor efectuate în situl din punctul „La Muscalu" au fost incluse în lucrări de specialitate şi popularizate în cadrul comunităţii ştiinţifice de către ambele părţi.

Tot în punctul „La Muscalu" a fost descoperit, de catre Dr. Maria Comşa, un mormânt izolat. Aşezarea din punctul „Pe Neguleasa", în secolele XVI–XVII şi XVIII s-a extins atât la poalele gorganei „La Muscalu", cât şi deasupra, pe terasa înaltă, în special pe adâncitura care s-a format peste şanţul care separa aşezarea neolitică de restul terasei. Mormântul a fost descoperit pe terasa înaltă, suprapunând resturi de locuire neolitice. Scheletul, orientat creştineşte, vest-est, avea o monedă depusă pe piept (Ungaria, Ferdinand 1, 1550–1564).

„Pe Neguleasă"

Pe fundul Văii Coadelor, în punctul numit de localnici „Pe Neguleasă", cu ocazia unor cercetări de suprafaţă efectuate de Dr. Eugen Comşa în anul 1960, au fost descoperite urme din perioada feudalismului timpuriu şi dezvoltat. Atunci au fost adunate de la suprafaţa solului fragmente ceramice, resturi de lipitură arsă, precum şi câteva bucăţele de zgură de fier.

Drept urmare, în vara anului 1960, Dr. Maria Comşa a executat un sondaj în acea zonă, descoperindu-se existenţa aici a mai multor complexe, din secolul 10 şi mai târzii. Barbu Ionescu, care era la vremea aceea directorul Muzeului de Istoria din Oltenita a luat parte la săpăturile începute in 1960. Cercetarea a fost terminată în 1968 şi George Trohani a participat, de asemenea, în acea campanie. Locuirea începea în vale, unde odinioară curgea un pârâiaş (azi secat, care se vărsa în lacul Coadelor) şi continua până către mijlocul pantei terasei înalte. Pe terasa joasa a pârâiaşului se afla locuirea din secolele VI–VII, suprapusă, parţial, de cea din secolele VIII–IX. Mai sus, la poalele terasei înalte, se aflau locuinţele din secolele IX–X, iar mai sus, cam pe la mijlocul pantei, se aflau locuinţele unui sat din secolele XV–XVII, mergând chiar către mijlocul secolului XVIII. În decursul celor mai bine de trei sute de ani de existenţă satul românesc din secolele XV–XVII fusese separat de vale, prin şanţuri de îngrădire. Cimitirul acestui sat se afla în vale, în punctul „Pe Neguleasă", suprapunând parţial locuirea mai veche, din secolele VI–VII şi VIII–IX. De-a lungul Văii Coadelor, între punctele „Pe Neguleasă" şi „Valea lui Petcu", pe o distanţă de circa 1 km, se întinde o aşezare, care începea în secolul al VI-lea şi continua până în secolul al X-lea, inclusiv. În acel loc s-au

[45] Comşa 1990, 118.
[46] Comşa 1990, 120–121, 118–119.
[47] Comşa 1990, 115.

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desfăşurat 12 campanii arheologice, în anii 1960–1961, 1964–1969, 1972–1973, 1975, 1978). Cel mai nou nivel de locuire era reprezentat printr-o casă construită la suprafaţa solului (casa nr. 1), iar celelalte niveluri mai vechi fiind reprezentate prin bordeie. Cercetările efectuate în această parte a aşezării au fost completate în cursul anului 1968.

Casa descoperită avea forma aproximativ trapezoidală, cu colţurile rotunjite şi o suprafaţă de circa 48 m^2. Pereţii săi fuseseră construiţi din pari şi nuiele împletite, lipite cu lut amestecat cu pleavă şi nisip fin. Pe fragmentele de lipitură se păstrau imprimate părţi din scheletul lemos al casei. Avea o singură încăpere. Baza pereţilor se sprijinea pe tălpi de lemn. Podeaua casei o forma pământul bătătorit. Locuinţa era prevazută cu două vetre ovale, ambele deschise, prima fiind situată către centrul încăperii iar cealaltă lângă peretele de nord-est. Descoperirea unor pirostrii în stratul de cenuşă indică faptul că, vremelnic, pe lângă cele doua vetre permanente, era folosit şi spaţiul din preajma pereţilor de vest şi de sud, unde a aparut multă cenuşă.

