

# Pottery depot from the Kalnik-Igrišče II site

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# OSTAVA KERAMIKE S LOKALITETA KALNIK-IGRIŠĆE II

## POTTERY DEPOT FROM THE KALNIK-IGRIŠĆE II SITE

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*Tijekom istraživanja 2007. godine na lokalitetu Kalnik-Igrišće II otkrivena je manja jama koja sadrži 17,5 kilograma ulomaka keramičkih posuda. Ovdje donosimo morfološko-tipološku i statističku analizu keramičkog materijala, a čitav kontekst nalaza poklapa se s nalazima koji su u literaturi poznatiji kao ostave keramike.*

*Ključne riječi: Kalnik-Igrišće II, kasno brončano doba, naselje, tipološke i statističke analize keramike, ostava keramike*

*A small pit was discovered during the excavations conducted in 2007 at the Kalnik-Igrišće II site, containing 17.5 kg of pottery vessel fragments. This paper provides a morphological, typological and statistical analysis of the pottery, and the entire context of the find is consistent with the finds known in literature as pottery depots.*

*Key words: Kalnik-Igrišće II, Late Bronze Age, settlement, typological and statistical analyses of pottery, pottery depot*

### UVOD

Lokalitet Kalnik-Igrišće još je od ranije poznat u literaturi kao brončanodobno nalazište gdje se živjelo od vremena starijeg, ali i mlađeg razdoblja kulture polja sa žarama. Lokalitet se nalazi na prostoru sjeverozapadne Hrvatske (Koprivničko-križevačka županija), a samo naselje smješteno je na južnim obroncima Kalničkog gorja (karta 1). Prva istraživanja na lokalitetu započela su još davnih osamdesetih godina kada je tadašnji kustos arheološke zbirke u Gradskom muzeju u Križevcima, profesor Zoran Homen rekognoscirao područje Kalnika i proveo 1987. godine prvo probno iskopavanje na položaju Igrišće. Od 1988. do 1990. godine istraživanja je vodio Arheološki zavod Filozofskog fakulteta pod vodstvom prof. dr. sc. Nives Majnarić-Pandžić (Majnarić-Pandžić 1992; 1998). Od godine 2006. provode se sustavna arheološka iskopavanja na Igrišću koja vodi Institut za arheologiju u Zagrebu.<sup>1</sup>

Najnovija su arheološka iskopavanja otkrila vrijedne po-

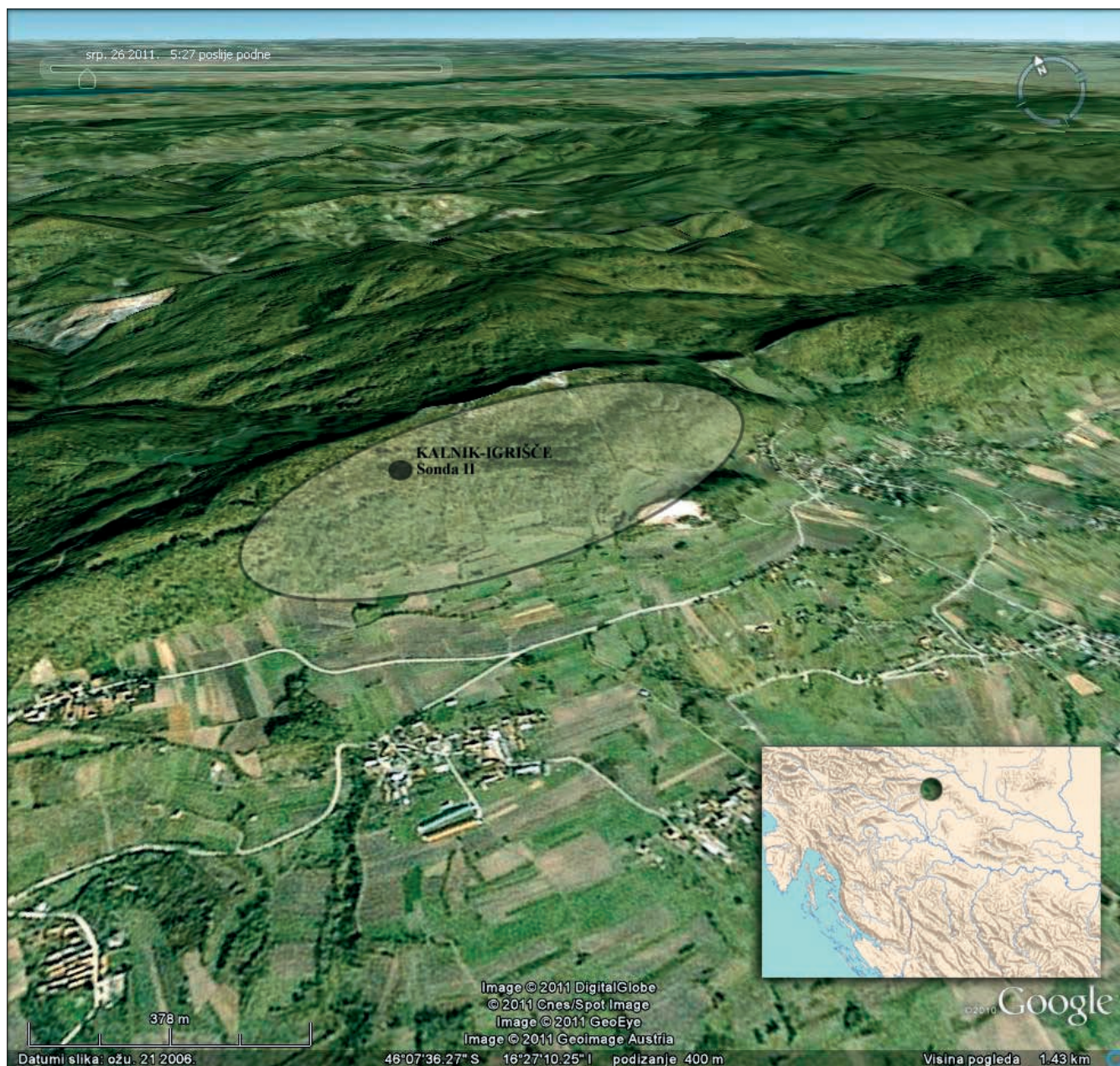
### INTRODUCTION

In literature, the Kalnik-Igrišće site is known as a Late Bronze Age site, populated since the early Urnfield culture. The site is located in north-western Croatia (the Koprivnica-Križevci County), and the settlement itself is on the southern slopes of the Kalnik mountain (Map 1). The first excavations at the site began back in the 1980s, when the then curator of the archaeological collection at the Museum of the City of Križevci, Professor Zoran Homen, reconnoitred the area of Kalnik and, in 1987, conducted the initial test excavations at the location of Igrišće. From 1988 to 1990, the excavations were conducted by the Department of Archaeology of the Faculty of Philosophy, under Professor Dr. Nives Majnarić-Pandžić (Majnarić-Pandžić 1992; 1998). Since 2006, the Zagreb Institute of Archaeology has been conducting systematic archaeological excavations in Igrišće.<sup>1</sup>

While the most recent archaeological excavations have discovered valuable information on the dietary habits of

<sup>1</sup> Voditelj arheoloških iskopavanja je dr. sc. Snježana Karavanić s Instituta za arheologiju u Zagrebu.

<sup>1</sup> Dr. Snježana Karavanić of the Zagreb Institute of Archaeology is in charge of the excavations.



Karta 1 Položaj brončanodobnog naselja (Kalnik-Igrišće II)  
 Map 1 Position of the Bronze Age settlement (Kalnik-Igrišće II)

datke o prehrani ondašnjih stanovnika<sup>2</sup>, a trenutna i buduća istraživanja na tragu su vrlo vrijednih podataka koji svjedoče o razvijenoj i složenoj arhitektonskoj slici objekata. Zahvaljujući Ministarstvu kulture koje je prepoznalo potencijal lokaliteta te lokalnoj zajednici, istraživanja su nastavljena i ove godine.

Na položaju Igrišće, na južnim terasama brda Kalnik, nalaze se tragovi koji svjedoče o intenzivnom životu na tom prostoru u razdoblju kasnog brončanog doba. Nova sezona istraživanja započela je 2006. godine, a već 2007. bilo je jasno kako se radi o višeslojnom i vrlo bogatom lokalitetu. Te godine otkriveni su prvi puta ostaci većeg brončanodob-

2 Pronađeni su ostaci karboniziranih žitarica, mahunarki i divljih jabuka. Trenutno je u tijeku znanstvena obrada arheobotaničkih nalaza u okviru doktorske disertacije mag. biologije Sare Mareković na Botaničkom zavodu Prirodoslovno-matematičkog fakulteta.

the population of that period,<sup>2</sup> we believe future excavations will reveal valuable and comprehensive information about the complexity of architectural structures. Thanks to the Ministry of Culture, which has recognised the site's potential, and to the local community, excavations have continued this year.

Traces indicative of intensive human habitation in the Late Bronze Age were found at the Igrišće site, on the southern terraces of Mt Kalnik. The new excavation season began in 2006, and already in 2007 it was clear that we were dealing with a very rich multi-layered site. The remains of a large Bronze-Age structure were found for the first time

2 Remains of carbonised cereals, leguminous plants and crab apples were found. The archaeobotanical finds are currently being processed by Sara Mareković, M.Sc. in Biology from the Department of Botany of the Faculty of Science, as part of her doctoral thesis.

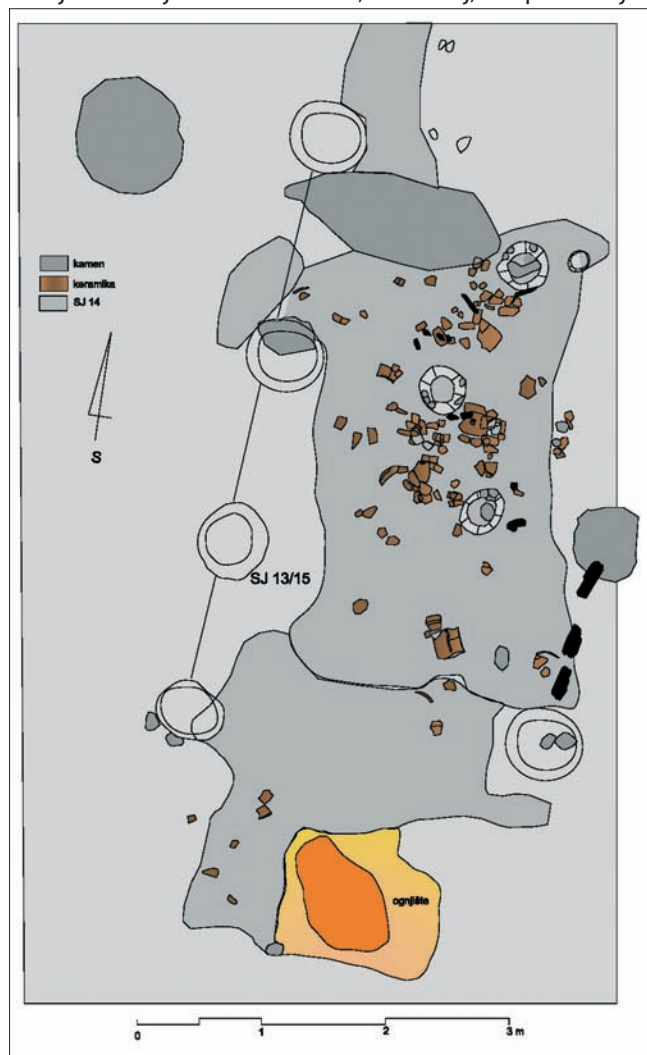


nog objekta čiji se tlocrt tek naslućivao. Tijekom te kampa-  
nje otkriven je i interesantan nalaz o kojemu će ovdje biti  
više riječi.

### POLOŽAJ JAME I STRATIGRAFSKI ODNOSI

Tijekom istraživačke kampanje 2007. godine na položaju  
Kalnik-Igrišće II, u sloju kasnog brončanog doba pažnju nam  
je zaokupio naizgled uobičajen nalaz keramičkih ulomaka.  
U manjoj ovalnoj jami (SJ 13/15)<sup>3</sup> otkrivena je velika količi-  
na razbijenih keramičkih posuda. Ulomci su bili položeni u  
jamu, promjera 45–50 cm, dubine 35 cm. Jama se nalazi u  
kontekstu s ostacima brončanodobne kuće, odnosno u nizu  
jama od stupova koji se nalaze na približno jednakoj udalje-  
nosti te prate ostatke urušenja kuće u smjeru S–J (sl. 1).

Sjeverno i južno od SJ 13/15, u isti sloj, ukopane su još



Sl. 1 Kalnik-Igrišće II. Tlocrtna situacija iz 2008. godine (izradila:  
A. Kudelić)

Fig. 1 Kalnik-Igrišće II. Layout plan, 2008 (drawn by A. Kudelić)

tri jame jednakih dimenzija na udaljenosti od otprilike 80-  
ak cm. Istočno od linije koja predstavlja rub kuće nalaze  
se ostaci gorenog drveta s mnoštvom razbijenih posuda i

<sup>3</sup> SJ 13 je zapuna ukopa SJ 15. SJ 13 sastavljena je od tamnosmeđe, rahle  
zemlje s vrlo malo ostataka karboniziranih žitarica pri vrhu, 17,5 kg  
ulomaka keramičkih posuda te ostacima ugljena na dnu.

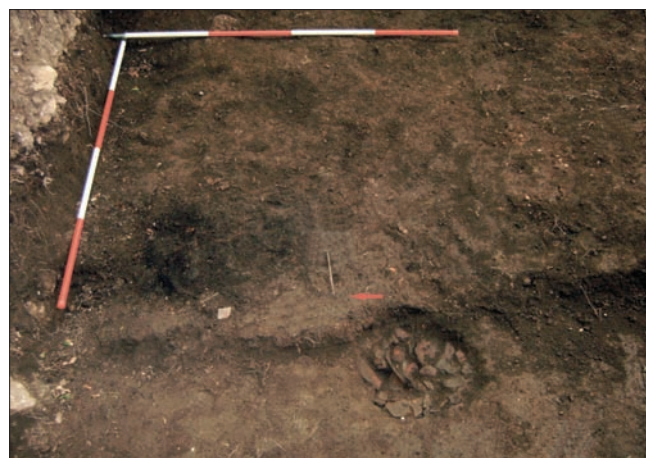
that year, but its plan could only be guessed. The campaign  
also revealed an interesting find of which more will be said  
further on.

### THE POSITION OF THE PIT AND STRATIGRAPHIC RELATIONS

While excavating the Late Bronze Age layer at the Kal-  
nik-Igrišće II site during the 2007 excavation campaign, our  
attention was drawn to a seemingly ordinary find of a gro-  
up of pottery vessel fragments - a large quantity of broken  
pottery vessels found in a small oval pit (SU 13/15).<sup>3</sup> The pit  
into which the fragments had been placed was 45–50 cm  
wide and 35 cm deep. It was found among the remains of a  
Bronze-Age house, in a row of equidistant postholes outli-  
ning the ruins of the house in the north-south direction  
(Fig. 1).

Three other pits of equal dimensions, approximately  
80 cm apart from each other, were found to the north and  
south of SU 13/15, dug into the same layer. Found to the east  
of the line representing the edge of the house were the re-  
mains of burned wood, a multitude of broken vessels and  
remains of carbonised cereals. Found to the west of the li-  
ne of posts was a layer of yellow loam or sub-humus (SU  
10) with the pit dug into it. According to the stratigraphic  
image, this pit is connected to the floor of the house and,  
together, they form a single unit. This time, however, we  
will skip the details concerning the structure; they will be  
published in some future article, once the picture has been  
completed by new research. Our attention will remain focu-  
sed on this seemingly ordinary pit the purpose of which  
seems possible to define.

