

## BARICE – NASELJE DANILSKE KULTURE U BENKOVCU

U članku su izneseni podatci s istraživanja provedenih 2012. na nalazištu danilske kulture Barice u Benkovcu kod Zadra. Izlaganje je koncentrirano na prikaz otkrivenih objekata, originalnost njihovih oblika i na pitanja tehničkih postupaka primijenjenih pri njihovu podizanju.

KLJUČNE RIJEČI: *srednji neolitik, danilska kultura, istočni Jadran, Dalmacija, naselja*

Premda se u arheološkoj literaturi spominje već duži niz godina, arheološki potencijali neolitičkog nalazišta Barice u Benkovcu, ostali su uglavnom nepoznati jer su podatci koji se u vezi s njim navode ograničeni samo na posve uopćene napomene o njegovoj okvirnoj kulturnoj pripadnosti.<sup>1</sup>

Neolitičko je naselje smješteno na sjevernom rubu benkovačkog polja, a zauzima danas zapuštene ratarske površine uza samu južnu periferiju suvremenog dijela Benkovca (Sl. 2-3). S obzirom na dugogodišnju i vrlo intenzivnu ratarsku aktivnost, nalazište je zasigurno moralo izgubiti svoju izvornu mikrotopografiju, pa se današnjom izrazito zaravnjenom površinom, s debelim humusnim slojem i posve rijetkim višegodišnjim raslinjem posve utapa u jednoličnu topografiju ambijenta kojem pripada. Vidljive su samo granice parcela ili minimalni tragovi kakvih drugih, recentnijih aktivnosti. Zbog tih okolnosti, a posebice izrazito debelog sloja humusa koji posve prikriva površinske nalaze, a otklanja i mogućnost uočavanja drugih važnih indika-

## BARICE – SETTLEMENT OF THE DANILO CULTURE IN BENKOVAC

The article presents information obtained in 2012 at the site of Barice belonging to the Danilo culture in Benkovac near Zadar. The report offers representation of objects unearthed, originality of their forms and questions of technical procedures applied in their construction.

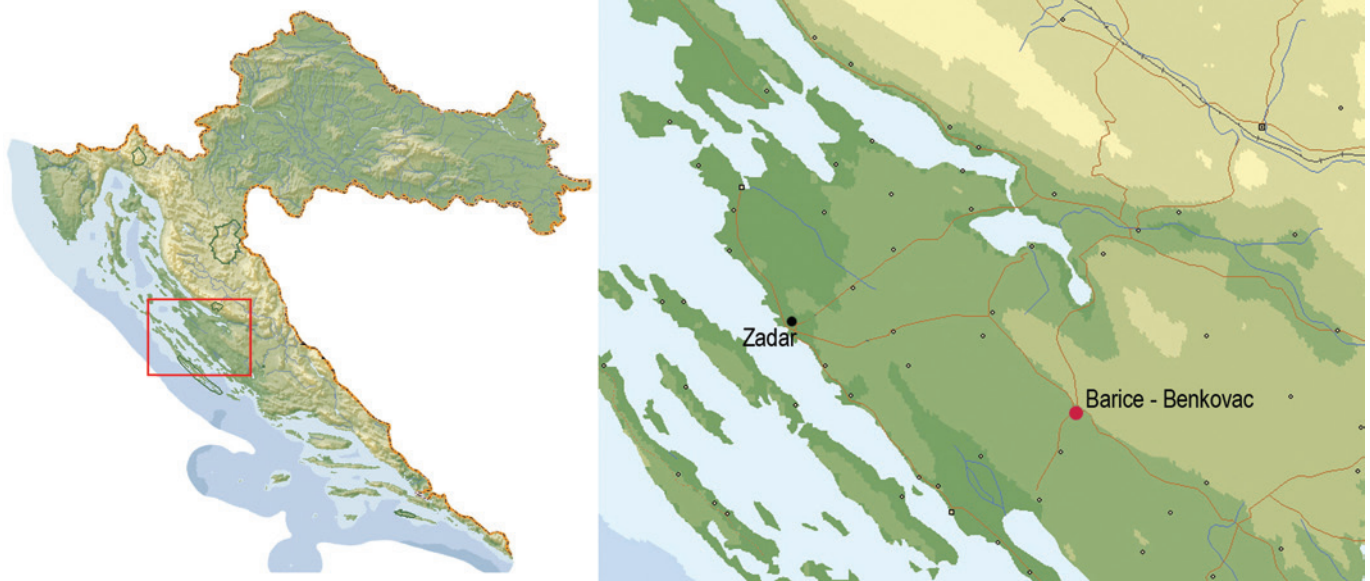
KEY WORDS: *Middle Neolithic, Danilo culture, eastern Adriatic, Dalmatia, settlements*

Although it has been mentioned in the archaeological publications for quite a while, archaeological potentials of the Neolithic site of Barice in Benkovac remained mostly unrecognized as the data related with it are limited to quite general remarks about its broad cultural attribution.<sup>1</sup>

Neolithic settlement is situated on the northern edge of the Benkovac field, spreading on a piece of untended agricultural area near the southern periphery of contemporary Benkovac (Figs. 2-3). Considering lengthy and very intensive agricultural activity, the site lost its original microtopography so that it presently corresponds to dreary topography of the ambience it belongs to with its very flat surface, thick humus layer and scanty perennial plants. Only borders of the plots are visible or minimal traces of some other recent activities. Size and possible shape of the Neolithic settlement presently cannot be apprehended even vaguely using conventional methodological approaches due to mentioned circumstances and particularly very thick humus layer which com-

1 Govoreći o srednjem neolitiku na benkovačkom području, Š. Batović navodi više nalazišta: Smilčić, Grduša – Lokve u Islamu Grčkom, Barice u Benkovcu, Kula Atlagića, Lisičić, Lepure, Ostrovicu i Raštević, konstatirajući da je istraženo samo naselje u Smilčiću i neznatno naselje u Benkovcu; Š. BATOVIĆ, 1990, 39. U svom jednako naslovljenom kasnijem osvrtu na prapovijest istoga područja autor na istome nalazištu navodi nalaze danilske i malo-brojne nalaze hvarske kulture; Š. BATOVIĆ, 2004, 30, 47.

1 In relation with the Middle Neolithic in the Benkovac region Š. Batović mentioned several sites: Smilčić, Grduša – Lokve in Islam Grčki, Barice in Benkovac, Kula Atlagića, Lisičić, Lepuri, Ostrovica and Raštević, stating only that the settlement in Smilčić was explored and the settlement in Benkovac only slightly; Š. BATOVIĆ, 1990, 39. In his later review of prehistory of the same region with the same title the author mentions finds of the Danilo culture and scarce finds of the Hvar culture; Š. BATOVIĆ, 2004, 30, 47.



Karta 1. / Map 1.

tora za razdvajanje površina sa i bez arheološkog depozita – razlike u konzistenciji, kvaliteti, boji tla i sl. – veličinu i eventualno oblik neolitičkog naselja konvencionalnim metodološkim pristupima danas nije moguće ni izdaleka sagledati.<sup>2</sup>

Na temelju površinskih nalaza i nalaza prikupljenih tijekom iskopavanja provedenog na posve ograničenoj površini uza samu suvremenu komunikaciju na sjevernoj periferiji polja, moguće je pretpostaviti da je tijekom neolitika na tomu dijelu polja najprije postojalo naselje impresso, a potom danilske i hvarske kulture.<sup>3</sup> Međutim, raspoloživi podatci ne daju nikakav čvrst oslonac za određivanje njihovih međusobnih prostornih, a time ni stratigrafskih i kulturnih odnosa, a pogotovo se to odnosi na istovrsne odnose s naseljem koje je predmet ovoga priloga (Sl. 1).

S obzirom na prethodno navedene činjenice te krajnje ograničene mogućnosti koje pružaju raspoloživi

pletely covers surface finds, and eliminates possibility of noticing other important indicators for distinguishing surfaces with or without archaeological deposit – differences in consistency, quality and color of the soil etc.<sup>2</sup>

On the basis of the surface finds and finds collected during the excavations conducted on a quite limited surface near the modern road on the northern periphery of the field, we can assume that a settlement of the Impresso culture was formed first in this part of the field and later on also settlements of the Danilo and Hvar cultures.<sup>3</sup> Available information provide no firm support for determining their mutual spatial and consequently stratigraphic and cultural relations. This refers in particular to identical relations with a settlement discussed in this article (Fig. 1).

Considering the aforementioned and quite limited possibilities offered by available finds and infor-

2 Primjena sofisticiranijih istraživačkih metoda, uobičajenih u sličnim okolnostima, na Baricama je danas izrazito otežana zbog vrlo složenih imovinskih i pravnih odnosa te nedostupnosti vlasnika pojedinih parcela.

3 Površinske nalaze prikupio je M. Savić, nekadašnji kustos Zavičajnog muzeja u Benkovcu, koji je na tom dijelu nalazišta proveo i minimalno iskopavanje. Prema bilješkama s provedenog sondiranja, a i na temelju prikupljene arheološke građe, nedvojbeno je samo postojanje depozita s impresso, te depozita s danilskim i hvarskim nalazima. Površinski nalazi, zajedno s onim prikupljenim tijekom sondiranja M. Savića i bilješkama koje su tom prigodom vođene, čuvaju se u Zavičajnom muzeju u Benkovcu. Kolegi M. Čurkoviću, ravnatelju i kustosu Zavičajnog muzeja u Benkovcu, zahvaljujem na mogućnostima uvida.

2 Application of sophisticated research methods usual in similar circumstances is quite difficult at Barice due to complex situation in terms of property and legal rights, and unavailability of the owners of certain plots.

3 Surface finds were gathered by M. Savić, former curator of the Regional Museum in Benkovac who also carried out minor excavations at this part of the site. According to notes from the trial excavation, and on the basis of gathered archaeological finds the only certain thing is existence of the deposit with the Impresso culture and the deposit with the Danilo and Hvar finds. Surface finds together with the ones gathered during trial excavations of M. Savić and his notes are kept in the Regional Museum in Benkovac. I would like to thank colleague M. Čurković, curator and head of the Regional Museum in Benkovac for allowing me to see the finds.



SL. 1. / FIG. 1.

Barice, kompleks neolitičkih nalazišta.