Din interiorul locuinţei au fost scoase două tipuri de ceramică (smălţuită şi nesmălţuită), dar şi două lulele smălţuite, lucrate din pastă roşiatică, destul de fină, una cu decor incizat după ardere, iar a doua cu decor în relief. Dintre obiectele de fier găsite, amintim aici: două catarame, cuţite, piroane, balamale, o tindeică şi mai multe cuie lungi de 14 cm. În mod deosebit, sunt de menţionat două tipare pentru turnat bumbi şi piese de podoabă, găsite în stratul de cenuşă dinspre colţul de sud-vest al încăperii. Acestea dovedesc existenţa unui bijutier sătesc, care confecţiona bumbi şi podoabe pentru comunitatea în care trăia dar, posibil şi pentru altele. În ceea ce priveşte tehnica sa de lucru, meşteşugarul amintit folosea şi păstra tradiţii vechi, provenind din mileniul I-p.Chr. sau poate chiar mai vechi.

Ţinând cont de ceramică şi de cele doua lulele, complexul respectiv a putut fi încadrat cronologic în secolul al XVII-lea, eventual la începutul celui de al XVIII-lea.

Existenţa unui bijutier care se ocupa de obţinerea unor bumbi sau bijuterii, chiar şi din metal modest, ceea ce presupune un oarecare rafinament în execuţie, arată că la Radovanu exista o comunitate evoluată din punct de vedere economic, care depăşise faza de sat propriu-zis, dobândind anumite caracteristici specifice oraşelor[48].

Tot „La Neguleasă” a fost săpat cimitirul ultimei aşezări, acesta aflându-se în vale, suprapunându-se peste o locuire din secolele VI–X. Din acest cimitir, în anii 1964–1969 şi 1972–1973 au fost săpate 159 de morminte, orientate creştineşte, vest-est (capul spre vest), cu unele deviaţii. Ceva mai mult de o treime dintre cei decedaţi aveau depusă, intenţionat, câte o monedă, aceasta servind arheologului pentru datarea fiecăruia dintre ele. Monedele erau turceşti, ungureşti sau emise de oraşul Ragusa. Dat fiind că în unele morminte nu erau schelete, iar in altele erau rămăşiţe aparţinând la doi indivizi (M.72 – gemeni nou-născuţi, M.82 mamă şi copil nou-născut), seria a cuprins 161 de indivizi din secolele XV–XVII şi 14 din secolele XVIII–XIX. Dintre acestea, 76 (46,20%) erau de copii, sub vârsta de 14 ani.

Restul de indivizi au fost împărţiţi în trei grupe, pe baza indicelui lor cefalic şi a altor caracteristici. În ceea ce priveşte tipologia, s-au găsit forme mediteranoide, nordoide, crômagnoide şi dinaroide.

Valea Luicii

Rămăşiţele celor 14 indivizi descoperiţi în Valea Luicii (sec. XVIII–XIX) cuprindeau 4 adulţi şi 10 copii, 5 dintre ultimii fiind morţi în primul an de viaţă. În acest caz, cei 4 adulţi aveau trăsături mediteranoide (M.8, femeie), mongoloide (M.10), sau crômagnoide B (M.13 bărbat). M.7 nu a putut fi atribuit unui anumit tip antropologic. Seria de la Radovanu are asemănări apropiate cu seriile de la

[48] M. Comşa 1986, 227–232.

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Izvor (sec. VIII) şi Cernica (sec. XVII–XVIII) şi este considerată o verigă de legătură între cele două[49].

„La Frații Dincă”

Primul care a efectuat un sondaj în punctul „La Frații Dincă” a fost arheologul Dr. Expectatus Bujor care, în urma rezultatelor preliminare obținute, a încadrat aşezarea fortificată de la Radovanu în perioada cuprinsă între a doua jumătate a secolului al II-lea a.Chr. şi până la mijlocul secolului I p.Chr.