Found at the top of the filling (SU 13) of the aforemen-  
tioned dugout structure (SU 15) was a dark-grey layer of earth,

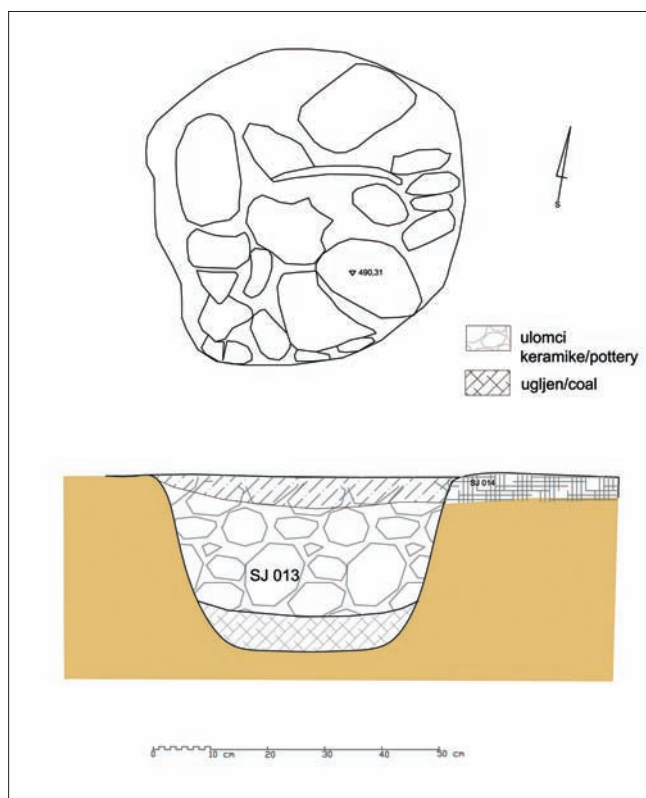


Sl. 2 Kalnik-Igrišće II 2007. SJ 13/15 (snimila: S. Karavanić)

Fig. 2 Kalnik-Igrišće II, 2007, SU 13/15 (photo: S. Karavanić)

rich not only in coal, but also in carbonised cereal remains  
(SU 14). Underneath this layer there were pottery vessel  
fragments. To be more precise, the arranged fragments  
followed the shape of a clearly defined circular pit. At first

<sup>3</sup> SU 13 is the filling of the SU 15 dugout structure. SU 13 consists of dark-  
brown, loose earth with very few remains of carbonised cereals at the top,  
17.5 kg of pottery vessel fragments and remains of coal at the bottom.



Sl. 3 Shematski prikaz SJ 13/15

Fig. 3 Scheme of SU 13/15

ostacima karboniziranih žitarica. Zapadno od niza stupova nalazi se sloj žute ilovače ili subhumus (SJ 10) u koji je jama ukopana. Prema stratigrafskoj slici ova je jama u vezi s podnicom kuće te na taj način one čine jednu cjelinu. Ipak, detalje oko samoga objekta ovoga puta ćemo zaobići, a nova istraživanja svakako će upotpuniti sliku koja je u planu za neko sljedeće izlaganje. Pažnju ćemo posvetiti konkretno ovoj, naizgled običnoj i svrsi određivoj jami.

Pri vrhu zapune (SJ 13) spomenutog ukopa (SJ 15) nalazio se tamnosivi sloj zemlje bogat ugljenom, ali i ostacima karboniziranih žitarica (SJ 14). Ispod tog sloja pronađeni su ulomci keramičkih posuda. Točnije, slagani ulomci pratili su rubove jasno definirane kružne jame. U prvom trenutku činilo se kako je riječ o jednoj većoj posudi unutar ukopa. Pažljivim pregledom materijala utvrđeno je kako ulomci ipak ne pripadaju jednoj posudi, već se radi o dijelovima od nekoliko posuda. Ulomci su slagani tako da prate oblik ukopa i nižu se jedan na drugi u nekoliko slojeva (sl. 2). Najveći ulomci imaju dimenzije 15x18 cm i 27x8 cm. Ispod 15-ak cm nataloženih dijelova posuda nalazi se rjeđa koncentracija fragmenata, ali se pojavljuje veća količina ugljena i gara sve do dna ukopa (sl. 3).

U jami je pronađeno nekoliko vrsta arheološkog pokretnog materijala, a najveći broj nalaza jesu ulomci keramičkih posuda. Pronađena su 4 manja ulomka lijepa i nekoliko sitnih fragmenata životinjskih kosti.

Napravljena je kvantitativna i kvalitativna statistička obrada podataka na temelju svih ulomaka keramičkih posuda. Njihova vremenska pripadnost određena je temeljem

it seemed we were dealing with one large vessel inside the dugout structure, but a careful examination of the material established that the fragments did not belong to a single vessel but to several. The fragments were arranged to follow the shape of the dugout structure and placed on top of each other in several layers (Fig. 2). The biggest fragments are 15x18 cm and 27x8 cm in size. Underneath approximately 15 cm of vessel parts, there is a much lower concentration of fragments, but more coal and soot, reaching all the way to the bottom of the dugout structure (Fig. 3).

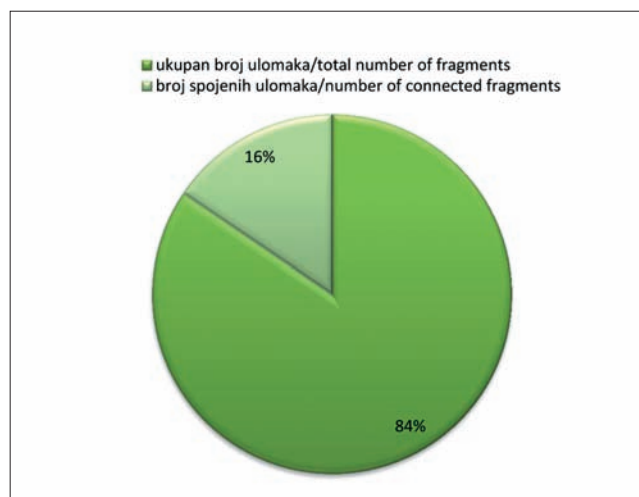
Several types of movable archaeological material were found in the pit, most of them pottery vessel fragments. Four small fragments of daub and several tiny fragments of animal bone were also found.

A quantitative and qualitative analysis of statistical data was carried out of all pottery vessel fragments. They were dated according to the analysis of their typical morphological characteristics and by comparison with known neighbouring sites.

### MORPHOLOGICAL AND TECHNICAL CHARACTERISTICS OF POTTERY FROM SU 13

The pottery vessel fragments from SU 13 belong to a closed archaeological context and, as such, their morphological, and certain technological, characteristics could explain the context of the find itself. A total of 354 pottery fragments were found in the pit. During the treatment of the pottery material, 16% of all fragments were successfully pieced together (Fig. 4). Only a small number of fragments could be matched and, after reassembling, their number amounted to 289.

In view of the amount of morphologically similar pottery material, we expected to be able to piece together a much larger percentage of vessels, particularly since the fractures were not worn and the fragments were quite large and uniform in structure. Three types of structures were defined in the pottery material based on these observations. The division is standard (intermediate, coarse and fine structure),



Sl. 4 Postotak spojenih ulomaka u odnosu na ukupni broj pronađenih ulomaka keramike

Fig. 4 Percentage of matched pottery fragments in relation to the total number of all pottery fragments found

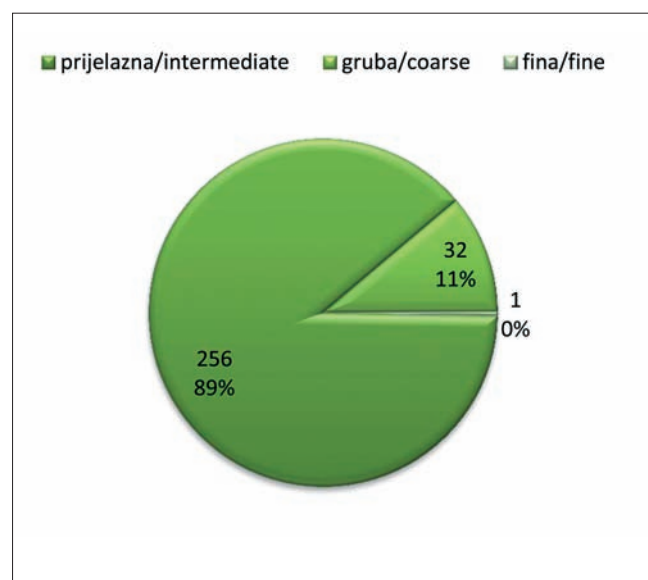
analize tipičnih morfoloških značajki te usporedbom s poznatim susjednim nalazištima.

### MORFOLOŠKO TEHNOLOŠKE ODLIKE KERAMIČKOG MATERIJALA IZ SJ 13

Ulomci keramičkih posuda iz SJ 13 dio su zatvorene cjeline i na taj način predstavljaju nalaz čije bi nam morfološke, ali i neke tehnološke karakteristike mogle rastumačiti sam kontekst nalaza. U jami je pronađeno ukupno 354 ulomaka keramike. Prilikom obrade keramičkog materijala od ukupnog broja ulomaka uspješno je zalijepljeno njih 16% (sl. 4). Spojiti se mogao samo manji broj ulomaka, a nakon lijepljenja njihov broj iznosio je 289.

S obzirom na količinu morfološki sličnog keramičkog materijala očekivali smo mnogo veći postotak slijepljenih posuda, posebno iz razloga što lomovi nisu istrošeni, a ulomci su prilično velikih dimenzija i ujednačenih struktura. Na temelju ovih opažanja određene su tri vrste struktura keramičkog materijala. Podjela je klasična (prijelazna, gruba i fina struktura) i nije pokazala nikakve osobitosti (sl. 5), a temelji se na čistoći gline, odnosno količini dodanih primjesa, obradi površine te debljini stijenki.

Osnovu za određivanje grube strukture čine ulomci posuda od nepročišćene gline kojoj su dodane krupnije primjese, a površina takvih ulomaka izrazito je hrapava. Ovakvih ulomaka je vrlo malo i izgleda kako pripadaju jednoj posudi, vjerojatno njezinom donjem dijelu. Dokumentirali smo 32 ulomka grube strukture (30 ulomaka od stijenki posuda i 2 ulomka od dna posude). Tip posude nije moguće odrediti no vjerojatno se radi o većoj posudi odnosno loncu. Prosječna debljina stijenki iznosi 0,8 cm. Boju je gotovo nemoguće odrediti jer je keramika gorjela naknadno na visokoj temperaturi, pa boja varira od narančaste preko tamnosivih i sivih nijansi. Vrsti prijelazne strukture pripada većina ulomaka. To su posude napravljene od pročišćene gline čija debljina stijenke iznosi od 0,6 do 1,4 cm. Vanjska površina može i ne mora biti uglačana (uglačane su zdjele).

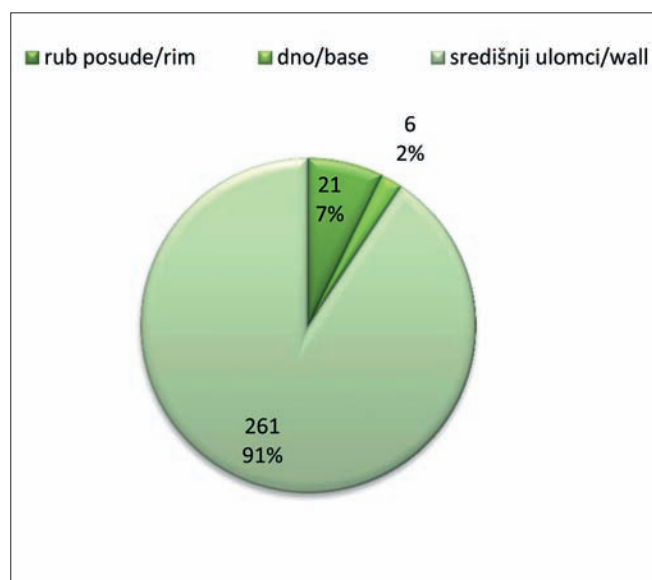


Sl. 5 Vrste keramičkih struktura  
Fig. 5 Types of pottery structures

displays no specific characteristics (Fig. 5) and is based on the composition of clay, i.e. the quantity of tempers, surface treatment and the thickness of walls.

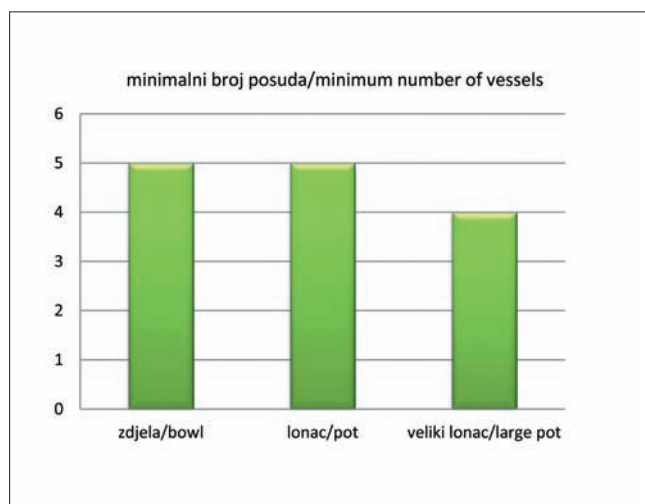
The coarse structure is identified on the basis of vessel fragments made of unpurified clay containing large quantities of tempers. The surface of such fragments is exceptionally rough. There are few of them and they all seem to belong to one vessel, probably its lower section. A total of 32 fragments have been counted (30 wall fragments and 2 base fragments). Although the type of vessel is impossible to determine, it was probably large, i.e. a pot. The average thickness of the walls is 0.8 cm. The colour is virtually impossible to define as the pottery subsequently burned at high temperatures, and the colour now varies from shades of orange to shades of dark-grey and grey. Most of the fragments belong to the intermediate structure. These vessels are made of purified clay, their walls are between 0.6 and 1.4 cm thick, and the external surface may or may not be polished (the bowls are polished). These fragments vary in colour from grey, orange and stained dark-grey to brown. As the pottery subsequently burned, the colour and the section of the walls cannot be used as criteria for determining its structure. The fine structure pertains to vessels made of purified clay with thin walls and a polished surface. The only fragment we have attributed to this structure is a large fragment of a small pot, with an average wall thickness of 0.4 cm. The surface is highly polished and red-brown in colour, while the section is dark-grey. The fragment clearly shows that this vessel was not exposed to flames. We can conclude that the main difference lies in the treatment of the vessels' surface. Judging by this criteria, the vessels used as tableware are polished and shiny (T. 1: 1–3), while the other fragments mostly belong to larger vessels used for storing supplies or as kitchenware.

Even though the vessels could not be completely reconstructed, we managed to define their types, mostly through large pottery fragments. By dividing the parts of vessels in-



Sl. 6 Zastupljenost pojedinih dijelova posuda  
Fig. 6 Occurrence of particular parts of vessels





Sl. 7 Minimalni broj posuda iz SJ 13  
Fig. 7 Minimal number of vessels from SU 13

Boja ovih ulomaka varira od sive, narančaste, tamnosive mr-ljaste do smeđe boje. Keramički materijal je naknadno gorio i ne može se govoriti o boji stijenke i presjeka kao kriteriju za određivanje strukture. Fina struktura odnosi se na posude koje su napravljene od pročišćene gline tankih stijenki i uglačane površine. Jedini ulomak koji smo pripisali ovoj strukturi jest veći ulomak manjeg lončića čija prosječna debljina stijenki iznosi 0,4 cm. Površina je uglačana do sjaja, crveno-smeđe boje, dok je presjek tamnosive boje. Ova posuda nije bila izložena vatri, što se jasno vidi na ulomku koji je pronađen. Možemo zaključiti kako se osnovna razlika primjećuje u obradi površine posuda. Prema tom kriteriju posude koje predstavljaju stolno posuđe, uglačane su i sjajne (T. 1: 1–3) dok ostali ulomci pripadaju uglavnom većim posudama za zalihe odnosno kuhinjskom posuđu.