*Barice, complex of Neolithic sites.*

nalazi i podatci u Zavičajnom muzeju u Benkovcu, tijekom 2012. poduzeo sam nešto opsežnije iskopavanje koje je trebalo pružiti potpunije i sigurnije podatke koji bi omogućili odgovore barem na neka od otvorenih pitanja.<sup>4</sup> Iskopavanje je provedeno na kompaktnoj površini od 225 m<sup>2</sup>, na parceli B. Kvesića,

mation in the Regional Museum in Benkovac, I conducted somewhat more comprehensive excavation which was supposed to provide more complete and more certain information which would give answers to at least some of the open questions.<sup>4</sup> Excavation was performed on a compact surface of 225 m<sup>2</sup> on

4 Iskopavanje je provedeno u okviru znanstvenog projekta *Stariji prapovijesni periodi na području istočnog Jadrana* i kao sastavni dio terenske nastave studenata arheologije na Odjelu za arheologiju Sveučilišta u Zadru. Osim voditelja u iskopavanju su sudjelovali doc. dr. sc. Dario Vujević i znanstvena novakinja Kristina Horvat, oboje s Katedre za prapovijest Odjela za arheologiju. Suradnicima i studentima arheologije zahvaljujem na njihovu doprinosu uspješnoj provedbi istraživanja.

4 Excavations were carried out within the scientific project "*Earlier prehistoric periods in the eastern Adriatic region*" and as a part of field practice for the archaeology students of the Department of Archaeology of the University of Zadar. Doc. dr. sc. Dario Vujević and junior researcher Kristina Horvat participated in the excavations, both from the Department of Archaeology. I would like to thank the associates and students of archaeology for their contribution in successful execution of the research.



SL. 2. / FIG. 2.  
Pogled na nalazište.  
*View of the site.*



SL. 3. / FIG. 3.  
Pogled na nalazište.  
*View of the site.*

koja je za iskopavanje odabrana na temelju usmenih podataka vlasnika o arheološkoj građi pronađenoj prilikom ranijih ratarskih aktivnosti.

Iskopavanje je provedeno prema standardima stratigrafskog pristupa koji je olakšan zbog već navedenih stratigrafskih okolnosti, ali i zbog iznimno dobro sačuvanih naseobinskih elemenata koji su omogućavali lako i sigurno prolaženje kroz depozit i dekonstruiranje elemenata stratifikacije.

Polazeći od utvrđenih činjenica, rezultate istraživanja moguće je sažeti u sljedeće.

**Prvo.** Računajući od aktualne površine do zdravice, ustanovljen je depozit vrlo ujednačene debljine od 0,90 do 0,95 m. Depozit je izrazito koherentan, bez stratigrafskih cezura koje bi upućivale na mogućnosti ili potrebu njegove podjele na uže stratigrafsko-kronološke cjeline, a istodobno ukazivale i na stupnjevitost kulturne dinamike. Formiranje depozita započelo je na vrlo ujednačenoj, gotovo idealno vodoravno formiranoj prvotnoj površini, pa su svi elementi stratifikacije naglašeno pravilni i bez devijacija (Sl. 4-5).

**Drugo.** S obzirom na vrlo intenzivnu ratarsku aktivnost uz korištenje teških poljodjelskih strojeva, gornji dio depozita do dubine 0,30-0,35 m izrazito je oštećen, pa taj njegov dio, osim uobičajene arheološke građe, nije pružio nikakve značajnije podatke o naseobinskim elementima u užem smislu (Sl. 4-5).

**Treće.** Premda je to već prethodno navedeno, ovdje ću još jednom naglasiti da je naselje i u kulturnom pogledu izrazito koherentno, odnosno da u cjelini arheološke građe nema takvih tipoloških i stilskih promjena koje bi mogle poslužiti kao osnova za distinkciju užih razvojnih cjelina.

**Četvrto.** Depozit je u cjelini formiran tijekom srednjega neolitika, pa se istraženi dio nalazišta u cjelini mora pripisati danilskoj kulturi. Ipak, pri samoj zdravici, zajedno s nalazima danilske kulture, prikupljeno je i nekoliko keramičkih ulomaka koji ni u tipološkom ni u stilskom pogledu ne pripadaju danilskoj, nego ih je moguće pripisati samo impresso kulturi. Međutim, treba posebno naglasiti kako ti nalazi ne čine nikakvu zatvorenu cjelinu niti pripadaju nekoj drugoj stratigrafskoj jedinici koju bi u cjelini stratifikacijskih procesa na Baricama bilo moguće izdvojiti kao samostalnu i intaktnu stratigrafsku formaciju. Samo po sebi, to znači da je prisutnost pojedinačnih ulomaka impresso keramike u danilskom depozitu samo posljedica nekih postdepozicijskih procesa koji su se odvijali izvan relativnokronoloških okvira impresso kulture.

the B. Kvesić's plot which was chosen for the excavations on the basis of information by the owner about the archaeological finds unearthed during the agricultural activities.

The excavation was organized on the basis of standards of stratigraphic approach which was facilitated by the mentioned stratigraphic circumstances and exceptionally well preserved dwelling elements which enabled easy and secure excavation of the deposit and deconstruction of the stratification elements.

Starting from the known facts excavation results can be summarized as follows:

**Firstly.** Deposit with uniform thickness of 0,90-0,95 m was defined from the surface to the virgin soil. Deposit is exceptionally coherent without stratigraphic caesurae which would indicate possibilities or need for its division into smaller stratigraphic-chronological wholes showing at the same time graduality of cultural dynamics. Forming of the deposit started on a very uniform, almost ideally horizontal original surface, so that all stratification elements are exceptionally regular and without deviations (Figs. 4-5).

**Secondly.** Considering very intensive agricultural activity with use of heavy agricultural machinery, upper part of the deposit up to the depth of 0,30-0,35 m, is heavily damaged so that this part, except for its archaeological material, did not offer any important information about dwelling elements (Figs. 4-5).

**Thirdly.** Although it has already been mentioned I will emphasize once more that the settlement is quite coherent in cultural sense i.e. that the archaeological material exhibits no such typological or stylistic changes which may be used as a basis for distinction of smaller development units.

**Fourthly.** Entire deposit was formed during the Middle Neolithic so that the explored part of the site as a whole must be attributed to the Danilo culture. However at the virgin soil together with the finds of the Danilo culture there were several pottery sherds which can only be ascribed to the Impresso culture in typological and stylistic sense. It is worth mentioning that these finds do not make any kind of closed unit nor do they belong to some other stratigraphic unit which could be distinguished as an independent and intact stratigraphic formation in stratification processes in Barice. *Eo ipso* that means that the presence of individual fragments of the Impresso pottery in the Danilo deposit was just a consequence of certain postdepositional processes which were not related with the relative-chronological framework of the Im-



SL. 4. / FIG. 4.  
Dio sjevernog profila.  
*Segment of the northern profile.*



SL. 5. / FIG. 5.  
Dio sjevernog profila.  
*Segment of the northern profile.*

Razumije se, u takvim okolnostima i na temelju tako maloga broj nalaza nije ni moguće, a nije ni potrebno, ulaziti u pitanje kulturoloških i općih razvojnih relacija između impresso i danilske kulture na ovom nalazištu. No, prisutnost spomenutih nalaza važna je u najmanju ruku zbog toga što nedvojbeno potvrđuje ranija zapažanja s drugog dijela nalazišne cjeline na Baricama. Naime, neovisno o vremenskom odnosu naselja ranoga i srednjega neolitika, odnosno o relacijama između impresso i danilske kulture, sigurno je da su na Baricama postojala naselja i jedne i druge kulture, ali je isto tako sigurno da nisu zauzimala iste pozicije ili da nisu obuhvaćala jednaku površinu. Sva druga pitanja na dosegnutoj razini istraženosti pripadaju području spekulativnog.

**Peto.** Na ovoj razini istraženosti, u zoni nedefiniranog i posve spekulativnog mora ostati i pitanje odnosa danilskog naselja prema naselju hvarske kulture dokumentiranog nalazima iz Zavičajnog muzeja. Naime, krajnja mogućnost ozbiljnog zaključivanja u ovom se trenutku mora zadržati samo na konstataciji o postojanju jednog neolitičkog nalazišnog kompleksa s više naseobinskih cjelina koje pripadaju različitim kronološkim odsjecima neolitika. S obzirom na to, strategija budućih, očigledno potrebnih istraživanja mora se temeljiti na utvrđivanju njihovih prostornih i stratigrafskih odnosa, a time i kulturoloških relacija, kao bitnih pretpostavki za razmatranje kulturnih, privrednih i socioloških dinamika neolitičkih zajednica tog područja, a možda i šireg prostora Ravnih kotara.

U tom kontekstu treba posebno imati na umu i činjenicu da ovdje spomenutim nalazištima nisu iscrpljeni svi arheološki potencijali užeg benkovačkog prostora u prapovijesti, a koncentracija većeg broja nalazišta jasno upućuje na kvalitetu njegovih ambijentalnih svojstava primjerenih ekonomskim postulatima zajednica različitih prapovijesnih perioda.<sup>5</sup>

**Šesto.** Tijekom iskopavanja prikupljena je velika količina nalaza koji pripadaju uobičajenom repertoaru danilske kulture. Premda u cjelini te građe postoje i oni nalazi koji u pojedinim segmentima zasigurno pridonose obogaćivanju njezine ukupne slike i dosadašnjeg poznavanja, što je posve prirodno za svako novo istraživanje, najveći dio nalaza pripada već dobro poznatim danilskim standardima u litičkoj i keramičkoj produkciji svih vrsta.<sup>6</sup>

In such circumstances and on the basis of such small number of finds it is impossible and unnecessary to discuss questions of culturological and general developmental relations between the Impresso and Danilo cultures at this site. Nevertheless presence of the mentioned finds is important to say the least because they undoubtedly confirm earlier insights from the other part of the Barice site as a whole. Namely regardless of the chronological relations between the settlements of the Impresso and Danilo cultures it is certain that settlements of both cultures were represented at Barice but it is just as certain that they did not take same positions or that they did not encompass the same area. All other questions at the present state of exploration would be speculations.

**Fifthly.** At this level of exploration, question of relation of the Danilo settlement with the settlement of the Hvar culture as documented by the finds in the Regional Museum has to remain in the zone of undefined and quite speculative. Final possibility of serious conclusions at this moment must remain on the statement about the existence of one Neolithic site complex with several settlement wholes belonging to various chronological segments of the Neolithic. Considering all this, strategy of future research which is evidently necessary must be based on determining their spatial, stratigraphic and culturological relations as important preconditions for considering cultural, economic and sociological dynamics of the Neolithic communities from this region and perhaps even wider region of Ravni Kotari.

