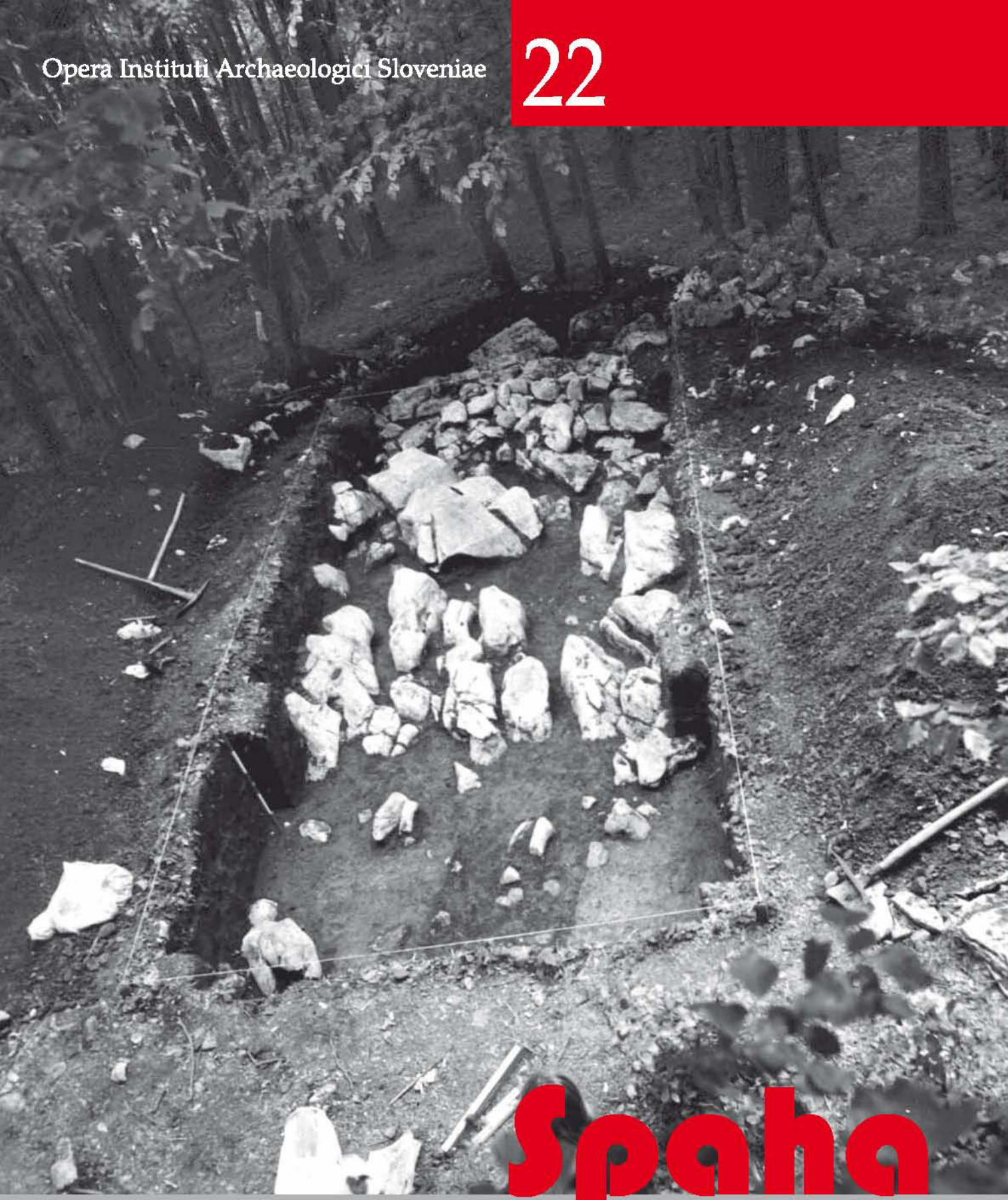
Opera Instituti Archaeologici Sloveniae 22



Spaha

Uredil / Edited by:
Anton Velušček

Zbirka / Series **OPERA INSTITUTI ARCHAEOLOGICI SLOVENIAE 22**
Uredniki zbirke / Editors of the series Jana Horvat, Andrej Pleterski, Anton Velušček

Anton Velušček (ur. / ed.) **Spaha**

Recenzenta / Reviewed by Matija Črešnar, Alenka Tomaž
Prevod / Translation Maja Sužnik
Jezikovni pregled / Language Editor Maja Sužnik
Tehnična ureditev / Technical Editor Mateja Belak
Likovno-grafična zasnova / Graphic art and design Milojka Žalik Huzjan
Oblikovanje ovitka / Front cover design Tamara Korošec
Računalniški prelom / DTP Mateja Belak
Priprava slikovnega gradiva / Preparation of illustrations Tamara Korošec, Lucija Lavrenčič, Mateja Belak
Izdala in založila / Published by Inštitut za arheologijo ZRC SAZU, Založba ZRC
Zanju / Represented by Oto Luthar, Jana Horvat
Glavni urednik / Editor-in-Chief Vojislav Likar
Tisk / Printed by ???

Izid knjige sta podprla / Published with the support of Javna agencija za knjigo RS, Znanstvenoraziskovalni center SAZU
Slovenian Book Agency, Scientific Research Centre SASA

Fotografija na naslovnici / Front cover photo Greta Hirschbäck - Merhar

CIP - Kataložni zapis o publikaciji
Narodna in univerzitetna knjižnica, Ljubljana

903(497.4Brezovica pri Predgradu)(082)

SPAHA / uredil, edited by Anton Velušček ; [prevod Maja Sužnik]. - Ljubljana : Inštitut za arheologijo ZRC SAZU, Založba ZRC, 2011. - (Opera Instituti Archaeologici Sloveniae ; 22, ISSN 1408-5208)

ISBN 978-961-254-290-0

1. Velušček, Anton

256514816

© 2011, ZRC SAZU, Inštitut za arheologijo, Založba ZRC
Vse pravice pridržane. Noben del te knjige ne sme biti reproduciran, shranjen ali prepisan v kateri koli obliki oz. na kateri koli način, bodisi elektronsko, mehansko, s fotokopiranjem, snemanjem ali kako drugače, brez predhodnega pisnega dovoljenja lastnikov avtorskih pravic.
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher.

SPAHA

Uredil / Edited by
Anton Velušček

ZALOŽBA ZRC

LJUBLJANA 2011

VSEBINA

CONTENTS

SPREMNA BESEDA IN ZAHVALA

V nizu novejših objav slovenskih najdišč iz mlajše kamene in/ali bakrene dobe (glej Velušček 2004a; 2006a; 2009a; Guštin 2005a; Tomaž 2006; Šavel 2009a; 2009b; Plestenjak 2010) je naposled prišlo na vrsto tudi arheološko najdišče Spaha nad Brezovico pri Predgradu. Gre za rezultate izkopavanj, ki so se vršila od konca sedemdesetih do sredine osemdesetih let prejšnjega stoletja. Vseskozi jih je vodila arheologinja Greta Hirschbäck - Merhar, takrat še v Pokrajinskem muzeju Kočevje, danes pa v zasluženem pokoju.

Prevzemanje gradiva s Spahe se je sprva zdelo kot dogodivščina brez konca. V primeru, da bi se med obdelavo premislili, ne bi bili edini, ki so se gradiva lotili, a že kmalu nad njim obupali. Pri nas, na srečo, ni šlo v tej smeri. Sprva smo nekaj let najdbe previdno pregledovali, pripravili širši izbor in jih nato narisali. Ob tem se je vzpostavila skupina zainteresiranih raziskovalcev, ki so ob sicer zgolj suhoparnih podatkih o artefaktih, najdišču na južnih obronkih Kočevske Male gore dali povsem nov in v marsičem presenetljiv pomen.

Za arheologa so keramične (in tudi druge) najdbe s Spahe vsekakor prečudovite, čeprav zelo fragmentirane. Prelomi so stari, tako da za neko večjo muzejsko postavitev ni veliko surovine. Pri preučevanju pa je vendar najprej presenetilo, da je bila Spaha poseljena kar štirikrat v prazgodovini in sicer ob koncu mlajše kamene dobe, najmanj dvakrat v bakreni dobi in zelo verjetno tudi v obdobju kulture žarnih grobišč – morda v njenem zgodnjem delu, ko so iz bližine najdišča na Spahi arheološko izpričane najdbe, ki kažejo na jantarsko pot. Zelo izpovedna se zdi zadnja vloga najdišča, ko je bilo na njem kresišče. Z vrha so opozarjali okoliške vasi na prihod plenilskih turških hord. Tu je tudi iskati izvor imena *Spaha*. Nemški glagol *spähen* prevajamo z *opreza-ti*, samostalnik *der Späher (-s, -)* pa v slovenščini pomeni *izvidnik*. V ta namen je bila postavljena lesena stražnica z zidanim temeljem, ki se je ohranil vse do danes in je bil pomembna orientacijska točka pri rekonstruiranju izkopavanj pred več kot četrt stoletja.

Analiza keramičnega gradiva je torej pokazala, da je bila Spaha poseljena v obdobjih savske skupine, lasinjske kulture in horizonta keramike z brazdastim vrezom. Iz teh časovnih horizontov je tudi veliko število fragmentov žrmelj, ki se jih je zelo verjetno največkrat uporabljalo za drobljenje žit, se pravi za pridobivanje hrane, ki izhaja iz poljedelstva. Število odlomkov žrmelj ne bi bilo presenetljivo, če bi bilo najdišče v ravnini blizu rodovitne zemlje. Toda Spaha je vrhnji del apnenčastega

PREFACE AND ACKNOWLEDGEMENTS

In the series of recent publications of Slovenian sites from the Neolithic and/or Eneolithic (see Velušček 2004a; 2006a; 2009a; Guštin 2005a; Tomaž 2006; Šavel 2009a; 2009b; Plestenjak 2010) it was finally time for the archaeological site Spaha above Brezovica pri Predgradu. These are the results of excavations carried out from the end of the 70s up until the middle of the 80s of the last century and were led by the archaeologist Greta Hirschbäck - Merhar, then from the Regional museum Kočevje, and today in the well deserved retirement.

The takeover of the material from Spaha seemed at first like the never-ending story. If we had changed our minds during the processing we would not have been the first to take over the material but soon give it all up. Luckily, it did not turn out this way. We started off with a few years of careful study of the finds, the preparation of the narrower selection, and then the drawing. During this time a group of interested researchers was formed who, regardless of only the dull artefact data, gave this site on the southern edge of the Kočevska Mala gora a completely new and in many ways surprising meaning.

For an archaeologist the pottery (and other) finds from Spaha are most certainly incredible, even if badly fragmented. Fractures are old, therefore, there is not much substance for any major museum exhibition. Nevertheless, during the research the first thing that surprises is the fact that Spaha was populated four times in prehistory, namely in the end of the Neolithic, at least twice during the Eneolithic, and most probably also during the Urnfield culture – possibly in its early part when the site near Spaha reveals archaeological finds testifying to the Amber route. The last role of the site seems very illustrative since a beacon was located there. From its top the nearby villages were alerted about the arrival of plundering Turkish hordes. The name *Spaha* also originates from the German verb *spähen*, which is translated as *to peek, to spy, to patrol*, while the noun *der Späher (-s, -)* stands for a *scout*. For this purpose a watchtower with built foundation was set here, which is preserved until the present day and was an important orientation point for the reconstruction of excavations of more than a quarter of a century ago.

Pottery analysis showed that Spaha was settled in the periods of the Sava group, Lasinja culture, and the horizon of pottery with furrowed incisions. From these time horizons we also find numerous quern fragments which were probably most frequently used for crushing grain, that is for acquiring food through agriculture. The number of quern fragments would not be surprising if this site was

hriba 826 m nad morjem in 600 m nad strugo Kolpe. O pomembnejših poljedeljskih površinah v bližini tudi ni vredno izgubljati besed. Je pa zato analiza pokazala, do so žrmlje in njih odlomki iz surovine, ki leži manj kot 2 km pod Spaho pri Knežji Lipi. Domnevamo, da so jih prazgodovinski naseljenci pridobivali za potrebe belokranjskih poljedelskih skupnosti. Kot kažejo keramične najdbe, je bila poselitev na Spahi namreč večkrat sočasna s poselitvijo Moverne vasi, ene izmed obsežneje raziskanih poselitvenih točk v Beli krajini.

Druga ugotovitev se zdi še bolj šokantna, a hkrati zelo zanimiva. Na Spahi je bilo odkritih več kamnitih sekir. Med njimi so tudi take iz surovin od daleč. Najbolj izstopa sekira iz "belega kamna", ki posnema obliko čevljarskega kopita. Z najdišč prve polovice 5. tisočletja pr. Kr. na zahodnem in osrednjem Balkanu jim pripisujejo vlogo nadomestka za bakreno orodje. Še pomembneje pa je, da naša sekira z omenjenih območij zelo verjetno izvira. Kot kaže keramika, so tudi ljudje na Spaho prišli z vzhoda oz. jugovzhoda, najverjetneje nekje z južnopanonskih ravnic. O povezavi med bakrom in omenjeno kamnito sekiro govori karta razprostranjenosti bakrenih sekir tipa Pločnik. Slovenskim najdiščem najbližja najdba te vrste je najdena takoj čez mejo pri Čatežu. Ali so bili prvi, pa tudi kasnejši, naseljenci na Spahi v osrednji in južni Sloveniji iskalci bakra? Zanesljivega odgovora v zborniku ne bomo našli. Vsekakor pa se zdi, da je v to smer z raziskavami vredno nadaljevati. Zbornik je vsekakor zanimiv, saj ponuja veliko odgovorov, še več pa odpira vprašanj.

Ob koncu se najprej zahvaljujem vodji izkopavanj Greti Hirschbäck - Merhar, ki je odstopila gradivo za obdelavo. Zahvala gre tudi avtorjem prispevkov, ki jih navajam po abecednem vrstnem redu: Antonio Alberti, Federico Bernardini, Gabriella Demarchi, Angelo De Min, Maruska Di Remigio, Pavel Jamnik, Emanuela Montagnari - Kokelj, Borut Toškan, Janez Turk in Matija Turk. Brez njihovega doprinosa bi bil ta zbornik vsebinsko zelo prazen. Zahvala gre tudi Tamari Korošec, ki je pripravila slikovno gradivo, Mateji Belak, ki je zbornik oblikovala, in Maji Sužnik, ki je slovensko besedilo jezikovno pregledala ter poskrbela za prevode.

Zahvala gre tudi sofinancerju Javni agenciji za knjigo, ki je prispevala sredstva za tisk zbornika, in še predvsem Agenciji Republike Slovenije za raziskovanje, ki je preko raziskovalnih projektov in programov študijo na gradivu s Spahe dejansko omogočila.

Anton Velušček
Ljubljana, marec 2011

located on the flatland near fertile soil. But Spaha is the top part of a limestone hill 826 m above sea level and 600 m above the Kolpa riverbed. There are no significant farming surfaces in the vicinity while the analysis had shown that the querns and its fragments are made of raw material which can be found less than 2 km away from Spaha at Knežja Lipa. We assume that the prehistoric settlers made querns for the needs of agricultural communities in Bela krajina. As revealed by the pottery finds the settlement at Spaha was several times contemporary to the settlement of Moverna vas, one of the most extensively researched settlement points in Bela krajina.

The second finding seems even more shocking but at the same time very interesting. Several stone axes were discovered at Spaha. Among them are also such made of raw materials from afar. The axe made of "white stone" imitating the form of a shoe tree stands out the most. At the sites from the first half of the 5th millennium BC in the western and central Balkans these axes are assigned the role of a copper tool substitute. And what is even more important, our axe most probably also originates from the mentioned area. From the pottery we can see that also people came to Spaha from the east or south-east, most probably from the south-Pannonian flatlands. The map of dispersion of type Pločnik axes testifies to the connection between copper and the discussed stone axe. The nearest find of this type to the Slovenian sites was found right across the border at Čatež. Were the first and also later settlers at Spaha in the central and southern Slovenia copper seekers? There will be no definite answer to this question in this monograph. Nevertheless, it seems worth to continue the research in this direction. Thus this monograph is extremely interesting since it offers many answers but poses even more questions.

Firstly I would like to thank the head of excavations Greta Hirschbäck - Merhar who kindly handed us the material for processing. My thanks extend also to the writers of the articles whom I enumerate in the alphabetical order: Antonio Alberti, Federico Bernardini, Gabriella Demarchi, Angelo De Min, Maruska Di Remigio, Pavel Jamnik, Emanuela Montagnari - Kokelj, Borut Toškan, Janez Turk, and Matija Turk. Without their contributions this monograph would have lacked content. A great thanks also to Tamara Korošec who prepared the graphic material, to Mateja Belak who designed the monograph, and to Maja Sužnik who proof-read the Slovenian texts and provided translations.

Many thanks also to the co-financer the Slovenian Book Agency which contributed funds for the printing of this monograph, and first and foremost to the Slovenian Research Agency which through research projects and programmes actually enabled the study of the material from Spaha.

Anton Velušček
Ljubljana, March 2011

1. SPAHA NAD BREZOVICO PRI PREDGRADU SKOZI ČAS – PRAZGODOVINSKA POSELITVENA TOČKA IN NJEN POMEN

1. SPAHA ABOVE BREZOVICA PRI PREDGRADU THROUGH TIME – PREHISTORIC SETTLEMENT POINT AND ITS MEANING

Anton VELUŠČEK

Izvleček

V prispevku predstavljamo geografske in druge okoljske značilnosti Kočevske, t. j. pokrajine, kjer se nahaja arheološko najdišče Spaha. Maloštevilna arheološka najdišča kažejo na to, da je pokrajina arheološko še vedno relativno slabo poznana.

Poselitev na Spahi se je skoncentrirala v štirih arheoloških in enem zgodovinskem obdobju, od neolitika do začetka novega veka, in ni bila kontinuirana. Analiza najdb razkriva izjemno strateško lego najdišča ob poti prvih iskalcev bakra na tem območju in v bližini nahajališča klastičnih kamnin, ki so uporabne za žrmlje. Gre za dejavnika, ki sta bila zagotovo odločilna pri poselitvi na tem zanimivem, a skalnatem in za življenje težkem svetu 826 m nad morjem.

Ključne besede: prazgodovinska višinska poselitev, kresišče iz 16. stoletja, iskalci bakra, surovina za žrmlje.

Abstract

This article presents geographic and other environmental characteristics of the Kočevska (*Gottschee*), i.e. the region where the archaeological site Spaha is located. A small number of archaeological sites indicate that this region is archaeologically still relatively poorly known.

The settlement of Spaha was concentrated in four archaeological and one historical period, from the Neolithic to the beginning of the Early Modern Period, and was not continual. The analysis of finds reveals an extraordinary strategic location of the site, along the road of the first copper prospectors in this area and near the deposits of clastic rocks, which are used to make querns. These are the two factors that were surely decisive for the population of this interesting, yet rocky and difficult to live at world 826 m above sea level.

Keywords: prehistoric hilltop settlement, 16th century beacon, copper prospectors, raw material for querns.

1.1 UVOD

Arheološko najdišče Spaha se nahaja na rahlo dvignjenem južnem platoju Straže (834 m n. m.) na Spahi[1] ali Grädischu[2] (826 m). Straža je eden izmed kopastih

[1] Ime Spaha najbrž izvira iz nemške oblike glagola oprezati *spähen*, oz. iz samostalnika izvidnik *der Späher (-s, -),* kar potrjuje vlogo Spahe kot kresišča oz. izvidnice (stražnice) proti Turkom, o čemer pričajo arheološke ostaline in listine iz obdobja turških vpadov (glej Simonič 1939, 78–80).

[2] Kočevski urbar iz 16. stoletja Spaho omenja kot Grädisch (Simonič 1939, 80, 90; Hirschbäck - Merhar 1979, 232).