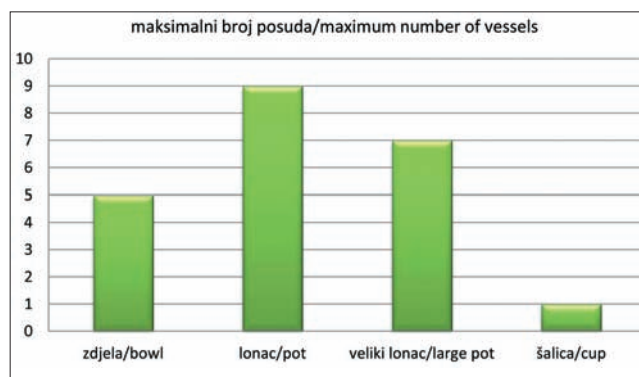
Iako se posude nisu mogle u cjelosti rekonstruirati, prema uglavnom većim ulomcima keramičkog materijala, uspjeli smo definirati tipove. Izdvajanjem dijelova posuda (rub, stijenka, dno posude) dobiven je statistički podatak o zastupljenosti pojedinih zona (dijelova) posuda. Podaci na neki način predstavljaju ekvivalent količini materijalnih ostataka navedenih zona od npr. jedne čitave posude (sl. 6). Dakle, najbrojniji su ulomci stijenki, zatim rubova, a tek onda dna od posuda.

Tipološka obrada materijala temeljena je uglavnom na ulomcima rubova. Takva analiza rezultirala je prikazom minimalnog broja posuda (sl. 7).

Maksimalni broj posuda dobiven je na temelju zbroja ostalih elemenata koji mogu predstavljati dijagnostičke elemente pojedinih tipova, npr. ručke i drške. Prema kriteriju minimalnog broja posuda dobiveni su rezultati prema kojima su zdjele i lonci najzastupljeniji tip. Kada pogledamo grafikon s prikazom maksimalnog broja posuda tada je rezultat nešto drugačiji (sl. 8). U ovom slučaju vodeći oblik ipak predstavljaju lonci, pa veliki lonci<sup>4</sup> i tek onda zdjele.

U jami je pronađen i dio manje ručke koji je mogao pripadati šalici, iako se ostatak šalice nije mogao identificirati

4 Veliki lonac je lonac velikih dimenzija čiji opseg ruba (oboda) prelazi 50 cm, a služi za skladištenje hrane ili pića.



Sl. 8 Maksimalni broj posuda iz SJ 13  
Fig. 8 Maximal number of vessels from SU 13

to groups (rim, wall, base) statistical data were obtained on the occurrence of individual zones (parts) of the vessels. In some way, these data correspond to the quantities of material remains for each of the zones of an individual vessel (Fig. 6). Thus, the most numerous are wall fragments, followed by rim fragments, with base fragments occurring the least frequently.

The typological classification of the material was mostly based on rim fragments. This analysis revealed the minimal number of vessels (Fig. 7).

The maximal number of vessels was calculated by adding up the remaining type-indicative elements e.g. handles and grips. According to the criteria of the minimal number of vessels, the results obtained pointed at bowls and pots as being the most frequent. If we consult the graph showing the maximal number of vessels, the result is somewhat different (Fig. 8): pots, even large pots (pythos)<sup>4</sup>, occur the most frequently, only then followed by bowls.

A part of a small handle was also found in the pit. It may have belonged to a cup, although the rest of the cup could not be identified among the remaining pottery fragments. It can, however, be observed that the remains belonged both to kitchenware and tableware. Two bowls (T. 1: 2, 3) and a small-sized pot (T. 1: 1) can be singled out as tableware. The remains of two smaller pots are coarser and were probably used as kitchenware (T. 4: 1, 2). Based on the criterion of the circumference of the rim ( $\geq 50$  cm) we identified 3 large pots, that is, vessels for keeping supplies (storage). We can surmise what the dimensions were by comparing them to a reconstructed storage pot found at the same site: accordingly, the circumference of the widest part of the vessel may have even exceeded 50 cm, as may the vessel's height (Karavanić et al. 2011: 6).

Thus, we are faced with an assemblage of vessels that can belong both to the area where food was prepared and to the area where food (or liquids) was stored. We must bear in mind that this pit is located next to the area that was probably used for the preparation of food and (or) the storing of supplies (Karavanić 2009: 34). However, it will be some time before more detailed information about the structure itself becomes available.

4 A large pot (storage pot) is a large-sized pot with a rim exceeding 50 cm in circumference and it is used for storing food or drink.

među preostalim ulomcima keramike. Iz predloženog se ipak može primijetiti kako su ostaci pripadali kuhinjskom jednako kao i stolnom repertoaru posuda. Kao stolno posude posebno se mogu izdvojiti dvije zdjele (T. 1: 2, 3) i jedan lonac manjih dimenzija (T. 1: 1). Ostaci dva manja lonca grublje su izrade i vjerojatno su korišteni kao dio kuhinskog repertoara posuda (T. 4: 1, 2). Prema kriteriju opsega ruba posude ( $\geq 50$  cm) definirana su 3 velika lonca (pithos), odnosno posude za zalihe (skladištenje). Prema primjeru rekonstruiranog lonca za zalihe s istog lokaliteta moguće je pretpostaviti o kojim se dimenzijama radi, a ako je tako tada je opseg najšireg dijela posude mogao iznositi i preko 50 cm, baš kao i visina posude (Karavanić et al. 2011: 6).

Dakle, pred nama se nalazi repertoar posuda koje možemo smjestiti u prostor gdje se priprema hrana jednako kao i u prostor za čuvanje zaliha hrane (ili tekućine). Zanimljivo je podsjetiti kako se ova jama nalazi uz prostor koji je vjerojatno služio kao prostor za pripremu hrane i (ili) čuvanje zaliha (Karavanić 2009: 34). Ipak na detaljnije podatke o samom objektu još ćemo neko vrijeme pričekati.

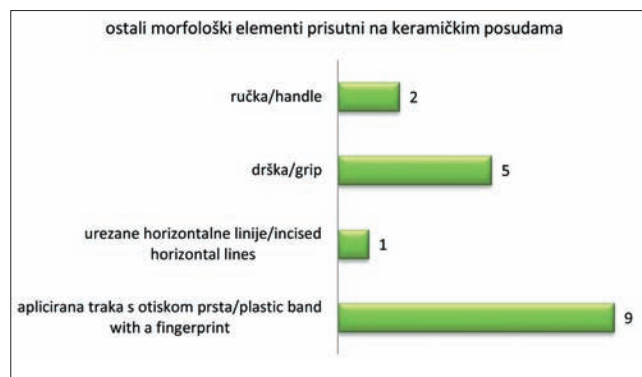
Potrebno je spomenuti kako se ukras na stijenkama posuda javlja rijetko i uglavnom su to horizontalno aplicirane trake s otiskom prsta. Na jednom je ulomku zabilježeno urezivanje horizontalne dvostruke linije. Zanimljiva je pojava čak 4 veća ulomka s modeliranim drškama koje se nalaze na trbuhu posude odnosno najširem dijelu posude (sl. 9; T. 6: 1–4).

Kao što smo ranije napomenuli većina je keramičkih ulomaka iz ove jame sekundarno gorjela. Najslabiji tragovi gorenja primjećuju se na stolnoj keramici dok se posljedice vrlo visokih temperatura mogu primijetiti na 9% keramičkih ulomaka koji uglavnom pripadaju većim loncima. Što se tiče deformacija, primjećena su zanimljiva oštećenja vidljiva na površini nekih posuda. Oštećenja se mogu prepoznati u obliku otkrhanih ovalnih ljuški, a nastala su pod utjecajem visoke temperature. Prema literaturi koja se bavi tehnologijom i proizvodnjom keramike, ovakva oštećenja nastaju ako se posuda pri pečenju prenapro zagrijava (Rye 1988: 131). Gotovo identična oštećenja vidljiva su na nekoliko ulomaka (T. 1: 1; 2: 1; 5: 2; 6: 4). Na kraju valja još jednom navesti kako su keramički ulomci prilično velikih dimenzija (najveći ulomci 15x18 cm i 27x8 cm) što je rijetkost u slučaju sekundarno odbačenog keramičkog materijala. Isto tako neistrošeni lomovi na gotovo svim ulomcima govore u prilog tezi kako se ova skupina nalaza pohranila u jamu nakon što je njihova primarna uloga završila.

## KULTURNO KRONOLOŠKA I TIPOLOŠKA ANALIZA

### Lonci

U jami (SJ 13/15) se pojavljuju uglavnom lonci ljevkastoga vrata. Takav je i lonac (T. 3: 2) koji ima suženi izrazito ljevkastog vrat. Analogije ovom tipu lonca nalazimo u naseljima ruške grupe u Sloveniji kao što je Brinjeva gora (Oman 1981: T. 38: 2). U Ormožu najbliži mu je lonac tipa L15 (Dular, Tomanić Jevremov 2010: sl. 88). Na osnovi statističke anali-



Sl. 9 Zastupljenost pojedinih dekorativno-funkcionalnih elemenata na posudama

Fig. 9 Occurrence of decorative and functional elements on the vessels

It should be mentioned that the walls of the vessels are very rarely decorated, mostly with a horizontal plastic band with a fingerprint. One of the fragments displayed an incised double horizontal line. Also of interest are 4 large fragments with handles on the vessel's belly, i.e. the widest area of the vessel (Fig. 9; T. 6: 1–4).

As mentioned earlier, most of the pottery fragments from this pit have been exposed to secondary burning. Tableware pottery displays the slightest traces of burning, while the effects of very high temperatures can be observed on 9% of pottery fragments, mostly belonging to large pots. With regard to deformations, interesting damage has been observed on the surface of some vessels, in the shape of circular or elliptical (oval) spalls, caused by fire and high temperatures. According to the literature dealing with pottery production, such damage is caused if the vessel is heated too quickly during the firing process (Rye 1988: 131). Almost identical damage can be observed on several fragments from this pit (T. 1: 1; 2: 1; 5: 2; 6: 4). Finally, we should state one more time that the pottery fragments are quite large (the largest ones are 15x18 cm and 27x8 cm in size) which is rare in discarded pottery material. The lack of wear on the edges of almost all broken fragments supports the thesis that this group of finds was deposited in the pit after their primary role had finished.

## CULTURAL, CHRONOLOGICAL AND TYPOLOGICAL ANALYSIS

### Pots

Most of the pots found in the pit (SU 13/15) have funnel-shaped necks. Among them is a pot (T. 3: 2) with a narrow and distinctly funnel-shaped neck. Analogies with this type of pot can be found in the settlements of the Ruše group in Slovenia, such as Brinjeva gora (Oman 1981: T. 38:2). The most similar specimen found in Ormož is a L15-type pot (Dular, Tomanić Jevremov 2010: Fig. 88). The statistical analysis shows that there are many such pots in the settlement. The only thing that is not certain in Ormož is their dating, but they probably belong to the Ha B period. Two pots with funnel-shaped necks were also found in pit no.



ze moguće je vidjeti da su ti lonci zastupljeni u značajnom broju u naselju. Jedino se ne može sa sigurnošću reći kakva im je datacija u Ormožu, ali se radi vjerojatno o periodu Ha B. Dva lonca ljevkastoga vrata pronađena su i u jami 77 u Ormožu (Skolibrova ulica, sektor 1) (Dular, Tomanič Jevremov 2010: T. 3: 3, T. 4: A). Jama 77 datirana je u Ha B (Dular, Tomanič Jevremov 2010: 79), a datiranje omogućava vrč koji je značajan inventar ruške grupe (Dular, Tomanič Jevremov 2010: T. 3: 2). Analogiju loncima ljevkastog vrata nalazimo i na Pošteli I (Teržan 1990: T. 50: 3) gdje je datiran u sam kraj Ha B ili točnije Ha B3. Oni se također javljaju u gornja tri stratum Brinjeve gore (Oman 1981; Teržan 1990: 37) i datirani su u široki vremenski raspon čitavog stupnja Ha B i kulturno pripadaju grupi Ruše.

Osim ovih izrazito velikih lonaca, u jami se javljaju i dva ulomka manjih lonaca, jedan zaobljenoga tijela i izvučenoga ruba (T. 4: 1) i drugi S-profiliranog tijela s plastičnom trakom s otiscima prsta (T. 4: 2). Ovaj posljednji ima analogije u loncu iz jame 41 u Skolibrovoj ulici, sektor 1 u naselju Ormož (Dular, Tomanič Jevremov 2010: T. 2 A, 2). Oba lonca su karakteristična za čitavo razdoblje Ha B stupnja i mogu se pripisati različitim kulturnim grupama mlađe kulture polja sa žarama.

U jami su pronađeni lonci grube fature ukrašeni plastičnim trakama s otiscima prsta (T. 2: 1–3). Prema svojim stilskim karakteristikama mogu se pripisati različitim kulturnim grupama mlađe kulture polja sa žarama s brojnim analogijama u srednjem Podunavlju. Među njima osobito je zanimljiv lonac izvučenog ruba i zaobljenog tijela (T. 2: 3) koji je imao promjer oko 45 cm. Lonac sličan ovome pronađen je u sloju 1 na nalazištu Brinjeva Gora u Sloveniji (Oman 1981: T. 2: 1). Može se povezati s nalazom iz groblja Mindelheim datiranim u Ha A2 (Oman 1981: 149). Također se nalaze i u sloju 2 Brinjeve Gore (Oman 1981: T. 14: 1) datirani u Ha A period (Oman 1981: 150). Međutim vrlo je teško datirati ove tipove lonaca precizno. S-profilacija tijela ukazuje na nešto mlađu dataciju u vrijeme Ha B stupnja kulture polja sa žarama.

Zanimljiv je veći ulomak lonca (T. 1: 1) koji je manjih dimenzija, ali bi se po kvaliteti pečenja, kao i tehnici obrade površine mogao uvrstiti i u finu keramiku. Analogije mu također nalazimo na nalazištima u susjednoj Sloveniji u okviru grupe Ruše.

Dijelovima tijela velikih lonaca pripadaju i ulomci s modeliranim drškama (T. 5: 4; T. 6: 1–4) koje su u paru stajale odmah ispod mjesta najvećeg promjera posude. Slične nalazimo opet u naseljima ruške grupe u Sloveniji npr. na loncu iz Pošte I (Teržan 1990: 31, sl. 1: 3). Zanimljiva je rekonstrukcija lonca iz kvadranta 80 u Skolibrovoj ulici, sektor 2 (Dular, Tomanič Jevremov 2010: T. 18: 1) koji je na mjestu najvećeg promjera bio ukrašen plastičnom trakom s otiscima prsta, a u donjem dijelu je imao takvu dršku. Stoga i na osnovi ulomaka iz ove jame na Kalnik-Igrišću II dolaze u obzir i takve rekonstrukcije.

### Zdjele

Pojavljuje se jednostavan tip zdjele blago uvučenoga ruba bez ukrasa (T. 1: 2, 3; T. 3: 5). Takve su zdjele česti tip na naselju Kalnik-Igrišće II (Karavanić 2009: Pl. 11). Budući da

77 in Ormož (Skolibrova ulica, sector 1) (Dular, Tomanič Jevremov 2010: T. 3: 3, T. 4A). Pit 77 was dated back to Ha B (Dular, Tomanič Jevremov 2010: 79) thanks to a jug which is a highly important piece of the Ruše group inventory (Dular, Tomanič Jevremov 2010: T. 3: 2). Analogies with the pots with funnel-shaped necks can also be found at Poštela I (Teržan 1990: T. 50: 3), dating back to the very end of Ha B or, more precisely, Ha B3. They also appear in the upper three strata of Brinjeva Gora (Oman 1981; Teržan 1990: 37), where they are broadly dated to the entire Ha B phase and belong to the cultural group of Ruše.