In that context we have to keep in mind the fact that sites mentioned here do not reflect all archaeological potentials of the limited Benkovac region in prehistory, and concentration of a larger number of sites clearly indicates quality of its environmental characteristics suitable for economic postulates of the communities in various prehistoric periods.<sup>5</sup>

**Sixthly.** During the excavations large amount of finds was gathered belonging to common repertory of the Danilo culture. Although within this material there are finds which contribute to improving present image of this culture in certain segments which is quite natural for every new research, most finds belong to well known Danilo standards in lithic and ceramic production of all kinds.<sup>6</sup>

5 J. CHAPMAN, R. S. SHIEL, Š. BATOVIĆ, 1996, 194-209; Š. BATOVIĆ, 2004, 28 i Karta 2.

6 Iscrpan prikaz kulturoloških aspekata provedenih istraživanja povjeren je suradnicima na istraživanju. Usporediti prilog D. Vujevića i K. Horvat u ovom broju *Archaeologia Adriaticae*.

5 J. CHAPMAN, R. S. SHIEL, Š. BATOVIĆ, 1996, 194-209; Š. BATOVIĆ, 2004, 28 and Map 2.

6 Research associates were entrusted with a thorough analysis of culturological aspects of the excavations. Cf. article by D. Vujević and K. Horvat in this issue of *Archaeologia Adriaticae*.

**Sedmo.** Unatoč stratigrafskoj homogenosti i kulturnoj koherentnosti depozita, zbog iznimno dobro sačuvanih naseobinskih elemenata koji pružaju finu mogućnost stupnjevanja okomite i prostorne dinamike u razvoju neolitičke aglomeracije, značajne ne samo za ovo nalazište nego za danilsku kulturu u cjelini pa i čitav neolitik na području istočnog Jadrana, na nalazištu Barice moguće je posve jasno definirati nekoliko sukcesivnih stambenih horizonata koji se međusobno razdvajaju ponajprije veličinom i oblicima objekata, a potom rasporedom i međusobnim prostornim odnosima te tehničkim finesama primijenjenim u njihovoj izgradnji. Upravo te činjenice vezane uz naseobinske elemente smatram najvažnijim rezultatom istraživanja provedenih 2012., pa je i ovaj prilog u prvom redu posvećen toj temi.<sup>7</sup>

Slijedom prethodne konstatacije, na nalazištu Barice moguće je definirati tri glavna stambena horizonta: inicijalni (I. stambeni horizont), središnji (II. stambeni horizont) i završni (III. stambeni horizont). Osim toga, inicijalni stambeni horizont (I. stambeni horizont) moguće je razdvojiti na dvije stratigrafski odvojene, ali razvojno vrlo blisko povezane cjeline (Ia i Ib), koje za razliku od kasnijih, ne dijeli duži vremenski raspon, niti se međusobno bitno razlikuju po temeljnim načelima primijenjenim pri podizanju stambenih objekata. Navedenim razlozima za takvo povezivanje stratuma Ia i Ib treba dodati još jednu iznimno važnu činjenicu. Naime, dio nastambi mlađeg stambenog horizonta – K1b, K2b i K3b – ležao je na tanjem ali izrazitom sloju gara koji nedvojbeno upućuje na opožarenost toga dijela naseobinske cjeline u kojoj je potpuno stradao dio ranijih nastambi, pa je to jedini pravi razlog zbog kojega je njihova potpuna obnova bila potrebna nakon vrlo kratkog vremenskog raspona. Da se ne radi o dužem vremenskom rasponu i nekim drugim razlozima povezanim s prirodnim ograničenjima u trajanju neolitičkih objekata, razvojem aglomeracije povezanim s promjenama u demografskoj slici zajednice ili kakvim drugim sličnim potrebama, osim navedene okolnosti, potvrđuje i izrazita podudarnost u veličinama i temeljnim načelima primijenjenim pri podizanju nastambi.

**Sevently.** Despite stratigraphic homogeneity and cultural coherence of the deposit, at the site of Barice we can clearly distinguish several successive dwelling horizons due to exceptionally well preserved dwelling elements offering fine possibility of grading vertical and spatial dynamics in the development of a Neolithic agglomeration relevant not only for this site but also for the Danilo culture as a whole. These dwelling horizons can be differentiated on the basis of size and shapes of the objects, and then also distribution and mutual spatial relations as well as technical details used in their construction. I believe that these facts related with settlement elements are the most important result of the excavations from 2012 so that this article will deal primarily with this theme.<sup>7</sup>

Following the previous statement, at the site of Barice we can define three main dwelling horizons: initial (first dwelling horizon), middle (second dwelling horizon) and final (third dwelling horizon). Furthermore initial dwelling horizon (first dwelling horizon) can be separated into two wholes (Ia and Ib) which are separate in stratigraphical terms but very closely related developmentally. They are not separated (as opposed to later ones) by longer chronological ranges nor they differ in basic principles applied in construction of the dwelling objects. Another exceptionally important fact has to be added to the mentioned reasons for relating strata Ia and Ib. Namely some of the dwelling objects of the younger dwelling horizon – K1b, K2b and K3b – laid on a thinner but very distinct layer of soot which undoubtedly indicates fire in that part of the dwelling unit in which some of the earlier dwelling objects were destroyed completely which was the only true reason for their renewal after a very short period. Exceptional correspondence in sizes and basic principles applied in constructing dwelling objects confirm that we cannot think of some longer chronological span and some other reasons related to natural limitations in the duration of the Neolithic objects, development of agglomeration related with changes in the demographic image of the community and some other similar needs.

7 Postojeći podatci o ostacima neolitičkih nastambi na području Dalmacije još su uvijek skromni zbog čega u prikazima naseobinskih aspekata neolitičkih zajednica na području istočnog Jadrana još uvijek dominiraju posve uopćene i krajnje spekulativno intonirane ocjene iznesene u ranijim sintetskim pregledima; Š BATOVIĆ, 1966, 48, bilješka 5, 50, 84; Š. BATOVIĆ, 1979, 494; J. MÜLLER, 1988, 114; Z. BRUSIĆ, 2008, 49, 59. Zahvaljujući podatcima s novijih ili sasvim novih istraživanja ti su nedostaci djelomice ublaženi; B. MARIJANOVIĆ, 2009; E. PODRUG, 2011.

7 Existing information about the dwelling objects in the region of Dalmatia are still modest because of which settlement aspects of the Neolithic communities in the eastern Adriatic region are quite general and speculative in earlier synthetic overviews; Š BATOVIĆ, 1966, 48 note 5; 50; 84; BATOVIĆ, 1979., 494; J. MÜLLER, 1988, 114; Z. BRUSIĆ, 2008, 49, 59. Owing to information from recent or quite new excavations the situation has improved; B. MARIJANOVIĆ, 2009; E. PODRUG, 2011.



U vezi s III. stambenim horizontom koji je označen kao završni horizont stanovanja potrebno je posebno naglasiti da to ovdje nikako ne znači i njegovo istodobno izjednačavanje s krajem neolitičkog naselja, nego je time obuhvaćen samo najmlađi sačuvani horizont nastambi. Naime, u najmlađem, ratarskim aktivnostima oštećenom dijelu depozita, morao je postojati još najmanje jedan takav horizont, pa bi tek taj horizont stanovanja mogao označavati vrijeme koje prethodi kraju naselja (Sl. 4-5).

Prema tomu, na istraženoj površini Barica jasno se izdvajaju stambeni horizonti Ia i Ib, II i III, a njima je moguće dodati i recentnim aktivnostima destruiran, ali gotovo siguran horizont IV.

Premda njegovo postojanje nije dvojbeno, početni horizont stanovanja (stambeni horizont Ia) nije dokumentiran u mjeri koja bi pružala veće mogućnosti njegova iscrpnijeg prikazivanja i analiziranja. Ustanovljene su samo četiri nastambe, a i one su tek djelomice sačuvane (Sl. 6-7). Ipak, unatoč slaboj sačuvanosti očigledno je kako je u svim primjerima riječ o iznimno skromnim objektima, samo s jednom prostorijom, koji već zbog svojih veličina u stambenom smislu ne nadilaze vrijednosti običnih koliba. Sudeći prema njihovu rasporedu i međusobnim odnosima vjerojatno je riječ o pravokutnim tlorisima, od kojih su dva svojim užim stranama orijentirana u pravcu S-J, a druga dva u pravcu I-Z. Pretpostavka o vjerojatnim pravokutnim tlorisima nameće se zbog toga što bi eventualni kvadratni tlorisi, kako to pokazuju rješenja na idealnim grafičkim planovima, dovodili do mjestimičnog preklapanja barem dviju nastambi – K2a i K3a.

Unutrašnjost nastambi dokumentirana je jednako slabo kao i njihovi tlorisi. Ipak, i na temelju minimalnih ostataka moguće je pretpostaviti da je barem u dijelu dviju nastambi – K1a i K3a – postojala tanka podnica od nabijene žute gline. U druge dvije, ustanovljene samo prema uskim pojasima žute gline koji ocrtavaju dio njihovih tlorisa, takva mogućnost nije izvjesna.

Osim dijelova nastambi u ovom stambenom horizontu nisu ustanovljeni nikakvi tragovi drugih konstruktivnih elemenata niti tehničkih postupaka primijenjenih pri njihovu podizanju.

Stambeni horizont Ib dokumentiran je znatno bolje, nastambe leže izravno na onima iz stratum Ia, na približno istim pozicijama i bez ikakva međusloja, ali s otklonom osnovnih osi u odnosu na one starije, ili u njihovoj neposrednoj blizini, pa svojim oblicima i veličinama mogu poslužiti kao obrasci za otklanjanje praznina u potpunijem sagledavanju starijih objekata (Sl. 6-14, 17). Posve je pouzdano

In relation with the third dwelling horizon which was marked as the final horizon of dwelling it is necessary to emphasize that this does not mean that it corresponds to the end of the Neolithic settlement but it only encompasses latest preserved horizon of the dwelling objects. Namely in the latest part of the deposit which was damaged in soil cultivation there had to be at least another such horizon which might mark the period prior to the end of the settlement (Figs. 4-5).