În anul 1967, lucrând de mai mulți ani pe Valea Coadelor, Dr. Maria Comşa a fost anunțată de către localnici că în punctul numit „La Frații Dincă” s-a surpat un mal şi se observă acolo mult pământ ars. În aceeaşi zi, deplasându-se la fața locului, Dr. Maria Comşa a constatat că în mal existau încă resturile unui cuptor de ars oale. Având în vedere că malul nu avea rezistență, urmând să se prăbuşească în curând, arheologul amintit a studiat imediat rămăşițele cuptorului. Acesta era situat în panta aflată spre nord de aşezarea fortificată geto-dacă, în malul de la periferia aşezării nefortificate, care continua spre nord şi nord-vest de *dava* amintită[50], în dreapta drumului care duce de la Radovanu spre satul Căscioarele. Acest drum trece prin fostul şanț care separa aşezarea fortificată (*dava*) de aşezarea civilă. Cuptorul de olar se afla pe panta terasei înalte, în partea dinspre sat, înainte ca drumul să intre în fostul şanț.

Cuptorul, în urma studiului, s-a constatat că avea o formă tronconică, fiind scobit în lut, având grătar orizontal, sprijinit pe un perete median. Nu avea încărcătură de vase. În pământul prăbuşit s-au găsit fragmente ceramice din Epoca Bronzului, dar şi porțiuni de fructiere getice. Cuptorul a fost datat în secolul I a.Chr., probabil în prima sa jumătate[51].

Ulterior, prin studiile efectuate de Dr. Sebastian Morintz şi Dr. Done Şerănescu, datarea s-a făcut într-o secvență temporală mai restrânsă, pe baza analizei ceramicii şi a monedelor, între anii 150 a.Chr. şi 60 a.Chr.

În apropierea cuptorului gasit în punctul „La Frații Dincă”, cu câțiva metri mai la vale, s-au găsit alte două cuptoare, la poalele terasei inalte. Acestea erau fără grătar şi au fost scobite în lut, având groapa de acces comună. În umplutura gropii de acces s-a gasit ceramică lucrată cu mâna şi cu roata rapidă. Este posibil ca groapa de acces să fi avut un acoperiş. Ambele cuptoare au fost folosite pentru arderea ceramicii şi aparțin aspectului cultural Ciurel, din secolele VI–VII.

Cuptoarele de ars ceramica erau destul de frecvente în aşezările din secolele VI–VII.

„Gorgana a doua”

Movila se află în partea de sud-est a comunei Radovanu şi reprezintă un martor de eroziune a terasei înalte din dreapta Argeşului.

În timpul unei periegheze făcute de Dr. Barbu Ionescu în anul 1930, de-a lungul terasei Argeşului, au fost recoltate fragmente de vase geto-dace.

În anul 1971, efectuându-se noi cercetări de suprafață, de către Dr. Sebastian Morintz, Dr. Done Şerbănescu şi Dr. Barbu Ionescu, au fost descoperite din nou resturi de vase geto-dace, dar şi altele, aparținând unui aspect nou de la sfârşitul Epocii Bronzului, numit Cultura Radovanu. În

[49] Popovici & Georgescu, 1975, 12, 9–16.

[50] *Dava* is a term used for a certain type of fortified settlement belonging to the Getic-Dacian communities.

[51] M. Comşa 1986, 143–151.

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perioada 1971–1973, 1975–1977, 1979 şi 1984, au fost astfel identificate două niveluri de cultură, unul aparţinând Epocii Bronzului şi altul perioadei geto-dace. În mod sporadic, au fost găsite şi fragmente de vase de tip Boian (faza Vidra).

Au fost scoase la iveală 10 locuinţe de suprafaţă, aparţinând Epocii Bronzului, cu urme ale parilor din care era alcătuit scheletul lor lemnos. Au mai fost găsite gropi cu resturi menajere, adică oase de animale şi vase fragmentare, mai rar întregi.

Au putut fi stabilite trei categorii de ceramică: una modelată neglijent, din pastă amestecată cu cioburi pisate, o ceramică îngrijit lucrată, din lut de calitate mai bună, cu cioburi pisate mărunt, o ceramică fină.