In addition to these exceptionally large pots, two smaller pots were also found in the pit, one of which had a rounded body and an everted rim (T. 4: 1) and the other an S-profiled body and a plastic band with fingerprints (T. 4: 2). Analogies with the latter can be found in a pot from pit no. 41 in Skolibrova ulica, sector 1, in the settlement of Ormož (Dular, Tomanič Jevremov 2010: T. 2 A, 2). Both pots are characteristic of the entire Ha B phase and can be attributed to different cultural groups of the late Urnfield Culture.

The pit also contains coarse pots decorated with plastic bands with fingerprints (T. 2: 1–3). Based on their stylistic traits, they can be attributed to different cultural groups of the Late Urnfield Culture, with numerous analogies in the central Danube River basin. Of particular interest among them is a pot with an everted rim and a rounded body (T. 2: 3), approximately 45 cm in diameter. A pot similar to this one was found in layer 1 of the Brinjeva Gora site in Slovenia (Oman 1981: T. 2: 1). It can be linked to the find from the Mindelheim graveyard, dated back to the Ha A2 period (Oman 1981: 149). Such pots can also be found in layer 2 of Brinjeva Gora (Oman 1981: T. 14: 1), dated back to the Ha A period (Oman 1981: 150). It is, however, very difficult to date these types of pots with any degree of precision. The S-profiled body points towards a somewhat later period of the Ha B phase of the Urnfield culture.

Of interest is a large fragment of a pot (T. 1: 1) which, albeit small, could still be classified as fine pottery based on the quality of the firing and the surface treatment techniques. Analogies with it were also found at the sites in neighbouring Slovenia, as part of the Ruše group.

Fragments with handles also belong to parts of large pots (T. 5: 4; T. 6: 1–4): the handles came in pairs and were positioned immediately below the point where the diameter of the pot was the largest. Once again, we find similar ones in the settlements of the Ruše group in Slovenia, e.g. a pot from Poštela I (Teržan 1990: 31, Fig. 1: 3). The reconstruction of a pot from quadrant 80 in Skolibrova ulica, sector 2 (Dular, Tomanič Jevremov 2010: T. 18: 1) is interesting: in places where its diameter was the largest, it was decorated with a plastic band with fingerprints and had a similar handle in its lower section. Based on the fragments from this pit, such reconstructions could also apply to the Kalnik-Igrišće II pit.

### Bowls

There are simple, undecorated bowls with slightly inverted rims (T. 1: 2, 3; T. 3: 5). This type of bowls is common

se javljaju također na naseljima grupe Ruše u Sloveniji (Brinjeva gora, Poštela, Ormož) mogu se pripisati istoj kulturnoj grupi i datirati okvirno u vrijeme Ha B.

Izuzetak je ulomak zdjele uvučenoga ruba ukrašen fazetiranjem (T. 3: 4) koji se možda može datirati i prije Ha B stupnja, ali s obzirom da ga nalazimo i u naselju u Ormožu, u vatrištu 2/2 u Skolibrovoj ulici, sektor 2 (Dular, Tomanič Jevremov 2010: T. 12: 2), moguća je i datacija u Ha B3 i Ha C1. Ipak, ova posljednja datacija prema Dular, Tomanič Jevremov (2010: sl. 93) čini nam se manje vjerojatnom jer je fazetiranje karakteristično uglavnom za stariju kulturu polja sa žarama.

### Ostalo

Među ulomcima oboda koji su nađeni u jami (SJ 13) prevladavaju oni izvučeni prema van koji se vjerojatno mogu pripisati loncima. Zabilježen je i jedan ulomak ravnog ruba koji je pripadao koničnoj zdjeli, i jedan ulomak neukrašenog uvučenog ruba koji je pripadao zdjeli uvučenoga ruba. Ostali ulomci dijelovi su ravnih dna (T. 7) koji su pripadali različitim tipovima lonaca i nisu kronološki osjetljivi. U jami su pronađene i dvije trakaste ručke (T. 6: 5, 6), koje su mogle biti dio zdjelice ili šalice.

Od ukrasa izdvajaju se plastične trake s otiscima prsta (T. 5: 3, 5) koje su česti ukras na loncima tijekom čitavog raspona trajanja kulture polja sa žarama. Zanimljiv je ulomak s dva reda horizontalnih žlijebova (T. 5: 2) koji se javljaju na amforama mlađe kulture polja sa žarama u srednjem Podunavlju, pa tako i u grupi Ruše i Stillfried.

U zaključku se može reći da keramika pripada vremenu mlađe kulture polja sa žarama, stupnja Ha B. Svojim se stilskim obilježjima najviše uklapa u repertoar kulturne grupe Ruše u Sloveniji.

## ANALIZA INTERPRETACIJA

Temeljem rezultata analiza pokretnog materijala iz jame teško ćemo reći da se radi o tzv. jami za zalihe. Više je argumenata koji potkrepljuju ovo mišljenje. Prije svega jamu ispunjava nekoliko posuda, odnosno dijelovi od različitih posuda. Posude koje su mogle biti korištene kao spremnici za zalihe veće su od dimenzija jame. Prema rekonstruiranim dimenzijama posuda prevladavaju one veće zapremnine (sl. 10) koje povezujemo sa skladištenjem hrane.

Osvrnut ćemo se na još jednu mogućnost interpretacije. Riječ je o tzv. otpadnim jamama. U literaturi se često spominju jame koje su sekundarno korištene kao jame za odlaganje otpada (npr. jama za vađenje gline sekundarno se koristi kao jama za otpatke). Ipak, prečesto se i olako koristi pojam otpadna jama i to uglavnom za većinu ukopanih "objekata" u naseljima. Takve jame zapunjene su često tamnijom zemljom, sporadičnim ulomcima keramičkog materijala te životinjskim kostima. Otpadna jama u pravilu se ne nalazi u neposrednoj blizini mjesta stalnog boravka ljudi posebno ako se koristi dulje vrijeme. Temeljem prethodno navedenih argumenata, ovaj se ukop tumači kao jedan u nizu ukopa od stupova nadzemnog objekta. Je li sekundarno mogao poslužiti kao mjesto pohrane, pretežno keramičkog, otpada? Vjerojatno.

in the Kalnik-Igrišče II settlement (Karavanić 2009: Pl. 11). As they also appear in the settlements of the Ruše group in Slovenia (Brinjeva gora, Poštela, Ormož), they can be attributed to the same cultural group and broadly dated back to the Ha B period.

The fragment of a bowl with an inverted rim, decorated by faceting (T. 3: 4), is an exception: it might be dated before the Ha B phase, but since it can also be found in the settlement of Ormož, in fireplace 2/2 in Skolibrova ulica, sector 2 (Dular, Tomanič Jevremov 2010: T. 12: 2) it might also be dated back to the Ha B3 and Ha C1 phases. The latter dating according to Dular, Tomanič Jevremov (2010: Fig. 93), however, seems less likely because faceting was generally characteristic of the early Urnfield culture.

### Other

Most of the rim fragments found in the pit (SU 13) are everted and can probably be attributed to pots. A fragment of a straight rim, part of a conical bowl, was also recorded, as was a fragment of an undecorated inverted rim which belonged to a bowl with an inverted rim. Other fragments are parts of flat bases (T. 7) which belonged to different types of pots and are not period-specific. Two strap handles (T. 6: 5, 6) were also found in the pit; they may have been part of a small bowl or a cup.

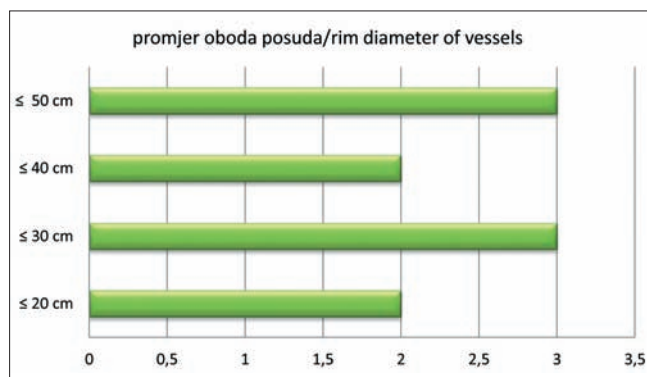
Standing out among the decorations are plastic bands with fingerprints (T. 5: 3, 5), frequently used for the decoration of pots throughout the Urnfield culture. Of interest to us is a fragment with two rows of horizontal grooves (T. 5: 2) which can be found on amphorae from the late Urnfield culture in the central Danube river basin, including the Ruše and Stillfried groups.

In conclusion, we can say that the pottery belongs to the Ha B phase of the late Urnfield culture. Based on their stylistic traits, they fit best in the assemblage of the Ruše cultural group in Slovenia.

## ANALYSIS OF INTERPRETATIONS

The results of the analyses of movable material from the pit make it difficult to define this as a so-called storage pit, and several arguments support this view. First of all, the pit is filled with several pots or, rather, parts of different pots. The ones that may have been used as storage containers are larger than the pit itself. The reconstructed dimensions of the vessels indicate that the large-volume ones (Fig. 10), connected to food storage, are in the majority.

One other possible interpretation should be taken into consideration: the so-called waste pits. Literature frequently talks of pits secondarily used as pits for the disposal of waste (i.e. a clay extraction pit can be secondarily used as a waste pit). However, the term waste pit is used too frequently and lightly, usually for the majority of dug-in "features" in settlements. Such pits are usually filled with darker earth, sporadic pottery fragments and animal bones. As a rule, a waste pit is not located in the immediate vicinity of the place used for human habitation, particularly if used for longer periods of time. Based on the above arguments, this dugout structure can be interpreted as one in the line of



Sl. 10 Raspon promjera oboda posuda  
Fig. 10 Range of rim diameters

Prije bilo kakvih zaključaka potrebno je reći nekoliko riječi o keramičkim posudama koje su izgubile svoju primarnu funkciju, dakle njihova uloga više nije spremnik hrane, pića i sl.

Etnoarheološka istraživanja pokazala su kako keramički ulomci i oštećene keramičke posude često imaju reciklažnu ulogu (Deal, Hagstrum 1995: 114–117). Posude koje su svoju primarnu funkciju izgubile mogle su biti korištene u druge svrhe. Istraživanja provedena na području južne Amerike (Tzetal Maya i Wanka plemena iz Perua, Chanal) pokazala su da čak 20% posuda u domaćinstvu čine one koje su oštećene (Deal 2005: 13). Posuda koja je nekoć korištena kao spremnik za tekućinu, nakon što je polomljena mogla je poslužiti za čuvanje krutina (žitarice i sl.). Veći ulomci posuda mogu se koristiti u različite svrhe, pa tada i dobivaju novu namjenu npr. veći ulomci koriste se za prijenos žeravice ili kao grijači. Keramički se ulomci također koriste u proizvodnji keramičkih posuda kao reciklažni materijal u obliku groga, kao primjese glini, ali i pri gradnji kuća (mrvljena keramika često se miješa s blatom). Veće količine keramičkog otpada možemo očekivati uz lončarske radionice (Deal 2005). Posljednjih desetljeća sve je više etnoloških studija koje se bave ovom tematikom. Dakle, odbacivanje oštećenih keramičkih posuda ili njihovih dijelova događa se, ali rijetko keramički otpad odlazimo poput onog organskog. Ukoliko keramički materijal nalazimo u kontekstu tzv. otpadne jame količina je uglavnom "uobičajena". Dakle, za veći broj razbijenih i odbačenih posuda neobična je pojava polaganje u za njih iskopanu jamu, pa čak i u već postojeći ukop. Keramika je materijal koji je višestruko iskoristiv u bilo kojem obliku, pa i danas se u selima razbijeno posuđe i crepovi bacaju na zemljane puteve.

Praktičnu ulogu mogli su imati ulomci iz jame s Kalnika, ako polazimo od pretpostavke da je riječ o jami za stup. Pri postavljanju balvana, u za njega iskopanu rupu, potrebno je ispuniti preostali prostor u jami i učvrstiti stup na način da se jama zapuni zemljom ili kamenjem. U tom slučaju i ulomci keramike mogli su poslužiti u tu svrhu. Ulomke bi tada, pretpostavljamo, pronašli koncentrirane uz rubove jame. Kamena je na lokalitetu i okolici bilo u izobilju, a ono predstavlja mnogo čvršći materijal koji se mogao koristiti u takve svrhe što je i potvrđeno na istom objektu u nekoliko manjih jama za kolce (Karavanić 2009: 82). Ako je ukop širi od stu-

dugout structures made for the posts of an above-ground structure. Could it have served its secondary purpose as a place for the disposal of, predominantly pottery, waste? Probably.

Before we draw any conclusions, we need to say a few words about pottery vessels which had lost their primary function and were no longer used as containers for food, drink, etc.

Ethnoarchaeological research has shown that pottery fragments and damaged pottery vessels were often recycled (Deal, Hagstrum 1995: 114–117). Vessels which lost their primary function could be used for other purposes. Research carried out in South America (Tzetal Maya and Wanka tribes from Peru, Chanal) shows that damaged vessels constituted as much as 20% of all vessels in a household (Deal 2005: 13). When broken, a vessel once used for storing liquids could be used for storing dry goods (cereals, etc.). Large vessel fragments could be used for different purposes, and their purpose changed accordingly: for instance, large fragments were used for carrying embers, or as heaters. Pottery fragments were also used as recycling material in the making of other pottery vessels, as grog, a temper to clay, as well as in the building of houses (crushed ceramic is often mixed with mud). Although pottery workshops used up most of the pottery waste, they are still among the few places where we can expect to find it in large concentrations (Deal 2005). In the past several decades, there has been an increase in the number of ethnological studies dealing with this issue. Damaged pottery vessels, or their parts, were indeed discarded, but were rarely disposed of in the same way as organic waste. If pottery is found in a so-called waste pit, the quantities are mostly "usual". In other words, it is unusual for a large number of broken and discarded vessels to be disposed of in a pit specially designated for them, or even in an already existing dugout structure. Pottery can be used for many different purposes and in many different forms: in today's villages, people still throw broken dishes and roof tiles onto dirt paths.

If we start from the assumption that this was a posthole, the fragments from the Kalnik pit may have had a practical purpose. When placing posts into designated holes, the space remaining in the hole must be filled up and the post secured by filling the hole up with earth or stones. Pottery fragments may have also been used for the purpose. Had that been the case, we presume we would have found the fragments concentrated around the edges of the hole. The site and its surroundings, however, revealed an abundance of stones. Stone is a much stronger material and could have been used for such purposes, as has been confirmed in several small postholes in the same structure (Karavanić 2009: 82). It is still possible, though, the pit being much wider than the post, that the vessel fragments had been arranged around it. After the house had burned and the wood deteriorated, the rest of the fragments caved into the central part where the post had been; we can find traces of the post at the bottom of the pit in the form of coal remains. One might well ask how, and why, as many as 17.5 kg of pottery fragments ended up in a pit like this.



pa ulomci su mogli biti složeni uokolo. Nakon što je kuća u jednom trenutku izgorjela, a drvo propalo ostatak se ulomaka urušio u središnji dio gdje se nalazio drveni stup, čije tragove nalazimo u donjem dijelu jame kao ostatke ugljena. Postaviti se može pitanje kako je i zašto u jednoj takvoj jami završilo čak 17,5 kg keramičkih ulomaka.