1.1 INTRODUCTION

The archaeological site Spaha is located at a slightly raised plateau of Straža (834 m a.s.l.) at Spaha[1] or Grädisch[2] (826 m). Straža is one of the domed tops of

[1] The name Spaha probably originates from the German form of the verb to peek *spähen*, or from the noun scout *der Späher (-s, -),* which confirms the role of Spaha as a beacon or a watchtower location against the Turks, which is also attested by the archaeological remains and documents from the period of the Turkish invasions (see Simonič 1939, 78–80).

[2] Kočevje land registry from the 16th century refers to

Sl. 1.1: Zemljevid južne Slovenije s Spaho. Podlaga: *Šolska karta socialistične republike Slovenije,* v merilu 1 : 500 000, Ljubljana 1981
Fig. 1.1: A map of southern Slovenia with Spaha. From *Šolska karta socialistične republike Slovenije,* scale 1 : 500 000, Ljubljana 1981.

vrhov Kočevske Male gore, ki se po dinarski smeri iz jugovzhoda proti severozahodu nadaljuje v nekoliko višje, prav tako kopasto oblikovane vrhove, kot sta npr. Grič (953 m) in Vidrov vrh (938 m), in nato v Malo goro (964 m) (*sl. 1.1*).[3]

Vrh Straže dominira nad Poljansko dolino, ki leži na nadmorski višini med pribl. 400 in 450 m nad Kolpo (pribl. 200 m), od katere je po zračni liniji oddaljen slabih 7 km. Najbližje naselje je bil Prerigelj na jugozahodnem pobočju (pribl. 710 m n. m.), ki je bil leta 1942 opuščen in požgan.[4]

Straža, z arheološkim najdiščem Spaha, se nahaja v jugovzhodnem delu pokrajine, ki jo poznamo kot Kočevska. Gre za dinarsko pokrajino, kot jo je definiral znani slovenski geograf A. Melik.[5] Po novi regionaliza-

Kočevska Mala gora, which along the Dinaric direction from the southeast towards the northwest continues into a somewhat higher but also dome-shaped tops, e.g. Grič (953 m) and Vidrov vrh (938 m), and then into Mala gora (964 m) (*Fig. 1.1*).[3]

The top of Straža dominates above Poljanska dolina which is located at an altitude between approx. 400 and 450 m above the river Kolpa (approx. 200 m), from which it is less than 7 km straight line away. The nearest hamlet was Prerigelj on the south-western slope (approx. 710 m a.s.l.) which was deserted and burned down in 1942.[4]

Straža, with the archaeological site Spaha, is located in the south-eastern part of the region known to us as the Kočevska. This is a Dinaric region as it was defined

[3] *Atlas Slovenije,* Ljubljana 1985.
[4] Hrvatin 2001, 444.
[5] Po Kladnik, Perko 2001, 21, 23.

Spaha as Grädisch (Simonič 1939, 80, 90; Hirschbäck - Merhar 1979, 232).
[3] *Atlas Slovenije,* Ljubljana 1985.
[4] Hrvatin 2001, 444.

cijski shemi[6] je naravnogeografsko gledano sestavljena iz delov treh pokrajinskih enot:

1. Mala gora, Kočevski rog[7] in Poljanska gora
2. Ribniško-kočevsko podolje
3. Velika gora, Stojna in Goteniška gora.

V osrednjem delu najdemo pretežno ravninsko Kočevsko polje, ki se proti severozahodu nadaljuje v Ribniško polje. Na vzhodu in severu pokrajine sta Mala gora in Kočevski rog. Na zahodu in jugozahodu se širita hribovita Stojna in Goteniška dolina. Južna meja območja pa je nad reko Kolpo pri Bilpi, kjer reka teče skozi ozko sotesko in nato na odprtem v Beli krajini pri Metliki pot nadaljuje na Hrvaško ter se pri Sisku izliva v Savo.

1.2 GEOGRAFSKI ORIS

Na vzhodnem in severnem delu Kočevske v naravnogeografski pokrajinski enoti z imenom Mala gora, Kočevski rog in Poljanska gora[8] najdemo dinarsko pokrajino, ki obsega kraški svet planotastih in slemenastih pogorij ter vmesnih podolij in suhih dolin.

Najstarejše kamnine, permske glinovce in kremenove peščenjake, najdemo samo v bližini Knežje Lipe. Veliko večji obseg ima zgornjetriasni in jurski dolomit. V Kočevskem rogu se pojavlja v širši okolici Mirne gore. Skoraj celotna Mala gora ter večina Kočevskega roga pa sta iz jurskega in krednega apnenca, ki v pokrajini prevladuje. V bližini Starega Brega in opuščenega naselja Rdeči Kamen se pojavljajo tudi zgornjekredni laporji, eocenski flišni laporji in peščenjaki. V geološki preteklosti so bili sicer odloženi na celotnem območju, danes pa so zaradi erozije ohranjeni v obliki skromnih zaplat.

Manjši osrednji del Kočevske predstavlja Kočevsko polje,[9] pribl. 72 km^2 velika ravnina, ki je na jugovzhodu še posebej razgibana. Polje skoraj na vseh straneh obdajajo planotasti, a tudi bolj strmi vrhovi. Štejemo ga med robna raztočna polja z nepropustnimi kamninami na dnu. Obsežen osrednji del polja zavzemajo jezerske usedline, ki so se odlagale od miocena do kvartarja. Severovzhodno od Kočevja je najti tudi trdne kredne karbonatne kamnine. Vzhodni rob je iz krednih apnencev in apnenčastih breč, ki jih marsikje pokrivajo debele plasti pliocenskih in pleistocenskih rdečih ilovic. Pri Kočevju pa najdemo nahajališča rjavega premoga in lignita miocenske oz. pliocenske starosti.

[6] Glej Perko, Kladnik 2001.

[7] Za podroben geografski oris območja, glej še diplomsko delo P. Gostinčar, Geomorfološke značilnosti Kočevskega roga in Kočevske Male gore, Ljubljana 2009 (*http://geo.ff.uni-lj.si/pisnadela/pdfs/dipl_200905_petra_gostincar.pdf*.)

[8] Pri opisu naravnogeografskih danosti osrednjega in vzhodnega dela Kočevske besedilo povzemamo po Hrvatin 2001, 436–446.

[9] Pri opisu naravnogeografskih danosti Kočevskega polja besedilo povzemamo po Topole 2001, 426–434.

by the well-known Slovenian geographer A. Melik.[5] According to the new regionalisation scheme[6] it is physiogeographically composed of parts of three regional units:

1. Mala gora, Kočevski rog, and Poljanska gora
2. Ribniško-kočevsko podolje
3. Velika gora, Stojna, and Goteniška gora.

In the central part we find the predominantly flat Kočevsko polje which continues into Ribniško polje towards the north-west. At the east and north part of the region are Mala gora and Kočevski rog. At the west and south-west are the hilly Stojna and Goteniška dolina. The southern border of this area is situated above the river Kolpa at Bilpa, where the river runs through the narrow gorge and then continues its way in the open in Bela krajina near Metlika towards Croatia and finally flows into the Sava at Sisak.

1.2 GEOGRAPHIC DESCRIPTION

In the eastern and northern part of the Kočevska, in the natural geographic regional unit named Mala gora, Kočevski rog, and Poljanska gora[7] we encounter a Dinaric landscape which includes the Karstic world of plateau and ridge mountain ranges and intermediate depressions and dry valleys.

The oldest rocks, Permian mudstones and quartz sandstones, can be found in the vicinity of Knežja Lipa. There is much more of Upper Triassic and Jurassic dolomite. At Kočevski rog it appears in the wider surroundings of Mirna gora. Almost entire Mala gora and most of Kočevski rog are of Jurassic and Cretaceous limestone, which is prevalent in this landscape. Near Stari Breg and the abandoned settlement of Rdeči Kamen also Early Cretaceous marls, Eocenous flysch marls, and sandstones appear. In the geological past they were deposited in the entire area but are today due to erosion preserved only in the form of modest patches.

The smaller, central part of the Kočevska is the Kočevsko polje,[8] approx. 72 km^2 big plain which is especially diverse in the south-east. The plain is from almost all sides encompassed by plateau-like but steeper peaks. It is classified as a border polje with impermeable rocks at the bottom. The vast central part is composed of lake sediments which were deposited from the Miocene until the Quaternary. Northeast to Kočevje solid Cretaceous carbonate rocks can be found. The east edge is made of Cretaceous limestones and limestone breccias, which are in many places covered by thick layers of Pliocene

[5] Po Kladnik, Perko 2001, 21, 23.

[6] See Perko, Kladnik 2001.

[7] The description of natural-geographic characteristics of the central and eastern part of the Kočevska according to Hrvatin 2001, 436–446.

[8] The description of natural-geographic characteristics of the Kočevsko polje according to Topole 2001, 426–434.

Na skrajnem zahodnem in jugozahodnem delu Kočevske, v naravnogeografski pokrajinski enoti z imenom Velika gora, Stojna in Goteniška gora[10], prevladujejo obsežna planotasta hribovja s strmimi in slabo razčlenjenimi pobočji, ki jih ločujejo zakrasela podolja z uvalami in suhimi dolinami ter ravniki, med katerimi je posebno velik Kočevskoreški, ki se vleče od Jelenovega Žleba med Goteniško in Veliko goro vse do Verderbške gore, kjer se strmo prevesi v sotesko reke Kolpe.

Tudi na tem območju prevladujejo karbonatne kamnine. Triasne kamnine najdemo v dolini Kolpe in v okolici Kostela. Bolj v notranjosti so mlajše jurske in kredne kamnine. V osrčju Stojne najdemo sklenjene kredne apnence. Gre za območje, kjer je podobno kot v Kočevskem rogu in na Mali gori veliko brezen in kraških jam, med katerimi se pojavlja tudi več ledenih jam.

Na vzhodnem in zahodnem oz. jugozahodnem delu Kočevske so površinski vodni tokovi zelo redki. Še največ jih najdemo v obliki potokov, ki za kratko tečejo po nepropustnih kamninah med Nemško Loko in Mozljem ter jugovzhodno od Kočevske reke. Drugod pa se površinske vode v glavnem pojavljajo le na obrobju v obliki močnih kraških izvirov na stiku med prepustnim in neprepustnim svetom. Zaradi prevlade karbonatnih kamnin se namreč večji del vode pretaka globoko v kraškem podzemlju. Ponekod se iz njih razvijejo potoki, ki dovajajo vodo predvsem Kolpi, ta pa se v mogočni soteski prebija skozi kraški svet. Njen pretok močno niha. Viška sta v novembru (125 m^3/s) in marcu (110 m^3/s), nižek pa julija (27 m^3/s).

Pomembna vodna žila na Kočevskem polju je Rinža. Vodo dobiva iz več kraških izvirov, ki se napajajo na Stojni, ob močno naraslem vodovju pa preko apnenčastega praga tudi iz Ribniškega polja. Po 11 km toku ponikne severno od Črnega Potoka. Ob naraslih vodah podaljšuje tok po zoženem podolju proti jugovzhodu do Livolda in celo v pas triasnih dolomitov do Mozlja. Na dan pride ponovno kot izvir Bilpe, kjer se kmalu nato izlije v Kolpo. Vzhodno od Kočevja se nahajajo Željnske jame, ki merijo v dolžino 1600 m. Njihove vode podzemno odtekajo v porečje reke Krke.

Na pretežno razgibanem svetu sežejo najvišji vrhovi v Kočevskem rogu in na Stojni preko 1000 m. Razmeroma ravno dno Kočevskega polja je na višini pribl. 460–480 m. Struga reke Kolpe pa je, kot rečeno, na višini pribl. 200 m.

Strme kopaste vrhove in strme dele pobočij planotastih hribovij prekriva plitva rendzina. Za poljedelstvo ugodne obdelovalne zemlje je razmeroma malo. Najdemo jo na osrednjem delu Kočevskoreškega ravnika in drugih večjih ravnih delih površja kot so npr. Koprivniško polje in posamezni predeli Kočevskega polja. Odeja prsti večinoma ni sklenjena, saj je zaradi

[10] Pri opisu naravnogeografskih danosti zahodnega in južnega dela Kočevske besedilo povzemamo po Kladnik 2001, 414–424.

and Pleistocene red loams. Near Kočevje deposits of brown coal and lignite of the Miocene or Pliocene age are located.

At the utmost western and southwestern part of the Kočevska, in the natural-geographic regional unit called Velika gora, Stojna, and Goteniška gora[9] extensive plateau-like hills with steep and not very uneven slopes are prevalent and are separated by the depressions with dolinas, dry valleys, and corrosional plains, among which the Kočevska Reka one is especially big and spreads from Jelenov Žleb between Goteniška and Velika gora all to Verderbška gora where it steeply falls into the gorge of the river Kolpa.

Carbonate rocks also prevail here. Triassic rocks can be found in the valley of the Kolpa and in the vicinity of Kostel. More towards the inland are younger Jurassic and Cretaceous rocks. In the heart of Stojna Cretaceous limestones can be found. This is the area where, similar to Kočevski rog and Mala gora, there are numerous abysses and Karstic caves, several of which are also ice caves.

At the eastern and western or south-western part of the Kočevska surface water flows are very rare. Most of them are streams which for a short period flow over the impermeable rocks between Nemška Loka and Mozelj and southeast of Kočevska Reka. Elsewhere surface waters mainly appear only at the edge in the form of strong Karstic springs at the contact between permeable and impermeable world. Due to the prevalence of carbonate rocks the greatest part of water flows deep in the Karstic underground. From these waters sometimes streams develop which supply water mostly to the Kolpa, the river which makes its way through the Karstic world in a majestic gorge. Its flow varies significantly. Its peaks are in November (125 m^3/s) and March (110 m^3/s), while its lowest point is in July (27 m^3/s).

An important water vein at the Kočevsko polje is the Rinža. Its water is supplied by many Karstic springs at Stojna and during the heavily risen waters also over the limestone rock barrier from the Ribniško polje. After the 11 km flow it disappears north of Črni Potok. During risen waters it prolongs its flow along the narrowed depression towards the southeast to Livold and even into the band of Triassic dolomites to Mozelj. It resurfaces as the spring of the Bilpa and soon after flows into the Kolpa. East of Kočevje, Željnske jame are located which are 1600 m long. Their waters flow into the river basin of the river Krka subterraneanly.

At the mostly uneven terrain the highest peaks in Kočevski rog and at Stojna reach over 1000 m. The relatively flat bottom of the Kočevsko polje is at the height of approx. 460–480 m. The Kolpa riverbed is, as stated before, at approx. 200 m.

[9] The description of natural-geographic characteristics of the western and southern parts of the Kočevska according to Kladnik 2001, 414–424.

močne zakraselosti površje kamnito in gosto prepredeno z apnenčevimi skalnimi čoki. Prst je skeletna in se v večji količini pojavlja le v posameznih skalnih žepih.

O preteklem okolju za Kočevsko ni podatkov. Palinološka analiza[11] dveh vrtin iz bližnje, a za Kočevsko ne povsem primerljive Bele krajine kaže, da so bile za obdobje pred več kot pribl. 8750 leti značilne drevesne vrste kot so lipa, hrast, brest, leska in smreka. Med pribl. 8750 in 7600 pred sedanjostjo je prevladoval bukov gozd z občasnimi čistinami, ki so nastale zaradi požigalništva. Pojavi se tudi že prvi pelod žit, kar je presenetljivo, saj odgovarjajočih najdišč iz tistega časa ne poznamo.[12] Za obdobje med pribl. 7500 in 7000 je značilen upad bukve in bolj odprta krajina. Med pribl. 7000 in 6700 pride do ponovnega zaraščanja gozda z leskovo in bukovo fazo. Pribl. 6700 in 5700 je za vzorčno območje v Mlaki značilna gabrova faza. Opazen je tudi človekov vpliv na okolje, z največjo intenziteto okoli 6100 let pred sedanjostjo, ko se je krčilo gabrov gozd s požigalništvom ali sečnjo. Med pribl. 5700 in 4800 prevladuje bukov gozd, opazen je tudi zmanjšan pritisk človeka na okolje. Do še večjih sprememb pa pride med pribl. 4800 in 4500 pred sedanjostjo, saj je zaznati upad bukve in naraščanje vrednosti peloda jelke.

Pelodna diagrama kažeta tudi na nekdanje klimatske razmere.[13] V obdobju po pribl. 6700 do pribl. 6000–5700 pred sedanjostjo je prevladovala bolj suha klima. Medtem ko naj bi bilo po obdobju pred pribl. 6000 do 5700 leti nekaj časa bolj vlažno.

Danes na Kočevskem gozdovi poraščajo vse višje reliefne oblike, planote, bolj oddaljene in odročne predele ter bolj strm svet. Delež gozda zadnja desetletja ponovno narašča in znatno presega dve tretjini površja. Največ je smreke, bukve in jelke. V višjih legah nad 700 m prevladuje dinarski mešani gozd bukve in jelke. Pod 700 m so predvsem bukovi gozdovi.

Za Kočevsko je značilno celinsko podnebje. Na nekaterih območjih prihaja do temperaturnega obrata, zato je višje topleje kot v nižini. Na območju Kočevskega roga pa je višji svet nekoliko hladnejši. Zime so dolge in ostre. Količina padavin niha med 1300 in 1600 mm. Najmanj padavin je pozimi in še te so v glavnem v obliki snega, ki v povprečju obleži po več mesecev.

Danes najgosteje poseljeni so Kočevsko polje in druga prometno dostopnejša ter bolj uravnana območja (npr. Kočevskoreški ravnik in Koprivniško polje).

Čez Kočevsko potekajo tudi pomembne prometne poti.[14] Danes najpomembnejša prometnica teče iz smeri Ljubljane preko Ribnice, Kočevja in Banja Loke mimo Kostela na Petrino ob Kolpi in se nato nadaljuje, nekaj časa po dolini Kupice, proti Delnicam ter dalje v Kvar-

[11] Andrič 2007a, tab. 1; glej še Andrič 2007b; Mason, Andrič 2009.

[12] Glej še Andrič 2007a, 185, tab. 1.

[13] Andrič 2007a, 185, 186.

[14] *Atlas Slovenije,* Ljubljana 1985.

Steep cumulous peaks and steep parts of slopes of plateau-like hills are covered by shallow rendzina. There is little land appropriate for agriculture. It can only be found at the central part of the Kočevska Reka corrosional plain and other major flat parts of the surface, such as the Koprivniško polje and individual parts of the Kočevsko polje. The cover of soil is mostly not unified for the surface is rocky and thickly intertwined with limestone rock monadnocks. The soil is skeletal and mostly appears solely in individual rock pockets.

There are no data for the Kočevska regarding the past environment. Palinological analysis[10] of two drills from the nearby but for the Kočevska not completely comparable Bela krajina shows that in the period of more than approx. 8750 years ago typical tree species were: lime, oak, elm, hazel, and spruce. Between approx. 8750 and 7600 before the present the beech forest was prevalent with occasional clearings created by the slash and burn agriculture. The first pollen of wheat also appears, which is surprising since we do not know of any matching sites from this time.[11] For the period between approx. 7500 and 7000 the decrease of beech and the appearance of a more open landscape is characteristic. Between approx. 7000 and 6700 there occurs a new overgrowth of forest with hazel and beech phase. Approx. 6700 and 5700 is for the sample area at Mlaka characteristic the hornbeam phase. The human influence on environment is also noticeable, its greatest intensity being around 6100 years before the present when the hornbeam forest was cleared with slash and burn agriculture or felling. Between approx. 5700 and 4800 the beech forest prevails and a decreased pressure from the humans to the environment can be noticed. Even greater changes occur between approx. 4800 and 4500 before the present when a decrease in beech and increase in fir pollen values appear.