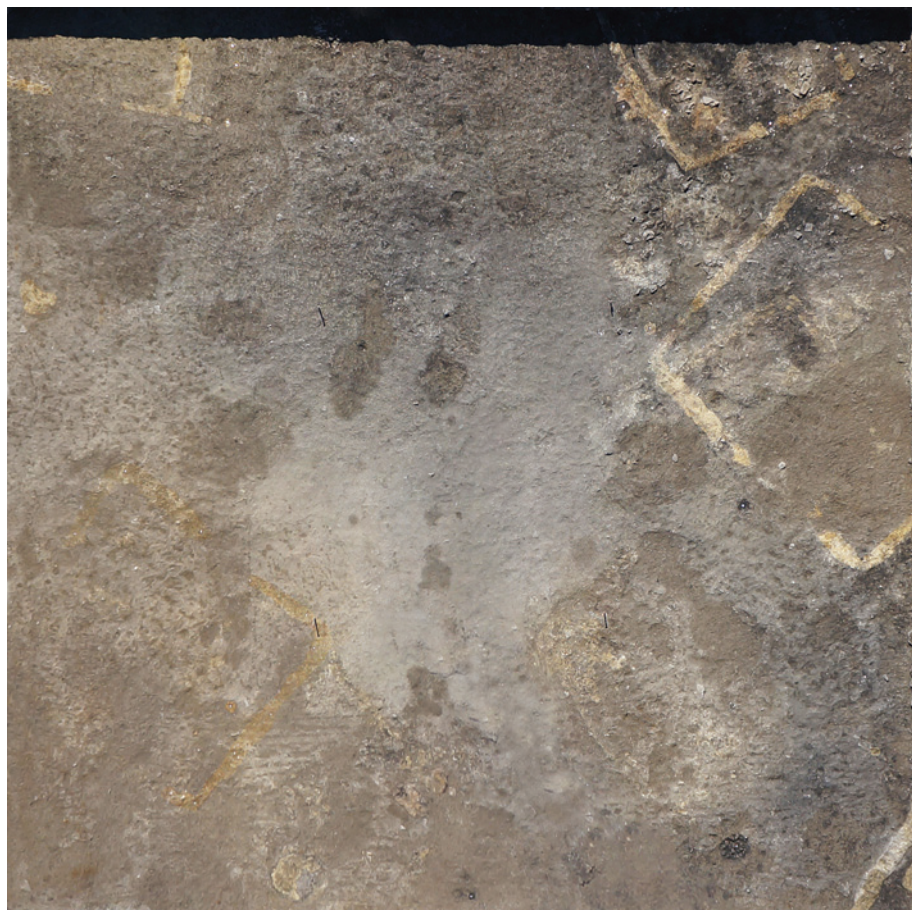
Accordingly in the explored area in Barice we can clearly distinguish dwelling horizons Ia and Ib, II and III, to which we can also add almost certainly horizon IV which was destroyed by recent activities.

Although its existence is certain, initial horizon of dwelling (dwelling horizon Ia) was not documented so as to offer greater possibilities of its more thorough representation and analysis. Only four dwelling objects were found, preserved only partially; 6-7. However, despite poor preservation it is evident that in all cases these were exceptionally modest objects with only one room whose dwelling qualities correspond to common huts. Judging from their distribution and mutual relations their layouts were probably rectangular, two of which were oriented in N-S direction with their narrow sides, and the other two in E-W direction. Hypothesis about probable rectangular layouts is more likely because possible square layouts as shown on the ideal graphic plans would lead to partial overlapping of at least two dwelling objects – K2a and K3a.

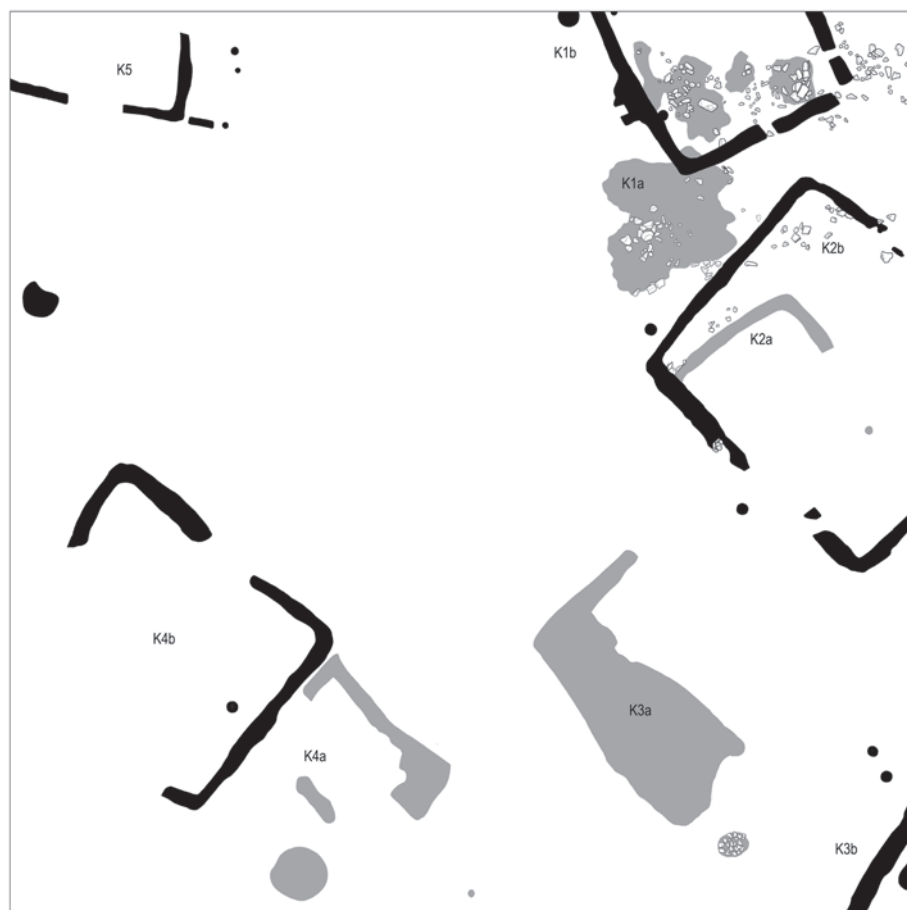
Interior of the dwelling objects was documented just as poorly as their layouts. However on the basis of minimal remains it is possible to assume that a thin floor of yellow packed clay was present at least in the part of two objects – K1a and K3a. In the other two, identified only after zones of yellow clay which delineate portion of their layouts such possibility is not likely.

Except the portions of the dwelling objects, in this dwelling horizon there were no traces of other constructive elements nor technical procedures applied in their construction.

Dwelling horizon Ib was documented much better, objects are placed directly on the ones from the stratum Ia, on approximately same positions and without any interlayer, but with a deviation of main axes in relation with the earlier ones, or in their immediate vicinity, so that they can be used with their forms and sizes as patterns for eliminating voids in a more complete comprehension of the earlier objects



SL. 6. / FIG. 6.  
Stratum Ia i Ib, obrisi kuća.  
*Strata Ia and Ib, outlines of houses.*



SL. 7. / FIG. 7.  
Stratum Ia i Ib, obrisi kuća.  
*Strata Ia and Ib, outlines of houses.*

— Stratum Ia  
— Stratum Ib



ustanovljeno pet nastambi od kojih su tri vidljive gotovo u cjelini svojih izvornih tlorisa i veličina, jedna u približnoj polovici izvorne veličine, a samo je jedna minimalno vidljiva, i to isključivo zbog svoje pozicije u samom kutu istraživačke površine.

Tlorisi i veličine nastambi markirane su pojasima nabijene žute gline koji daju jasne obrise svakog pojedinačnog objekta (Sl. 6-14, 17). Sve otkrivene nastambe malih su dimenzija, gotovo minimalističke, s jednom jedinom prostorijom, a tlorisima su bliže kvadratnima nego pravokutnim oblicima. Kao ilustracija njihovih naglašениh prostornih ograničenosti, a rekao bih i izrazite skučenosti i u svemu niske stambene vrijednosti, može poslužiti podatak o ukupnoj površini dviju nastambi koje je, s obzirom na njihovu gotovo potpuno sačuvanost i vidljivost, moguće jednostavno izračunati. Veća nastamba – K2b – zauzima površinu veličine 5,20x4,20 m što čini nešto manje od 22 m<sup>2</sup>, dok druga – K4b – sa stranama 3,80x4,60 m ne daje ni punih 18 m<sup>2</sup> stambene površine. S velikom je sigurnošću moguće pretpostaviti jednak obrazac i za treću, većim dijelom vidljivu nastambu – K1b, a malo je vjerojatno da bi i one djelomice vidljive nastambe – K3b i K5 – bitno odstupale od navedenih veličina.

Kao što je već navedeno, sve su nastambe jasno vidljive ponajprije prema pojasima nabijene žute gline koji bi istodobno morali činiti i osnovu zidne konstrukcije. Ne uzimajući u obzir mjestimična manja oštećenja (npr. K4b), ti su pojasi kod svih nastambi kompaktni i ujednačene širine. Međutim, na dužim stranama triju otkrivenih nastambi – K2b, K4b i K5 – vidljivi su nešto duži prekidi koji sugeriraju jasnu namjeru: formiranje ulaznog otvora. O unutrašnjosti nastambi i uređenju interijera nije moguće iznijeti nikakav konkretan podatak. Za razliku od jasno markiranih tlorisa, nastambe nisu imale nikakvu posebno priređenu podnicu, a mjestimice vidljivi ostatci te vrste pripadaju nastambama iz horizonta Ia. Budući da se njihovi tlorisi ne podudaraju, zbog čega je isključena mogućnost korištenja starijih podnica, nameće se zaključak o potpunoj odsutnosti bilo kakvih zahvata povezanih s poznatim primjerima neolitičke i općenito prapovijesne prakse pri uređivanju interijera. Jednako tako, nijedna od otkrivenih nastambi nije imala ognjište ili peć. Stanovita koncentracija sitnijeg kamenja povezanog sa zapečenom površinom, koja sugerira substrukciju i podnicu ognjišta u unutrašnjosti nastambe K1b, u stvari ne pripada toj nego starijoj K1a nastambi (Sl. 15-16). Međutim, izvan nastambi konstatirano je nekoliko ovalnih,

(Figs. 6-14, 17). Five dwelling objects were found, three of which are visible in almost complete layout and size, one in half of its original size, and only one was barely visible exclusively due to its position in the corner of the explored area.

Layouts and sizes of the dwelling objects were marked with zones of yellow packed clay which offer clear contours of each individual object (Figs. 6-14, 17). All dwelling objects have small, almost minimalistic dimensions, with only one room, and their layouts are closer to square than rectangular shapes. We can use information about total area of two dwelling objects considering their complete preservation and visibility as an illustration of their pronounced spatial limitations, extreme lack of space and generally poor dwelling quality. Larger object – K2b – takes area of 5,20x4,20 m which is less than 22 m<sup>2</sup>, while the other – K4b – with dimensions of 3,80x4,60 m makes little less than 18 m<sup>2</sup> of dwelling area. We can assume with a great degree of certainty that the pattern was the same for the third object, which is visible for the most part – K1b, and it is highly unlikely that the hardly visible objects – K3b and – K5 – were significantly larger or smaller.