Nalazi iz jame svakako predstavljaju jednu vrstu otpada. Dakle, primarna uloga ovih nalaza više ne postoji i funkcija koju gubi pretvara ga u otpad. Keramičke posude sada su samo ulomci pohranjeni u jamu pored kuće. Zanimljive podatke o sličnim nalazima pronašli smo u naselju Pod pored Bugojna u središnjoj Bosni. U horizontu A koji pripada ranom, te srednjem brončanom dobu autor je primijetio zanimljivu pojavu koju objašnjava kao neobičan dio duhovne kulture. Donosi podatke o dvije jame od stupova nadzemnog objekta u kojima je pronađeno nekoliko posuda. Iz jednog ukopa potječu dva pehara i jedna šalica, a iz drugog dva manja pehara s još nekoliko ulomaka drugih, većih posuda. Čović dalje tumači kako se te posude nisu slučajno našle u tzv. stupcima već su posljedica ili obredne gozbe ili obreda libacije (Čović 1991: 23). Jedan dio razbijenih posuda položen je u jamu pored stupova, a slična situacija zabilježena je prilikom istraživanja ranobrončanodobnog naselja u Gornjoj Tuzli (Čović 1991: 23). Na tlocrtu je jasno vidljiv raspored jama od stupova koje predstavljaju ostatke nadzemnog objekta. Ugaoni stup je ispod naboja zelenkaste ilovače skrivao nekoliko grubih posudica i ulomke od dvije veće posude s trakastim drškama (Čović 1961: 107). Na maloj udaljenosti, odmah pored, nalazi se jama koju također tumači kao jamu od stupa, na čijem je dnu pronađen veći ulomak posude (Čović 1961: 107). Ako se zadržimo na interpretaciji autora i komparaciji sličnih pojava na dva lokaliteta koje je osobno istraživao, tada bi i opisana situacija s lokaliteta Kalnik-Igrišće II mogla imati slična tumačenja. Osnovna razlika jest u keramičkom repertoaru. Autor navodi kako je riječ o nalazima manjih posuda za piće. Za detaljnije rasprave o ovoj situaciji na bosanskim gradinama bila bi nam potrebna i detaljna statistička analiza keramičkog materijala koja ovdje nedostaje. Iz tih razloga direktne komparacije navedenih situacija nećemo dalje iznositi.

Jama s Kalnika nije korištena dulje vrijeme, odnosno keramički materijal nije se taložio kroz dulji period: ona je zatvorena u jednom trenutku. Možemo samo pretpostaviti da se to dogodilo u trenutku podizanja objekta. Ipak, ovakav slijed događaja nailazi na određene nelogičnosti. Ako su ulomci položeni u trenutku gradnje kuće, dakle prije samog postavljanja drvenog stupa u jamu, tada bi zasigurno pod težinom balvana većina ovih ulomaka popucala, a keramički materijal bi vjerojatno bio mnogo sitniji. Kao što je ranije navedeno, u jamu su položeni izuzetno veliki ulomci keramičkih posuda, kakve rijetko nalazimo u kontekstu otpada. Ako izvrnemo logiku postoji još jedan mogući slijed događaja, a taj je polaganje nakon propadanja (napuštanja) kuće.

Na lokalitetu Rhenen-Remmerden na području Nizozemske otkriveno je prapovijesno naselje koje je kontinuirano naseljeno od ranog do kasnog brončanog doba. Objekti su nadzemni i ostaci naselja vidljivi su uglavnom na temelju rupa od stupova i na ostacima ukopanih objekata. Autori iz-

The finds from the pit are definitely a type of waste. In other words, their primary function no longer existed and the loss of this role transformed them into waste. Pottery vessels were now merely fragments stored in a pit by the house. We have found interesting information about similar finds in the village of Pod near Bugojno, Central Bosnia. The author observed an interesting phenomenon in horizon A, which belongs to Early and Middle Bronze Age, and interpreted it as an unusual manifestation of spiritual culture. He provides information on two postholes of an above-ground structure in which several vessels were found. One dugout structure contained two goblets and one cup, and the other two smaller goblets and several fragments of other, larger, vessels. According to Čović, these vessels did not end up in the postholes by accident; they were the aftermath of either a ceremonial feast or a libation ceremony (Čović 1991: 23). He then adds that some of the broken vessels had been placed in a pit next to the posts and that a similar situation had been recorded during the excavations of an early Bronze Age settlement in Gornja Tuzla (Čović 1991: 23). The plan clearly shows the layout of the postholes as the remains of an above-ground structure. Under a layer of greenish loam, the corner post concealed several little coarse vessels and fragments of a larger vessel with strap handles (Čović 1961: 107). Not far from it is a pit he also interprets as a posthole, at the bottom of which a large vessel fragment was found (Čović 1961: 107). If we concentrate on the author's interpretation and the comparison of the similarities between the two sites he personally excavated, the situation from the Kalnik-Igrišće II site could be interpreted in a similar manner. The main difference is in the pottery assemblage. According to the author, the finds mostly consist of small drinking vessels. A more in-depth discussion about the situation in Bosnian hillforts would require a detailed statistical analysis of the pottery, which is not available. For these reasons, no direct comparisons of the situations will be made.

The Kalnik pit was not used for a long time, i.e. pottery had not been accumulating over a long period of time because it was closed up at one point. We presume that this occurred when the house was being built. Such sequence of events, however, is somewhat illogical. If the fragments had been deposited while the house was being built, i.e. just before the wooden post was placed in the hole, most of the fragments would have inevitably cracked under the weight of the post and the pottery would have been much more fragmented. As stated before, the pit contained exceptionally large pottery fragments that are rarely found as waste. Inverting the logic, there could be another possible sequence of events: that they were placed there after the house fell into ruin (was abandoned).

A prehistoric settlement discovered at the Rhenen-Remmerden site in The Netherlands was continuously populated from Early to Late Bronze Age. The structures were built above ground and the visible remains include postholes and the remains of dug-in features. The authors singled out two finds from postholes which also contained pottery fragments. A horizontally-placed bronze spear was also found in one of the holes. Our attention is drawn to

dvajaju nalaze iz dvije jame za stupove koje također sadrže keramičke ulomke dok je u jednoj jami od stupa pronađeno horizontalno postavljeno brončano koplje. Ono što privlači pozornost, osim samog nalaza, jest položaj u kojemu je predmet pronađen. Koplje se nalazi pri vrhu jame i uglavljeno je od ruba do ruba ukopa. Autori zaključuju kako je koplje tamo postavljeno nakon što je drveni stup uklonjen iz jame (Van Hoof, Meurkens 2008: 94). Ova teza je vrlo zanimljiva i ne možemo je tako lako odbaciti. Prema takvom scenariju moguće je kako su i ulomci iz jame s Kalnika položeni nakon što je objekt propao.

Ovakvi nalazi nisu osamljen primjer, dapače u brončano-dobnim naseljima česta su pojava, a nerijetko i zanemarena. Riječ je o nalazima koje nazivamo keramičke ostave. Keramičke ostave jesu skupine posuda koje su u jednom trenutku zakopane, a osnovnu razliku u odnosu na spremišta čini položaj posuda te niz drugih okolnosti. Nalazimo ih u naseljima od vremena eneolitika, a u brončano doba posebno su brojne (Stapel 1999: 201; Palatova, Salaš 2002: 111). Pojam keramičke ostave u stranoj se literaturi pojavljuje 30-ih godina 20. stoljeća (Palatova, Salaš 2002: 7), a o fenomenu ostava keramike intenzivno se raspravlja od 60-ih godina (Marešova 1965; Palatova, Salaš 2002: 8). Od tada, pa do kraja stoljeća, raste broj publiciranih nalaza, a posebno obilna literatura dolazi s područja Moravske. U posljednje vrijeme sve se češće spominju ovakvi nalazi i na području Austrije, Mađarske pa i Slovenije (Kavur 2011).

Ostava keramike je zatvorena cjelina koja sadrži određenu količina keramičkih posuda (čitave posude ili ulomci) te često i neku drugu vrstu materijala: kamen, metal, ostaci hrane (žitarice i sl.), životinjske kosti, ljudske kosti i sl. Posude mogu biti položene u zemlju (u naselju, izvan naselja, na groblju, u spilji) ili u vodu (močvara, rijeka, jezero i sl.). Većina je ovakvih ostava pronađena unutar naselja, u ukopanim objektima – jamama. One sadrže ili čitave posude često okrenute naopako ili na bok, ali i razbijene posude odnosno njihove dijelove. Svrha zatrpavanja keramičkog materijala nije ponovno korištenje, kao što to može biti slučaj s metalom. Dakle svrha zatrpavanja nije skrivanje (Stapel 1999).

Višegodišnje rasprave na temu donijele su niz kategorija i kriterija na temelju kojih određene skupine nalaza tumačimo kao keramičke ostave. Takvi se kriteriji odnose na: mjesto nalaza (specifična geografska obilježja npr. spilje), akumulacija sličnih nalaza na jednom ograničenom prostoru, netipični nalazi u jami, uporaba vatre, posebno tretirani predmeti (namjerno uništavanje predmeta, namjerno slaganje predmeta) itd. (Stapel 1999: 18, 19).

Često puta definiranje određene skupine nalaza ili zatvorene cjeline kao ostave nije upitno, ali interpretacije su uglavnom problematične odnosno nedokazive. Ako je ostava skupina predmeta koja se deponira sa svrhom da se više ne koristi onda se i pojam otpad može tako tumačiti. Znači da otpad može biti običan svakodnevni, ali i tzv. sveti otpad<sup>5</sup> odnosno odbačeni predmeti korišteni pri prakticanju nekog obreda o čemu detaljnije raspravlja A. Stapel (Stapel 1999: 139). Ovdje dolazimo i do pojma otpadna jama koji

the position in which the spear was found: at the top of the pit, lodged between the rims of the dugout structure. The authors concluded that the spear had been placed there after the wooden post had been removed from the pit (Van Hoof, Meurkens 2008: 94). This thesis is very interesting and cannot be easily discarded. According to this scenario, the fragments from the Kalnik pit may have been put there after the structure had fallen into ruin.

Such finds are not isolated examples, on the contrary: similar situations are frequently found in Bronze-Age settlements, but they are often neglected. Such finds are usually referred to as pottery depots. Pottery depots are buried groups of vessels. The main difference between depots and storage places is the position of the vessels, as well as a number of other circumstances. They are found in Copper Age settlements, and are particularly numerous in the Bronze Age (Stapel 1999: 201; Palatova, Salaš 2002: 111). The term pottery depot appeared in foreign literature in the 1930s (Palatova, Salaš 2002: 7) and was intensely debated in the 1960s (Marešova 1965; Palatova, Salaš 2002: 8). The number of published finds had risen by the end of the 20<sup>th</sup> century, with particularly extensive literature on the subject coming from Moravia. Recently, there has been an increase in the number of references to such finds in the territory of Austria, Hungary, even Slovenia (Kavur 2011).

A pottery depot is a closed context composed of a certain quantity of pottery vessels (whole vessels or fragments) and, frequently, other types of materials as well: stone, metal, food remains (cereals, etc.), animal bones, human bones, etc. The vessels may be placed in the ground (in the settlement, outside of the settlement, in a graveyard, in a cave) or in water (swamp, river, lake, etc.). Most of these depots were found within settlements, in dug-out structures – pits. They either contain whole vessels, often turned upside-down or lying on the side, or broken vessels, or their parts. The purpose of covering up pottery is not for it to be reused, as may be the case with metal. In other words, the purpose of covering it up is not hiding (Stapel 1999).

Over the years, discussions on this topic have defined a number of categories and criteria based on which certain groups of finds can be defined as pottery depots. The criteria include: location of the find (specific geographic features, e.g. caves), accumulation of similar finds in a limited area, atypical finds in a pit, use of fire, special treatment of items (intentional destruction, intentional arrangement), etc. (Stapel 1999: 18, 19).

Defining a group of finds, or a closed context, as a depot is often not questionable, but interpretations are mostly problematic, i.e. impossible to prove. If a depot is defined as a group of items deposited with no further intention of use, then the term waste can be interpreted in the same manner. Waste can thus be both standard, everyday waste, but also the so-called sacred waste,<sup>5</sup> i.e. discarded items that had been used in a ceremony. This is discussed in detail by A. Stapel (Stapel 1999: 139). We now come to the term waste pit, which is usually found in exclusively secular interpretations,

5 Sveti otpad je otpad nastao prilikom obredne gozbe odnosno to su materijalni ostaci ritualnih radnji (Stapel 1999:139–141).

5 Sacred waste is waste created during a ritual feast, i.e. the material remains of ritual activities (Stapel 1999:139-141).

se u interpretacijama koristi isključivo u svjetovnom smislu, iako to nije uvijek slučaj. Ono što razlikuje otpadnu jamu od keramičke ostave jest često količina materijala i prije svega raspored unutar ukopa. Radi se o namjernom (smislenom) polaganju (slaganju) predmeta u jamu, bilo da se radi o čitavim posudama ili samo o ulomcima keramike. U ovom trenutku govorimo o tragovima određenih radnji (npr. lomljenje, paljenje, konzumiranje hrane i sl.). Ako se takve radnje mogu prepoznati kroz određene materijalne ostatke (polomljene keramičke posude) koji se opetovano javljaju u specifičnom arheološkom kontekstu (npr. jame za stupove), možemo li govoriti o tragovima ritualnih radnji?

Većina će se autora, koji su se dotakli teme, složiti da se najvjerojatnije radi o materijalnim ostacima rituala, odnosno ritualnih aktivnosti. Slijedom tih misli definirano je nekoliko interpretacijskih modela koji se uglavnom ponavljaju (Palatova, Salaš 2002; Stapel 1999). Ostave keramike tako se tumače kao ostaci žrtve ljevanice (*Libationsopfer*), obrednih gozbi (*Speiseopfer*), žrtvovanja prilikom gradnje objekata (*Bauopfer*) i naravno tumačenja drugog kulturnog značenja. Posebnu kategoriju čine polaganja posuda pri gradnji tzv. *Bauopfer*. Riječ je o jednoj vrsti žrtvovanja ili obilježavanja gradnje kuća, zidova, palisada i sl. Temelji ovakvim žrtvovanjima nalaze se na Bliskom Istoku gdje se polažu životinjske, ljudske žrtve te keramičke posude (Stapel 1999: 151). Ovakav tip ostave Čović je prepoznao na primjeru spomenutih nalaza s bosanskih gradina (Čović 1961; 1991). Ako ćemo prihvatiti ovakvu interpretaciju tada bi i jama s Kalnika mogla biti rastumačena. Osnovni kriterij za ovakvu podjelu jest repertoar posuda i mjesto pohrane "svetog otpada".

Kod ovakvih se nalaza događa još jedna radnja koju je moguće prepoznati. Riječ je o pečačenju jama. A. Stapel tvrdi kako je kod određenih obreda vrlo važno tzv. pečačenje jama. Tzv. sveti otpad (posude, razni predmeti, hrana) korišteni pri nekom ritualu po završetku se pohranjuje u zemlju i zatvara kako nebi došlo do oskvrnuća, a primjere nalazi u antičkim izvorima (Stapel 1999: 141).

Lindinger (1998–1999: 84) prilikom objave ostave keramičkih posuda s lokaliteta Zwendorf u Donjoj Austriji, kao važan kriterij kod obrade i tumačenja inventara (posuda), navodi funkcionalni kontekst posuda (Lindinger 1998–1999: 84) te ih dijeli u nekoliko grupa: posude iz kojih se pije i jede, posude za posluživanje hrane, posude za transport i skladištenje hrane (pića) te posude za pripremanje hrane (Lindinger 1998–1999: 85: Tab. 2). Rezultati dobiveni analizom 19 ostava keramičkih posuda s područja Austrije ukazuju na širok spektar kombiniranog polaganja različitih tipova posuda. Ipak, vodeći oblik jesu šalice i vrčiči (posude za pijeње), a odmah zatim slijede posude za skladištenje.

Zanimljive su ideje koje donosi Kavur (2011: 84) stavljajući naglasak na tip nalaza koje sadrži jedna, prema njegovom mišljenju, ostava. Na brončanodobnom lokalitetu Sodolek u jami promjera nešto manjeg od jednog metra pronađeno je 17 ulomaka keramike. Ulomci su velikih dimenzija, a njih 5 pripada ostacima različitih tipova ručki. Autor govori o namjernom i smislenom odabiru ulomaka koji se u jednom trenutku polažu u zemlju. Nedovoljno podataka i detalja vezanih uz ovaj nalaz s lokaliteta Sodolek umanjuje vrijednost

although that is not always the case. The difference between a waste pit and a pottery depot is often in the quantity of material and, above all, in its distribution within the dugout structure. The items, regardless of whether they are whole vessels or merely pottery fragments, are intentionally (meaningfully) positioned (arranged) in the pit. We are now talking about the traces of specific actions (e.g. breaking, burning, consumption of food, etc.). If such actions can be recognised in the material remains (broken pottery vessels) repeatedly appearing in specific archaeological contexts (e.g. postholes), can we speak of the traces of ritual activities?