Pollen diagrams also point to the past climatic conditions.[12] In the period after approx. 6700 until approx. 6000–5700 before the present a drier climate prevailed, while after the period before approx. 6000 to 5700 years there were damper conditions for a while.

Today in the region of Kočevje all higher relief forms, plateaus, more distant and remote parts, and the steeper world are overgrown by forests. The proportion of forest has been increasing again in the recent decades and significantly exceeds two thirds of the surface. Spruce, beech, and fir prevail. In higher locations above 700 m the Dinaric mixed forest of beech and fir prevails. Below 700 m there are mostly beech forests.

The Kočevska has a continental climate. In some areas the temperature inversion occurs which makes it warmer in the higher areas than below. In the area of

[10] Andrič 2007a, Tab. 1; see also Andrič 2007b; Mason, Andrič 2009.

[11] See also Andrič 2007a, 185, Tab. 1.

[12] Andrič 2007a, 185, 186.

nerski zaliv. Od te glavne poti je treba omeniti odcep pri Livoldu. Pelje mimo Mozlja, Knežje Lipe, se pod Stražo nad Brezovico z arheološkim najdiščem Spaha usmeri bodisi proti severu na Koprivniško polje bodisi proti vzhodu v Belo krajino ali pa proti jugovzhodu v Poljansko dolino na Predgrad in nato po strmem pobočju v nekoliko bolj odprto dolino reke Kolpe, katere dolina se kmalu zatem, po nekaj kilometrih, ko reka ponovno teče po ozki soteski, na široko odpre pri Gribljah v Beli krajini.[15] Naslednja važna prometnica se od glavne poti odcepi severno od kočevske železniške postaje v smeri proti severovzhodu in gre prek Male gore (484 m), Smuke (472 m) ter pri Dvoru (192 m) doseže dolino reke Krke.

1.3 ARHEOLOŠKA NAJDIŠČA NA KOČEVSKEM (*sl. 1.2*)

1. Spaha nad Brezovico pri Predgradu

Višinska naselbina in izvidniška točka (kresišče); neolitik (savska skupina), eneolitik (lasinjska kultura, horizont keramike z brazdastim vrezom), bronasta doba (kultura žarnih grobišč) in 16. stoletje po Kr.

Vir: ta zbornik; glej še Simonič 1939; P. Petru, Brezovica pri Predgradu, v: *Arheološka najdišča Slovenije,* 1975, 244; Dular 1985, 97, sl. 13; 88; Mason 1994, 188, sl. 2: 11; 3: 10; 2008, 21, zemljevid 1: 10; Mason, Andrič 2009, 332, sl. 3: 14.

2. Prerigel (Prerigelj)

Posamezna najdba (železna sulična ost – NM Ljubljana, inv. št. P 12291); starejša železna doba.

Vir: F. Truhlar, Prerigel, v: *Arheološka najdišča Slovenije,* 1975, 238.

3. Knežja Lipa

Naselbina(?); prazgodovina.

Vir: V. Stare, Knežja Lipa, v: *Arheološka najdišča Slovenije,* 1975, 238.

4. Rimsko (Remergrunt), (v kraju)

Naselbina(?); prazgodovina(?).

Vir: F. Truhlar, Remergrunt, Kočevje, v: *Arheološka najdišča Slovenije,* 1975, 238.

5. Rimsko (Remergrunt), (v gozdu ob cesti Kočevje–Črnomelj)

Grobišče (gomile); prazgodovina.

Vir: F. Truhlar, Remergrunt, v: *Arheološka najdišča Slovenije,* 1975, 238.

6. Rajndol

Grobišče (gomile); neopredeljeno.

Vir: V. Stare, Rajndol, v: *Arheološka najdišča Slovenije,* 1975, 238.

7. Mozelj

Naselbina(?); prazgodovina.

Vir: V. Stare, Mozelj, v: *Arheološka najdišča Slovenije,* 1975, 238.

8. Mozelj

Posamezna najdba (novec Vespazijana); antika.

Vir: Kos 1988, 418.

9. Črni potok pri Kočevju

Naselbina(?); prazgodovina.

Vir: V. Stare, Črni potok pri Kočevju, v: *Arheološka najdišča Slovenije,* 1975, 237.

[15] Mason 2008, 17.

Kočevski rog the higher land is somewhat colder. Winters are long and severe. The amount of rainfall swings between 1300 and 1600 mm. The least rainfall is during the winter and even those are usually in the form of snow which generally persists there for months.

Today the Kočevsko polje and other easily accessible and more flattened areas (e.g. Kočevska Reka corrosional plain and the Koprivniško polje) are densely populated.

Important traffic routes cross the Kočevska.[13] The most important road today runs from the direction of Ljubljana past Ribnica, Kočevje, and Banja Loka past Kostel and Petrina at the river Kolpa and then continues, for a while through the valley of the Kupica, towards Delnice and further on to the Kvarner gulf. We need to mention the exit towards Livold. It runs past Mozelj, Knežja Lipa, under Straža above Brezovica with the archaeological site Spaha where it directs either towards the north to the Koprivniško polje or towards the east into Bela krajina or towards the southeast into the Poljanska dolina to Predgrad and then along the steep slope into a somewhat more open valley of the river Kolpa – the valley of which soon after, when the river again runs through a narrow gorge, opens widely at Griblje in Bela krajina.[14] The next important route exits from the main road north of the Kočevje railway station in the direction towards the northeast and runs over Mala gora (484 m), Smuka (472 m), and near Dvor (192 m) reaches the valley of the river Krka.

1.3 ARCHAEOLOGICAL SITES IN KOČEVSKA (*Fig. 1.2*)

1. Spaha above Brezovica pri Predgradu

Hilltop settlement and watch-out spot (beacon); Neolithic (the Sava group), Eneolithic (the Lasinja culture, horizon of pottery with furrowed incisions), Bronze Age (the Urnfield culture), and the 16th century AD.

Source: this monograph; see also Simonič 1939; P. Petru, Brezovica pri Predgradu, in: *Arheološka najdišča Slovenije,* 1975, 244; Dular 1985, 97, Figs. 13; 88; Mason 1994, 188, Figs. 2: 11; 3: 10; 2008, 21, map 1: 10; Mason, Andrič 2009, 332, Fig. 3: 14.

2. Prerigel (Prerigelj)

Chance find (iron spear point – NM Ljubljana, inv. no. P 12291); Early Iron Age.

Source: F. Truhlar, Prerigel, in: *Arheološka najdišča Slovenije,* 1975, 238.

3. Knežja Lipa

Settlement(?); prehistory.

Source: V. Stare, Knežja Lipa, in: *Arheološka najdišča Slovenije,* 1975, 238.

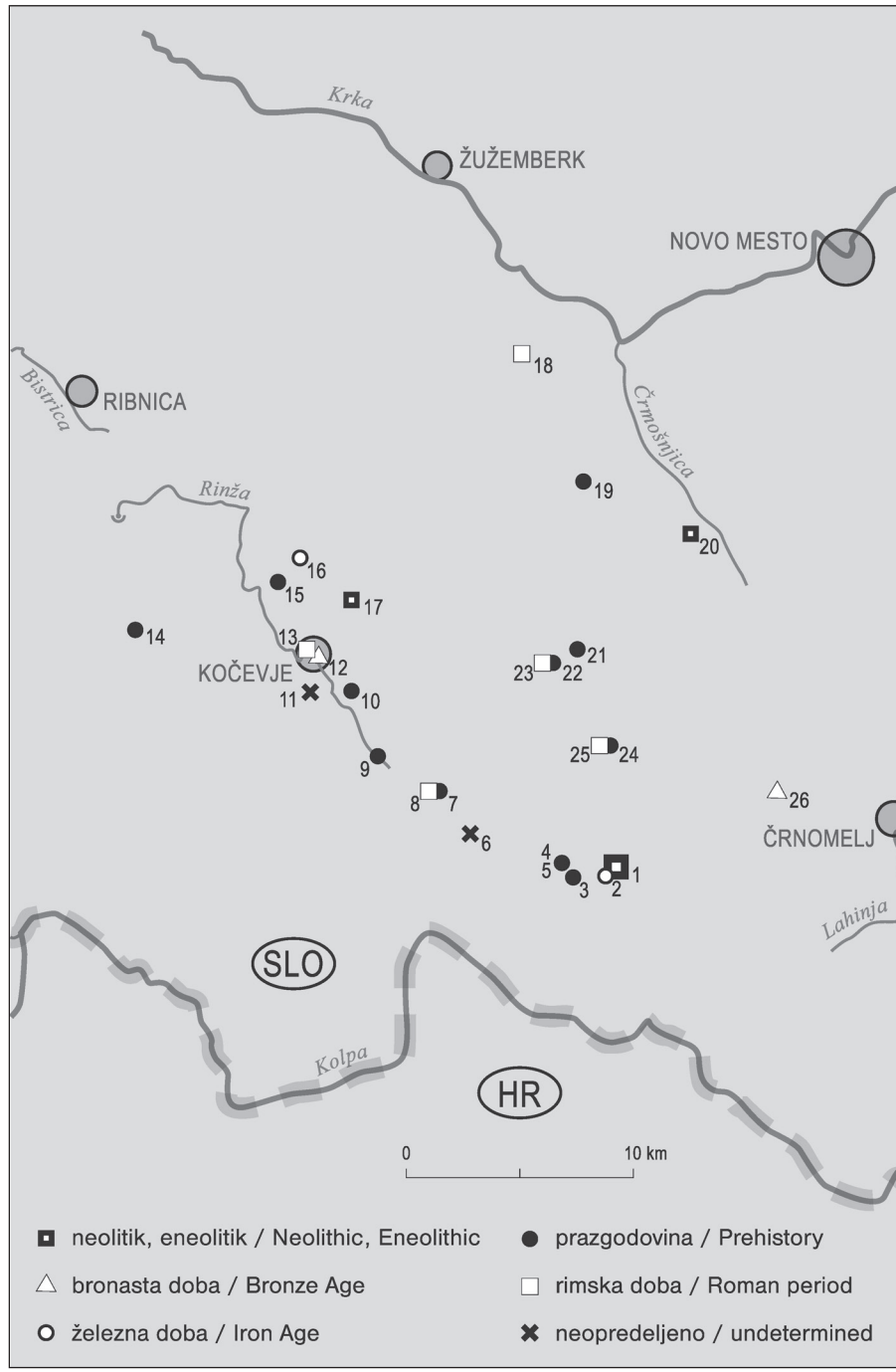
4. Rimsko (Remergrunt), (in the hamlet)

Settlement(?); prehistory(?).

Source: F. Truhlar, Remergrunt, Kočevje, in: *Arheološka najdišča Slovenije,* 1975, 238.

[13] *Atlas Slovenije,* Ljubljana 1985.

[14] Mason 2008, 17.



Sl. 1.2: Karta arheoloških najdišč od neolitika do antike na Kočevskem. Večfazna najdišča so označena samo s prvo fazo.
Najdišča: **1** – Spaha, **2** – Prerigel (Prerigelj), **3** – Knežja Lipa, **4**, **5** – Rimsko (Remergrunt), **6** – Rajndol, **7, 8** – Mozelj, **9** – Črni potok pri Kočevju, **10** – Dolga vas, **11** – Merešloh ali Medvedova oz. Črna jama, **12, 13** – Kočevje, **14** – Grčmanova jama, **15** – Stara cerkev, **16** – Gorenje, **17** – Ciganska jama, **18** – Gorenja Topla reber, **19** – Mala knežja jama, **20** – Topli vrh, **21** – Spodmol pri Macesnovi gorici, **22, 23** – Mačkovec, **24, 25** – Koprivnik, **26** – Sv. Križ nad Stražnjim vrhom.
Fig. 1.2: A map of archaeological sites from the Neolithic until the Antiquity in the Kočevska. Multi-phase sites are marked only by the first phase.
Sites: **1** – Spaha, **2** – Prerigel (Prerigelj), **3** – Knežja Lipa, **4, 5** – Rimsko (Remergrunt), **6** – Rajndol, **7, 8** – Mozelj, **9** – Črni potok near Kočevje, **10** – Dolga vas, **11** – Merešloh or Medvedova or Črna jama, **12, 13** – Kočevje, **14** – Grčmanova jama, **15** – Stara cerkev, **16** – Gorenje, **17** – Ciganska jama, **18** – Gorenja Topla reber, **19** – Mala knežja jama, **20** – Topli vrh, **21** – Spodmol pri Macesnovi gorici, **22, 23** – Mačkovec, **24, 25** – Koprivnik, **26.** Sv. Križ above Stražnji vrh.

10. Dolga vas
Naselbina(?); prazgodovina.
Vir: V. Stare, Dolga vas, v: *Arheološka najdišča Slovenije,* 1975, 237.
11. Merešloh ali Medvedova oz. Črna jama
Jamsko najdišče(?); neopredeljeno (prazgodovina ali antika).
Vir: glej poglavje 2, v tem zborniku.
12. Kočevje (železniška proga)
Posamezna najdba (antenski meč – NM Dunaj, inv. št. 70132); bronasta doba (kultura žarnih grobišč – Ha B).
Vir: V. Stare, Kočevje, v: *Arheološka najdišča Slovenije,* 1975, 237; Šinkovec 1995, 111, t. 32: 219.
13. Kočevje
Posamezne najdbe (novci Nerve, Trajana, Antonina Pija in dva nečitljiva – izgubljeni); antika.
Vir: V. Stare, Kočevje, v: *Arheološka najdišča Slovenije,* 1975, 237; Kos 1988, 418.
14. Grčmanova jama
Jamsko najdišče (poselitveni prostor(?)); prazgodovina (bronasta doba(?)).
Vir: glej poglavje 2, v tem zborniku.
15. Stara cerkev
Naselbina, grobišče (gomile); prazgodovina.
Vir: V. Stare, Stara cerkev, v: *Arheološka najdišča Slovenije,* 1975, 237.
16. Gorenje (za hišo J. Hrena)
Grobišče (gomila); starejša železna doba(?).
Vir: V. Stare, Gorenje, v: *Arheološka najdišča Slovenije,* 1975, 237.
17. Ciganska jama
Jamsko najdišče (poselitveni prostor, grobišče(?)); mlajši paleolitik, neolitik (savska skupina), eneolitik (lasinjska kultura, horizont keramike z brazdastim vrezom) in novi vek.
Vir: glej poglavje 2, v tem zborniku.
18. Gorenja Topla reber (sv. Peter)
Višinska naselbina(?); antika.
Vir: T. Knez, Gorenja Topla reber, v: *Arheološka najdišča Slovenije,* 1975, 237.
19. Mala knežja jama
Jamsko najdišče (poselitveni prostor); prazgodovina.
Vir: glej poglavje 2, v tem zborniku.
20. Topli vrh
Višinska naselbina; prazgodovina (neolitik in/ali eneolitik).
Vir: T. Knez, Novi Tabor, v: *Arheološka najdišča Slovenije,* 1975, 244; Dular 1985, 102, sl. 97; 2001, 94, sl. 15; Mason 1994, 188, sl. 2: 12; 3: 12; 2008, 21, zemljevid 1: 12; Mason, Andrič 2009, 332, sl. 3: 19; Križ 2009b, 51; 2009c, 63.
21. Spodmol pri Macesnovi gorici
Jamsko najdišče (poselitveni prostor(?)); prazgodovina (verjetno eneolitik ali bronasta doba).
Vir: glej poglavje 2, v tem zborniku.
22. Mačkovec (pri vasi)
Naselbina; prazgodovina.
Vir: V. Stare, Mačkovec, v: *Arheološka najdišča Slovenije,* 1975, 237.
23. Mačkovec (na njivah)
Grobišče; antika.
Vir: V. Stare, Mačkovec, v: *Arheološka najdišča Slovenije,* 1975, 237.
24. Koprivnik (okolica)
Naselbina(?); prazgodovina.
Vir: V. Stare, Koprivnik, v: *Arheološka najdišča Slovenije,* 1975, 238.
25. Koprivnik (pri vasi)
Grobišče; antika.

5. Rimsko (Remergrunt), (in the forest along the road Kočevje–Črnomelj)
Burial ground (mounds); prehistory.
Source: F. Truhlar, Remergrunt, in: *Arheološka najdišča Slovenije,* 1975, 238.
6. Rajndol
Burial ground (mounds); undefined.
Source: V. Stare, Rajndol, in: *Arheološka najdišča Slovenije,* 1975, 238.
7. Mozelj
Settlement(?); prehistory.
Source: V. Stare, Mozelj, in: *Arheološka najdišča Slovenije,* 1975, 238.
8. Mozelj
Chance find (coin of Vespasian); antiquity.
Source: Kos 1988, 418.
9. Črni potok near Kočevje
Settlement(?); prehistory.
Source: V. Stare, Črni potok pri Kočevju, in: *Arheološka najdišča Slovenije,* 1975, 237.
10. Dolga vas
Settlement(?); prehistory.
Source: V. Stare, Dolga vas, in: *Arheološka najdišča Slovenije,* 1975, 237.
11. Merešloh or Medvedova or Črna jama
Cave site(?); undefined (prehistory or antiquity).
Source: see chapter 2, in this monograph.
12. Kočevje (railroad)
Chance find (antenna sword – NM Dunaj, inv. no. 70132); Bronze Age (the Urnfield culture – Ha B).
Source: V. Stare, Kočevje, in: *Arheološka najdišča Slovenije,* 1975, 237; Šinkovec 1995, 111, Pl. 32: 219.
13. Kočevje
Chance finds (coins of Nerva, Trajan, Antoninus Pius, and two illegible – lost); antiquity.
Source: V. Stare, Kočevje, in: *Arheološka najdišča Slovenije,* 1975, 237; Kos 1988, 418.
14. Grčmanova jama
Cave site (settlement area(?)); prehistory (Bronze Age(?)).
Source: see chapter 2, in this monograph.
15. Stara cerkev
Settlement, burial ground (mounds); prehistory.
Source: V. Stare, Stara cerkev, in: *Arheološka najdišča Slovenije,* 1975, 237.
16. Gorenje (behind J. Hren's house)
Burial ground (a mound); Early Iron Age(?).
Source: V. Stare, Gorenje, in: *Arheološka najdišča Slovenije,* 1975, 237.
17. Ciganska jama
Cave site (settlement area, burial ground(?)); Upper Palaeolithic, Neolithic (the Sava group), Eneolithic (the Lasinja culture, horizon of pottery with furrowed incisions), and Modern Period.
Source: see chapter 2, in this monograph.
18. Gorenja Topla reber (St Peter)
Hilltop settlement(?); antiquity.
Source: T. Knez, Gorenja Topla reber, in: *Arheološka najdišča Slovenije,* 1975, 237.
19. Mala knežja jama
Cave site (settlement area); prehistory.
Source: see chapter 2, in this monograph.
20. Topli vrh
Hilltop settlement; prehistory (Neolithic and/or Eneolithic).
Source: T. Knez, Novi Tabor, in: *Arheološka najdišča Slovenije,* 1975, 244; Dular 1985, 102, Fig. 97; 2001, 94, Fig. 15; Mason 1994, 188, Figs. 2: 12; 3: 12; 2008, 21, map 1: 12; Mason, Andrič 2009, 332, Fig. 3: 19; Križ 2009b, 51; 2009c, 63.

Vir: V. Stare, Koprivnik, v: *Arheološka najdišča Slovenije,* 1975, 238.

26. Sv. Križ nad Stražnjim vrhom

Višinska naselbina; (pozna)bronasta in/ali železna doba.

Vir: Dular 1985, 63, sl. 5: 22, 6–11, 27; Dular, Tecco - Hvala 2007, 350, sl. 275; Mason 2008, 25, zemljevid 2: 8.

1.4 SPAHA V PROSTORU IN ČASU

Arheološke raziskave na Spahi, ki jih je od leta 1979 do 1984 vodila Greta (Margareta) Hirschbäck - Merhar, so razkrile večslojno prazgodovinsko najdišče in ohranjen zidan temelj stražnice iz obdobja turških vpadov.