S-au găsit şi unele obiecte din os sau din corn. A fost evidenţiată şi o activitate metalurgică locală, fiind găsite tipare pentru turnarea unor topoare.

În cuprinsul aşezării din Epoca Bronzului au fost identificate două şanţuri, a căror funcţionalitate nu a putut fi stabilită. Un alt şanţ, aparţinând perioadei geto-dace, care delimita aşezarea respectivă, se afla la marginea sudică a platoului.

După toate probabilităţile, Cultura Radovanu reprezintă ultima manifestare a Epocii Bronzului din sudul României. Această civilizaţie a rezultat din procesul de fuziune etno-culturală dintre elemente nord-pontice, istro-pontice şi balcanice. Faţă de Cultura Coslogeni, o altă civilizaţie care se găsea în zonă, s-a considerat necesară efectuarea unei comparaţii în ceea ce priveşte tipul de aşezări, tipul de locuinţe, inventarul aşezărilor şi, mai ales, ceramica. În urma acestei analize de detaliu a rezultat că în complexul de la Radovanu nivelul de viaţă era mai ridicat în mod semnificativ, faţă de cel din Cultura Coslogeni.

În aşezarea geto-dacică au fost delimitate trei niveluri de locuire, din care, cel superior a fost distrus de lucrările agricole.

În primul nivel de locuire locul a fost fortificat cu un şanţ în forma literei U, situat la marginea aşezării, având adâncimea între 3,20–3,80 m şi care urma conturul terasei. Nu s-a putut stabili cu certitudine prezenţa unei palisade de-a lungul şanţului de apărare. Ulterior, se renunţă la folosirea şanţului, care se colmatează.

Locuinţele celui de al doilea nivel erau de suprafaţă, cu una sau, uneori, chiar cu două vetre, de obicei situate pe latura de nord.

Locuinţele erau acoperite cu trestie sau paie.

Una dintre ele (locuinţa 1) se pare că a aparţinut unui bijutier, al cărui inventar a fost găsit lângă vatră şi consta dintr-o ştanţă din bronz de formă tronconică, cu imaginea în relief a zeiţei Atena Partenos, dornuri, o dăltiţă cu gura curbată, o lingură de turnat, creuzete, tipare în care se turnau bare de metal. În afara locuinţei s-au găsit rămăşiţe de la turnare şi zgură.

A doua locuinţă, situată lângă prima, către sud, este un sanctuar, deoarece pe latura ei de nord-est s-a găsit o vatră bombată, ornamentată cu cercuri, în apropierea ei descoperindu-se cupe cu picior de o formă aparte, folosite pentru ceremonii religioase.

În preajma locuinţelor s-au găsit gropi cu ceramică fragmentară, sau chiar vase întregi, dar şi oase de animale. Nu departe de locuinţa de cult a fost găsită şi o groapă cu caracter ritual, în care erau depuse două vase cu gura în jos, această „ofrandă" fiind adusă divinităţii, probabil după stabilirea locului de reşedinţă al comunităţii.

În toate nivelurile de locuire geto-dacă au fost găsite numeroase fragmente ceramice elenistice din amfore de tip „Rhodos" sau „Cos" neştampilate, vase decorate cu firnis negru sau cu vopsea, sau, în primul nivel, fragmente de cupe elenistice cu decor în relief.

S-au găsit şi obiecte din lut sau din metal (arme, pinteni, un mic fragment dintr-o cămaşă de zale, monede). Se remarcă şi prezenţa unor figurine antropomorfe masculine.

Cel de al treilea nivel, în măsura în care s-a păstrat, indică o locuire sporadică şi pe o suprafaţă mică. Acest nivel a fost datat în sec. I a.Chr.

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Pe baza elementelor care au putut fi folosite pentru datare, mai ales monede, s-a putut trage concluzia că *dava* de la Radovanu a existat şi funcţionat între 150-cca. 60 a.Chr. Aceasta a reprezentat unul dintre centrele economice, politice, militare şi religioase ale lumii geto-dace, alături de alte dave cunoscute în Câmpia Română, cum ar fi cele de la Zimnicea, Popeşti, Piscu Crăsani şi Cârlomăneşti, cu care a fost parţial contemporană.