Most of the authors who have dealt with this topic will agree that these are, most probably, material remains of rituals, that is, of ritual activities. This line of thought has led to several recurring interpretation models (Palatova, Salaš 2002; Stapel 1999). Pottery depots are thus interpreted as the remains of libations (*Libationsopfer*), ritual feasts (*Speiseopfer*), building sacrifices (*Bauopfer*) and, of course other worship practices. The placing of vessels during construction, the so-called *Bauopfer*, constitutes a special category. This is a type of sacrifice used to mark the construction of houses, walls, palisades, etc. The origins of these sacrifices can be found in the Middle East, where animal and human sacrifices, and pottery vessels, are offered (Stapel 1999: 151). Such depots could be recognised in the published finds of Bosnian hillforts (Čović 1961; 1991). If we were to accept this interpretation, the Kalnik pit might be explained. The main criteria for this categorisation are the vessel assemblage and the location of the "sacred waste" depository.

The find reveals traces of another activity: the sealing of pits. According to A. Stapel, the so-called sealing of pits is a very important moment in certain rituals. Once the ritual has taken place, the so-called sacred waste (vessels, various items, food) used during the ritual are deposited into the ground and sealed to avoid desecration. She has found examples of such practices in ancient sources (Stapel 1999: 141).

When Lindinger (1998–1999: 84) published his work on the depot of pottery vessels from the Zwendorf site in Lower Austria, he mentioned the function of vessels as an important criterion in the processing and interpretation of the inventory (vessels) (Lindinger 1998–1999: 84), and divided the vessels into several groups: vessels used for eating and drinking, vessels used for serving food, vessels used for the transport and storage of food (drink) and vessels used for the preparation of food (Lindinger 1998–1999: 85: Tab. 2). Although the analysis of 19 depots of pottery vessels from Austria showed that vessels had been placed together in a wide range of combinations, the most numerous were cups and small jugs (drinking vessels), closely followed by storage vessels.

Interesting ideas are presented by Kavur (2011: 84), who gives prominence to the type of finds contained in what he considers to be one depot: 17 pottery fragments were found at the Bronze Age site of Sodolek, in a pit that is slightly less than one metre in diameter. The fragments are large and five of them are remains of various types of handles.



iznesenih podataka. Dalje navodi nekoliko primjera ostava keramike s prostora Republike Slovenije. Repertoar objavljenih nalaza sa spomenutog područja možemo nadopuniti s vrlo zanimljivim i reprezentativnim nalazom s lokaliteta Ormož. Kasnom brončanom dobu pripada kružna jama 77, promjera 60 cm i dubine 40 cm koja je zapunjena s ulomcima keramike, dok se pri vrhu nalaze veliki ulomci gotovo čitavih posuda (Dular, Tomanič Jevremov 2010: 20). Prema podacima s kojima raspolažemo, od cjelovitih tipološki odredivih posuda, možemo izdvojiti: dva velika lonca (Dular, Tomanič Jevremov 2010: T. 3: 3; T. 4: 1) gotovo identična onima iz jame (SJ 13) s lokaliteta Kalnik-Igrišće. Treći lonac nešto je manjih dimenzija, a promjer oboda ne prelazi 24 cm (Dular, Tomanič Jevremov 2010: T. 3: 1). U jami je pronađen manji lončić s ručkom, grublje izrade, ukrašen apliciranjem trakom s otiskom prsta, zdjela uvučenog ruba i vrčić nešto finije izrade (Dular, Tomanič Jevremov 2010: T. 3: 2, 4, 5). Prema fotografiji nalaza *in situ* može se primijetiti kako su u najvećem loncu (Dular, Tomanič Jevremov 2010: T. 3: 3) bili poslagani neki od ulomaka većih posuda, dok su manje posude (vrč i manji lončić s ručkom) očuvane gotovo u cijelosti. Jama se nalazi otprilike 2,5 metara sjeverno od najbližeg rekonstruiranog objekta (Dular, Tomanič Jevremov 2010: Prilog 2). Sadržaj nam, prema dostupnim podacima, govori o posudama koje su vjerojatno bile spremnici tekućine ako ih povežemo s vrčevima koji su uz njih pronađeni (manji lončić s ručkom mogao je imati ulogu vrča jer je pogodan za izlivanje).

Interpretacije spomenutog fenomena deponiranja keramičkih posuda i (ili) njihovih ulomaka uglavnom se odnose na materijalne ostatak ritualnih radnji što jest dio svakodnevnog života prapovijesnih zajednica. Iako se autori uglavnom slažu s ovakvim tumačenjem nalaza, izgleda kako za sada ostajemo samo na razini definiranja (prepoznavanja) takvih fenomena. Ipak, temeljitiji pristup i obilnija građa zasigurno će razjasniti i ovakvu vrstu izražavanja brončodobnih poedinaca (ili manje zajednice). Složenost obreda (rituala) ogleda se u kombiniranim polaganjima posuda, ali i priloga pa se navedene podjele i kategorije često nalaze u kombinaciji. Koncept prapovijesne religije odnosno komunikacija s "onim svijetom" veže se uz zemljinu utrobu, bilo da se radi o spiljama, bunarima (Harding 2000: 313) ili jednostavnim jamama.

### OSTAVE KERAMIKE S PODRUČJA RH

U domaćoj literaturi prema do sada objavljivanom materijalu nije bilo direktnih interpretacija ovakve vrste. Zbog velikih građevinskih projekata, posebice u cestogradnji, arheološki su istražene velike površine, a rezultat je gomila arheološke pokretne i nepokretne građe na čije ćemo objave još neko vrijeme pričekati. Na primjeru sličnih iskustava u susjednim zemljama, izgleda da ćemo u dogledno vrijeme raspolagati s više ovakvih nalaza. Ovdje donosimo dvije, već objavljene, ostave keramike koje su iznimno važne za proučavanje brončanog doba na prostoru Hrvatske.

Prvo ćemo izdvojiti jednu ostavu keramičkih posuda, odnosno njezinih ulomaka, s prostora Istre. Riječ je o spiljskom lokalitetu Vela peč u Veloj dragi, nedaleko sela Vranja

According to the author, the selection of fragments to be placed into the ground was deliberate and meaningful, but the value of this claim is reduced by the lack of data and details about the Sodolek find. He continues by providing several examples of pottery depots from the Republic of Slovenia. The repertory of published finds from this area can be updated with a very interesting and representative find from the Ormož site. Circular pit 77 from the Late Bronze Age, 60 mm in diameter and 40 cm deep, is filled with pottery fragments, with large fragments of almost entire vessels placed at the top (Dular, Tomanič Jevremov 2010: 20). According to information available, two large pots can be singled out from the typologically definable vessels (Dular, Tomanič Jevremov 2010: T. 3: 3; T. 4: 1); they are almost identical to those from the (SU 13) pit from the Kalnik Igrišće site. A third pot can also be singled out; it is somewhat smaller and the diameter of its rim does not exceed 24 cm (Dular, Tomanič Jevremov 2010: T. 3: 1). Also found in the pit were: a small coarse pot with a handle, decorated with a band with fingerprints, a bowl with an inverted rim and a slightly finer little pot (Dular, Tomanič Jevremov 2010: T. 3: 2, 4, 5). A photograph of the finds *in situ* shows that the largest pot (Dular, Tomanič Jevremov 2010: T. 3: 3) contained some arranged fragments of large vessels, while smaller vessels (a jug and a small pot with a handle) were almost fully preserved. The pit is located approximately 2.5 metres north of the closest reconstructed structure (Dular, Tomanič Jevremov 2010: Appendix 2). According to information available, if we link them to the jugs they were found next to (the small pot with a handle may have been used as a jug because it is suitable for pouring), we are dealing with vessels used most probably for storing liquids.

Deposited pottery vessels and/or their fragments are mostly interpreted as material remains of ritual activities, which were part of the prehistoric communities' everyday life. Even though authors generally agree with this interpretation, it seems that, for the time being, we have to settle for a mere definition (recognition) of these phenomena. However, more detailed research and more comprehensive materials will certainly shed light on this form of expression used by Bronze Age individuals (or small communities). The complexity of rituals, reflected in the combined depositing of vessels and goods, often results in the combined application of the above divisions and categories. The concept of prehistoric religion, i.e. communication with "the other world", is associated with the earth's womb, either through caves, wells (Harding 2000: 313) or simple pits.

### POTTERY DEPOTS FROM CROATIA

None of the materials published in Croatian literature to date contain direct interpretations of this kind. Large-scale construction projects, of roads in particular, led to large-scale archaeological excavations which, in turn, resulted in an enormous quantity of movable and immovable archaeological material for the publication of which we will have to wait for a while yet. Judging by the examples of neighbouring countries, it seems we shall soon have several such finds on our hands. We are presenting here two pottery de-

na zapadnom podnožju Učke (Forenbaher et al. 2006: 5). Na fotografiji se lijepo vidi kako su ulomci ili čitave posude slagane u jednu posebno oblikovanu manju jamu (sl. 11).

Opis nalaza: „Ulomci su prilično veliki i potječu od petnaestak različitih posuda. Ležali su približno vodoravno, gusto zbijeni jedni povrhu drugih, a između njih bilo je tek nešto malo zemlje. Ispuna među ulomcima nije sadržavala tragove paljevine niti bilo što drugo što bi se isticalo u odnosu na sastav okolnog konteksta 130. Nekoliko ulomaka odloženo je tako



Sl. 11 Kontekst 130a, Vela peć (Forenbaher et al. 2006: 37; sl. 17)  
Fig. 11 Context 130a, Vela peć (Forenbaher et al. 2006: 37; Fig. 17)

da je dno posude okrenuto prema gore. Pri dnu nagomilanih ulomaka pronašli smo gotovo čitav vrč, također okrenut naopak.“ (Forenbaher et al. 2006).

Možemo se složiti s autorima koji su publicirali nalaze iz Vele peći i zaključiti kako se u spilji povremeno odvijala obredna aktivnost čije tragove nalazimo u tzv. kontekstu 130a (Forenbaher et al. 2006: 39). U maloj jami u Veloj peći pronađeno je 5 šalica različitih formi, dva vrča, dva lonca te čak devet zdjela, također različitih tipova (Forenbaher et al. 2006: 22–24). Ovaj nam sadržaj sugerira kako se radi i o konzumaciji pića, ali i hrane. Moguće je pretpostaviti kako je pri tzv. ritualnom obredu sudjelovalo maksimalno 5 osoba<sup>6</sup>. Keramički repertoar pripada vremenu srednjeg i kasnog brončanog doba, odnosno prijelaznom razdoblju (Forenbaher et al. 2006: 29). Kontekst iz Vele peći, prema kriterijima za definiranje keramičkih ostava (Stapel 1999: 18), tumačimo kao: netipičan nalaz u jami (akumulacija sličnih nalaza na ograničenom prostoru), specifična lokacija nalaza (spilja), polomljeni predmeti te namjerno slaganje predmeta.

Na prostoru sjeverne Hrvatske, točnije u varaždinskoj županiji tijekom nadzornih, zaštitnih istraživanja otkriven je zanimljiv nalaz. Lokalitet Jalkovec-Police nalazi se u nizinskom dijelu županije, a ostaci naselja nalaze se na izduženoj riječnoj gredi uz koju teče rijeka Plitvica (Bekić 2009: 184). Ako izuzmemo sve poteškoće tijekom istraživanja, o čemu nas je autor objavljenog materijala detaljno upoznao, izgleda kako se u jami obujma neznatno većeg od najveće posude (cca 80 cm) nalazila posuda velike zapremnine (pithos/amfora). Posuda je očuvana tek trećinom svojeg original-

pots, both published, that are of exceptional importance for studying the Bronze Age in Croatia.

First, we would like to talk about a depot of pottery vessels, or rather, their fragments, from Istria. The site is located in the Vela peć cave in Vela draga, not far from the village of Vranje, in the western foothills of Mt Učka (Forenbaher et al. 2006: 5). The photograph clearly shows fragments and whole vessels arranged in a specially-shaped small pit (Fig. 11).

Description of the find: “The fragments are rather large and belong to approximately fifteen different vessels. They were lying almost horizontally, densely packed one on top of another, with only a little earth between them. The filling between the fragments displayed no traces of burning, or anything else that would stand out from the surrounding Context 130. Several fragments had been deposited with the base of the vessel facing upwards. An almost whole jug was found at the bottom of the accumulated fragments, also placed upside-down.” (Forenbaher et al. 2006).

We can agree with the authors who published the finds from Vela peć and conclude that the cave was occasionally used for ritual activities, the traces of which can be found in the so-called Context 130a (Forenbaher et al. 2006: 39). Found in the small pit in Vela peć were five cups of various shapes, two jugs, two pots and as many as nine bowls, also of different types (Forenbaher et al. 2006: 22–24). The contents are indicative of both drinking and eating. We can assume that a maximum of 5 persons participated in the so-called ritual ceremony.<sup>6</sup> The pottery assemblage belongs to the Middle and Late Bronze Age, that is, the transition period in between (Forenbaher et al. 2006: 29). According to the criteria for defining pottery depots (Stapel 1999: 18), the Vela peć context can be interpreted as: atypical find in a pit (accumulation of similar finds in a limited area), specific location of the find (cave), broken items and intentional arrangement of items.

An interesting find was discovered during the test and rescue excavations conducted in North Croatia, more specifically in the Varaždin County. The Jalkovec-Police site is located in the County's lowlands, and the remains of the settlement on an elongated riverbank plateau along the river Plitvica (Bekić 2009: 184). Disregarding all difficulties encountered during the excavations, of which the author of the published material informed us in detail, it seems that a pit, the circumference of which only slightly exceeded that of the largest vessel (approx. 80 cm), contained a large-capacity vessel (pythos/amphora). Only the lower third of the vessel's original form was preserved. Placed at the bottom of the large vessel were four cups, one plate and several handle fragments (Bekić 2009: 185). All small vessels were covered by a large pottery fragment (perhaps a wall of a large vessel that had fallen in). In other words, the maximal number of small vessels contained in the large one is 8.<sup>7</sup> The vessel contained no other findings (Bekić 2009: 187). These luxury cups belong to the period influenced by the Central European circle of the early Urnfield culture, the Baier-

6 The assumption is based on the sum of the cups from Context 130a.

7 The criterion for the maximal number of vessels is based on the sum of all fragments of vessel rims and cup handles.

6 Pretpostavka se temelji na zbroju šalica iz konteksta 130a.

nog oblika i to u donjem dijelu. Na dnu velike posude položene su četiri šalice, jedna plitica te nekoliko ulomaka ručki (Bekić 2009: 185). Sve su posudice bile prekrivene većim ulomkom keramike (možda urušena stijenka velike posude). Dakle maksimalni broj posudica u velikoj posudi iznosi 8<sup>7</sup>. Posuda nije sadržavala druge nalaze (Bekić 2009: 187). Luk-suzne šalice tipološki pripadaju utjecaju srednjoeuropskog kruga rane kulture polja sa žarama, faza Baierdorf-Velatice.<sup>8</sup> Kontekst nalaza, prema kriterijima za definiranje keramičkih ostava (Stapel 1999: 18), tumačimo kao: netipičan nalaz u jami (akumulacija sličnih nalaza na ograničenom prostoru), grupiranje pojedinih nalaza čije karakteristike vežemo uz određene radnje (pijenje) i namjerno slaganje predmeta. Temeljem tih kriterija nalaz s lokaliteta Jalkovec–Police tumačimo kao ostavu keramike. Ova skupina nalaza tumači se kao ostava šalice i ostalih sličnih oblika koji su mogli poslužiti ispijanju tekućine: šalice, vrčiči, čaše i sl. Često ih nalazimo u kombinaciji s većim spremnicima za tekućinu: amfore, lonci, veliki vrčevi (Stapel 1999: 147). Ipak, valja i kritički sagledati ovakvo tumačenje ostave Jalkovec–Police. Nedostaje nam vrlo važan podatak koji odgovara na pitanje je li jama bila zapečaćena i zatvorena u jednom trenutku.<sup>9</sup> Dalje se nameće ideja da ova jama predstavlja jednu vrstu “hladnjaka” u zemlji koja zadržava stalnu temperaturu tekućine. Teško je ipak povjerovati da će se jedna ovakva cjelina svjetovne prirode očuvati na ovaj način, gotovo netaknuta. Sve što je neuobičajeni kontekst unutar nekog naselja traži posebnu pozornost. O postojanju naselja u blizini nema dvojbe, ali to je jedini podatak za sada. Iz ovoga bi mogli pretpostaviti kako je pri obredu u Jelkovcu sudjelovalo maksimalno 7 osoba<sup>10</sup>. Prema kvaliteti i prestižu posuda možemo isto tako pretpostaviti kako se radi o društveno visoko pozicioniranim pojedincima. Ipak, neki nam podaci o ovom nalazu nedostaju i zaključak je iz tih razloga upitan.