Najstarejšo poselitev na Spahi oz. prvo poselitveno fazo datiramo v savsko skupino.[16] V tem obdobju so bile na zgornjem naselbinskem platoju postavljene najmanj 3 oz. 4 hiše in zelo verjetno tudi kamniti zid, ki je varoval naselje na lažje dostopnih mestih. Najboljše analogije za keramiko smo našli v Moverni vasi, Ozlju, na Resnikovem prekopu in Gradcu pri Mirni. Na njej prevladujejo vrezani motivi v kombinaciji z odtisi. Nekoliko drugače je na bolj oddaljenih najdiščih, kot sta Čatež – Sredno polje in Ptujski grad, kjer so odtisi pogostejši okrasni motiv. Tako se, vsaj na prvi pogled, izrisujeta najmanj dve območni varianti savske skupine, a je zaradi stanja raziskav, predvsem množine neobjavljenih najdb, do dokončnega sklepa treba še počakati.

Zelo zanimiv rezultat je dala tudi tipološka analiza keramike, ki v nasprotju z mnenjem večine slovenskih raziskovalcev tega obdobja,[17] savsko skupino postavlja za sočasno poznolengyelskim (Lengyel III) najdiščem na severovzhodu Slovenije in zahodu Madžarske, MOG IIb in Wolfsbach v Avstriji in še posebej kulturi Seče ter 4. stopnji sopotske kulture na Hrvaškem,[18] kjer je najti veliko analogij tudi za ornament na keramiki in ne v glavnem samo za oblike.[19]

Spaha je bila drugič obljudena v obdobju zgodnjega eneolitika.[20] Poselitev je bila še vedno skoncentrirana na vrhnjem platoju. Število ugotovljenih lokacij, kjer so bile postavljene hiše, se poveča na 6, kot kažejo tkalske uteži so se v eni izmed njih ukvarjali s tkanjem.[21] Na podlagi vertikalne in horizontalne stratigrafije sklepamo, da v tem obdobju zgornjega naselbinskega platoja zelo verjetno ne obdaja več kamniti zid. Arheološke najdbe nedvomno kažejo na vasico lasinjske kulture. Najbližje analogije smo našli v Moverni vasi, Ljubljansko barje pa npr. takšne keramike ne pozna.

Koliko časa je obstajala vasica lasinjske kulture ni mogoče ugotoviti, dejstvo je, da se poselitev na Spahi zelo verjetno obnovi v obdobju keramike z brazdastim

[16] Glej poglavje 5, v tem zborniku.

[17] Glej npr. Guštin 2005a.

[18] Glej poglavje 5.3.1, v tem zborniku.

[19] Prim. z Marković 1994, t. 13; 18; 19a; 19b.

[20] Glej poglavje 5.2, v tem zborniku.

[21] Glej poglavje 3.3.2.5, v tem zborniku.

21. Spodmol pri Macesnovi gorici

Cave site (settlement area(?)); prehistory (probably Eneolithic or Bronze Age).

Source: see chapter 2, in this monograph.

22. Mačkovec (near the hamlet)

Settlement; prehistory.

Source: V. Stare, Mačkovec, in: *Arheološka najdišča Slovenije,* 1975, 237.

23. Mačkovec (in the fields)

Burial ground; antiquity.

Source: V. Stare, Mačkovec, in: *Arheološka najdišča Slovenije,* 1975, 237.

24. Koprivnik (surroundings)

Settlement(?); prehistory.

Source: V. Stare, Koprivnik, in: *Arheološka najdišča Slovenije,* 1975, 238.

25. Koprivnik (near the hamlet)

Burial ground; antiquity.

Source: V. Stare, Koprivnik, in: *Arheološka najdišča Slovenije,* 1975, 238.

26. Sv. Križ above Stražnji vrh

Hilltop settlement; (Late) Bronze and/or Iron Age.

Source: Dular 1985, 63, Figs. 5: 22, 6–11, 27; Dular, Tecco - Hvala 2007, 350, Fig. 275; Mason 2008, 25, map 2: 8.

1.4 SPAHA IN TIME AND SPACE

The archaeological research at Spaha, which was from 1979 until 1984 led by Greta (Margareta) Hirschbäck - Merhar, revealed a multi-layered prehistoric site and a preserved built foundation of a watchtower from the period of the Turkish invasions.

The oldest settlement at Spaha or the first settlement phase is dated to the Sava group.[15] In this period at the upper settlement plateau at least 3 or 4 houses were built and very probably also a stone wall to protect the settlement at the more easily accessible points. The best analogies for pottery were found in Moverna vas, Ozalj, at Resnikov prekop, and Gradec near Mirna. Incised motives in combination with imprints prevail. The situation at some of the further away sites like Čatež – Sredno polje and Ptujski grad is slightly different because here imprints appear as a more frequent decoration. Thus, at least at the first sight, there are at least two regional variants of the Sava group, nevertheless, primarily due to the multitude of unpublished data the final conclusion is yet to be made.

The typological analysis of pottery also yielded very interesting results which, contrary to the belief of most Slovenian researchers of this period,[16] places the Sava group as contemporary to Lengyel III sites in the northeast of Slovenia and western Hungary, MOG IIb, and Wolfsbach in Austria, and especially the Seče culture and the phase 4 of the Sopot culture in Croatia,[17]

[15] See chapter 5, in this monograph.

[16] See e.g. Guštin 2005a.

[17] See chapter 5.3.1, in this monograph.

vrezom. Keramike iz tega časa je malo. Predpostavljamo, da sta bili postavljeni najmanj 2 hiši. Pomembno je tudi, da sta bila v tem času obljudena tako zgornji kot severni del spodnjega platoja. Analogije za keramiko so v Ciganski jami, Moverni vasi, na Gradcu pri Mirni, Ljubljanskem barju, Gradišču nad Dešnom in po drugih najdiščih tega časa v osrednji, severovzhodni in tudi že zahodni Sloveniji.

Proti pričakovanjem[22] je bila Spaha obljudena tudi v obdobju kulture žarnih grobišč, na kar kaže sicer majhno število najdb, ki so bile odkrite pri izkopu sonde III.[23] Zadnje gradbene aktivnosti pa moremo postaviti v čas turških vpadov, najverjetneje v 16. stoletje, ko so na zgornjem prazgodovinskem naselbinskem platoju postavili leseno stražnico, katere kamnit temelj se je ohranil do danes.[24]

Relativnokronološko datacijo večkratnih poselitev na Spahi smo dopolnili tudi z absolutnokronološkimi podatki. Ker radiokarbonskih datumov s Spahe nimamo, smo se v analizi sklicevali za posamezno poselitveno fazo na datume s tipološko "sočasnih" najdišč po Sloveniji in tudi širše. Pri tem smo se omejili na neolitik in eneolitik.

Po podatkih, ki smo jih zbrali, moremo savsko skupino in s tem tudi najstarejšo poselitev na Spahi okvirno postaviti v drugo četrtino 5. tisočletja, v razpon med 4712 in 4547 pr. Kr., oz. med 4726 in 4504, če upoštevamo celoten nabor tudi "problematičnih" datumov.[25] Veliko mlajša je naselbina lasinjske kulture. Glede na datume iz Slovenije – verjetni razpon med 4366 in 4080 pr. Kr. – in sosednjih območij govorimo o obdobju zadnje četrtine 5. in o začetku 4. tisočletja.[26] Iz druge četrtine 4. tisočletja so najdbe horizonta keramike z brazdastim vrezom. Radiokarbonske datacije kažejo na verjetni razpon med 3775 in 3519 pr. Kr., kar potrjujejo tudi rezultati arheološko-dendrokronoloških raziskav kolišč na Ljubljanskem barju.[27]

Kakor je razvidno, absolutni datumi pritrjujejo relativni kronologiji, da je savska skupina starejša od lasinjske kulture in slednja od horizonta keramike z brazdastim vrezom. Pri natančnejšem pregledu in primerjavah s podatki z območij izven Slovenije pa se na videz idealna kronološka shema zaplete. Največ neujemanja je pri umeščanju savske skupine. Na podlagi tipološke analize govorimo o naslednjem horizontu: Savska skupina – Lengyel III – MOG IIb – Wolfsbach – Seče – Sopot 4 – Tiszapolgár. Radiokarbonski datumi kažejo na drugačno sočasnost: Savska skupina – Lengyel III – MOG Ia in Ib – Sopot II-B – pozni neolitik in delno Proto-Tiszapolgár na vzhodu Madžarske. Razlogov za

[22] Glej npr. Dular 1985, 97; 2001, 94.

[23] Glej poglavje 5.3.1, v tem zborniku.

[24] Simonič 1939, 80; glej še poglavje 3: *sl. 3.5* in *3.6*, v tem zborniku.

[25] Glej poglavje 5.3.2.1 in *tab. 5.4:* 10,11, v tem zborniku.

[26] Glej poglavje 5.4, v tem zborniku.

[27] Glej poglavje 5.4, v tem zborniku.

where many analogies can be found also for the pottery ornament and not just for the shapes.[18]

Spaha was populated for the second time in the period of the Early Eneolithic.[19] The settlement was still concentrated at the top plateau. The number of discovered locations with houses increases to 6, due to the discovery of weaving weights we can say that one of them was the place for weaving.[20] On the basis of the vertical and horizontal stratigraphy we conclude that in this period the upper settlement plateau is very probably no longer surrounded by a stone wall. Archaeological finds undoubtedly point to a hamlet of the Lasinja culture. The closest analogies were found in Moverna vas, whereas the Ljubljansko barje, for example, does not know such pottery.

It is impossible to determine how long the village of the Lasinja culture existed but the fact is that the settlement at Spaha was most probably renewed in the period of the horizon of pottery with furrowed incisions. Pottery from this time is scarce. We assume that there were at least 2 houses. It is also important that at that time both, the upper and the northern part of the lower plateau, were populated. Analogies for pottery are in Ciganska jama, Moverna vas, Gradec near Mirna, at the Ljubljansko barje, Gradišče above Dešen, and other sites of this time in the central, north-eastern, and already also in the western Slovenia.

Contrary to the expectations[21] Spaha was populated also in the period of the Urnfield culture; the basis for this conclusion are a small number of finds discovered in trench III.[22] The last building activities can be set in the time of the Turkish invasions, most probably in the 16th century, when a wooden watchtower was built on the upper settlement plateau and the foundation of which is preserved until the present day.[23]

Relative chronological dating of multiple settlings of Spaha has been supplemented by the absolute chronological data. Since we do not have radiocarbon dates from Spaha the analysis used for every individual settlement phase dates from the typologically "simultaneous" sites in Slovenia and wider. Here we limited ourselves to the Neolithic and Eneolithic.

According to the gathered data the Sava group and thus also the oldest settlement at Spaha can be approximately set into the second quarter of the 5th millennium, between 4712 and 4547 BC or between 4726 and 4504, if we consider the complete set of also "problematic" dates.[24] Much younger is the settlement of

[18] Cf. Marković 1994, Pls. 13; 18; 19a; 19b.

[19] See chapter 5.2, in this monograph.

[20] See chapter 3.3.2.5, in this monograph.

[21] See e.g. Dular 1985, 97; 2001, 94.

[22] See chapter 5.3.1, in this monograph.

[23] Simonič 1939, 80; see also chapter 3: *Figs. 3.5* and *3.6*, in this monograph.

[24] See chapter 5.3.2.1 and *Tab. 5.4:* 10,11, in this monograph.

neujemanje zaenkrat ne znamo pojasniti, je pa očitno. To je razvidno tudi iz absolutnih datumov za grobišče Varna I, ki je relativnokronološko postavljeno najbolj zgodaj na konec tiszapolgárske kulture, radiokarbonski datumi pa kažejo na korelacijo s prototiszapolgárskim horizontom, na čas 46. in prve polovice 45. stoletja pr. Kr.[28] Presenetljivo je tudi, da je pri lasinjskih datumih in datumih iz drugih realtivnokronološko sočasnih kultur zaznati večjo skladnost. V Sloveniji, na Hrvaškem, jugozahodnem Slovaškem, v zahodni Panoniji na Madžarskem in delno v Avstriji govorimo o obdobju zadnje četrtine 5. in o začetku 4. tisočletja pr. Kr. Presenetljivo in hkrati nesprejemljivo je, da se npr. hrvaški radiokarbonski datumi za lasinjsko kulturo prekrivajo z datumi stopnje Sopot III po S. Dimitrijeviću, zato J. Balen upravičeno meni, da se je življenje klasične sopotske kulture končalo do najkasneje okoli leta 4500,[29] kar se vsekakor prekriva z absolutno in, delno, tudi relativno kronologijo[30] savske skupine.

Radiokarbonsko datiranje je pokazalo še na druge pomanjkljivosti, ki so sicer bolj lokalnega značaja in bodo verjetno odpravljene po objavi najdb z najdišč, ki jih omenjamo v nadaljevanju. Mi. Horvat je pri tipološki opredelitvi "neolitskega" keramičnega gradiva iz SE 002/1/1 z najdišča Col 1 pri Podgračenem ugotovila, da so v tej stratigrafski enoti naleteli na ponovitev keramičnih oblik, kakršne srečamo v četrti in deloma peti fazi Moverne vasi (SE 050 in 022) in delno najstarejšem horizontu pokopov v Ajdovski jami (SE 044).[31] "Tako lahko, ob upoštevanju stratigrafsko in oblikovno opredeljene lončenine iz omenjenih najdišč, keramični zbir dokumentiran v najdišču Col 1 uvrstimo na prehod iz srednjega v pozni neolitik, s tem, da moramo pretežni del keramičnega zbira vseeno uvrstiti v mlajši neolitik."[32] Kar je, če nič drugega, vsaj presenetljivo, saj so najnovejši radiokarbonski datumi pokazali, da je verjetni razpon pokopov v Ajdovski jami – šlo naj bi za stratigrafsko in kulturno ločena horizonta SE 044 in 043, v kar se sicer dvomi[33] – treba zožiti v interval od 10–20 let in to v obdobju okoli leta 4300 pr. Kr.[34] Tako se zastavlja več vprašanj. Kako to, da izkopavalci niso prepoznali analogij za najdbe iz SE 002/1/1 tudi v t. i. keramičnem zbiru

[28] Glej poglavje 5.3.2.4, v tem zborniku; Yerkes, Gyucha, Parkinson 2009, 1071.

[29] Balen et al. 2009, 35.

[30] Glej Marković 1994, 85, ki III. stopnjo sopotske kulture po Dimitrijeviću deli na stopnji 3 in 4, slednja pa je relativnokronološko sočasna kulturi Seče.

[31] Mi. Horvat (2009, 31) na drugem mestu piše, da je keramika iz Cola 1 pri Podgračenem primerljiva najdbam iz pete in šeste faze v Moverni vasi in mlajše faze pokopov v Ajdovski jami, kar pa ne spremeni vsebine tega odstavka, nasprotno, zdi se, da ti podatki še bolj potrjujejo pravilnost našega razmišljanja.

[32] Horvat 2005, 153.

[33] Glej Culiberg, Horvat, Šercelj 1992, sl. 2; Horvat 2005, 153; 2009, 28 in prim. z Bonsall et al. 2007, 730.

[34] Bonsall et al. 2007, 734.

the Lasinja culture. Considering the dates from Slovenia – the probable range between 4366 and 4080 BC – and neighbouring areas we are dealing with the period from the last quarter of the 5th and beginning of the 4th millennium.[25] Finds from the horizon of pottery with furrowed incisions originate from the second quarter of the 4th millennium. Radiocarbon dates indicate the probable range between 3775 and 3519 BC, which is confirmed also by the results of the archaeo-dendrochronological research of pile-dwellings at the Ljubljansko barje.[26]

As seen above, the absolute data agree with the relative chronology that the Sava group is older than the Lasinja culture and the latter also from the horizon of pottery with furrowed incisions. The more precise inspection and comparison with the data from areas outside Slovenia immediately complicate the seemingly ideal chronological scheme. The greatest discrepancies occur with the positioning of the Sava group. Based on the typological analysis we speak about the following horizon: the Sava group – Lengyel III – MOG IIb – Wolfsbach – Seče – Sopot 4 – Tiszapolgár. Radiocarbon data indicate a different simultaneity: the Sava group – Lengyel III – MOG Ia and Ib – Sopot II-B – Late Neolithic and partly Proto-Tiszapolgár in the east of Hungary. The reasons for this discrepancy cannot be explained at the moment but it is an obvious one. This is clear also from the absolute dates for the cemetery of Varna I which is relatively chronologically set at the earliest to the end of the Tiszapolgár culture, while the radiocarbon dates point to the correlation with the Proto-Tiszapolgár horizon, to the time of the 46th and the first half of the 45th century BC.[27] It is also surprising that the Lasinja dates and dates from other relatively chronologically simultaneous cultures show greater congruity. In Slovenia, Croatia, south-western Slovakia, western Pannonia in Hungary, and partly also in Austria we speak about the period of the last quarter of the 5th and the beginning of the 4th millennium BC. It is surprising and unacceptable that for example Croatian radiocarbon dates for the Lasinja culture overlap with the dates of Sopot III phase according to S. Dimitrijević, therefore J. Balen justifiably believes that the life of the classic Sopot culture ended at the latest around 4500,[28] which certainly overlaps with the absolute and, partly, also relative chronology[29] of the Sava group.

The radiocarbon dating also revealed other imperfections, which are of a more local character and

[25] See chapter 5.4, in this monograph.

[26] See chapter 5.4, in this monograph.

[27] See chapter 5.3.2.4, in this monograph; Yerkes, Gyucha, Parkinson 2009, 1071.

[28] Balen et al. 2009, 35.

[29] See Marković 1994, 85, who divides phase III of the Sopot culture according to Dimitrijević into phases 3 and 4, the latter being relatively chronologically simultaneous to the Seče culture.

mlajšega horizonta pokopov,[35] tj. v SE 043? Kako dolgo časovno obdobje opisuje nastajanje SE 002/1/1 z najdišča Col 1? Ali je res mogoče v keramiki, ki je absolutnokronološko ozko datirana v manj kot deset do dvajsetletno obdobje, prepoznavati značilnosti prehoda iz srednjega v mlajši neolitik oz. pretežno mlajšega neolitika?[36] Ali je večstoletna sekvenca neolitskih poselitvenih faz Moverne vasi,[37] glede na zgoraj zapisano in interpretacijo nekoga, ki je dober poznavalec osrednjeslovenske neolitske keramike, realnost ali zgolj fikcija?

Rezultati naših analiz torej kažejo, da sta vrhnja platoja Spahe večkrat služila kot prostor za bivanje. Ob tem se ne moremo izogniti ključnemu vprašanju o razlogu(-ih), zaradi katerega je bilo najmanj petkrat izbrano ravno to mesto.

Prvi in hkrati najverjetnejši razlog moremo iskati v vlogi, ki jo je Spaha imela v obdobju turških vpadov v 15. in 16. stoletju,[38] ko je bila na zgornjem platoju arheološkega najdišča postavljena lesena stražnica z zidanim temeljem. Z njega so domači podložniki lahko že od daleč in s tem še pravočasno opozarjali na plenilske turške horde, ki so prihajale z juga, sprva bolj po Poljanski dolini in kasneje večkrat mimo Kostela, ali se preko Kočevske vračale s pohoda na sever.[39] O tem izčrpno piše I. Simonič,[40] ki posredno, sklicujoč se na kočevski urbar, navaja, da je bila na Spahi (Grädischu) organizirana stražarska služba, v mirnem času s posadko 6 mož, v sovražni nevarnosti pa kar z 18 možmi, ki je morala stražiti, patruljirati in paziti na kresove, da so svojega pravočasno prižgali podložniki iz Knežje Lipe, Preriglja in Nemške Loke. Zaradi tega so bili celo oproščeni davka in so leta 1574 prosili komisarja še za nadaljnjo oprostitev. O velikem pomenu te službe govori tudi podatek, da so s tega hriba dajali poročila Vinici, Beli krajini in Kostelu ter Modrušu in Ozlju na Hrvaškem, s strelom pa znak za zažig kresov pri Mozlju, Škrilju, Rogatem hribu, Ribnici in preko Turjaka Ljubljani.