Din anul 2004 au fost reluate săpăturile arheologice de pe „Gorgana a doua", considerându-se că acesta este un sit reprezentativ pentru Epoca Bronzului, prin Cultura Radovanu, dar şi pentru a doua epocă a fierului, prin existenţa aici a unei aşezări de tip davă, din secolele II–I a.Chr.

În acel an şi în 2005 au fost scoase la iveală o locuinţă din epoca bronzului şi material ceramic specific perioadei.

Pentru perioada getică, din a doua epocă a fierului, au fost găsite 5 locuinţe incendiate, unele cu vetre. Nu s-au găsit urme ale şanţului de fortificaţie, acesta fiind distrus probabil de numeroasele alunecări de teren din zonă.

Au mai fost descoperite două vase de provizii (chiupuri), vase elenistice de import (amfore de tip Cos), Pseudocos sau Heraclea Pontica, o drahmă emisă de oraşul Apollonia.

În anul 2006 s-au descoperit construcţii de suprafaţă, două dintre ele cu vetre, decorate cu şnur, aflate în stare precară de conservare. Una dintre construcţii a fost săpată în anii '70–80 ai secolului trecut, de către Dr. Sebastian Morintz şi Dr. Done Şerbănescu. Tot în acel an au fost descoperite monede geto-dace, greceşti şi romane[52].

„Gorgana unu"

În anul 2007 s-a trecut la săparea „Gorganei unu", situată la 150 m de „Gorgana a doua", unde se află un complex geto-dacic fortificat, săpat in anul 1988 de către Dr. Eugen Comşa.

S-a secţionat valul de apărare care, conform Dr. Eugen Comşa, era susţinut de parapeţi din piatră, având o fundaţie puţin adâncă. Unul dintre aceştia a fost descoperit în cursul săpăturilor. Traseul valului era însoţit, în imediata lui apropiere, de un şanţ de apărare (sec. I a.Chr.)[53].

Valea Popii (com. Radovanu)

În marginea cimitirului, la circa 150 m în stânga şoselei Oltenița-Hereşti, pe un bot de terasă înaltă de circa 5 m a fost identificată, cu mulţi ani în urmă, o aşezare geto-dacică. În acelaşi loc, în 1954, au fost găsite materiale ale Culturii Tei, aparţinând Epocii Bronzului. Între 14–21 noiembrie 1963 s-au efectuat sondaje pentru a preciza caracterul aşezărilor şi a obţine noi date asupra celor două culturi semnalate anterior. Acestea s-au efectuat în apropierea casei locuitorului Vasile Arsene.

În cursul cercetării s-a constatat că stratul cu materiale arheologice avea o grosime de 0,60–0,80 m şi că partea sa superioară era răvăşită de arături până la adâncimea de 0,30–0,40 m. La baza stratului arheologic s-au găsit în cantitate relativ redusă fragmente ceramice ale Culturii Tei şi o depunere consistentă aparţinând culturii geto-dace. În acest ultim caz, pe lângă ceramică fragmentară, s-au găsit şi resturile unei locuinţe parţial adâncite.

„Valea lui Petcu" 2

În cursul săpăturilor desfăşurate în aşezarea prefeudală, începând cu deceniul şase, de către Dr. Maria Comşa în punctul mai sus amintit, au fost descoperite două tipuri principale de locuinţe, adică bordeie şi case, fiecare cu diferite variante.

[52] Şerbănescu 1987, 155.
[53] Şerbănescu *et alii*, 2008, 247–248.

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În perioada 1979–1981, Dr. Maria Comşa a efectuat săpături în punctul „Valea lui Petcu” 2, descoperind o serie de complexe din perioada feudală timpurie, cu ceramică constând din: ulcioare amforoidale din a doua jumătate a secolului X şi începutul secolului al X-lea, unele având urme de decor pictat.