Na prostoru srednjeg Podunavlja u vrijeme prijelaza srednjeg u kasno brončano doba, za trajanja kulture grobnih humaka i velatičke faze (starija faza kulture polja sa žarama), broj keramičkih ostava raste (Lindinger 1998–1999: 85; Palatova, Salaš 1998–1999: 103). Ostava šalice s lokaliteta Jalkovec–Police pripada spomenutom razdoblju, a sličan set posuda nalazimo i unutar ostave Tešetice 2. Ostava pripada velatičkoj fazi kulture polja sa žarama, a sastavljena je od većeg broja šalice (19), 4 zdjele i jedne posude veće zapremnine (Palatova, Salaš 1998–1999: 111). Ovakav način polaganja manjih posuda u posudu veće zapremnine (lonac, pithos) zabilježen je u ostavi posuda s lokaliteta Hulině u Moravskoj iz vremena kulture grobnih humaka (Spurný 1968: 247).<sup>11</sup>

7 Kriterij za maksimalni broj posuda temelji se na zbroju svih ulomaka od oboda posuda i ručki od šalice.

8 Predmeti iz jame kulturološki su postavljeni u Virovitičku grupu kulture polja sa žarama, a apsolutni datumi datiraju jamu u 14. st. pr. Kr. (Bekić 2009).

9 Treba računati da je kao posljedica oranja gornji dio jame vjerojatno uništen.

10 Ova pretpostavka temelji se na zbroju ostataka šalice iz jame K8 (4 cjelovite šalice, dva ulomka od različitih ručki koje također pripadaju tipovima šalice i jedna zdjelica).

11 U većoj posudi navodno je bilo položeno između sedam i devet manjih vrčiča (Spurný 1968: 247).

dorf-Velatice phase.<sup>8</sup> According to the criteria for defining pottery depots (Stapel 1999: 18), the find can be interpreted as: atypical find in a pit (accumulation of similar finds in a limited area), grouping of individual finds the characteristics of which can be linked to specific activities (drinking) and intentional arrangement of items. Based on these criteria, we can define the Jalkovec–Police find as a pottery depot. This group of finds can be interpreted as a depot of cups and other similar items that may have been used for drinking: cups, small jugs, etc. They are frequently found together with large containers used for the storage of liquids: amphorae, pots, large jugs (Stapel 1999: 147). This interpretation of the Jalkovec–Police depot, however, should be critically assessed. We are still missing a very important piece of information: whether the pit was closed and sealed at any point.<sup>9</sup> One cannot help thinking that the pit was a kind of an in-the-ground “cooler”, maintaining a constant temperature of the liquids. It is hard to believe, however, that a secular context would be so preserved, almost intact. Anything unusual in a settlement deserves special attention. There is no doubt that there was a settlement in the vicinity, but that is the only piece of information we have for the moment. Based on this, we could assume that a maximum of 7 persons participated in the rituals in Jelkovac.<sup>10</sup> Based on the quality and prestigiousness of the vessels, we can also assume that these individuals were members of high society. However, as we are still missing some information about the find, this conclusion is questionable.

In the transition period between the Middle and the Late Bronze Age, during the Tumulus culture and the Velatic phase (early phase of the Urnfield culture), the number of pottery depots in the Central Danube basin was on the increase (Lindinger 1998–1999: 85; Palatova, Salaš 1998–1999: 103). The depot of cups from the Jalkovec–Police site belongs to this period, and a similar set of vessels was found in the Tešetice 2 depot. The depot belongs to the Velatic phase of the Urnfield culture, and comprises a large number of cups (19), 4 bowls and one large-capacity vessel (Palatova, Salaš 1998–1999: 111). This practice of placing small vessels into a larger-capacity one (pot, pithos) was also recorded in the depot of vessels from the Hulině site in Moravia, dated back to the Tumulus culture (Spurný 1968: 247).<sup>11</sup>

## CONCLUSIONS

The symbolism of pottery depots, that is, of material remains that had obviously been subject to special treatment, cannot be dismissed. The inventory in the depots was carefully arranged and the very layout of entire vessels, or their fragments, suggests that this was a specific, planned, de-

8 According to the cultural classification, the items from the pit have been attributed to the Virovitica Group of the Urnfield culture, while absolute dates place the pit itself into the 14<sup>th</sup> c. BC (Bekić 2009).

9 We must bear in mind that the top of the pit was probably destroyed by ploughing.

10 This assumption is based on the sum of the remains of cups from the K8 pit (4 complete cups, two fragments of different handles which also belong to cups, and one little bowl).

11 Between seven and nine small jugs were allegedly placed into the large vessel (Spurný 1968: 247).



## ZAKLJUČNA RAZMATRANJA

Simbolika keramičkih ostava, odnosno materijalnih ostataka na kojima je vidljiv poseban tretman ne može se zanemariti. Inventar u ostavama brižno je slagan i baš takav raspored, bilo čitavih posuda ili ulomaka, sugerira kako je riječ o određenoj smišljenoj, namjernoj radnji koja ne priличи kontekstima na kakve smo navikli (npr. otpadna jama, jama za zalihe). Ostave ne sadrže samo čitave predmete, već i ostatke određenih radnji poput: lomljenja posuda, paljenja (zapečena zemlja, dijelovi peći, pepeo i ugljen), te konzumiranja hrane i pića (ostaci hrane i specifični tipovi posuda). Takve se jame u najviše slučajeva pečate i svjesno trajno zatvaraju. Najveći broj ovakvih ostava pronađen je u naseljima. Za sada ne raspoložemo s konkretnim podacima o položaju ovakvih ostava u odnosu na stambene i druge objekte, no prema nekim izvorima možda je riječ o prostoru uz rubove naselja (Stapel 1999: 268–269). Ostave keramike nalazimo na nekropolama kao i izoliranim mjestima poput spilja, ali i lokacijama izvan naselja. Postojeće publikacije nude velik broj ostava keramike, ali često nam nedostaju detaljni podaci o samom kontekstu nalaza. Takav spektar ostava različitih kontekstualno sadržajnih cjelina odaje sliku kompleksnih i raznovrsnih ritualnih radnji. Svjedoče li takvi podaci o bogatom i razvijenom religijskom sustavu brončano-dobnih zajednica?

Ako govorimo o odabiru ulomaka koji se polažu u jamu, na primjeru SJ 13 s lokaliteta Kalnik-Igrišće II, primjećujemo dva tipa oštećenja. 9 % ulomaka gorjelo je na visokoj temperaturi (deformacija stijenci i pregorena keramička struktura). Većina keramičkih nalaza bila je u kontaktu s jakom vatrom. Na nekoliko ulomaka mogu se prepoznati oštećenja nastala pod utjecajem visoke temperature. Trag vatre obilježio je većinu nalaza iz jame, a spomenuti valja i veću količinu ugljena na dnu ukopa. Za sada se ovakvi podaci ne mogu uobličiti u neka konkretnija tumačenja, ali mogu predstavljati bazu podataka. O kontekstu jame moći ćemo više reći kada se istraži čitav objekt. Prema dosadašnjim podacima ovaj nalaz svakako zaslužuje posebnu pozornost. Tragovi radnje mogu se prepoznati u načinu slaganja ulomaka, a količina keramičkog otpada značajna je i ne uklapa se u standardnu količinu materijalnih ostataka iz sličnih zatvorenih cjelina na lokalitetu. Što se tiče tipova posuda iz SJ 13, prevladava stolno (zdjele) i kuhinjsko (veći lonci za zalihe) posuđe (sl. 12). U jami iz Kalnika nalazimo tragove vatre i simbol hrane kao važne sadržajne elemente, a podatak o raznovrsnim i brojnim ostacima žitarica uz SJ 13 uklapa se u priču. Iako se jama nalazi u nizu jama za stupove većeg objekta, izgleda kako u njoj, u trenutku polaganja keramičkog "otpada", stupa nije bilo.

Materijalni ostaci iz jame s Kalnika relativno kronološki, a na temelju tipološke analize keramičkih posuda, pripadaju razdoblju Ha B mlađoj fazi kulture polja sa žarama. Prema podacima koje donosi literatura ovo je razdoblje kada broj ovakvih ostava opada ili one gotovo nestaju. Za razliku od ostava Jalkovec–Police i ostave iz Vele peći koje pripadaju razdoblju prijelaza srednjeg u kasno brončano doba te starijoj fazi kulture polja sa žarama kada su na prostoru srednje Europe keramičke ostave najbrojnije. Naizgled se kontekst iz Vele peći čini kao manja otpadna jama, te ne osobito reprezentativna što se tiče vrste nalaza. Ipak, detaljnim istra-

liberate activity, which does not fit in the contexts we are used to (e.g. waste pit, storage pit). Depots do not contain only entire items, they also contain the remains of certain activities, such as: the breaking of vessels, burning (burned earth, parts of kilns, ashes and coal) and eating and drinking (food remains and specific types of vessels). Such pits are most often sealed and, deliberately, permanently closed. Most of these depots were found in settlements. At present, we do not have any concrete information about the position of these depots with respect to housing and other structures, but there are indications that they were mostly located along settlement borders (Stapel 1999: 268–269). Pottery depots can also be found in necropolises and isolated places, such as caves, but also in locations outside settlements. Published works mention a large number of pottery depots, but often provide no detailed information on the context of the find. Such a wide spectrum of context-specific depots paints a picture of complex and varied ritual activities. Does this information testify to a rich and advanced religious system in Bronze-Age communities?

When speaking about the selection of fragments to be placed in the pit, SU 13 from the Kalnik-Igrišće II site reveals two types of damage. Nine percent of the fragments burned at high temperatures (deformation of walls). Most of the pottery finds were exposed to strong fire. Several fragments display damage to their walls that is consistent with the damage caused by the firing of ceramics. Most of the finds from the pit show traces of fire, and there is also a large quantity of coal at the bottom of the dugout structure. We are currently unable to provide a more concrete interpretation of this information, but it can serve as a database. We will be able to say more about the context of the pit once the entire structure has been examined. According to information available to date, this find definitely deserves special attention. Traces of activity can be recognised in the way the fragments are arranged and there is a large quantity of pottery waste, which is not consistent with the quantities of material remains usually found in similar closed contexts at the site. Among the types of vessels found in SU 13, tableware (bowls) and kitchenware (large storage pots) prevail (Fig. 12). The traces of fire and the symbol of food are the main elements in the content of the Kalnik pit, and various and numerous remains of cereals found next to SU 13 fit into the story. Even though the pit is one in a line of holes housing the posts of a large construction, it seems that the post was not in it when the pottery "waste" was placed there.

Based on the typological analysis of pottery vessels, the material remains from the Kalnik pit can be relatively dated to the Ha B phase of the late Urnfield culture. According to literature, this was a period when such depots were on the decline or had already disappeared, unlike the Jalkovec–Police depots and the Vela peć depot, which belong to the transition period between the Middle and Late Bronze Age and the early phase of the Urnfield culture, when pottery depots in Central Europe were the most numerous. At first, Vela peć seems to be a small waste pit, not particularly representative of this type of finds. Detailed research has indicated that we are undoubtedly dealing with the traces of a ritual of which only the so-called "sacred waste" remains.

živačkim pristupom, ovakav kontekst nedvojbeno svjedoči o tragovima rituala od kojega nam ostaje samo tzv. "sveti otpad". S druge strane imamo keramičku ostavu iz Jalkovca koja naizgled predstavlja tipičan primjer ostave čiji inventar odgovara tzv. ritualu ispijanja tekućina. Ipak, sa zaključkom treba biti oprezan jer je ova cjelina dobrim dijelom uništena i nedostaju podaci o zapuni jame (eventualno pečaćenje).

Smatramo da je važno napomenuti kako su objave ovakve vrste nalaza u proteklih 50-ak godina uglavnom, ako ne i isključivo temeljene na cjelinama koje sadrže kompletne posude. Ipak, ostavu čine i ulomci od različitih posuda (Gutjahr 2011) često puta zanemarivani i tumačeni kao sadržaj iz otpadnih jama i jama za zalihe. U zaključku bi trebalo upozoriti na moguće pogrešne interpretacije i na važnost dobro dokumentiranih cjelina čija je vjerodostojnost i preciznost često ključan faktor.

Pažnju svakako treba usmjeriti na još neke pojedinosti, a to su: odabir mjesta deponiranja, priprema mjesta deponiranja (sekundarno korištenje jama), detaljna analiza materijalnih ostataka i stvaranje kvalitetne baze podataka na kojoj će se dalje temeljiti interpretacije.