Na pomembno strateško lego Spahe kaže tudi razporeditev arheoloških najdišč na tem območju v neo- in eneolitiku. Poleg naselbine na Spahi je v smeri proti jugu na 550 m visokem hribu tik nad Kolpo stalo manjše naselje Straža nad Gorenjimi Radenci.[41] V smeri proti vzhodu, torej neposredno proti Beli krajini, kjer so izpričana naselja kot npr. Ržišče (oz. Ržišča),[42] Gradac[43]

[35] Kar sicer kasneje prepozna tudi sama Mi. Horvat (glej op. 31 in Horvat 2009, 28).

[36] Glej še Horvat 2009, sl. 5.

[37] "Long-term" po Budja 1994a, 76; za radiokarbonske datacije glej poglavje 5: *tab. 5.1*, v tem zborniku.

[38] Glej Simonič 1939, 69; Simoniti 1999, 412; Ferenc 2005, 36.

[39] Simonič 1939, 69.

[40] 1939, 80.

[41] Dular 2001, 94, sl. 17, t. 7: 13–18.

[42] Mason, Bricelj 2000–2004.

[43] Mason 1994.

will be probably eliminated after the publishing of finds from those sites that are mentioned here on. Mi. Horvat discovered in the typological definition of "Neolithic" pottery from SE 002/1/1 from the site Col 1 near Podgračeno that in this stratigraphic unit there was a repetition of pottery shapes which we encounter in the fourth and partly the fifth phase of Moverna vas (SE 050 and 022) and partly in the oldest horizon of burials in Ajdovska jama (SE 044).[30] "Thus we can, while considering the stratigraphically and formally defined pottery from the mentioned sites, assign the pottery set documented at the site Col 1 to the transition from the Middle to Late Neolithic, yet we still have to assign the greatest part of the pottery collection to the Late Neolithic."[31] Which is, if nothing else, at least surprising since the most recent radiocarbon dates have shown that the probable range of burials in Ajdovska jama – these are supposedly two stratigraphically and culturally separate horizons SE 044 and 043, though this has been doubted[32] – needs to be narrowed into the interval of 10–20 years and this in the period around 4300 BC.[33] Thus several questions are posed. How come the excavators did not recognise the analogies for finds from SE 002/1/1 also in the s.c. pottery pool of the younger burial horizon,[34] i.e. in SE 043? How long is the time period which describes the creation of SE 002/1/1 from the site Col 1? Is it really possible to recognise in the pottery, which is absolutely chronologically narrowly dated into less than a ten to twenty year period, the characteristics of the transition from the Middle to Late Neolithic or mostly Late Neolithic?[35] Is the several-century sequence of Neolithic settlement phases of Moverna vas,[36] according to what is written above and the interpretation of someone who is a good connoisseur of the central Slovenian Neolithic pottery, a reality or just fiction?

The results thus show that the top two plateaus of Spaha served as a living space several times. Here we cannot avoid the key question about the reason(s) why this exact spot was chosen at least five times.

[30] Mi. Horvat (2009, 31) at other point writes that the pottery from Col 1 near Podgračeno is comparable to the finds from the fifth and sixth phase in Moverna vas and the younger horizon of burials in Ajdovska jama, all of which does not alter the contents of this passage, to the contrary it seems that these data even further confirm the accuracy of our reasoning.

[31] Horvat 2005, 153.

[32] See Culiberg, Horvat, Šercelj 1992, Fig. 2; Horvat 2005, 153; 2009, 28 and cf. Bonsall et al. 2007, 730.

[33] Bonsall et al. 2007, 734.

[34] Which is later on recognised also by Mi. Horvat herself (see footnote 30 and Horvat 2009, 28).

[35] See also Horvat 2009, Fig. 5.

[36] "Long-term" according to Budja 1994a, 76; for radiocarbon dates see chapter 5: *Tab. 5.1*, in this monograph.

in Moverna vas,[44] je stalo na 847 m visokem hribu dobro zavarovano in morda, podobno kot velja za Spaho v obdobju savske skupine, celo s kamnitim zidom dodatno utrjeno naselje Židovec nad Miklarji.[45] O obstoju prazgodovinske, morda neo-eneolitske poti v tej smeri[46] govori tudi odkritje sedaj izgubljene kamnite sekire pred vhodom v jamo Grdanji skedenj.[47] V drugo smer proti severozahodu se pri Kočevju nahaja Ciganska jama z izpričanimi najdbami iz obdobja savske skupine, morda lasinjske kulture in zagotovo horizonta keramike z brazdastim vrezom,[48] kamor sodi tudi grobišče v Koblarski jami.[49] V jugozahodni smeri proti Gorskemu Kotarju in naprej proti Kvarnerju so izpričane naselbinske najdbe neo- in/ali eneolitske starosti v Lukovi jami[50] in na Kostelu.[51] V reki Kolpi, verjetno med Faro in Kostelom pa je bila najdena kamnita sekira iz serpentina, ki jo hrani Narodni muzej Slovenije pod inv. št. P 6391.[52]

Na smeri komunikacijskih povezav kažejo tudi petrografske analize kamnitih sekir, ki jih je opravil F. Bernardini s sodelavci.[53] Na Spahi so odkrili sekiro iz "belega kamna" ("white stone").[54] Stratigrafsko gledano je verjetno iz obdobja savske skupine.[55] Izvirala pa naj bi celo iz zahodne ali osrednje Srbije oz. s centralnega Balkana. Sekiri iz dolerita, skupaj s tistimi iz Istre, s Krka, iz zahodne in osrednje Slovenije,[56] verjetno izvirata iz banijskega ofiolitskega kompleksa. Prva[57] je bila najdena v režnju s prevladujočo keramiko lasinjske kulture,[58] medtem ko je bila druga[59] odkrita v sondi IV, kjer so naleteli na najdbe horizonta keramike z brazdastim vrezom.[60] Podobne starosti je verjetno tudi sekira iz metaultramafita,[61] zanjo se domneva izvorno območje nekje na severnem delu Balkana.

Iz oddaljenih krajev, morda celo iz severne Italije, je na Spaho prišel visokokakovostni roženec z belimi vložki.[62] Na podlagi spremljajoče keramike se zdi, da ta orodja najverjetneje datirajo v obdobje lasinjske kulture.[63]

[44] Dular 1985, 101, 102, sl. 96.
[45] Dular 2001, 94, sl. 16.
[46] Prim. z Dular 1985, 97.
[47] F. Leben, Doblička gora, v: *Arheološka najdišča Slovenije,* 1975, 240; Dular 1985, 58, 59, sl. 19.
[48] Glej Velušček 2011.
[49] Jamnik et al. 2002; glej še Velušček 2004c, 242, sl. 5.3.8.
[50] Turk et al. 1996.
[51] Velušček 1996.
[52] Velušček 1996, 56 in tam navedena literatura.
[53] Glej poglavje 6, v tem zborniku.
[54] Poglavje 4: *sl. 4.8:* 7, v tem zborniku.
[55] Glej poglavje 4: *t. 4.3; 4.4:* 1–19, v tem zborniku.
[56] Glej poglavje 6: *sl. 6.3* in *tab. 6.3*, v tem zborniku.
[57] Poglavje 4: *sl. 4.8:* 6, v tem zborniku.
[58] Glej poglavje 3.3.2.1, v tem zborniku.
[59] Poglavje 4: *sl. 4.16:* 13, v tem zborniku.
[60] Glej poglavji 3.3.2.3 in 4: *t. 4.16:* 9–12, v tem zborniku.
[61] Glej poglavje 4: *t. 4.17:* 4, v tem zborniku.
[62] Glej poglavje 7, v tem zborniku.
[63] Glej poglavji 4 in 7, v tem zborniku.

The first and at the same time the most probable reason needs to be found in the role that Spaha played in the period of the Turkish invasions in the 15th and 16th centuries,[37] when there was a wooden watchtower with a built foundation located at the upper plateau of the archaeological site. From here the local subjects could from afar and thus in time warn about the arrival of plundering Turkish hordes coming from the south, at first primarily through the Poljanska dolina and later frequently past Kostel, or returning through the Kočevska from their raids to the north.[38] All this is extensively dealt with by I. Simonič,[39] who indirectly, referring to the Kočevje land registry, states that there was a watch service organised at Spaha (Grädisch), which in time of peace had 6 men and during the enemy danger even 18 men, who had to guard, patrol, and watch over the beacons to enable the subjects at Knežja Lipa, Prerigelj, and Nemška Loka to start theirs in time. Due to this they were even exempt from paying taxes and in 1574 they asked the commissioner for the further tax exemption. The great importance of this service is revealed also by the data that this hill gave reports to Vinica, Bela krajina, and Kostel, and Modruš and Ozalj in Croatia, while a shot was a sign to start the bonfires at Mozelj, Škrilj, Rogati hrib, Ribnica, and over Turjak to Ljubljana.

The important strategic position of Spaha is also indicated by the distribution of archaeological sites in this area during the Neo- and Eneolithic. In addition to the settlement at Spaha there was, in the direction towards the south, at a 550 m high hill right above the Kolpa also a smaller settlement of Straža above Gorenji Radenci.[40] In the direction towards the east, that is directly towards Bela krajina where we know of settlements like Ržišče (or Ržišča),[41] Gradac[42], and Moverna vas,[43] there was on a 847 m high hill a well guarded and possibly, similarly to Spaha in the Sava group period, even with a stone wall additionally fortified settlement Židovec above Miklarji.[44] The discovery of the now lost stone axe in front of the entrance to the cave Grdanji skedenj[45] also testifies to the existence of a prehistoric, possibly Neo-Eneolithic route in this direction.[46] In the other direction, towards the northwest is near Kočevje Ciganska jama with the attested finds from the period of the Sava group, possibly the Lasinja culture and definitely the horizon of

[37] See Simonič 1939, 69; Simoniti 1999, 412; Ferenc 2005, 36.
[38] Simonič 1939, 69.
[39] 1939, 80.
[40] Dular 2001, 94, Fig. 17, Pl. 7: 13–18.
[41] Mason, Bricelj 2000–2004.
[42] Mason 1994.
[43] Dular 1985, 101, 102, Fig. 96.
[44] Dular 2001, 94, Fig. 16.
[45] F. Leben, Doblička gora, in: *Arheološka najdišča Slovenije,* 1975, 240; Dular 1985, 58, 59, Fig. 19.
[46] Cf. Dular 1985, 97.

Tab. 1.1: Fragmenti žrmelj s Spahe: razporeditev po sondah in režnjih.
Tab. 1.1: Quern fragments from Spaha: distribution according to trenches and slices.

REŽENJ ŠT. / SLICE NO.	SONDA ŠT. / TRENCH NO.					
	I	II	III	IV	VI	VII
ni podatka / no data						2
1		2			9	2
2	1	14	11		46	9
3		39	11	7	22	7
4		3	8	2		1
5		2	1		3	1
SKUPAJ / TOTAL	**1**	**60**	**31**	**9**	**80**	**22**

V prid tezi o pomembnosti Spahe kot naselja ob važni prazgodovinski poti govorijo tudi skromne najdbe, ki kažejo na poselitev v obdobju kulture žarnih grobišč.[64] Pred več kot 30 leti je bil namreč na pobočju Debelega vrha odkrit žarnogrobiščni depo s številnimi bronastimi predmeti in tudi 12 jantarnimi jagodami[65] tipa Tiryns, ki nakazujejo, da je v tistem času mimo Spahe tekla trasa jantarske poti, ki je povezovala Baltik s Sredozemljem.[66]

Naslednji razlog za izbiro poselitvene točke na Spahi, ki se zaenkrat zdi drugotnega pomena in zaradi stanja raziskav ostaja zgolj na ravni delovne hipoteze, je iskati v tem, da so se njeni prebivalci ukvarjali s pridobivanjem surovine za izdelavo žrmelj oz. ročnih mlinov. Naj spomnimo, gre za napravo, ki se jo je največkrat uporabljalo za mletje oz. drobljenje zrnja,[67] v manjši meri pa gotovo tudi za druge namene.[68]

V prid tezi govori več dejavnikov. Na Spahi, 826 m nad morjem, kjer so zelo skromni pogoji za poljedelstvo,[69] je bilo najdenih več kot 200 fragmentov žrmelj iz različnih obdobij. Ob tem, da jih je največ iz neo-eneolitika (glej *tab. 1.1*), je pomembno tudi to, da surovina izvira iz nahajališča permskih klastičnih kamnin, ki jih je najti že manj kot 2 km zračne razdalje od Spahe pri Knežji Lipi.[70, 71] Gre za ležišče, ki je poleg nahajališč podobnih kamnin zahodno od Karlovca in že za ta namen verjetno preveč oddaljenih nahajališč pri Kočevski Reki in Kostelu (*sl. 1.3*), najdostopnejše poljedelskim neo-eneolitskim skupnostim z obrobja sicer redkih, a pomembnih zaplat visokoproduktivne prsti

[64] Glej poglavje 5.3.1, v tem zborniku.
[65] Hirschbäck - Merhar 1984, t. 9: 17.
[66] Teržan 1984.
[67] Smerdel 2002.
[68] Glej Črešnar 2010, 58.
[69] Za celotno pokrajino glej pri Hrvatin 2001, 445.
[70] Glej poglavje 8, v tem zborniku.
[71] Žrmlje iz enake surovine, a izvorno iz drugih nahajališč so izdelovali tudi koliščarji 4. tisočletja pr. Kr. na Ljubljanskem barju (glej Turk 2009, 281–286).

pottery with furrowed incisions,[47] which also includes the cemetry in Koblarska jama.[48] In the south-western direction towards Gorski Kotar and further towards the Kvarner gulf settlement finds of Neo- and/or Eneolithic age are attested in Lukova jama[49] and at Kostel.[50] In the river Kolpa, probably between Fara and Kostel, a stone axe made of serpentine was found and is kept at the National Museum of Slovenia under inv. no. P 6391.[51]

Petrographic analyses of stone axes performed by F. Bernardini and his colleagues[52] also reveal directions of communication connections. At Spaha an axe made of "white stone"[53] was discovered. Stratigraphically speaking it is probably from the period of the Sava group,[54] and it is supposed to originate from the western or central Serbia or the central Balkans. The two axes made of dolerite, together with those from Istria, from the island Krk, western and central Slovenia,[55] they probably originate from the Banija ophiolite complex (Croatia). The first[56] was found in the slice (i.e. context) with the prevailing pottery of the Lasinja culture,[57] while the second one[58] was discovered in trench IV, where there were finds from the horizon of pottery with furrowed incisions.[59] Of similar age is probably also the axe made of meta-ultramafite,[60] for which the origins are supposed somewhere in the northern Balkans.

High-quality chart with white inserts[61] came to Spaha from faraway places, possibly even from northern Italy. Considering the accompanying pottery it seems that these tools most probably date to the period of the Lasinja culture.[62]

In favour of the thesis about the importance of Spaha as a settlement along an important prehistoric route speak the modest finds which indicate the occupation of this place also during the Urnfield culture.[63] Namely, more than 30 years ago an Urnfield depot with numerous bronze objects and 12 amber beads[64] of the type Tiryns was discovered on the slope of Debeli vrh

[47] See Velušček 2011.
[48] Jamnik et al. 2002; see also Velušček 2004c, 242, Fig. 5.3.8.
[49] Turk et al. 1996.
[50] Velušček 1996.
[51] Velušček 1996, 56 and the bibliography given there.
[52] See chapter 6, in this monograph.
[53] Chapter 4: *Fig. 4.8:* 7, in this monograph.
[54] See chapter 4: *Pls. 4.3; 4.4:* 1–19, in this monograph.
[55] See chapter 6: *Fig. 6.3* and *Tab. 6.3*, in this monograph.
[56] *Fig. 4.8:* 6, in this monograph.
[57] See chapter 3.3.2.1, in this monograph.
[58] Chapter 4: *Pl. 4.16:* 13, in this monograph.
[59] See chapter 3.3.2.3, and chapter 4: *Pl. 4.16:* 9–12, in this monograph.
[60] See chapter 4: *Pl. 4.17:* 4, in this monograph.
[61] See chapter 7, in this monograph.
[62] See chapters 4 and 7, in this monograph.
[63] See chapter 5.3.1, in this monograph.
[64] Hirschbäck - Merhar 1984, Pl. 9: 17.

Sl. 1.3: Geološka karta z označenimi neo- oz. eneolitskimi arheološkimi najdišči: 1. Spaha, 2. Ržišče, 3. Gradac in 4. Moverna vas. Podlaga: *Osnovna geološka karta 1 : 100.000,* list Zagreb.
Fig. 1.3: Geological map with marked Neo- or Eneolithic archaeological sites: 1. Spaha, 2. Ržišče, 3. Gradac and 4. Moverna vas. From *Osnovna geološka karta 1 : 100.000,* list Zagreb.

v Beli krajini.[72] Čeprav petrografske analize žrmelj[73] z belokranjskih najdišč še niso bile narejene, se zdi na podlagi tipologije keramike[74] povsem mogoče, da je v

[72] Glej npr. Budja 1990b, 13–15; Andrič 2007a, 180; Mason 2008, 19; Mason, Andrič 2009, 331–333.

[73] Obstoj žrmelj na neo-eneolitskih najdiščih v Beli krajini omenja npr. M. Budja (1990b, 13).

[74] Glej poglavje 5, v tem zborniku.

which indicates that at that time the Amber route connecting the Baltic to the Mediterranean ran past Spaha.[65]

The next reason for choosing Spaha as a settlement point, which is for now of the secondary importance and due to the state of research stays solely on the level of working hypothesis, is to be sought in the fact that its inhabitants were engaged in extracting raw material

[65] Teržan 1984.

neolitiku in eneolitiku na Spahi živel del izvorno "belokranjske" populacije, ki je "trg" v Beli krajini oskrbovala z žrmljami. Morda je šlo celo za sezonsko poselitev, saj so na Spahi zime zelo mrzle, sneg pa se obdrži več mesecev, čemur pa nasprotujejo ostanki obrambnega zidu iz obdobja savske skupine, ki bolj kažejo na stalno poselitev. Kakorkoli že, kot pomoč pri transportu jim je lahko prišlo prav tudi domače govedo, ki ga je med kostnimi najdbami na Spahi največ.[75] K temu naj dodamo, da so belokranjska arheološka najdišča glede na zračno razdaljo oddaljena od pribl. 10 do manj kot 20 km od Spahe oz. skoraj enako do nahajališča klastitov pri Knežji Lipi (*sl. 1.3*). Na Ljubljanskem barju znaša npr. enaka razdalja od nahajališč surovin za žrmlje pribl. 5 km v primeru Starih gmajn[76] in več kot 10 km pri Maharskem prekopu.[77]

Teza o specializirani vasici, kjer so se ukvarjali s pridobivanjem surovine za žrmlje je vsekakor zanimiva, a trenutno arheološko povsem nedokazljiva. V to smer je bilo narejenih odločno premalo analiz. Ni podatkov o petrografskih analizah žrmelj iz Bele krajine, ni podatkov ali je bila Spaha sezonsko ali stalno poseljena in tudi ne o tem, koliko časa je bila obljudena v posameznem arheološkem obdobju. A kljub temu se ne bomo veliko zmotili, če poleg izjemne strateške točke ob prazgodovinski poti, ki je bila pri izboru lokacije prvenstvena, kot drugotno vlogo, glede na stanje raziskav, Spahi pripišemo prebivališče za ljudi, ki so se ukvarjali s pridobivanjem surovine za žrmlje in z njimi verjetno oskrbovali bližnje belokranjske skupnosti.