În campania din 1983 au fost scoase la iveală 3 bordeie şi 4 case, cu diferite tipuri de vetre, dar şi o anumită cantitate de ceramică. S-au găsit, de asemenea, numeroase bordeie şi case fără instalaţii de foc, care constituiau anexele sau dependinţele caselor de locuit permanente. S-a constatat existenţa a trei nivele de locuire în bordeie, cel mai vechi fiind bordeiul nr. 3, care se datează în prima jumătate a secolului al IX-lea, urmat de bordeiul nr. 1, databil pe la mijlocul secolului al IX-lea, apoi de bordeiul nr. 2 care poate fi încadrat în a doua jumătate a secolului amintit. În ceea ce priveşte casele, s-au găsit şi aici două nivele de locuire. Din etapa mai veche datează casele nr. 1, 3 şi 4, puţin adâncite în pământ, databile la sfârşitul secolului IX şi începutul secolului al X-lea, iar etapei mai noi îi aparţine casa nr. 2 databilă în secolul al X-lea.

Complexele de locuire aparţin în cea mai mare parte populaţiei autohtone vechi româneşti. Acestei populaţii îi aparţin bordeiului nr. 3 şi casele nr. 1–3. Bordeiele nr. 1, 2 şi casa nr. 4 aparţin unor indivizi veniţi din zona nord-pontică în decursul secolului al IX-lea (la mijlocul şi respectiv către sfârşitul acestui secol), care au intrat în contact cu populaţia locală, fiind asimilaţi de aceasta într-o perioadă relativ scurtă. Procesul de asimilare se reflectă în modul de organizare a interiorului locuinţei (cuptorul în groapă şi vetrele cenuşar). Aşa cum se prezintă situaţia până acum, în secolul al X-lea, la Radovanu avem de-a face cu o populaţie veche românească[54].

Radovanu II

Complexul de la Radovanu II se află la aproximativ 4 km distanţă de comuna Radovanu. Acesta a fost descoperit pe terasa înaltă a Argeşului, în timpul efectuării unor cercetări de suprafaţă în anul 1961, de către arheologul Dr. Eugen Comşa. Într-un loc de unde se extrăgea argilă, au fost descoperite câteva fragmente ceramice decorate cu linii incizate şi cu caneluri, microlite de silex şi numeroase fragmente de oase de animale. Pe baza motivelor decorative s-a putut face încadrarea materialelor descoperite în cultura Dudeşti[55].

O altă explorare a carierei de lut, efectuată în anul 1964, a dovedit existenţa pe acel loc a unei mici aşezări, cu dimensiuni aproximative de 100×30 m. S-a făcut un sondaj, fiind identificate două nivele de locuire. În primul au fost descoperite numeroase microlite din silex „balcanic”, dar şi de culoare gri-albicioasă sau roşie. S-au mai găsit un nucleu de silex, care se prelucrează pentru obţinerea diferitelor piese, dar şi două topoare de piatră, situate în diferite straturi ale nivelului.

Oasele de animale au aparţinut bovinelor şi ovinelor, porcul fiind mai puţin frecvent. De asemenea, s-au găsit oase de peşte şi cochilii de scoică *Unio sp.*

Ceramica a fost împărţită în trei categorii: menajeră, ceramică de aceeaşi calitate dar tratată în mod diferit după modelare (aplicarea unui slip care îi conferea luciu), ceramică fină. Nu a fost descoperită nicio figurină.

Primul nivel a fost atribuit culturii Dudeşti, (faza Cernica), iar cel de al doilea, de tip Radovanu II, având o locuinţă de suprafaţă la bază, aparţine unei perioade posterioare. Pentru a stabili încadrarea cronologică a nivelului, s-a recurs la tipologia comparată a ceramicii, ceea ce presupune o comparaţie de detaliu a acesteia cu alte situri apropiate din punct de vedere spaţial şi cronologic, cum ar fi cele de la Cernica, Bogata, Greaca, ceea ce a dus la concluzia că acest nivel aparţine fazei Bolintineanu a culturii Boian.

[54] M. Comşa 1988–1989, 143–152; M. Comşa 1985, 98.
[55] Comşa 1965, 39.