As it has already been mentioned all dwelling objects were clearly visible primarily on the basis of zones of yellow packed clay which also had to be the basis of the wall constructions. Regardless of the smaller damages (e.g. K4b) these zones are compact and uniform on all objects. However on the longer sides of three objects – K2b, K4b and K5 – there are somewhat longer interruptions suggesting clearly the intention of forming entrance. No specific information can be provided about the interior of the objects and their arrangement. As opposed to marked layouts, dwelling objects had no particular flooring, and remains visible at places belong to objects from the horizon Ia. Since their layouts do not match which eliminates possibility of using earlier floors it is reasonable to assume that there were no procedures related with known examples of the Neolithic and generally prehistoric practice in arranging the interior. None of the objects had a hearth or oven. Certain concentration of smaller stones related with burnt soil, suggesting substruction and floor of the hearth in the interior of the object K1b, does not belong to this object but to the older K1a object (Figs. 15-16). However several oval shallow pits filled with small stones or ashes were found out-



Sl. 8. / FIG. 8.  
Stratum Ia i Ib, podnice kuća.  
*Strata Ia and Ib, floors of houses.*



Sl. 9. / FIG. 9.  
Stratum Ia i Ib, obrisi kuća.  
*Strata Ia and Ib, outlines of houses.*

plitko ukopanih jama ispunjenih sitnim kamenjem ili pepelom, pa bi to upućivalo na mogućnost postojanja ognjišta na otvorenom prostoru (Sl. 18-19).<sup>8</sup>

Nasuprot iznimno dobro markiranim tlorisima nastambi, o njihovim gornjim dijelovima, mogućem izgledu, načinu i tehnikama podizanja te korištenim

side the objects indicating the possibility of presence of hearths in the open space (Figs. 18-19).<sup>8</sup>

As opposed to exceptionally well marked layouts of the dwelling objects, there are no direct information about their upper parts, their possible look, manner and techniques of construction

8 Prema podacima Z. Brusića jame-vatrišta konstatirane su i na nalazištu u Vrbici; Z. BRUSIĆ, 1995, 4.

8 According to information by Z. Brusić, pit-hearths were found at the site of Vrbica. Z. BRUSIĆ, 1995, 4.



Sl. 10. / FIG. 10.  
Stratum Ia i Ib, obrisi kuća.  
*Strata Ia and Ib, outlines of houses.*



Sl. 11. / FIG. 11.  
Stratum Ia i Ib, obrisi kuća.  
*Strata Ia and Ib, outlines of houses.*

materijalima nema nikakvih izravnih podataka. Posve nedostaju tragovi konstruktivnih elemenata koji su na prapovijesnim nalazištima obično vidljivi u obliku ležišta za stupove nosače, ili koncentracija kamenja koje je, grupirano u kružnim ili pravocrtnim formacijama, moglo poslužiti za učvršćivanje ili podupiranje nosivih elemenata zidnih stijenki, krovništa i sl. Doduše, na istraženju je površini konstatirano nekoliko jama, ali posve plitkih i maloga

and materials used. There are no traces of constructive elements which are usually visible on prehistoric sites in form of postholes or round or rectangular stone concentrations which could be used for strengthening or supporting load-bearing elements of walls, roof etc. There were several pits in the explored area but they were shallow and small so it is unlikely they were used for some serious constructive needs. In addition such pos-



Sl. 12. / FIG. 12.  
Stratum Ia i Ib, obrisi kuća.  
*Strata Ia and Ib, outlines of houses.*



Sl. 13. / FIG. 13.  
Stratum Ia i Ib, obrisi kuća.  
*Strata Ia and Ib, outlines of houses.*

promjera pa je teško pretpostaviti da su mogle poslužiti za neke ozbiljnije konstruktivne potrebe. Osim toga, tu mogućnost ne podupire ni njihov broj, međusobni raspored u kojemu nema vidljivih pravilnosti, a posebno odnos prema obrisima nastambi. Posve je neobičan i gotovo posvemašnji nedostatak kućnog lijepa koji je na prapovijesnim nalazištima jedan od najočitijih pokazatelja graditeljskih aktivnosti, a nerijetko i iznimno dobra ilustracija graditeljskih znanja

sibility is not supported by their number, mutual distribution without evident regularities and particularly relation with object contours. It is quite surprising that there is no daub which is one of the most evident indicators of building activities at prehistoric sites and frequently also exceptionally good illustration of building skills and knowledge. As peculiar as lack of daub may be, it may also be indicative for comprehending a special and



Sl. 14. / FIG. 14.  
Stratum Ia i Ib, obrisi kuća.  
*Strata Ia and Ib, outlines of houses.*



Sl. 15. / FIG. 15.  
Stratum Ia, podnica kuća, detalj.  
*Stratum Ia, floor of a house, detail.*

i vještina. No, koliko god ta okolnost bila neobična, ona bi u ovom slučaju mogla biti i indikativna za spoznavanje jednog posebnog i do danas nepoznatog postupka u podizanju neolitičkih nastambi na jadranskom području. Naime, budući da kućni lijev, odnosno slojevi gline nanoseni na obje strane lagane konstrukcije od prepletenog pruća, čine najvažniji dio zidne mase, njegov bi nedostatak upućivao na mogućnost da taj način podizanja nastambi na Bari-

previously unknown procedure in constructing Neolithic dwelling objects in the Adriatic region. Namely since daub i.e. clay layers applied on both sides of light construction consisting of wattle make the most important part of the wall, their lack may indicate the possibility that this manner was not applied at Barice at all. On the other hand this might mean that clay slip was not possible or necessary in application of some other construc-



Sl. 16. / FIG. 16.  
Stratum Ia, podnica kuća, detalj.  
*Stratum Ia, floor of a house, detail.*



Sl. 17. / FIG. 17.  
Stratum Ib, obrisi kuće.  
*Stratum Ib, outline of a house.*

cama uopće i nije primijenjen. S druge strane, to bi značilo da u primjeni nekog drugog konstruktivnog rješenja glineni premaz nije ni bio moguć ili nije bio uopće potreban. Ako je taj zaključak prihvatljiv, onda bi to značilo da su nastambe u horizontima Ia i Ib mogle biti građene samo od vodoravno složenih oblica, spojenih u kutovima na preklop, a možda još i međusobno povezanih i tako dodatno učvršćenih. Moguće šupljine u tako formiranim stijenjkama,

tive solution. If this conclusion is acceptable, this would mean that dwelling objects in the horizons Ia and Ib might have been built from horizontally arranged round logs connected in the corners and possibly mutually connected and additionally reinforced. Possible cavities in such walls, caused by unevenness or irregularities of the round logs could have been easily and efficiently closed with minimal amounts of clay mixed with various kinds





SL. 18. / FIG. 18.  
Ognjište na otvorenom.  
*Open-air fireplace.*



SL. 19. / FIG. 19.  
Ognjište na otvorenom.  
*Open-air fireplace.*

uvjetovane neravninama ili nepravilnostima oblica, mogle su biti lako i efikasno zatvorene minimalnim količinama gline pomiješane s različitim vrstama organskih tvari. Čini mi se da upravo ta mogućnost posve odgovara prethodno navedenim činjenicama.

Raspored i međusobni prostorni odnosi nastambi iz horizonta Ia ne pružaju oslonac za izvođenje određenijih zaključaka o komunalnom uređenju naselja i načelima prema kojima je ono provedeno.

of organic substances. It seems that this possibility corresponds to previously mentioned facts.

Distribution and mutual spatial relations of the objects from the horizon Ia do not allow more definite conclusions about the organization of the settlement and principles on which it was based. Their dense distribution and concentration in the southern part of the explored area, approximately in its diagonal, making the northern part of the area empty,



Sl. 20. / FIG. 20.

Odnos stratuma Ib i stratuma II.

*Relation between stratum Ib and stratum II.*



Sl. 21. / FIG. 21.

Odnos Stratuma Ib i stratuma II.

*Relation between stratum Ib and stratum II.*



SL. 22. / FIG. 22.

Stratum II i III, podnice kuća.

*Strata II and III, floors of houses.*

No, njihov zgsnuti raspored i koncentracija na južnom dijelu istražene površine, približno po njezinoj dijagonali, zbog čega je sjeverni dio te površine posve prazan, sugeriraju moguću kružnu ili ovalnu koncepciju u organizaciji naseobinske cjeline.

Pri koncipiranju naselja u horizontu Ib ta je koncepcija izgleda napuštena ili modificirana jer ustanovljeni raspored nastambi više sugerira njihovo grupiranje u dva paralelna niza, razdvojena potpuno praznim međuprostorom.

Središnji stambeni horizont – II. horizont – označava daljnji razvoj neolitičke aglomeracije na Baricama, a sudeći prema debljini depozita formira-

suggest possible round or oval concept in organization of the settlement.

In organizing of the settlement in the horizon Ib this concept seems to be abandoned or modified as the arrangement of the objects suggests their grouping in two parallel rows separated with a completely empty interspace.

Middle dwelling horizon – second horizon – marks further development of the Neolithic agglomeration in Barice. Judging from the thickness of the deposit formed during the previous dwelling horizon, its formation happened after a relatively short period of time; (Figs. 20-21).



Sl. 23. / FIG. 23.  
Stratum II, podnice kuća.  
*Stratum II, floors of houses.*



Sl. 24. / FIG. 24.  
Stratum II, podnice kuća.  
*Stratum II, floors of houses.*

nog tijekom prethodnog, njegovo je formiranje uslijedilo nakon relativno kratkog vremena (Sl. 20-21).