Kot rečeno, analize so pokazale, da je bila Spaha večkrat poseljena. Med različnimi naselbinskimi fazami je pričakovati tudi dolgotrajne prekinitve v poselitvi oz. izrabi naselbinskih platojev. Najdaljša med njimi je trajala verjetno več kot 2500 let. Radiokarbonski datumi s slovenskih najdišč zaenkrat kažejo, da moremo računati na vsaj približno dvesto- oz. stopetdesetletno prekinitev v poselitvi tudi pri zamenjavi populacije savske skupine z lasinjsko in verjetno nekoliko manj tudi slednje s tisto iz obdobja horizonta keramike z brazdastim vrezom, pa čeprav to še ni neizpodbitno dokazano[78] oz. trenutno ni dokazljivo. Drugi avtorji seveda menijo drugače.[79]

Z nosilci savske skupine pridejo na ozemlje celinske Slovenije stalna poselitev, poljedelstvo, živinoreja in keramika.[80] Poudariti je treba, da se je življenje skupine odvijalo z "izjemno" naglico, kar kažejo tudi podatki za kolišče Resnikov prekop na Ljubljanskem barju, kjer

[75] Glej poglavje 9, v tem zborniku.
[76] Glej Turk 2009.
[77] Glej Horvat, Župančič 1987.
[78] Glej še Balen 2008a, 23.
[79] Npr. Težak - Gregl 2007, 39, 40; Horváth 2010, 97–100.
[80] Prim. Budja 1994a, 76; Turk, Svetličič 2005, 73.

for the manufacturing of querns or manual mills. Be reminded that this is a device which was most often used for grinding or crushing grain,[66] and rarely certainly also for other purposes.[67]

Several factors speak in favour of this thesis. At Spaha, 826 m above sea level, where there are very poor conditions for farming,[68] over 200 quern fragments from various periods were found. Beside the fact that most of them are from the Neo-Eneolithic (see *Tab. 1.1*) it is also important that the raw material originates from the deposit of Permian clastic rocks, which can be found less than 2 km straight line from Spaha at Knežja Lipa.[69], [70] This is a deposit site which is, besides deposits of similar rocks west of Karlovac and thus for this purpose too distant deposits at Kočevska Reka and Kostel (*Fig. 1.3*), the most accessible to the farming Neo-Eneolithic communities from the edges of the rare but important patches of highly productive soils in Bela krajina.[71] Even though petrographic analyses of querns[72] from the sites in Bela krajina have not yet been done it seems on the basis of pottery typology[73] quite possible that in the Neolithic and Eneolithic a part of indigenous "Bela krajina" population lived at Spaha and supplied the "market" in Bela krajina with querns. This could even have been a seasonal settlement because winters at Spaha are very cold and the snow persists for several months – the idea contradicted by the remains of a defence wall from the period of the Sava group indicating more to the permanent settlement. However it may be, the help with the transport could have also been domestic cattle which prevail among bone finds at Spaha.[74] We should add that the Bela krajina archaeological sites are located approx. 10 to less than 20 km straight line from Spaha or almost the same to the clastite deposits at Knežja Lipa (*Fig. 1.3*). At the Ljubljansko barje the same distance to raw material deposits for querns amounts to approx. 5 km in the case of Stare gmajne[75] and over 10 km in the case of Maharski prekop.[76]

The thesis about the specialised village where people were extracting raw material for querns is certainly interesting but at the moment archaeologically

[66] Smerdel 2002.
[67] See Črešnar 2010, 58.
[68] For the entire landscape see Hrvatin 2001, 445.
[69] See chapter 8, in this monograph.
[70] Querns of the same raw material but originating from other deposits were manufactured also by pile-dwellers at the Ljubljansko barje in the 4th millennium BC (see Turk 2009, 281–286).
[71] See e.g. Budja 1990b, 13–15; Andrič 2007a, 180; Mason 2008, 19; Mason, Andrič 2009, 331–333.
[72] The presence of querns at the Neo-Eneolithic sites in Bela krajina is mentioned by e.g. M. Budja (1990b, 13).
[73] See chapter 5, in this monograph.
[74] See chapter 9, in this monograph.
[75] See Turk 2009.
[76] See Horvat, Župančič 1987.

sklepamo na manj kot desetletno poselitev.[81] Tudi sicer je verjetni 1-sigma razpon za savsko skupino približno 150 (200) let. Keramika kaže, da so njeni nosilci prišli z vzhoda oz. jugovzhoda ob rekah Savi, Dravi, Krki in Kolpi in očitno kmalu zatem ta prostor tudi zapustili, kot kažejo radiokarbonski datumi novim priseljencem, tokrat iz kroga lasinjske kulture.

Verjetni razlog za takšne "nagle" spremembe je iskati v dogajanju prve polovice 5. tisočletja pr. Kr. in je v zvezi s povečanim povpraševanjem po bakru.[82] V monografiji o Resnikovem prekopu smo opozorili, da moremo nosilce savske skupine povezati s prvimi iskalci bakra v tem delu Evrope.[83] Takšne povezave pa ni enostavno razložiti. Najprej zaradi tega, ker (še) ni najdb, ki dokazujejo prisotnost bakra v savski skupini. Naslednji problem, ki je obsežnejši, predstavlja neujemanje absolutne in relativne kronologije za 5. tisočletje v srednjem Podonavju (glej zgoraj), kar dejansko onemogoča kakršnokoli resnejšo interpretacijo. Glede na radiokarbonske datacije se npr. ni mogoče strinjati s tezo, da je savska skupina nastala s premikom proti jugozahodu – iz ravnine v hribovit predalpski svet – ali pod vplivom nosilcev zahodnopanonske poznolengyelske stopnje, kot menita npr. L. Horváth in N. Kalicz.[84] Zdi se, da je prej nasprotno.[85]

Kakorkoli že, savsko skupino smo relativnokronološko uvrstili v poznolengyelski horizont, ki je glede na tipologijo najdb sočasen npr. tiszapolgárski kulturi. Vzporednica v celinski Hrvaški je seška kultura. V Bolgariji je to horizont Karanovo VI.[86] Gre za obdobje, ko se je dejansko začel razcvet jugovzhodnoevropske metalurgije bakra.[87]

Kot rečeno, z ozemlja Slovenije tako starih bakrenih najdb (še) ne poznamo. Ne pozna jih npr. seška kultura[88] in bojda tudi ne Lengyel III v zahodni Panoniji.[89, 90] Tezo o prvih iskalcih bakra in metalurgih v tem majhnem kotičku Evrope pa kljub temu lahko gradimo na posrednih argumentih. Najprej na podlagi poselitvenih posebnostih slovenskega prostora v prazgodovini.[91]

[81] Glej Velušček 2006b, 24; Čufar, Korenčič 2006, 124; Toškan, Dirjec 2006, 148.

[82] Glej npr. Kuna 1981; Kalicz 1992, 12.

[83] Velušček 2006b, 44.

[84] 2006, 65.

[85] Prim. *tab. 5.4:* 6 in *5.10* iz poglavja 5, v tem zborniku.

[86] Glej Marković 1994, tab. 1; Bánffy 2002, sl. 10; Radivojević et al. 2010, 2777.

[87] Parzinger 1993, 345; prim. z Radivojević et al. 2010, 2776–2778; Krauß 2008, 129–133; Kalicz 1991, 350; 1992; Kuna 1981.

[88] Marković 1994, 111.

[89] Bánffy 1994, 293; prim. z Dobeš 1989; Dobeš, Peška 2010; Klassen 2010.

[90] Z avstrijske Koroške (Klein St. Paul, Fuchsofen) izvira trakasta spirala ("eine bandförmige Spirale") iz bakra, ki je na podlagi spremljajoče keramike datirana v poznolengyelsko obdobje in/ali lasinjsko kulturo (Gleirscher 2008, 7, sl. 2).

[91] Glej Velušček 2005a, 199–219.

completely improvable. Definitely too few analyses were performed in this direction. There are no data about the petrographic analysis of querns from Bela krajina, there is no data whether Spaha was seasonally or permanently settled, and also no data about how long it was populated in an individual archaeological period. Despite all these we will not be mistaken much if we assign the secondary role of Spaha, in the respect of a state of research, to this being a dwelling for people who were involved in acquiring raw material for querns and probably supplied the near communities of Bela krajina with them.

As stated before, the analyses have shown that Spaha was populated several times. Long interruptions of settlement or use of settlement plateaus are expected between different settlement phases. The longest probably lasted over 2500 years. Radiocarbon dates from Slovenian sites so far reveal that we can count on at least approximately two hundred or one hundred and fifty year break in the settlement also during the population change from the Sava group to the Lasinja culture and probably a few years less during the change from the latter to the horizon of pottery with furrowed incisions even though this has not yet been indisputably proven[77] or cannot be proven at the moment. Other authors, certainly, believe differently.[78]

With the carriers of the Sava group the permanent settlement, farming, animal-husbandry, and pottery arrive at the territory of central Slovenia.[79] It needs to be emphasized that the life of this group progressed "extremely" quickly which is confirmed also by the data from the pile-dwelling Resnikov prekop at the Ljubljansko barje, where we infer the settlement of less than ten years.[80] Also in general the probable 1-sigma range for the Sava group is approximately 150 (200) years. Pottery indicates that its carriers came here from the east or southeast along the rivers Sava, Drava, Krka, and Kolpa and obviously soon after also left this place, according to the radiocarbon dates, to the new settlers, this time of the Lasinja culture.

The probable reason for such "rapid" changes can be found in the happenings of the first half of the 5th millennium BC and is connected to the increased demand for copper.[81] In the monograph about Resnikov prekop we warned that the carriers of the Sava group can be connected to the first copper prospectors in this part of Europe.[82] Nevertheless, such connection is not easy to explain. Firstly because there are (yet) no finds which would prove the presence of copper in the Sava group. The following, more extensive problem is the dis-

[77] See also Balen 2008a, 23.

[78] E.g. Težak - Gregl 2007, 39, 40; Horváth 2010, 97–100.

[79] Cf. Budja 1994a, 76; Turk, Svetličič 2005, 73.

[80] See Velušček 2006b, 24; Čufar, Korenčič 2006, 124; Toškan, Dirjec 2006, 148.

[81] See e.g. Kuna 1981; Kalicz 1992, 12.

[82] Velušček 2006b, 44.

Približno v sredi 6. tisočletja je neolitizacija dosegla severnojadransko obalo in njeno neposredno zaledje na kraški planoti, kjer prevladujejo jamska najdišča. Nedaleč proč od morja pa je stalo naselje na prostem Sermin. Primarna dejavnost je bilo pastirstvo s čredami drobnice. Podatki kažejo, da se neolitski prebivalci Krasa in zahodne Slovenije s poljedelstvom niso ukvarjali.[92] Razlog, zakaj se od obale v notranjost – npr. v osrednjo Slovenijo – niso preveč oddaljili, je iskati v tem, da so črede drobnice potrebovale sol, ki so jo morda v tistem času že uspešno izkoriščali iz morja.[93] V zahodni Sloveniji se ohranijo podobne razmere vsaj do konca neolitika v 5. tisočletju. V najdbah je sprva prepoznati predvsem vplive, zelo verjetno je šlo za naselitev, iz južnejših predelov vzhodnojadranske obale. Vplivi z zahoda niso tako izraziti.[94] Najkasneje v prvi polovici 4. tisočletja se vzpostavijo stiki tudi s celinsko Slovenijo.[95]

Drugače je bilo drugod po Sloveniji. Prvi "poljedelski val" v 6. tisočletju pr. Kr. je območje osrednje in severovzhodne Slovenije zaobšel. Zdi se, da najzgodnejši poljedelci srednje Evrope niso imeli kaj iskati na reliefno zelo razgibanem terenu in ga zato niso naselili. Tako se prve poljedelske skupnosti, ki so izdelovale tudi keramiko, v celinski Sloveniji pojavijo šele z nosilci savske skupine oz. poznolengyelske kulture. Glede na radiokarbonske datume se je to lahko zgodilo najbolj zgodaj malo pred letom 4700 pr. Kr.[96] Ponovno na podlagi radiokarbonskih datumov in predvsem rezultatov raziskav na kolišču Resnikov prekop na Ljubljanskem barju lahko sklepamo, da so se prišleki pojavili nenadoma in razmeroma hitro območje tudi zapustili. Morda niso našli dovolj tistega, kar so iskali?[97] Datumi, če jim gre verjeti, tudi kažejo, da so najstarejša naselja savske skupine na jugu njene razprostranjenosti ob Savi in Kolpi. Razvidno je tudi, da se najdišča te skupine v največjem številu pojavljajo v dolinah – na naravno zavarovanih in dobro preglednih, tudi višinskih, točkah ob rekah ali nad rekami – oz. v porečjih velikih slovenskih rek kot so Sava, Drava, Krka in Kolpa. Slednje spominja na način, po katerem so rudosledci iskali rudo, da so opazovali rečne nanose in vegetacijo – za slednje so potrebovali dobra razgledna mesta –, kajti vedeli so, da različne rastline uspevajo na različnih geoloških podlagah.[98]

Z njimi so se verjetno širile tudi kladivaste sekire tipa Pločnik (glej *sl. 1.4*), ki so iz zelo čistega bakra.[99] Njihova razprostranjenost kaže, da jih je veliko na za-

[92] Npr. Velušček 2005a.

[93] Montagnari - Kokelj 2003, 75–93.

[94] Npr. Leben 1967, 76; Barfield 1972; Biagi, Voytek 1994; Greif, Montagnari - Kokelj 2002.

[95] Glej Velušček, Greif 1998; Velušček 2004a; Bernardini et al. 2009b.

[96] Glej poglavje 5: *tab. 5.4:* 10,11, v tem zborniku.

[97] Prim. s Höppner et al. 2005.

[98] Craddock 1995, 30, 31.

[99] Glej Radivojević et al. 2010, 2777 in tam navedeno literaturo.

crepancy between the absolute and relative chronology for the 5th millennium in the central Danubian region (see above) which actually prevents any kind of serious interpretation. Considering the radiocarbon dates we cannot, for example, agree with the thesis that the Sava group was created by the shift towards the southwest – from the plain into the hilly Alpine foothills – or under the influence of carriers of the west-Pannonian Late Lengyel stage, as is believed by e.g. L. Horváth and N. Kalicz.[83] It seems more to be the opposite.[84]

Be as it may, we relatively chronologically assigned the Sava group to the Late Lengyel horizon which is according to the typology of finds contemporary to, for example, the Tiszapolgár culture. The parallel in central Croatia is the Seče culture. In Bulgaria this is horizon Karanovo VI.[85] This is the period when the prosperity of the southeast European copper metallurgy actually started.[86]

As we said before, we have (yet) no such old copper finds from the territory of Slovenia. They are also unknown to, for example, the Seče culture[87] and supposedly also to Lengyel III in western Pannonia.[88, 89] The thesis about the first copper prospectors and metallurgists in this small part of Europe can nevertheless be built on circumstantial arguments, primarily on the basis of settlement peculiarities of the Slovenian territory in prehistory.[90]

Approximately in the middle of the 6th millennium the neolithisation reached the northern Adriatic coast and its direct hinterland on the Karstic plateau where cave sites prevail. Not far from the sea there was the open-air settlement Sermin. The primary activity was that of shepherds with flocks of ovicaprids. Data shows that Neolithic inhabitants of Karstic plateau and western Slovenia were not involved in farming.[91] The reason why they did not go far away from the coast – e.g. into the central Slovenia – was the fact that the flocks of ovicaprids needed salt which they could have at that time already successfully extracted from the sea.[92] In western

[83] 2006, 65.

[84] Cf. *Tabs. 5.4* and *5.10* from the chapter 5, in this monograph.

[85] See Marković 1994, tab. 1; Bánffy 2002, Fig. 10; Radivojević et al. 2010, 2777.

[86] Parzinger 1993, 345; cf. Radivojević et al. 2010, 2776–2778; Krauß 2008, 129–133; Kalicz 1991, 350; 1992; Kuna 1981.

[87] Marković 1994, 111.

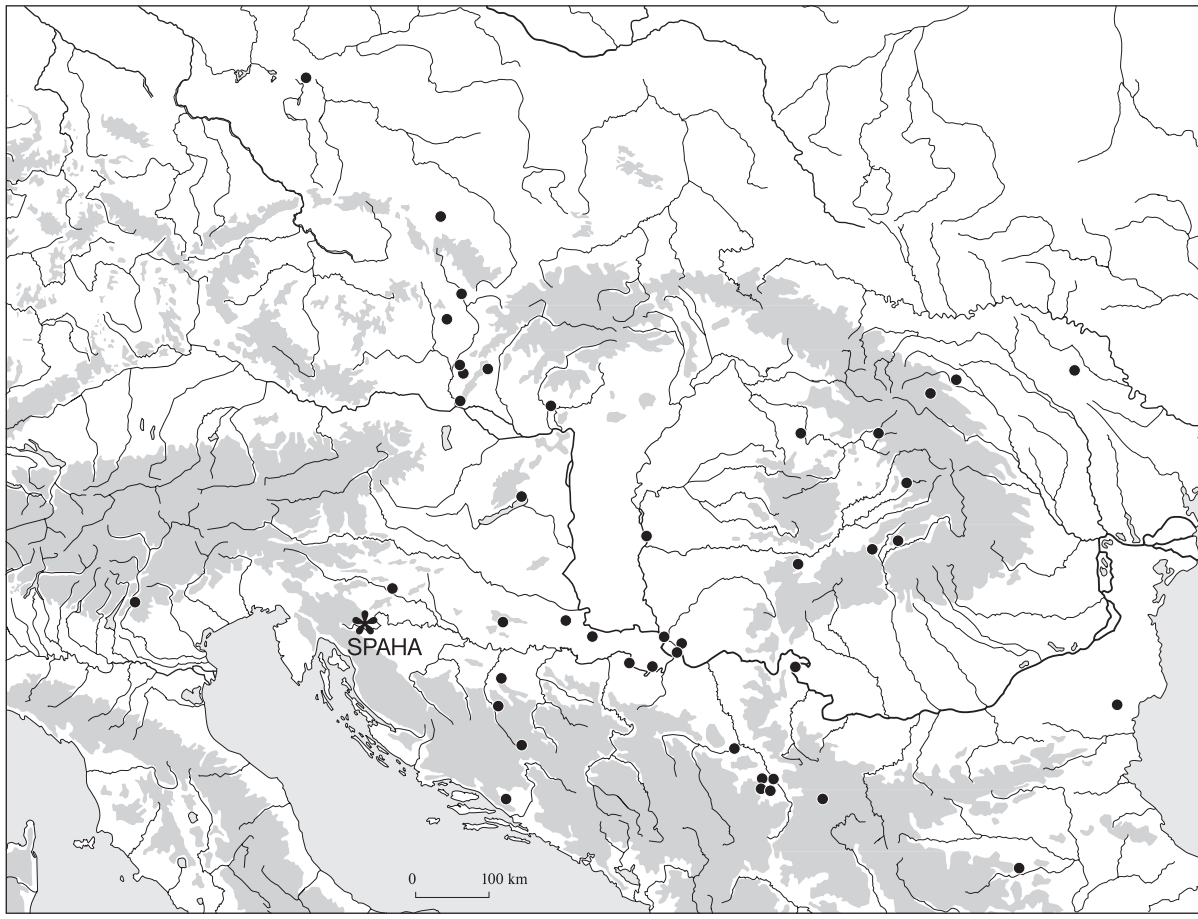
[88] Bánffy 1994, 293; cf. Dobeš 1989; Dobeš, Peška 2010; Klassen 2010.