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ABBREVIATIONS ~ ABREVIERI

- *AACarp – Acta Archaeologica Carpathica*, Kraków, Poland.
- *Acta* (Asiculica) – Muzeul Secuiesc al Ciucului, Sfântu Gheorghe, Romania.
- *ActaArchHung – Acta archaeologica Academiae scientiarum Hungaricae*, Budapest, Hungary.
- *ActaMN – Acta Musei Napocensis*, Cluj-Napoca, Romania.
- *Analele Banatului* (SN) – *Analele Banatului*, Serie Noua, Timişoara, Romania.
- *Antiquity* – Cambridge, Marea Britanie.
- *ActaMM – Acta Moldaviae Meridionalis*, Vaslui, Romania.
- *ActaMP – Acta Musei Porolissensis*, Zalău, Romania.
- *AEMT – Archaiologiko ergo ste Makedonia kai Thrake.*
- *AIIA-Iaşi Supl – Anuarul Institutului de Istorie şi Arheologie "A.D. Xenopol"*, Iaşi, Supliment, Iaşi, Romania.
- *An. Şt. Univ. "Al. I. Cuza" Iaşi – Analele ştiinţifice ale Universităţii "Al. I. Cuza"*, Iaşi, Roumanie.
- *Archaeolingua* – Budapest, Hungary.
- *Arheologija* – Kiev, Ukraine.
- *Archaeologia Romanica* – Bucharest, Romania.
- *ArhMold – Arheologia Moldovei*, Institutul de (Istorie şi) Arheologie ("A.D. Xenopol"), Iaşi, Romania.
- *Arhivele Olteniei* – Craiova, Romania.
- *Arta* – Revista Universităţii de Arte "George Enescu" Iaşi, Romania.
- *Bibliotheca Memoriae Antiquitatis – Bibliotheca Memoriae Antiquitatis*, Piatra Neamţ.
- *BAI – Bibliotheca Archaeologica Iassiensis*, Iaşi, Romania.
- *BMA – Bibliotheca Memoriae Antiquitatis*.
- *BMN – Bibliotheca Musei Napoccensis*, Cluj-Napoca, Romania.
- *BMMK – A Békés Megyei Múzeumok Közleményei*, Békéscsaba, Hungary.
- *Carpica* – Muzeul Judeţean Bacău, Romania.
- *CAANT – Cercetări Arheologice în Aria Nord-Tracă*, Bucureşti, Romania
- *CercetIst – Cercetări istorice*, Complexul Naţional Muzeal „Moldova", Iaşi, Romania.
- *Corviniana* – Revista Muzeului Castelul Corvineştilor, Hunedoara, Romania.
- *CCAR – Cronica Cercetărilor Arheologice din România*, Bucureşti, Romania.
- *CCDJ – Cultură şi civilizaţie la Dunărea de Jos*, Călăraşi, Romania.
- *Dacia – Dacia*. Recherches et découvertes archéologiques en Roumanie, Bucarest, I-XII (1924-1947).
- *Dacia*, NS – *Dacia*, Nouvelle Série, Revue d'archéologie et d'histoire ancienne, Bucarest (1957), Roumanie.
- *DissPann – Dissertationes Pannonicae* ex Instituto Numismatico et Archaeologico niversitatis de Petro Pázmány nominatae Budapesttinensis, Budapest, Hungary.
- *Dolgozatok – Travaux – Dolgozatok az Erdély Nemzeti Mùzeum Érem* – és Régiségtárából – Travaux de la Section Numismatique et Archéologique du Musée National de Transilvanie (Kolozsvár), Roumanie.
- *Drevnejšie obščnosti – Drevnejšie obščnosti*, Kišinev, Republic of Moldova.
- *European Journal of Archaeology*, London, Great Britain.
- *Forum cultural* – Direcţia Judeţeană pentru Cultură, Culte şi Patrimoniu Naţional, Botoşani.
- *IPH – Inventaria Praehistorica Hungarie*, Budapest, Hungary.