Naselje središnjeg stambenog horizonta pokazuje značajne promjene koje idu u dva pravca: k bitnom povećanju dimenzija nastambi na jednoj, te k drukčijem komunalnom uređenju, na drugoj strani. Tomu horizontu pripadaju ukupno četiri nastambe, od kojih je jedna otkrivena gotovo u cjelini svoje izvorne veličine – K3, dok su preostale tri otkrivene

Settlement of the middle dwelling horizon shows considerable changes regarding two aspects: considerable increase of object dimensions on one hand, and different organization on the other hand. Total of four objects belongs to this horizon one of which was almost complete – K3 – while other three were fragmentary – K1, 2, 4 (Figs. 22-26). All dwelling objects have exceptionally rectangular layout, compact and quite



Sl. 25. / FIG. 25.  
Stratum II, podnice kuća. .  
*Stratum II, floors of houses.*



Sl. 26. / FIG. 26.  
Stratum II, podnice kuća.  
*Stratum II, floors of houses.*

djelomice – K1, 2, 4 (Sl. 22-26). Sve nastambe imaju izrazito pravokutan tloris, kompaktne i prilično debele podnice formirane od nabijene žute gline, a užim stranama orijentirane su u pravcu S-J. Međutim, premda najuočljivije prema obrisima svojih podnica, nastambe su ustvari definirane formacijama krupnog i sitnijeg kamenja koje ocrtavaju i njihove tlorise i veličine, a ujedno čine i granice rasprostranja podnica (Sl. 24-26; Sl. 29). Jedina gotovo potpuno ustanov-

thick floors formed from yellow packed clay with narrow sides oriented in N-E direction. However although objects were recognizable after contours of their floors, they were actually defined by formations of large and small stones which delineate their layouts and sizes making at the same time borders of the floors (Figs. 24-26, 29). The only almost complete object with the dimensions of 12,00x4,70 m i.e. total size of 56,40 m<sup>2</sup>, exceeds

ljena nastamba svojim dimenzijama 12,00x4,70 m, odnosno ukupnom površinom od 56,40 m<sup>2</sup>, daleko nadilazi najveću nastambu starijeg horizonta. Premda to nije moguće s potpunom sigurnošću tvrditi, jer su indicije te vrste dosta skromno izražene, izgleda da je ta nastamba podijeljena na dva približno jednaka dijela, što bi s obzirom na njezinu dužinu bilo i posve prirodno. Međutim, neizvjesno je koliko je taj obrazac moguće primijeniti na ostale nastambe istog horizonta budući da su na istraženoj površini obuhvaćeni samo dijelovi njihovih površina. Sudeći prema zapečenim površinama, a i jednoj kružnoj formaciji sitnijeg kamenja u neposrednoj blizini takve zapečene površine u najvećoj nastambi – K1, izgleda da su u nastambama toga horizonta postojala i otvorena ognjišta. Naime, takve su formacije u brojnim primjerima potvrđivane kao substrukcije ognjišta i peći. Jednak bi smisao mogla imati istovrsna formacija i u djelomice otkrivenoj nastambi u sjeveroistočnom kutu istražene površine – K2 (Sl. 26).

Kako sam već naglasio, sudeći prema rasporedu i međusobnim odnosima otkrivenih objekata, komunalno uređenje središnjeg stambenog prostora provedeno je prema jasno definiranom načelu. Nastambe su raspoređene u dva paralelna niza razdvojena širokim međuprostorom pokrivenim sitnim kamenjem, koji zauzima središnji dio istražene površine (Sl. 22-23). Kako se radi o prostranoj površini na kojoj nisu ustanovljeni ostatci nikakvih konstrukcija, ta je površina mogla imati ulogu komunikacije u tom dijelu naseobinske cjeline. Sudeći prema profilima, ta naseobinska koncepcija nije izmijenjena sve do kraja trajanja naselja, unatoč očiglednim obnavljanjima nastambi vidljivima u sukcesivnom popravljanju podnica (Sl. 27a-b, 28a-b).

Pitanja povezana s podizanjem nastambi i korištenim materijalima u II. stambenom horizontu još su složenija od istovrsnih pitanja u prethodnom. Ta je složenost uvjetovana ponajprije bitnim povećavanjem dimenzija objekata, što je samo po sebi pred njihove graditelje postavljalo znatno ozbiljnije zahtjeve. Osim toga, nalazi kućnog lijepa i u središnjem su horizontu minimalni, a ni drugi konstruktivni elementi nisu izraženi. Ipak, jedno izgleda sigurno. Formacije kamena uz rubove nastambi moguće je – a rekao bih da je to i posve nedvojbeno – promatrati kao osnovu zidne konstrukcije, odnosno neku vrstu temeljne zone. Drugo je pitanje primijenjenih tehničkih postupaka i konstruktivnih elemenata koji su se na takvu temeljnu zonu oslanjali. Premda nedostatak kućnog lijepa sugerira rješenje podudarno s onim predloženim za nastambe u horizontu Ib,

by far the largest object of the earlier horizon. It seems that the object was divided in two parts of approximately the same size which would be natural considering its length, although it is not possible to state this with certainty as indications of this kind are quite modest. It is questionable whether this pattern could be applied on other dwelling objects of the same horizon since only parts of their surfaces were encompassed by the explored area. Judging from the burnt surfaces and the only round formation of small stones in immediate vicinity of such burnt areas in the largest object – K1 it seems there were open hearths in the objects of this horizon. Namely such formations were substractions of hearths and ovens in many cases. Same formation in partially discovered object (K2) in north-eastern corner of the explored area may have had the same meaning (Fig. 26).

As emphasized earlier, judging from the distribution and mutual relations of the discovered objects, organization of the middle dwelling area was conducted on the basis of a clearly defined principle. Objects were distributed in two parallel rows separated with a wide interspace paved with small stones taking central part of the explored surface (Figs. 22-23). Since this was a spacious area without any construction remains, this surface may have been used as a communication in this part of the settlement. Judging from the profiles this settlement concept was not altered until the end of the settlement despite evident renewals of the objects recognizable from successive renewals of the floors (Figs. 27a-b, 28a-b).

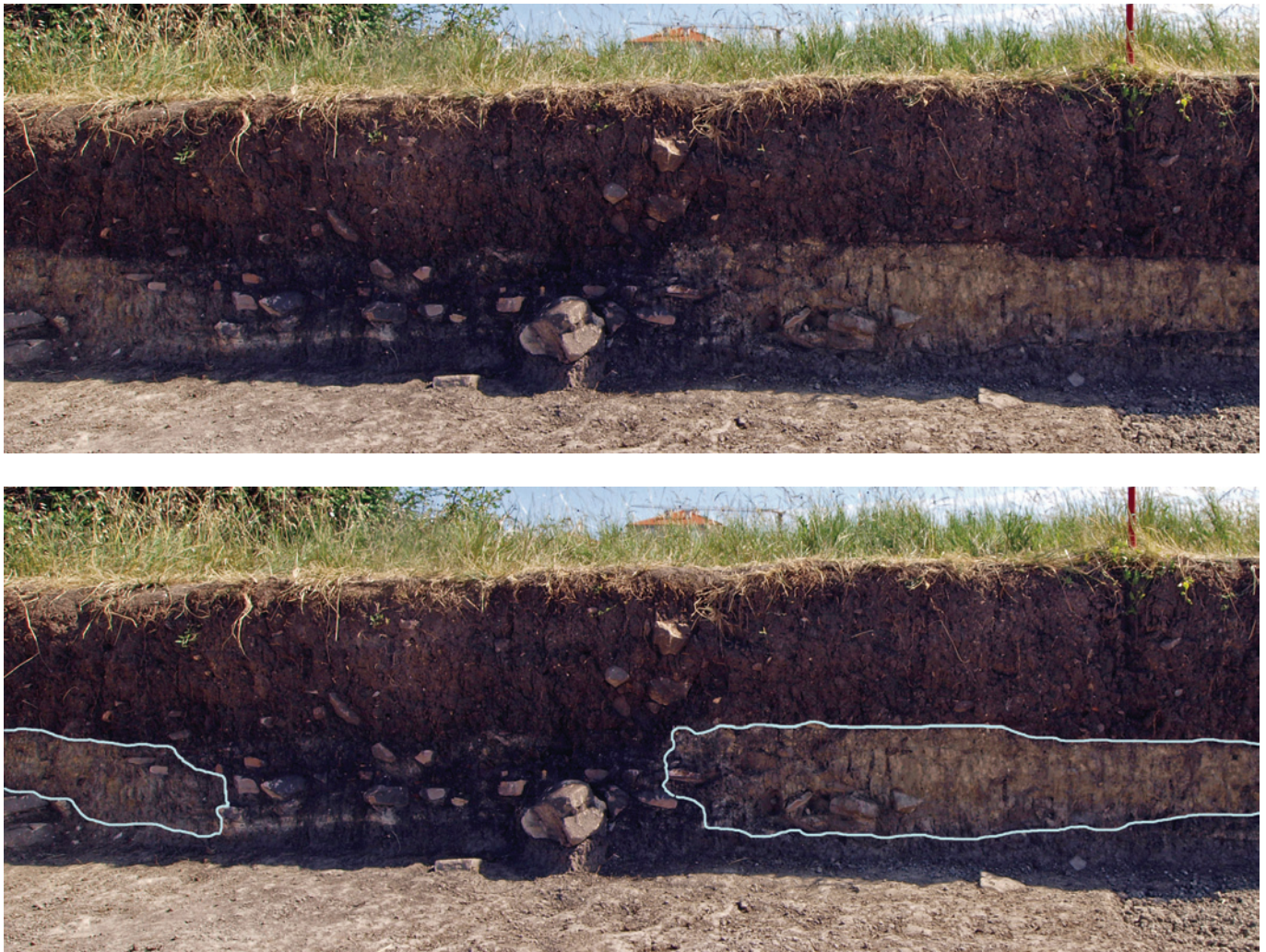
Questions related with construction of dwelling objects and materials used in the second dwelling horizon are even more complex than the same questions in the previous one. This complexity refers to considerable increase of object dimensions which posed significant demands for their builders. Furthermore finds of daub were minimal in the middle horizon and other constructive elements were not distinct. One thing seems certain: stone formations along the edges of the dwelling objects can be interpreted, quite certainly in my opinion, as a wall construction i.e. some kind of foundation. The question is what technical procedures and constructive elements were based on such a foundation. Although the lack of daub suggests a solution corresponding to the one suggested for dwelling objects in the horizon Ib, it is clear that it could not be realized in a completely identical manner, at



Sl. 27a-b. / Figs. 27a-b.

Raspored nastambi, sjeverni profil.

*Distribution of houses, northern profile.*



SL. 28a-b. / FIGS. 28a-b.

Raspored nastambi, sjeverni profil.