[89] A banded spiral ("eine bandförmige Spirale") made of copper originates from Austrian Carinthia (Klein St. Paul, Fuchsofen) which is on the basis of the accompanying pottery dated to the Late Lengyel period or/and the Lasinja culture (Gleirscher 2008, 7, Fig. 2).

[90] See Velušček 2005a, 199–219.

[91] E.g. Velušček 2005a.

[92] Montagnari - Kokelj 2003, 75–93.



Sl. 1.4: Arheološko najdišče Spaha in razprostranjenost bakrenih kladivastih sekir tipa Pločnik (po Dobeš, Peška 2010, sl. 3).
Fig. 1.4: The archaeological site Spaha and the distribution of copper hammer axes of the type Pločnik (according to Dobeš, Peška 2010, Fig. 3).

hodnem Balkanu v Srbiji, Bosni in Hercegovini in na vzhodu Hrvaške, pojavljajo pa se tudi npr. v Moldaviji, Romuniji, Bolgariji, na Madžarskem, Slovaškem, Moravskem, Češkem ter celo v severni Italiji, na Poljskem in vzhodni Nemčiji.[100] Na obrobju razprostranjenosti so pogostejše ob velikih rekah (*sl. 1.4*). Spahi najbližja je iz Marije Gorice na Hrvaškem,[101] nedaleč proč od naselja Čatež – Sredno polje.[102] Najzgodnejše datirajo v horizont Vinča-Pločnik II, najmlajše pa v tiszapolgársko kulturo.[103] Sekira z Moravske (Olomouc-Holice) je posredno datirana v horizont moravska slikana keramika IIa/IIb, v absolutni čas okoli sredine 5. tisočletja pr. Kr.[104]

Podobnega izvora – morda iz Srbije oz. osrednje Bosne – je tudi kamnita sekira s Spahe,[105] ki najverjetno

[100] Schubert 1965, 277; Dobeš, Peška 2010, sl. 3.
[101] Dobeš, Peška 2010, sl. 3: 2.
[102] Glej *Atlas Slovenije,* Ljubljana 1985, 156/B.
[103] Kuna 1981, 23, 24; prim. s Schubert 1965, 283; Dobeš, Peška 2010, 118–120; Radivojević et al. 2010, 2777.
[104] Dobeš, Peška 2010, 117.
[105] Glej poglavje 4: *t. 4.8:* 7, v tem zborniku.

Slovenia similar conditions are preserved at least until the end of the Neolithic in the 5th millennium. In the finds we at first recognise mostly the influences, most probably this was a settlement, from the southern parts of the east Adriatic coast. Influences from the west are not that prominent.[93] In the first half of the 4th millennium at the latest connections with central Slovenia are also established.[94]

Elsewhere in Slovenia the situation was different. The first "farming wave" in the 6th millennium BC bypassed the area of central and north-eastern Slovenia. It seems that the earliest farmers of central Europe had nothing to find in the very uneven terrain and thus did not settle it. Hence the first farming communities who also made pottery populate central Slovenia only with the carriers of the Sava group or Late Lengyel culture. According to the radiocarbon dates this could have

[93] E.g. Leben 1967, 76; Barfield 1972; Biagi, Voytek 1994; Greif, Montagnari - Kokelj 2002.
[94] See Velušček, Greif 1998; Velušček 2004a; Bernardini et al. 2009b.

tneje datira v savsko skupino. Na izvornem območju se pojavlja v poznovinčanski in poznobutmirski kulturi. Več jih je tudi na madžarskih poznoneolitskih najdiščih, sporadično pa tudi po npr. najdiščih tiszapolgárske kulture. Sekira je iz surovine, iz katere so narejena orodja, ki naj bi spominjala na baker in so zato verjetno predstavljala poceni, a očitno zelo dragoceno zamenjavo za takrat še vedno redke predmete iz bakra.[106] Kakor koli že, na Spaho je prišla bodisi po trgovskih bodisi kakšnih drugačnih poteh z Balkana oz. iz Podonavja.[107] Presenetljivo je tudi, da se primerljive sekire pojavljajo tudi na Tržaškem krasu in v Smardenči[108] (Sammardenchiji) pri Vidmu. Njihov izvor je treba še raziskati.[109]

V prid tezi o iskalcih bakra govori tudi dejstvo, da je celinska Slovenija razmeroma bogata z bakrovimi minerali. Največ jih najdemo v Posavskem in Škofjeloškem hribovju ter na južni strani Pohorja in pri Remšniku na Kozjaku.[110] Zanimiva so predvsem arheološka najdišča, ki so v bližini takšnih nahajališč. Kot primer smo že večkrat omenili Gradišče nad Dešnom.[111] Najdbe in radiokarbonska datacija zaenkrat kažejo, da je na strmem, s prepadnimi stenami varovanem mestu visoko nad strugo Save stalo naselje v obdobju savske skupine, lasinjske kulture in horizonta keramike z brazdastim vrezom. Če se spustimo navzdol po grebenu, pa je le nekaj kilometrov proč od naselja znano nahajališče bakrove rude Tolsti vrh.[112] Ali so ga takrat že poznali in izkoriščali, le ugibamo. Raziskave, ki tako povezavo lahko ovržejo ali potrdijo, namreč še niso bile opravljene. Drugi primer so naselje na Gradišču pri Stiški vasi in najdbe s Štefanje gore oz. iz okolice Luž pri Šenčurju.[113] V njihovi neposredni bližini je bakrova ruda na Možjanci nad Olševkom. V prvi polovici 20. stoletja je bil namen, da se jo ekonomsko izkorišča, a je nahajališče za današnje potrebe preskromno.[114] Manj kot 10 km stran od rudišča se nad strugo Save nahaja tudi naselje savske skupine Drulovka.

V obdobje lasinjske kulture najverjetneje datirajo najstarejše bakrene najdbe iz Slovenije.[115] Zagotovo pa jih poznamo v zahodni Madžarski,[116] na Hrvaškem[117] in na področju severne Italije.[118] V tem času so bakrovo rudo kopali pri Brixleggu v dolini Inna v Avstriji.[119, 120]

[106] Antonović 1997, 35–39 in poglavje 6, v tem zborniku.
[107] Glej poglavje 6, v tem zborniku.
[108] Ustna informacija S. Torkar.
[109] Glej poglavje 6, v tem zborniku.
[110] Velušček, Greif 1998, karta 1.
[111] Npr. Velušček 2004e, 302.
[112] Velušček 2004e, 301.
[113] Josipovič 1984, 73–89.
[114] Ustna informacija J. Osterman.
[115] Velušček, Greif 1998; prim. s Klassen 2010.
[116] Kalicz 1991; Somogyi 2002.
[117] Balen 2006a, 28; 2008b, 12.
[118] Klassen 2010, 35–39.
[119] Höppner et al. 2005, 293–315.
[120] Za problematiko širjenja zgodnjih najdb iz bakra v

happened just before 4700 BC at the earliest.[95] Again on the basis of the radiocarbon dates and mostly of the research results at the pile-dwelling Resnikov prekop at the Ljubljansko barje we can deduce that the newcomers appeared suddenly and relatively quickly also left the area. Maybe they did not find enough of what they were looking for?[96] Dates, if they can be believed, also show that the oldest settlements of the Sava group are in the south of its spread along the rivers Sava and Kolpa. It is also clear that the sites of this group in the greatest number appear in valleys – at the naturally protected and clear, also hilltop, points along or above rivers – or the river basins of the big Slovenian rivers like Sava, Drava, Krka, and Kolpa. The latter reminds us of the manner in which the prospectors searched for ore – by observing river deposits and vegetation, for which they needed good lookout spots because they knew that different plants grow on different geological bases.[97]

Hammer axes of the type Pločnik (see *Fig. 1.4*) made of very pure copper[98] also spread with them and their wide spread encompasses many of them in the western Balkans in Serbia, Bosnia and Herzegovina, and in the east of Croatia, but they also appear in Moldova, Romania, Bulgaria, Hungary, Slovakia, Moravia, Czech Republic, and even in northern Italy, in Poland, and eastern Germany.[99] On the margins of their distribution they appear more frequently along the big rivers (*Fig. 1.4*). The closest to Spaha originates from Marija Gorica in Croatia,[100] not far from the settlement Čatež – Sredno polje.[101] The earliest date to the horizon Vinča-Pločnik II and the youngest to the Tiszapolgár culture.[102] The axe from Moravia (Olomouc-Holice) is indirectly dated to the horizon of Moravian painted pottery IIa/IIb, to the absolute time around the middle of the 5th millennium BC.[103]

Of similar origin – possibly from Serbia or central Bosnia – is also the stone axe from Spaha,[104] which most probably dates to the Sava group. At its point of origin it appears in the Late Vinča and Late Butmir culture. Several can also be found on Hungarian Late Neolithic sites and sporadically also at the e.g. sites of the Tiszapolgár culture. The axe is made of the raw material that is to resemble copper, from this material also many tools were made, and thus probably represented a cheap but obviously very precious exchange for then

[95] See chapter 5: *Tab. 5.4:* 10,11, in this monograph.
[96] Cf. Höppner et al. 2005.
[97] Craddock 1995, 30, 31.
[98] See Radivojević et al. 2010, 2777 and the bibliography given there.
[99] Schubert 1965, 277; Dobeš, Peška 2010, Fig. 3.
[100] Dobeš, Peška 2010, Fig. 3: 2.
[101] See *Atlas Slovenije,* Ljubljana 1985, 156/B.
[102] Kuna 1981, 23, 24; cf. Schubert 1965, 283; Dobeš, Peška 2010, 118–120; Radivojević et al. 2010, 2777.
[103] Dobeš, Peška 2010, 117.
[104] See chapter 4: *Pl. 4.8:* 7, in this monograph.

Naselja lasinjske kulture se pogostokrat pojavljajo na mestih predhodne savske skupine, kar npr. velja za Spaho, Gradec pri Mirni, Drulovko, Čatež – Sredno polje in Ptujski grad. Podobno je tudi v Bukovnici, kjer pa je bila pred naseljem lasinjske kulture poznolengyelska vas. Ob tem je presenetljivo, da najdišč iz tega obdobja na Ljubljanskem barju ne poznamo.

Izvorno območje kladivaste sekire iz metaultramafita s Spahe je iskati nekje na severnem Balkanu.[121] Najdba datira v horizont keramike z brazdastim vrezom. Podobno kot tudi ena izmed sekir iz dolerita,[122] druga je lasinjska,[123] ki najverjetneje izvirata iz banijskega ofiolitskega kompleksa. Ker se sekire iz enake surovine pojavljajo tudi v zahodni Sloveniji, predvsem pa v Istri,[124] jih nedvomno lahko povežemo s Spaho, ki leži na poti. V tej luči se zato zdi zanimiv in zelo izpoveden depo treh bakrenih sekir tipa Szakálhát iz Boljuna v severovzhodni Istri.[125]

V okviru horizonta keramike z brazdastim vrezom naj poleg številnih najdb na Gradišču nad Dešnom omenimo še "sočasno" jamsko najdišče Kevderc na Lubniku, ki je nad znanim nahajališčem bakrove rude v Bodoveljski grapi.[126] V tem času je bilo po skoraj tisočletnem premoru ponovno poseljeno tudi Ljubljansko barje. Ob Hočevarici poznamo še kolišči Strojanova voda in Gornje mostišče.[127] S Hočevarice izhaja tudi dokaz, da so se koliščarji okoli 3600 pr. Kr. ukvarjali z metalurgijo bakra.[128] V 4. tisočletju so se zagotovo vzpostavile tudi povezave med celinsko Slovenijo, *Caput Adrio* in severnoitalijanskim prostorom.[129] Analize kamnitih ogrličnih obročkov kažejo, da izvirajo z območja severnih Karavank ali Pohorja.[130] Morda govore o poteh, po katerih je na Barje prihajala surovina za ulivanje bakrenih predmetov? Tudi sicer so od takrat naprej kolišča Ljubljanskega barja znana prav po metalurgiji bakra. Razna sondiranja in druge terenske raziskave so razkrile prisotnost bakrenih predmetov oz. metalurških pripomočkov še npr. na Maharskem prekopu,[131] Starih gmajnah[132] (4. tisočletje), Založnici,[133] Špici[134] (3. tisoč-

Srednjo Evropo glej npr. Matuschik 1997, 81–105; Gleirscher 2007, 93–110; Klassen 2010, 29–48.

[121] Glej poglavje 4: *t. 4.17:* 4, v tem zborniku.

[122] Glej poglavje 4: *t. 4.16:* 13, v tem zborniku.

[123] Glej poglavje 4: *t. 4.8:* 6, v tem zborniku.

[124] Glej poglavje 6, v tem zborniku.

[125] Mihovilić 1992, 207, sl. 1, 2; glej še Dobeš 1989, 40; Velušček, Greif 1998, 42.

[126] Prim. Velušček, Greif 1998, 35; Velušček 2004e, 301.

[127] Velušček, Čufar 2008, 31–48.

[128] Šmit 2004, 69–71.

[129] Pavšič, Dirjec 2004; Bernardini et al. 2009b.

[130] Glej Skaberne, Mladenovič 2004, 65–68.

[131] Velušček, Greif 1998, 32, 33.

[132] Velušček 2009b, 18–25.

[133] Velušček, Čufar 2003, 126.

[134] Velušček 2010, 88.

still very rare copper objects.[105] It must have reached Spaha either through commercial or some other routes from the Balkans or from the Danubian region.[106] It is also surprising that comparable axes appear in the Karst around Trieste and in Sammardenchia near Udine. Their origin is yet to be determined.[107]

The fact that continental Slovenia is relatively rich in copper minerals also speaks in favour of the copper prospectors' thesis. Most of these minerals are found in Posavsko and Škofjeloško hribovje, on the southern part of the Pohorje, and near Remšnik on the Kozjak.[108] Those archaeological sites that are near such deposits are particularly interesting. We have mentioned Gradišče above Dešen as an example several times already.[109] The finds and radiocarbon dating so far show that there was a settlement on the steep, with precipitous rocks sheltered spot high above the river bed of the Sava in the time of the Sava group, the Lasinja culture, and the horizon of pottery with furrowed incisions. If we descend the ridge there is a few kilometres away from the settlement a well known copper ore deposit Tolsti vrh.[110] We can only speculate whether it was known and used also at that time since the research, which is able to confirm or refute this connection, has yet to be performed. Other examples are the settlement at Gradišče above Stiška vas and finds from Štefanja gora or from the surroundings of Luže near Šenčur.[111] In their immediate vicinity the copper ore is found at Možjanca above Olševek. There was the intention to exploit this ore at the beginning of the 20th century but the deposit is too modest for the present-day needs.[112] Less than 10 km away above the river bed of the Sava is also the Sava group settlement Drulovka.

The oldest copper finds from Slovenia are probably from the period of the Lasinja culture.[113] They are certainly known from western Hungary,[114] in Croatia,[115] and in the area of northern Italy.[116] In this time the copper ore was dug at Brixlegg in the valley of the Inn in Austria.[117, 118] The settlements of the Lasinja culture often appear in the place of the previous Sava group, which is true for example for Spaha, Gradec near Mirna,

[105] Antonović 1997, 35–39 and chapter 6, in this monograph.

[106] See chapter 6, in this monograph.

[107] See chapter 6, in this monograph.

[108] Velušček, Greif 1998, map 1.

[109] E.g. Velušček 2004e, 302.

[110] Velušček 2004e, 301.

[111] Josipovič 1984, 73–89.

[112] J. Osterman, pers. comm.

[113] Velušček, Greif 1998; cf. Klassen 2010.

[114] Kalicz 1991; Somogyi 2002.

[115] Balen 2006a, 28; 2008b, 12.

[116] Klassen 2010, 35–39.

[117] Höppner et al. 2005, 293–315.

[118] For the issue of spreading early finds from copper into Central Europe see e.g. Matuschik 1997, 81–105; Gleirscher 2007, 93–110; Klassen 2010, 29–48.

letje) in na Dežmanovih koliščih[135] (3. in 2. tisočletje). Skratka argumentov, ki govorijo o tem, da je poselitev Barja ozko povezana z metalurško dejavnostjo, je veliko.

V tej smeri lahko nadaljujemo z nizanjem argumentov, ki govore v prid tezi, da ozemlje Slovenije ni bilo stalno poseljeno, oz. enakomerno stalno poseljeno, in da je bila poselitev v neposredni povezavi z glavno ekonomsko dejavnostjo nosilcev, a verjetno ni potrebno. Naj za konec omenimo le še podatek, da je slovenska prazgodovina v svetu še vedno najbolj znana po številnih, predvsem dolenjskih najdiščih iz halštatske dobe, kar zagotovo ni naključje, saj gre za območje, kjer je v okolici najti surovino za železarsko dejavnost, ki je bila v tem času nedvomno zelo razvita.[136]

1.5 SKLEP

Arheološko najdišče Spaha nad Brezovico pri Predgradu, 826 m n. m., je koncem sedemdesetih in v prvi polovici osemdesetih let prejšnjega stoletja raziskovala G. Hirschbäck - Merhar, takrat sodelavka Pokrajinskega muzeja v Kočevju. V šestih sondah je odkrila najdbe iz štirih prazgodovinskih obdobij. Že na površju so bili dobro vidni ostanki kamnitega temelja, sicer zelo verjetno lesene stražnice iz 16. stoletja, iz obdobja turških vpadov, ko je bilo na Spahi kresišče.

Raziskave so pokazale, da sta bila v prazgodovini poseljena dva vrhnja in nad okolico dvignjena platoja južnega pobočja kopastega hriba Straža, katerih vrh pisni vir omenja kot Grädisch.

Prvo poselitev na Spahi dokumentirajo najdbe iz obdobja savske skupine. V tistem času je bil obljuden samo najvišji plato, ki je bil na južni strani dodatno zavarovan s kamnitim obrambnim zidom. Analogije za keramiko in analize kamnitih sekir kažejo na primerjave z vzhodom, na območje seške kulture oz. 4. stopnje sopotske kulture po Z. Markoviću.[137] Poglobljena študija[138] na gradivu savske skupine je pokazala, da relativnokronološko sodi v poznolengyelski horizont, absolutnokronološko pa v čas med 4712 in 4547 (oz. med 4726 in 4504) pr. Kr. pri 1-sigma. Drugo poselitveno fazo na Spahi opredeljujejo najdbe iz obdobja lasinjske kulture. Absolutnokronološko govorimo o času med 4366 in 4080 oz. tudi še o zgodnjem 4. tisočletju pr. Kr. Veliko manj je najdb, ki jih lahko uvrstimo v horizont keramike z brazdastim vrezom. Absolutnokronološko je to čas druge četrtine 4. tisočletja pr. Kr. Takrat je bil poseljen tudi spodnji oz. južni naselbinski plato. Prazgodovinska poselitev se zaključi najverjetneje s kulturo žarnih grobišč. Skromne najdbe kažejo na mlajše prazgodovinsko obdobje in zagotovo niso bodisi neolitske ali

[135] Npr. Velušček 2009b, 25.

[136] Dular, Tecco - Hvala 2007, 212–217.

[137] 1994.

[138] Glej poglavje 5, v tem zborniku.

Drulovka, Čatež – Sredno polje, and Ptujski grad. It is similar with Bukovnica where there was a Late Lengyel village before the settlement of the Lasinja culture. The interesting thing here is that there are no sites from this period at the Ljubljansko barje.