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- *International Monographs in Prehistory* – Oxford, Great Britain.
- *Izdatelstvo na BAN*, Sofia, Bulgaria.
- *Izvestia NM Varna*, Varna, Bulgaria.
- *JPEK – Jarhbuch fűr Prähistorische und Ethnographische Kunst*, Berlin, Germany.
- *JMV – Jahrbuch des Oberösterrichischen Musealvereines*, Linz, Austria.
- *Journal of Archaeology – American Journal of Archaeology*, Chicago, U.S.A.
- *KZNM – Kurgany v zonah novostroek Moldavii*, Kišinev, Republic of Moldova.
- *Man* (Journal) – London, Great Britain.
- *Materiale – Materiale şi cercetări arheologice*, I (1953)–VIII (1962), Bucureşti, Romania
- *Materiale*, Ploieşti – *Materiale şi cercetări arheologice*, a XVII-a Sesiune anuală de rapoarte Ploieşti, 1983, Ploieşti, Romania.
- *Materiale*, Oradea – *Materiale şi cercetări arheologice*, a XIII-a Sesiune anuală de rapoarte, Oradea, 1979, Oradea, Romania.
- *MemAntiq – Memoria Antiquitatis*, Acta Musei Petrodavensis, Complexul Muzeal Judeţean Neamţ, Piatra Neamţ, Romania.
- *MitArchInst* – Mitteilungen des Archaeologischen Institutes des Ungarishen. Akademie der Wissenschaften, Budapest, Hungary.
- *Oltenia – Studii şi comunicări*, Craiova, Romania.
- *Peuce* – Institutul de Cercetări Eco-Muzeale, Tulcea, Romania.
- *Probleme de antropologie – Probleme de antropologie*, Bucuresti, Romania.
- *Proceedings of the Prehistoric Society*, Cambridge, Great Britain.
- *PMMB – Publicaţia Muzeului Municipiului Bucureşti*, Romania.
- *Revista arheologică – Revista arheologică*, Chişinău, Republic of Moldova.
- *Rom. J. Leg. Med. – Romanian Journal of Legal Medicine*, Bucharest, Romania.
- *Studia Praehistorica* – Archäologisches Institut der Bulgarischen Akademie de Wissenshcaften, Bulgaria.
- *Studjine zvesti archeologickeko ustavu SAV*, Nitra, Slowakia.
- *SAA – Studia Antiqua et Archaeologica*, Iaşi, Romania.
- *Saarbrücker Beiträge zum Altertumskunde* – Bonn, Germany.
- *SCIV (SCIVA) – Studii şi cercetări de istorie veche*, beginning with 1975: *Studii şi Cercetări de Istorie Veche şi Arheologie*, Institutul de Arheologie „Vasile Pârvan" Bucureşti, Romania.
- *Slovenská Archaeologia – Arheologický Ústav S.A.V.* Nitra, Slowakia.
- *Society for American Archaeology Memoire* – Washington. D.C., U.S.A.
- *Strabon – Strabon*. *Bulletin* D'information *Historique*, Institutul de Arheologie, Iaşi, Romania.
- *Thraco-Dacica – Thraco-Dacica*, Institutul Român de Tracologie, Bucureşti, Romania.
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- *Varia Archaeologica Hungarica*, Budapest, Hungary.
- *Vegetation History Archaeobotany – Vegetation History and Archaeobotany*, Berlin, Heidelberg, Germany.
- *Zbornik Narodnok Muzeja* (Beograd), Yugoslavia.

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The 85th Birth Anniversary of Eugen Comșa

PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM:
"The Neo-Eneolithic Period in Central and Southeast Europe"

We invite you to join us in a journey, back in time, to the moment when the symposium took place. We hope we could create an image about how it was, by photos taken during the meeting and speeches that preceded the title awards to my father. We hope you will be pleased to "walk" along the panels of the three exhibitions opened during the symposium and experience the same sensations that we had.

Moreover, you will travel with us to the Museum of the Gumelnița Civilisation in Oltenița and to the site of Radovanu, located in a village where my father found many sites of archaeological importance. The title of Citizen of Honour awarded by the mayor of Radovanu was just a confirmation of the tight bonds existing between Eugen Comșa and the mentioned place.

All in all, we are sure that you will enjoy reading the contributions to the symposium and that you will have no regrets for joining us in this imaginary journey.

Dr. Alexandra COMȘA

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