*Distribution of houses, northern profile.*

jasno je da to nije moglo biti ostvareno na posve istovjetan način, najmanje zbog dva razloga. Prvo, zbog znatno povećanih objekata, posebice njihovih dužina, koje nije moguće postići uporabom kraćih oblika kao kod nastambi iz horizonta Ib, nego samo korištenjem dugačkih stabala, čime se bitno povećava masa zidne konstrukcije. I drugo, zbog povećane mase zidnih konstrukcija postavlja se i problem njihove stabilnosti na kamenim temeljima, a time se javlja i potreba postojanja sustava čvrstih okomitih dijelova konstrukcije, čije bi se postojanje moralo iskazivati u obliku solidnih ležišta, odnosno dubljih jama. Kako prilikom istraživanja nije ustanovljeno postojanje jama koje bi mogle odgovarati toj svrsi, nego samo onih maloga promjera, a u broju i rasporedu koji ne bi mogao odgovoriti tim potrebama, očigledno je da s takvom mogućnošću podizanja nastambi II. stambenog horizonta ne treba računati.

least for two reasons. Firstly, because of considerably larger objects, particularly their lengths which cannot be obtained by using shorter round logs as well as in dwelling objects from the horizon Ib but only by using long trees which increase mass of the wall construction. Secondly, due to increased mass of the wall construction which causes a problem of their stability on stone foundations, and need of existence of systems with firm vertical parts of the construction whose existence should be expressed in form of solid postholes i.e. deeper pits. It is evident that such possibility of constructing objects in the second dwelling horizon should be excluded as no such pits were found during the research but only the ones with small diameter, whose number and distribution could not satisfy such needs.

Considering all this, and starting from the lack of daub which needs to be addressed in the identi-



S obzirom na to, a polazeći od nedostatka kućnog lijepa, čemu se mora pristupiti na jednak način kao i u stratumu Ib, pitanje podizanja objekata u središnjem stratumu ne treba tražiti u novim i složenijim rješenjima, nego u inventivnim usavršavanjima ranijih. Naime, zidovi dugačkih nastambi II. horizonta nisu morali biti građeni od dugačkih debala, nego jednako prikladnih kraćih oblica kao i u starijem horizontu, a potrebna dužina objekata mogla se postići dodavanjem oblica, jedne do druge. Time bi se otklonila i potreba za masivnim stupovima nosačima, a istodobno na najlakši način postigla podjela velikih nastambi na dva približno jednaka dijela, odnosno izgradnja objekata s dvije prostorije. Drugim riječima, to bi značilo zadržavanje istog tehničkog postupka kao i u horizontu Ib, a praktično bi podrazumijevalo podizanje dviju zasebnih cjelina povezanih zajedničkim zidom.

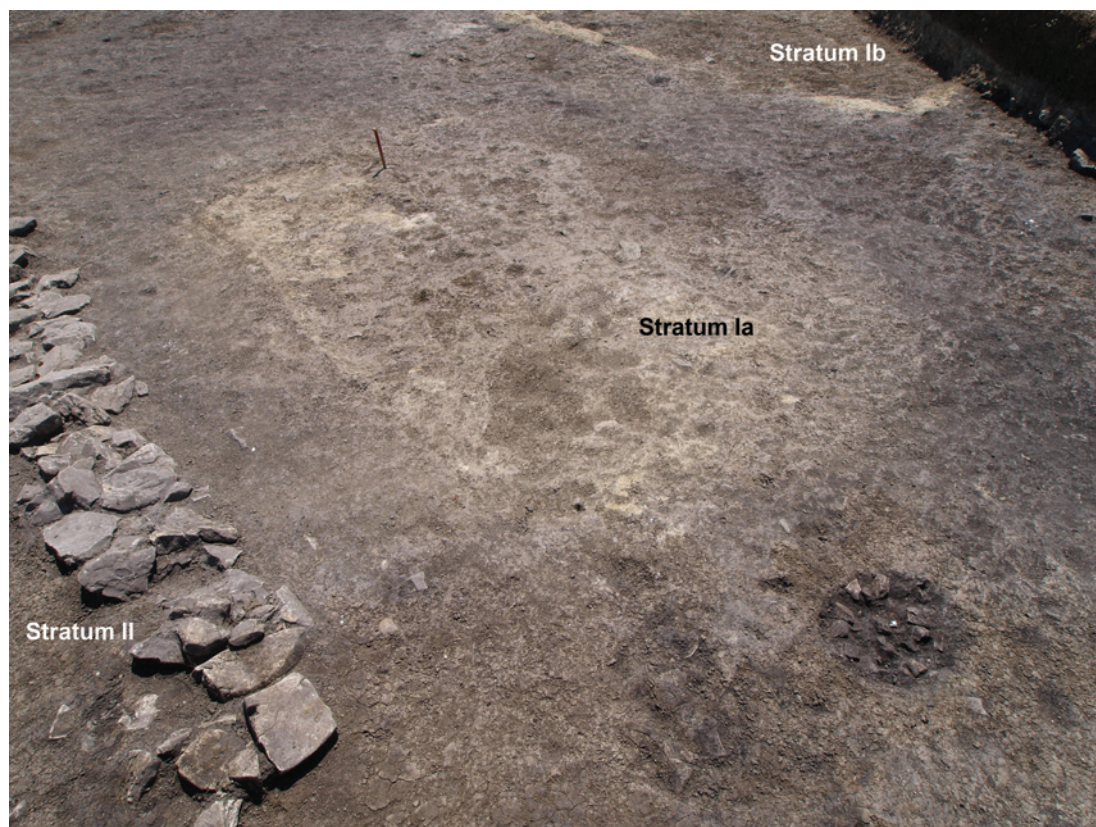
Napokon, III. stambeni horizont posvjedočen je samo u tragovima koje čine nizovi krupnijeg kamena u kojima se daju naslutiti obrisi dvaju objekata (Sl. 22). Razumije se, ti minimalni ostatci ne pružaju osnovu za izravnije i cjelovitije sagledavanje pitanja povezanih s načinima podizanja nastambi i načelima organiziranja naseobinske cjeline. Međutim, unatoč njihovoj skromnosti i ograničenjima koja postavljaju, mišljenja sam da do ozbiljnijih promjena u odnosu na prethodni stambeni horizont nije moglo doći. Možda je samo ukupan broj objekata povećan i s tim u vezi provedena nešto drukčija prostorna organizacija, kako to sugeriraju pozicije ustanovljenih ostataka nastambi.

Neovisno o predloženim interpretacijama naseobinskih ostataka, nedvojbeno je da se u ovom trenutku Barice afirmiraju ponajprije kao neolitičko naselje s najbolje sačuvanim, a potom i s najreprezentativnijim primjerima neolitičkih nastambi na čitavom području istočnog Jadrana. Osim toga, Barice se iskazuju i kao nalazište s posve originalnim rješenjima u oblicima nastambi te korištenim materijalima i primijenjenim tehnikama, pa ga nije moguće uspoređivati ni s jednim poznatim nalazištem na tom području. To samo po sebi pokazuje kako su sve dosadašnje interpretacije naseobinskih aspekata s neolitičkih aglomeracija na području istočnog Jadrana u osnovi samo uopćeni i pojednostavljeni pogledi, utemeljeni na ne samo očigledno nedostatnim nego i nepouzdanim podacima. Drugim riječima, sve interpretacije koje pretendiraju ka sintetiziranju tih pitanja, ne samo na razini neolitika nego i na razini bilo kojeg njegovog vremenskog odsjeka, na ovoj su razini istraženosti daleko od

cal way as in the stratum Ib, question of raising the objects in the middle stratum should not be sought in new and complex solutions but in improving the existing ones. Namely walls of long dwelling objects from the second horizon needed not be built from long tree trunks but from just as appropriate shorter round logs as in the earlier horizon and necessary length of the object could have been achieved by adding round logs, one next to the other. This would eliminate need for massive posts and at the same time large objects would be divided in two approximately same parts i.e. there would be an object with two rooms. In other words this would mean retaining the same technical procedure as in the horizon Ib, and practically it would imply raising two separate wholes connected with a common wall.

Finally third dwelling horizon was documented only in traces consisting of rows of larger stones which delineate two objects (Fig. 22). Naturally these minimal remains do not offer basis for a more direct and complete comprehension of the questions related with manners of raising dwelling objects and principles of organizing a settlement. However despite their modesty and limitations imposed, I believe that there could not have been serious changes in relation with previous dwelling horizon. Perhaps only total number of objects was increased and somewhat different spatial organization was conducted as suggested by positions of the documented remains of the dwelling objects.

Regardless of the suggested interpretations of the settlement remains it is certain that the site of Barice can presently be presented primarily as a Neolithic site with the best preserved and most representative examples of the Neolithic dwelling objects in the entire region of the eastern Adriatic. Furthermore, Barice seem to be a site with quite original solutions in dwelling object forms, materials used and techniques applied so that it cannot be compared with any known sites in this region. This shows that all previous interpretations of the settlement aspects of the Neolithic agglomerations in the eastern Adriatic region were basically just generalized and simplified views, based on evidently insufficient and unreliable information. In other words all interpretations pretending to synthesize these questions not only at the level of the Neolithic but also any chronological segment of the Neolithic are far from real at this level of exploration. Finds from Barice definitely indicate need for further research primarily because of presence of finds from other chronological segments of the Neolithic



Sl. 29. / FIG. 29.

Stratumi Ia, Ib, II, podnice kuća

*Strata Ia, Ib and II, floors of houses.*



Sl. 30. / FIG. 30.

Stratum Ia, Ib i II, podnice kuća.

*Strata Ia, Ib and II, floors of houses.*

realnog. Otkrića na Baricama svakako upućuju na potrebu daljnjih istraživanja, ponajprije zbog postojanja nalaza iz ostalih vremenskih odsjeka neolitika, koja bi na jednom mjestu mogla pružiti relevantne podatke za analiziranje i nasebinskih i drugih razvojnih dinamika, ali i na potrebu potpune promjene u strategiji istraživanja neolitičkih naselja na otvorenom. Kulturološki aspekti u užem arheološkom smislu, koji su bili u fokusu zanimanja tijekom ranijih istraživačkih perioda i usmjeravali iskopavanja na male i nepovezane površine, morali bi prepustiti mjesto onim istraživačkim koncepcijama koja ne isključuju ni te aspekte ali ih ne postavljaju kao primarni istraživački cilj. U istom pravcu ukazuju i rezultati zadnjih istraživanja provedenih na poznatom nalazištu Pokrovnik, koji se slično Baricama, ali već u ranome neolitiku, iskazuje kao jedinstven primjer organiziranja neolitičkog naselja s monumentalnim ostatcima graditeljskih zahvata.<sup>9</sup>

Na kraju ovoga priloga ostaje pitanje kronologije. S Barica na raspolaganju stoje dva radiokarbonska datuma. Prvi, koji stratigrafski pripada početku II. stratuma, daje vremenski okvir od 5210 do 5000 pr. Kr., a drugi, koji pripada obnovi istog horizonta, vremenski okvir od 4840 do 4710 pr. Kr. (Tab. 1-2). Uspoređeni s novijim radiokarbonskim analizama iz Pokrovnika (rani neolitik), Crnog vrila<sup>10</sup> i Ravlića pećine<sup>11</sup>, dobiveni datumi zauzimaju prihvatljive, a rekao bih i realne vremenske pozicije nalazišta u vremenskoj dinamici neolitika istočnog Jadrana.