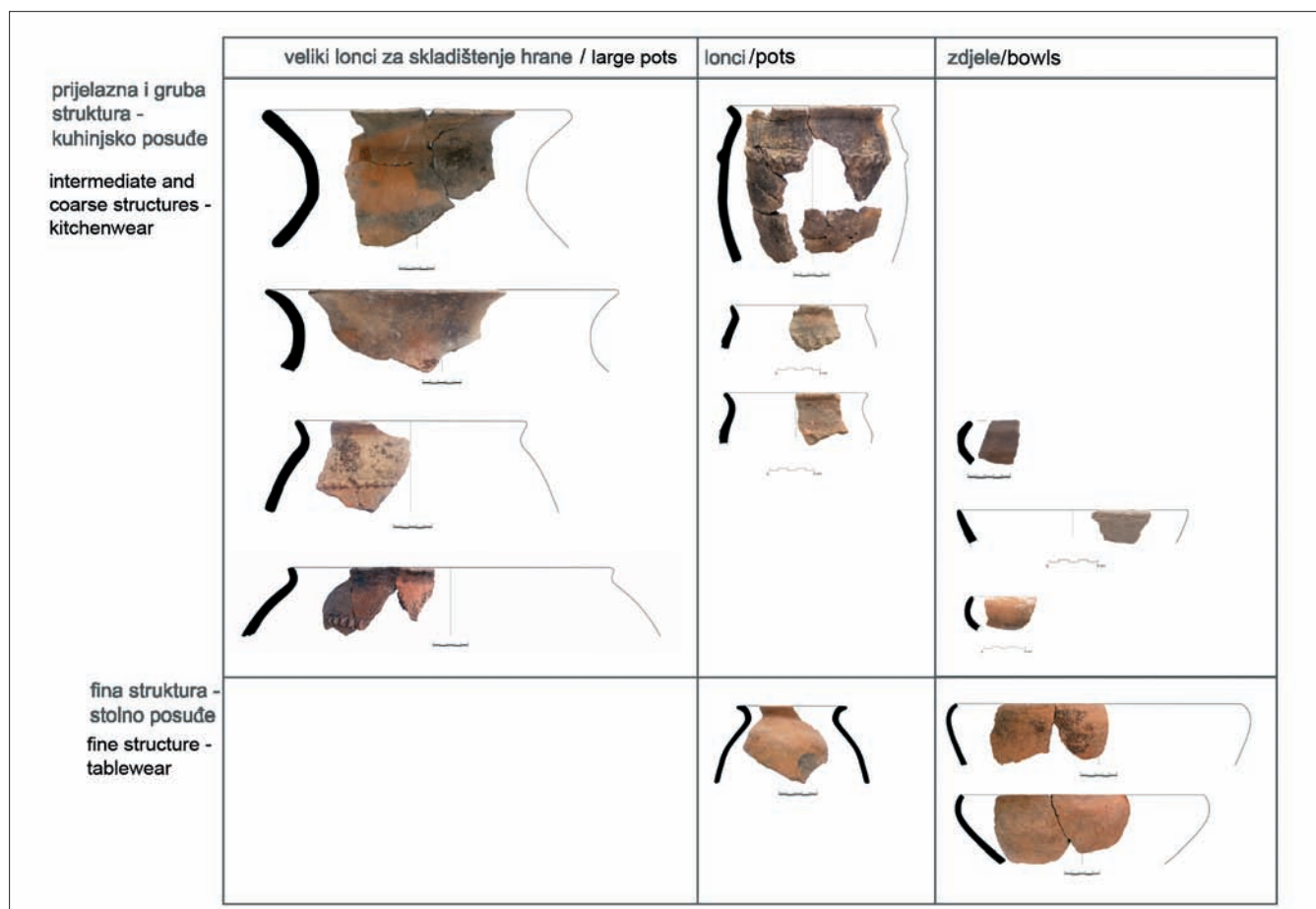
On the other side, there is the Jalkovec pottery depot which seems to be a typical example of a depot the inventory of which is consistent with libation. We must, however, be cautious when making conclusions because it was largely destroyed and we do not have sufficient information about the filling (possible sealing).

In our opinion, it is important to note that the works in which such types of finds have been published over the past 50 years are mostly, if not entirely, based on contexts containing entire vessels. Depots, however, are also made up of fragments of different vessels (Gutjahr 2011), which is frequently neglected and interpreted according to the standard pattern as "waste pits and storage pits". In conclusion, we should be aware of potentially erroneous interpretations and the importance of well-documented contexts, because their credibility and precision are often key factors.

Attention should also be focused on the following details: the selection of the site for the disposal, the preparation of disposal sites (secondary use of pits), a detailed analysis of the material remains and the compilation of a solid database to serve as the basis for all future interpretations.

Prijevod i lektura / Translation and Proofreading

Janja Ružić



Sl. 12 Tipovi posuda iz jame SJ 13/15  
Fig. 12 Types of vessels from SU 13/15

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T. 1



1



2



3

T. 2



1

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2

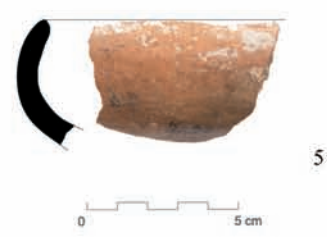
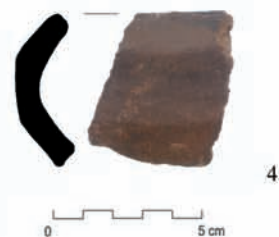
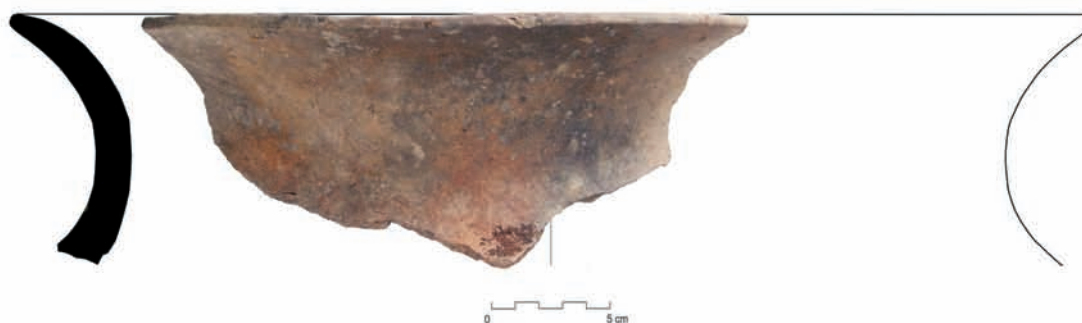
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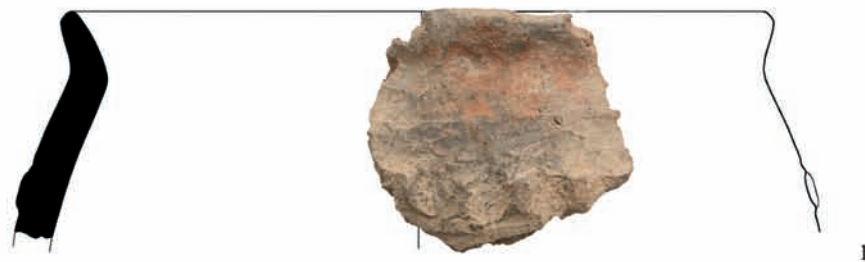
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T.3





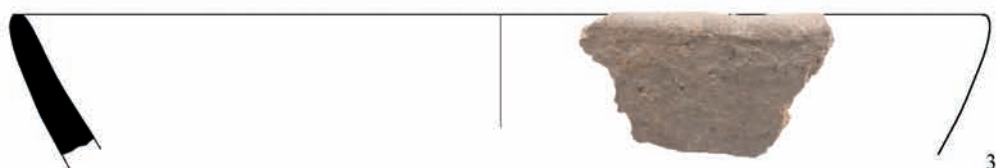
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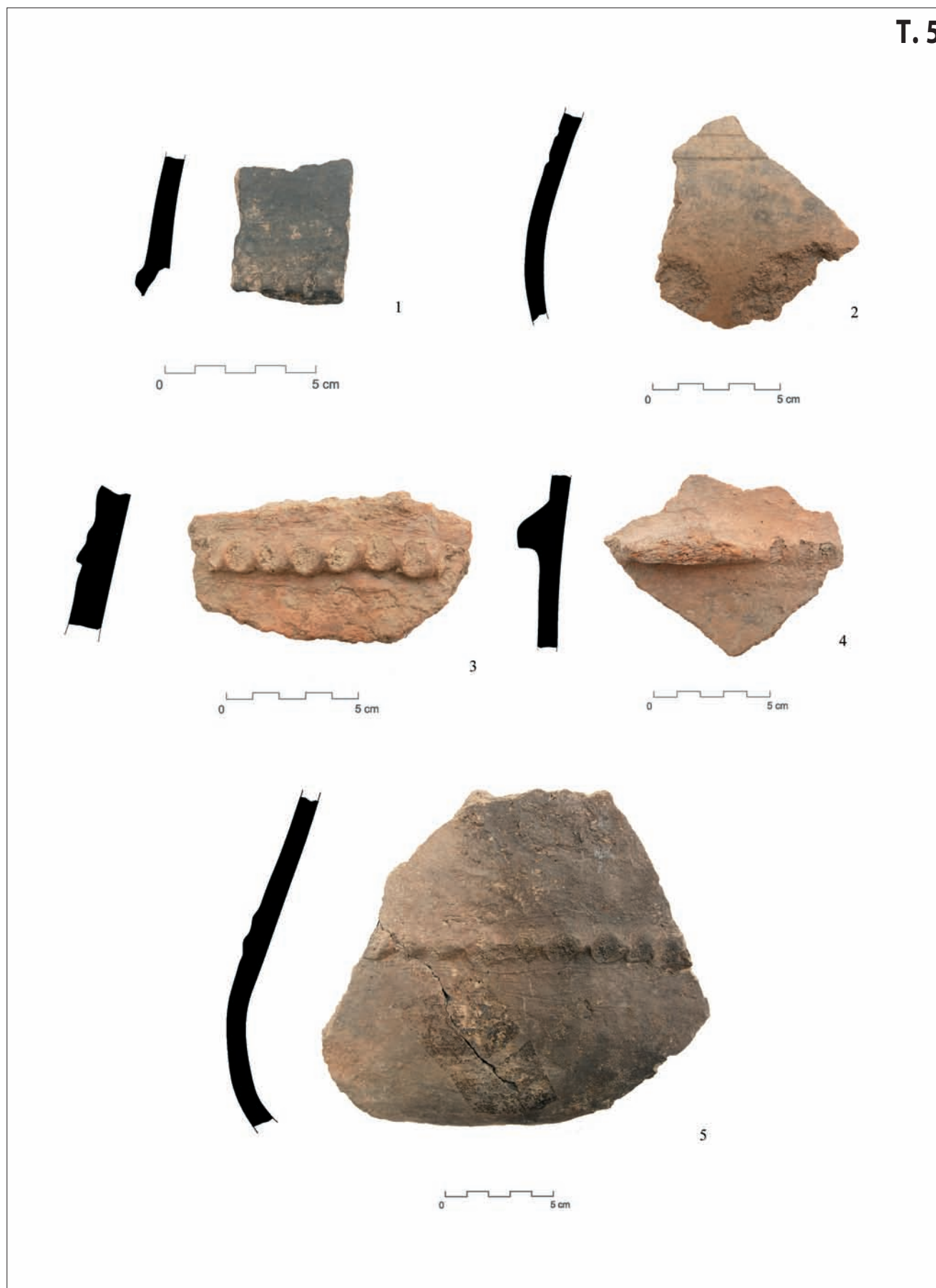


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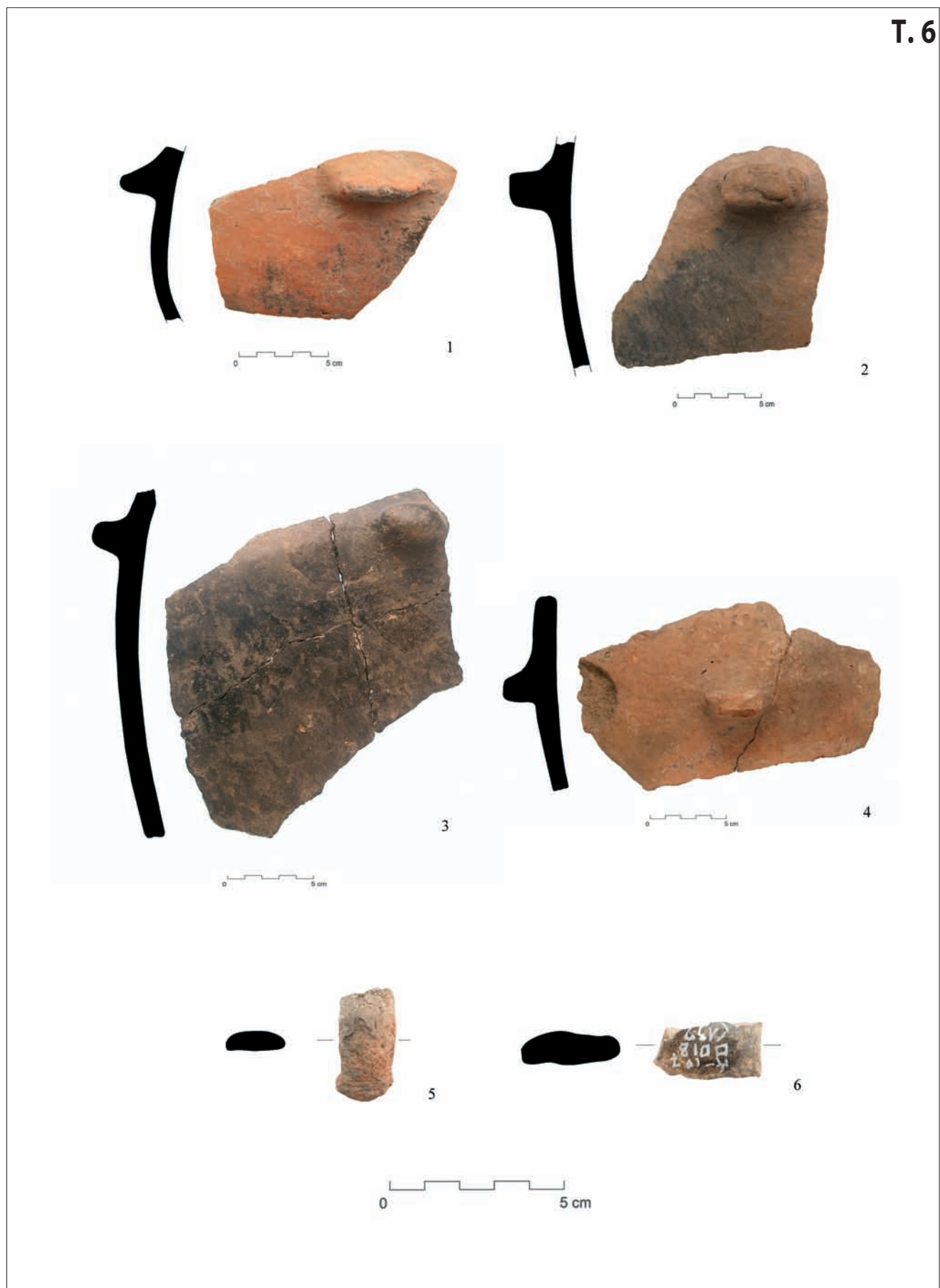


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T.5

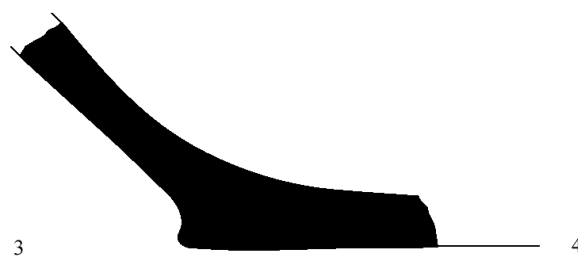
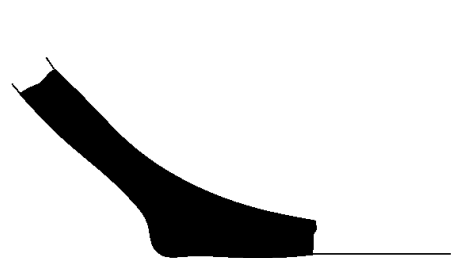
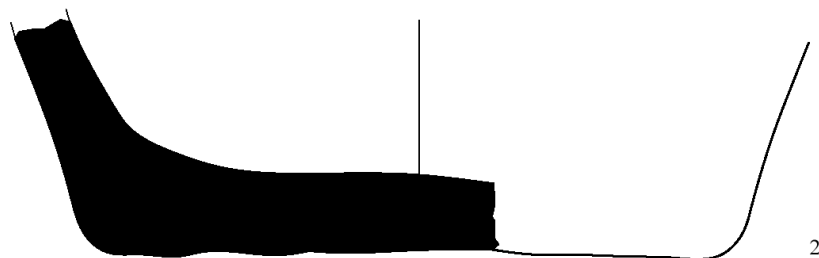
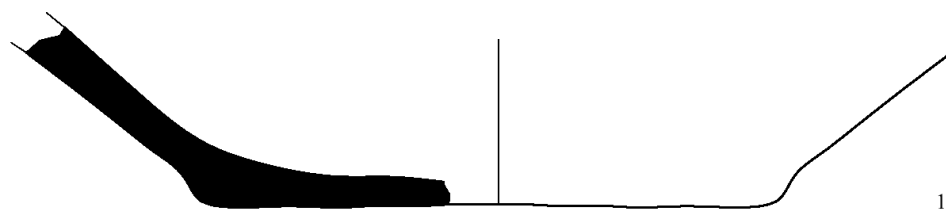


T. 6





T.7



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