Fotografije: B. Marijanović

which could offer relevant information for analyzing dwelling and other developmental dynamics at one place as well as the need to change strategies of exploration of open-air Neolithic sites. Culturological aspects in strict archaeological sense which were in the focus of interest during earlier exploration periods and which directed excavations to small and unrelated surfaces should give space to those excavation concepts which do not exclude mentioned aspects but they do not emphasize them as the primary aim of the research. Results of recent excavations at the famous site of Pokrovnik point in the same direction. Pokrovnik, similar as Barice, seems to be a unique example of organization of a Neolithic settlement as early as the Early Neolithic with monumental remains of construction activities.<sup>9</sup>

At the end of this article there is the question of chronology. There are two radiocarbon dates from Barice. The first date belonging stratigraphically to the beginning of the stratum II provides a chronological framework of 5210-5000 BC, and the other which belongs to the renewal of the same horizon offers chronological span of 4840-4710 BC (Tabs.1-2). If compared with recent radiocarbon dates from Pokrovnik (Early Neolithic), Crno vrilo<sup>10</sup> and Ravlića pećina<sup>11</sup> acquired dates take acceptable and actual chronological positions of the site in the chronological dynamics of the eastern Adriatic Neolithic.

Photos: B. Marijanović

Translation: Marija Kostić

9 Posljednja istraživanja na tom nalazištu vodio je autor ovoga priloga, a rezultati istraživanja bit će uskoro objavljeni.

10 B. MARIJANOVIĆ, 2009, 111-113.

11 B. MARIJANOVIĆ, 2012, 47.

9 The most recent excavations at this site were led by the author of this article, and the results will be published soon.

10 B. MARIJANOVIĆ, 2009, 111-113.

11 B. MARIJANOVIĆ, 2012, 47.

## CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-19.6:lab. mult=1)

Laboratory number: **Beta-327216**

Conventional radiocarbon age: **6160±30 BP**

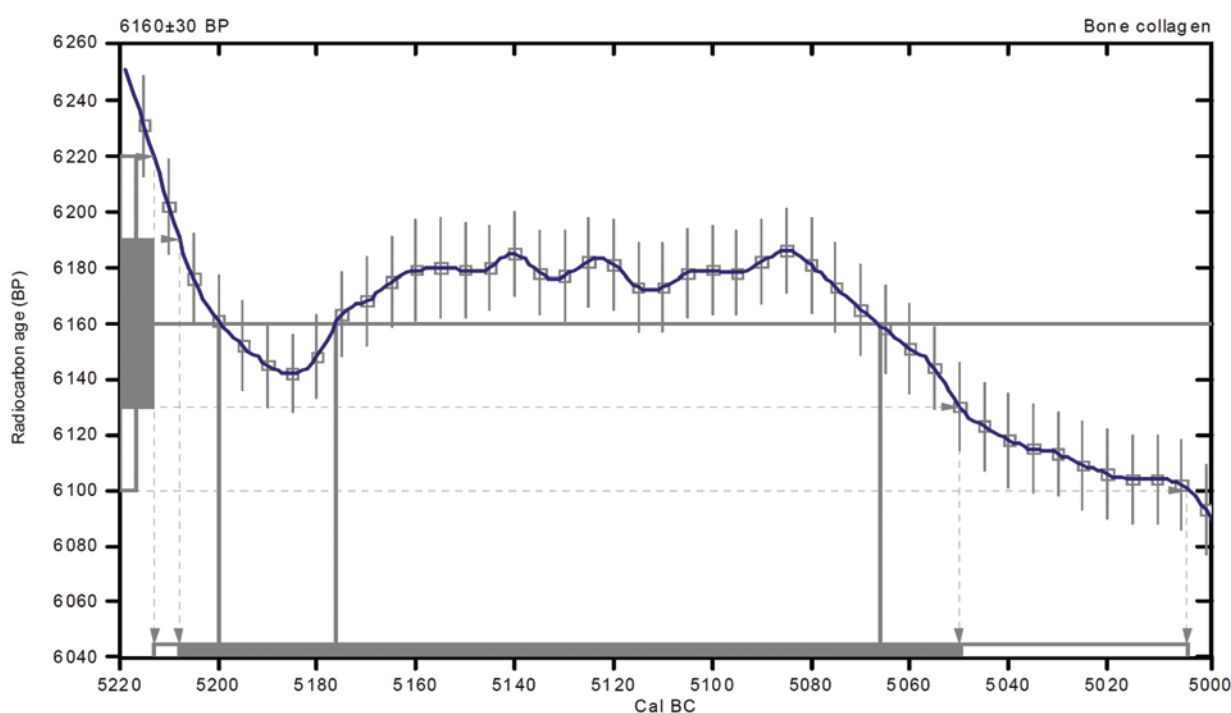
**2 Sigma calibrated result: Cal BC 5210 to 5000 (Cal BP 7160 to 6950)**  
(95% probability)

Intercept data

Intercepts of radiocarbon age  
with calibration curve:

Cal BC 5200 (Cal BP 7150) and  
Cal BC 5180 (Cal BP 7130) and  
Cal BC 5070 (Cal BP 7020)

**1 Sigma calibrated result: Cal BC 5210 to 5050 (Cal BP 7160 to 7000)**  
(68% probability)



### References:

#### Database used

INTCAL09

#### References to INTCAL09 database

Heaton, et al., 2009, *Radiocarbon* 51(4):1151-1164, Reimer, et al., 2009, *Radiocarbon* 51(4):1111-1150, Stuiver, et al., 1993, *Radiocarbon* 35(1):137-189, Oeschger, et al., 1975, *Tellus* 27:168-192

#### Mathematics used for calibration scenario

*A Simplified Approach to Calibrating C14 Dates*

Talma, A. S., Vogel, J. C., 1993, *Radiocarbon* 35(2):317-322

## Beta Analytic Radiocarbon Dating Laboratory

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Tablica 1. Radiokarbonski datum stratuma II (početak).

Table 1. Radiocarbon age of the stratum II (beginning).

## CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-19.6:lab. mult=1)

Laboratory number: **Beta-327215**

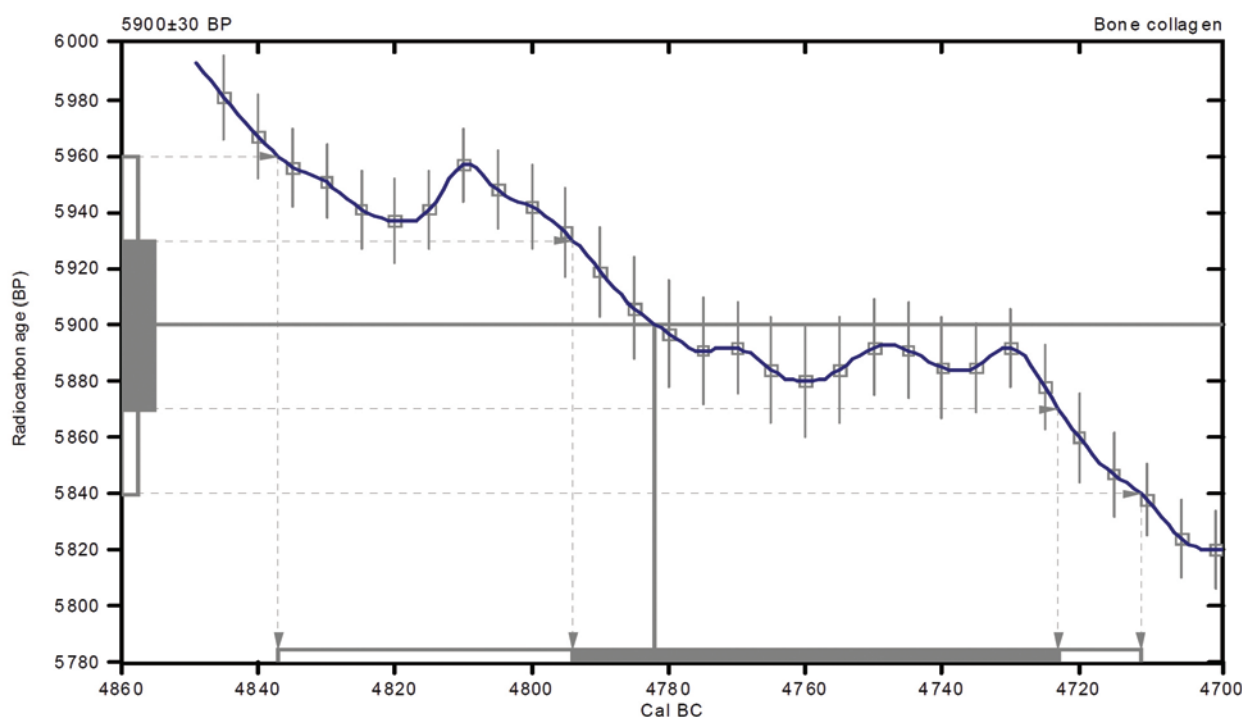
Conventional radiocarbon age: **5900±30 BP**

**2 Sigma calibrated result: Cal BC 4840 to 4710 (Cal BP 6790 to 6660)**  
**(95% probability)**

Intercept data

Intercept of radiocarbon age  
 with calibration curve: **Cal BC 4780 (Cal BP 6730)**

**1 Sigma calibrated result: Cal BC 4790 to 4720 (Cal BP 6740 to 6670)**  
**(68% probability)**



References:

*Database used*

INTCAL09

*References to INTCAL09 database*

Heaton, et al., 2009, *Radiocarbon* 51(4):1151-1164, Reimer, et al., 2009, *Radiocarbon* 51(4):1111-1150, Stuiver, et al., 1993, *Radiocarbon* 35(1):137-189, Oeschger, et al., 1975, *Tellus* 27:168-192

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Tablica 2. Radiokarbonski datum stratuma II (kraj).

Table 2. Radiocarbon age of the stratum II (ending).

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