The area of origin for the hammer axe made of meta-ultramafite from Spaha must be somewhere in the northern Balkans.[119] The find belongs to the horizon of pottery with furrowed incisions, similar to one of the axes made of dolerite,[120] the other is from the Lasinja culture[121] and most probably come from the Banija ophiolite complex. Since axes made of the same material also appear in western Slovenia and mostly in Istria,[122] they can be without a doubt connected to Spaha which lies along the way. In this sense the depot of three copper axes of the type Szakálhát from Boljun in north-eastern Istria seems very interesting and revealing.[123]

Discussing the horizon of pottery with furrowed incisions we should besides the numerous finds at Gradišče above Dešen also mention the "contemporary" cave site Kevderc on Lubnik which lies above the well known copper ore deposit in Bodoveljska grapa.[124] At that time the Ljubljansko barje was again settled after the almost one thousand year break. Besides Hočevarica we also know of pile-dwellings Strojanova voda and Gornje mostišče.[125] The proof that the pile-dwellers were involved in copper metallurgy around 3600 BC comes from Hočevarica.[126] In the 4th millennium the connections between continental Slovenia, *Caput Adria,* and northern Italian region must have been established.[127] The analyses of stone necklace ringlets indicate that they originate from the area of the northern Karavanke or Pohorje.[128] Could they be speaking about the routes on which the raw material for casting of copper objects was arriving at the Ljubljansko barje? From that time on the pile-dwellings at the Ljubljansko barje are known exactly for the copper metallurgy. Various sample trenching and other field studies revealed the presence of copper objects or metallurgic equipment also at, for example, Maharski prekop,[129] Stare gmajne[130] (4th millennium), Založnica,[131] Špica[132] (3rd millennium), and at De-

[119] See chapter 4: *Pl. 4.17:* 4, in this monograph.

[120] See chapter 4: *Pl. 4.16:* 13, in this monograph.

[121] See chapter 4: *Pl. 4.8:* 6, in this monograph.

[122] See chapter 6, in this monograph.

[123] Mihovilić 1992, 207, Figs. 1, 2; see also Dobeš 1989, 40; Velušček, Greif 1998, 42.

[124] Cf. Velušček, Greif 1998, 35; Velušček 2004e, 301.

[125] Velušček, Čufar 2008, 31–48.

[126] Šmit 2004, 69–71.

[127] Pavšič, Dirjec 2004; Bernardini et al. 2009b.

[128] See Skaberne, Mladenovič 2004, 65–68.

[129] Velušček, Greif 1998, 32, 33.

[130] Velušček 2009b, 18–25.

[131] Velušček, Čufar 2003, 126.

[132] Velušček 2010, 88.

eneolitske starosti. V 16. stoletju po Kr. je bilo na Spahi kresišče, se pravi izvidniška točka, ki na najboljši način izkazuje strateško lego[139] najdišča nad očitno pomembnimi potmi iz doline Kolpe oz. Bele krajine proti severu v osrednjo Slovenijo in obratno.

Prazgodovinsko, predvsem neo-eneolitsko poselitev na Spahi moremo povezati s širšim dogajanjem v tem delu Evrope.[140] Naše analize kažejo, da jo lahko povežemo s prvimi iskalci bakrove rude. Za najzgodnejši val v obdobju savske skupine sicer ni neposrednih podatkov in o tem lahko govorimo posredno. Več jih je iz obdobja lasinjske kulture, še več pa iz horizonta keramike z brazdastim vrezom. V obdobju kulture žarnih grobišč je mimo Spahe tekla trasa jantarske poti.

Ob iskalcih bakra, ki so se najverjetneje[141] ukvarjali tudi s poljedelstvom,[142] nas na nekoliko drugačno vlogo naselbinske točke opozarjajo številni odlomki žrmelj, katerih kamnina izvira z nahajališč pri Knežji Lipi, le par kilometrov proč od Spahe. Ker je teh najdb veliko, smo prišli do zaključka, slednje velja vsaj za obdobji savske skupine in lasinjske kulture, da je na Spahi živel del populacije, ki je "kolonizirala" obrobja visokoproduktivnih prsti v Beli krajini.[143] Najdbe ne govore v prid tezi o transhumantnem gospodarstvu,[144] kot ga npr. poznamo iz zahodne Slovenije,[145] ki tudi sicer ni izpričano v etnoloških virih za Belo krajino in Kočevsko,[146] ki naj bi se razmahnilo s pojavom višinskih naselij.[147] Nasprotno, najstarejša keramika je primerljiva belokranjski in bolj kot na časovno zaostajanje,[148] kaže na sočasnost.[149] V kombinaciji z drugimi razlogi za poselitev se zato zdi verjetnejše prakticiranje planinskega pašništva, kar v tem zborniku predlaga B. Toškan.[150]

[139] Prim. z Dular 1985, 97.
[140] Glej npr. Radivojević et al. 2010.
[141] Glej poglavje 7, v tem zborniku.
[142] Prim. s Kienlin 2008, 503–540.
[143] Prim. z Mason 2008, 18, 19.
[144] Glej npr. Mason 1994; 2008; Mason, Andrič 2009.
[145] Npr. Smerdel 1989; 1999.
[146] Glej poglavje 9, v tem zborniku in Simonič 1939, 156, 157, 159.
[147] Npr. Mason 1994, 188; 2008, 21.
[148] Glej npr. Budja 1990b, 13–16; Mason 1994, 185–189; Mason 2008, 21.
[149] Glej poglavje 5, v tem zborniku.
[150] Glej poglavje 9, v tem zborniku.

schmann's pile-dwellings[133] (3rd and 2nd millennium). Therefore, the arguments in favour of the fact that the settlement of the Ljubljansko barje was closely connected to metallurgy are many.

We could continue to enumerate the arguments in favour of the thesis that the Slovenian territory was not permanently settled or evenly permanently settled and that the settlement was in direct connection to the main economic activity of the carriers but it is not really necessary. Let us conclude with the data that the Slovenian prehistory is still best known around the world for its numerous, mostly the Dolenjska region sites from the Hallstatt period which cannot be a coincidence – for this is an area in the vicinity of which raw material for the ironing activities can be found and that activity was extremely developed at that time.[134]

1.5 CONCLUSION

The archaeological site Spaha above Brezovica pri Predgradu, 826 m a. s. l., was at the end of the 70s and in the first half of the 80s of the previous century researched by G. Hirschbäck - Merhar, then from the Regional museum in Kočevje. In six trenches she discovered finds from four prehistoric periods. The surface itself reveals the well visible remains of the stone foundation, most probably of a wooden watchtower from the 16th century, from the period of the Turkish invasions when a beacon was situated at Spaha.

Research revealed that in prehistory two upper and raised plateaus of the southern slope of the domed hill of Straža were settled, the top of which is in the written source referred to as Grädisch.

The first settlement at Spaha is documented by finds from the period of the Sava group. At that time only the upper plateau was populated which was on the southern side additionally protected by a stone defence wall. Analogies for pottery and stone axes analyses indicate comparisons with the east, the area of the Seče culture or the 4th phase of the Sopot culture according to Z. Marković.[135] The in-depth study[136] of the material of the Sava group showed that the relative chronology places it to the Late Lengyel horizon and absolute chronology to the time between 4712 and 4547 (or between 4726 and 4504) BC at 1-sigma. The second settlement phase at Spaha is defined by finds from the period of the Lasinja culture. Absolutely chronologically we speak about the time between 4366 and 4080 or also about the early 4th millennium BC. Much less finds can be assigned to the horizon of pottery with furrowed incisions. Absolutely chronologically this is the time of the second quarter

[133] E.g. Velušček 2009b, 25.
[134] Dular, Tecco - Hvala 2007, 212–217.
[135] 1994.
[136] See chapter 5, in this monograph.

of the 4th millennium BC. At that time the lower or southern settlement plateau was also inhabited. The prehistoric settlement most probably ends with the Urnfield culture. Modest finds point to the younger prehistoric period and are certainly not of the Neolithic or Eneolithic age. In the 16th century AD there was a beacon at Spaha, a lookout spot which best reveals the strategic position[137] of the site located above the obviously important routes from the Kolpa valley or Bela krajina towards the north into central Slovenia and back.

The prehistoric, especially Neo-Eneolithic settlement at Spaha can be connected to the broader happenings in this part of Europe.[138] Our analyses show that it can be associated with the first copper ore prospectors. There are indeed no data for the earliest wave of the Sava group and we can speak about this only indirectly. More are from the Lasinja culture and even more from the horizon of pottery with furrowed incisions. In the period of the Urnfield culture the Amber route ran past Spaha.

Besides copper prospectors who were most probably[139] also farmers[140] numerous fragments of querns, the rock for which originates from the deposits at Knežja Lipa located only a couple of kilometres away from Spaha, also remind us of a somewhat different role of this settlement point. Due to the great number of these finds we concluded, at least for the time of the Sava group and Lasinja culture, that one part of the population which "colonised" the margins of highly-productive soils in Bela krajina[141] lived at Spaha. Finds do not speak in favour of the thesis about transhumant economy[142] as it is for example known from western Slovenia,[143] which is also not attested in ethnological sources for Bela krajina and the Kočevska,[144] and which supposedly spread with the occurrence of hilltop settlements.[145] On the contrary, the oldest pottery is comparable to that of Bela krajina and points more to the contemporariness[146] than to chronological arrears.[147] In combination with other reasons for settlement the practicing of mountain grazing seems more probable, as it is also suggested by B. Toškan in this monograph.[148]

[137] Cf. Dular 1985, 97.

[138] See e.g. Radivojević et al. 2010.

[139] See chapter 7, in this monograph.

[140] Cf. Kienlin 2008, 503–540.

[141] Cf. Mason 2008, 18, 19.

[142] See e.g. Mason 1994; 2008; Mason, Andrič 2009.

[143] E.g. Smerdel 1989; 1999.

[144] See chapter 9, in this monograph, and Simonič 1939, 156, 157, 159.

[145] E.g. Mason 1994, 188; 2008, 21.

[146] See chapter 5, in this monograph.

[147] See e.g. Budja 1990b, 13–16; Mason 1994, 185–189; Mason 2008, 21.

[148] See chapter 9, in this monograph.

2. ARHEOLOŠKA IN PALEONTOLOŠKA JAMSKA NAJDIŠČA S ŠIRŠEGA OBMOČJA RIBNIŠKE IN STRUŠKE DOLINE TER KOČEVSKE

2. ARCHAEOLOGICAL AND PALEONTOLOGICAL CAVE SITES IN THE WIDER AREA OF RIBNIŠKA AND STRUŠKA DOLINA AND KOČEVSKA

Pavel JAMNIK in Anton VELUŠČEK

Izvleček

V prispevku predstavljamo 29 kraških jam s širšega območja ribniške in struške doline ter Kočevske, v katerih so bile najdene arheološke najdbe ali paleontološki ostanki. Med njimi je 10 jamskih najdišč, ki so prvič predstavljena.

Arheološki ostanki kažejo, da so bile jame obiskovane zaradi različnih razlogov od obdobja mlajšega paleolitika do sedanjosti.

V nekaterih jamah so ostanki jamskega medveda (*Ursus spelaeus*), redki ostanki jamskega leva (*Panthera leo spelaea*) in npr. tudi losa (*Alces alces* L.).

Ključne besede: kraške jame, arheološke najdbe, paleontološki ostanki.

Abstract

The paper presents 29 cave sites in the wider area of Ribniška and Struška dolina and Kočevska, which yielded archaeological or paleontological remains. Among them, we present 10 cave sites, which were not cited before.

Archaeological remains indicate that people visited caves for various reasons, from the Upper Palaeolithic to the present day.

Some caves revealed remains of the cave bear (*Ursus spelaeus*) and some also rare cave lion (*Panthera leo spelaea*) and moose (*Alces alces* L.) remains.

Keywords: Karst caves, archaeological finds, paleontological remains.

2.1 UVOD

Arheološke najdbe iz jam se v domači arheološki literaturi natančneje obravnavajo le v okviru kamenodobnih kultur[1] ali če so v jami morda odkrite pomembnejše najdbe. Drobne, vendar za vzpostavitev poselitvene slike nikakor ne nepomembne arheološke ostaline iz jam tako ostanejo večkrat prezrte. V zadnjih desetletjih so bile vsaj nekatere objavljane v obliki kratkih poročil v "Poročilih" revije *Varstvo spomenikov*, nekaj pregledov jamskih najdišč po regijah Slovenije pa je najti tudi v reviji *Naše jame*.[2]

[1] Npr. Brodar 1991; Turk et al. 1993.

[2] Npr. Leben 1970; Josipovič 1983.

2.1 INTRODUCTION

Slovene archaeological literature mentions archaeological remains, found in caves, only whilst discussing Stone Age cultures[1] or when important finds occur. Scarce archaeological remains found in caves, which are significant in order to establish settlement patterns, are repeatedly ignored. A small number of these have been in the last decades mentioned in the form of short reports ('*Poročila*') in the journal *Varstvo spomenikov* and some references can also be found in the journal *Naše jame*.[2]

[1] e.g. Brodar 1991; Turk et al. 1993.

[2] e.g. Leben 1970; Josipovič 1983.

Poleg slovenskih raziskovalcev paleolitika, katerim je jamski prostor eden osnovnih objektov preučevanja, se je v slovenski arheologiji sistematično z jamskimi arheološkimi najdišči in vodenjem evidence o "arheoloških jamah" dolga leta ukvarjal F. Leben. V doktorski disertaciji[3] je predstavil katalog jamskih arheoloških najdišč iz jugovzhodnoalpskega območja z obsežno literaturo. Jame je tudi kronološko ter kulturno opredelil. Bazo podatkov je kasneje dograjeval in predstavlja pomemben segment baze podatkov o arheoloških najdiščih Slovenije, t. i. ARKAS.[4]

Pri tokratni lokalno zamejeni predstavitvi jamskih arheoloških najdišč se kot glavno vprašanje zastavlja, kako široko območje vključiti v predstavitev. Vedno je nekje blizu "mejne črte" še kakšno najdišče, ki bi ga bilo predstavitvi smiselno dodati, če že ne zaradi drugega, pa vsaj zato, da so podatki zbrani na enem mestu. Kot kriterij predstavitve smo za izhodišče vzeli naravne komunikacijske povezave oziroma območje z jamo kot arheološkim najdiščem, ki se v naravno komunikacijsko povezavo po našem mnenju še vključuje.

Pri jamskih arheoloških najdiščih na Ribniškem, Kočevskem in obkolpskem območju je ozemlje težko zamejiti z ostro ločnico. Območje Male gore, Kočevskega roga, pobočja nad Kolpo in Poljanska gora, so prostrana področja, ki so brez dvoma po kriteriju naravne komunikacijske povezanosti lahko obravnavana kot nekakšna mikroregija. V zadnjih letih je bilo prav na širšem območju kočevske in ribniške odkritih več novih jamskih najdišč. Vzrok je morda na eni strani v nekdanji "zapostavljenosti" tega območja, na drugi pa v ozaveščanju jamarjev, da je pri raziskavah kraških objektov treba biti pozoren tudi na arheološke in paleontološke ostaline.[5]

V jamskih najdiščih z obravnavanega območja sistematične arheološke raziskave v večini primerov niso bile opravljene. Pomembno izjemo predstavlja Ciganska jama v sistemu Željnskih jam z bogato mlajšepaleolitsko kulturo,[6] kronološko mlajša obdobja pa so tudi tam ostala do pred kratkim[7] podrobneje neobdelana.

Težava jamskih arheoloških najdišč je tudi v tem, da je pri odkritih arheoloških ostalinah ponavadi prisoten časovno in kulturno neenoten zbir, kar se zdi, da dodatno otežuje odločitev za nadaljevanje raziskave. Posledično je torej tudi pričujoča predstavitev le skromen zbir podatkov, iz katerih pa je vendar mogoče vsaj približno časovno opredeliti arheološka obdobja, ki so zastopana v obravnavanih jamah, in včasih podati tudi razloge, zakaj je človek vanje zahajal.

[3] Leben 1971.

[4] Glej: http://arkas.zrc-sazu.si

[5] Avtorja se Društvu za raziskovanje jam (DZRJ) iz Ribnice zahvaljujeva za zavzeto dokumentiranje in obveščanje o arheoloških in paleontoloških najdbah iz jam, ki jih predstavljava v tem prispevku.

[6] Glej Brodar 1991.

[7] Glej Velušček 2011.

Besides Slovenian researchers of Palaeolithic, which use caves as one of the main areas of their research, F. Leben systematically studied archaeological cave sites and was keeping records on 'archaeological caves' for many years. In his doctoral thesis,[3] he presented a catalogue of archaeological cave sites in the south-eastern Alpine area, which was accompanied by extensive bibliography. Caves were also chronologically and culturally defined. He kept upgrading his records and his catalogue now represents an important segment of the database of archaeological sites in Slovenia, the so-called ARKAS.[4]

One of the main questions of this locally delimited presentation of archaeological cave sites is the size of the research area. It always happens that there is another site somewhere nearby, which could also be included in the presentation, if for no other reason but to have all the data collected in one database. Therefore, as a basis for this presentation, we decided to follow natural communication routes in the area or archaeological cave sites, which, in our opinion, utilised this natural communication route.

Archaeological cave sites in the area of Ribnica, Kočevska, and near the river Kolpa are not easy to enclose by a sharp boundary. The areas of Mala gora, Kočevski rog, the slopes above the river Kolpa, and Poljanska gora are vast areas, which can be considered as a micro-region by a criterion of natural communication routes. Several new cave sites were discovered in the wider area of Kočevska and Ribniška. The reason for this perhaps lies in the until recent neglect of this area on one side and in educating the cavers that they should also pay attention to archaeological and paleontological remains while researching the caves on the other.[5]

The cave sites, studied in this book, were most often not areas of archaeological systematic research. One notable exception is Ciganska jama that forms part of a system of Željnske jame, which are rich with Upper Palaeolithic cultural remains,[6] while later periods remained neglected until recently.[7]

Another problem with archaeological cave sites is the fact that archaeological remains usually present a mix of remains of different cultures and periods, which further complicates a decision whether to continue with the research. The present paper is therefore only a modest collection of data, from which is, however, possible to at least partially identify archaeological periods represented in the studied caves and sometimes mention reasons why people were visiting them.

[3] Leben 1971.

[4] See: http://arkas.zrc-sazu.si

[5] The authors thank the Speleological Society (DZRJ) of Ribnica for their constant documenting and for providing information regarding archaeological and paleontological finds from the caves presented in this paper.

[6] See Brodar 1991.

[7] See Velušček 2011.

2.2 NAJDIŠČA

Pregled najdišč začenjamo pod Rašico, kjer komunikacijsko možnost v smeri Ribniške doline in naprej proti Kočevski in Kolpi razdeli Mala gora. Ob vzhodni strani Male gore se vleče kompoljsko-struška dolina, ki se v Strugah v smeri proti vzhodu razcepi v komunikacijsko povezavo proti Zvirčam in preko Suhe krajine do Dvora pri Žužemberku, proti jugovzhodu pa nadaljuje ob vznožju Male gore proti Kočevski. Na zahodni strani Male gore naravna komunikacija poteka mimo Velikih Lašč v Ribniško dolino in naprej proti Kočevju.

Ob glavni komunikacijski povezavi med Ribnico in Kočevjem je ravno tako pomembna pot med Ribnico in Kočevsko preko Goteniške doline. Obe povezavi se v smeri proti jugu združita pri Štalcarjih, kjer se ozemlje že prevesi v dolino reke Kolpe, ki jo ocenjujemo kot pomembno komunikacijsko izhodišče oz. vozlišče.

Iz Kočevske proti novomeški kotlini je mogoča komunikacijska povezava preko Kočevskega roga. V pregled jam z arheološkimi najdbami smo zato vključili tudi jugozahodni in zahodni del Kočevskega roga in v smeri do reke Kolpe še del Poljanske gore.

Pri porečju Kolpe smo se odločili za območje od izvira, čeprav je ta že na hrvaški strani, pa do zaselka Bilpa oz. predela pod Starim trgom ob Kolpi (*sl. 2.1*).

Tako smo v pregled vključili 29 jamskih objektov. Med njimi je tudi jama,[8] iz katere arheoloških, tj. artefaktov, ali paleontoloških ostalin sicer še ne poznamo, vendar po ogledu skoraj ni dvoma, da gre za potencialno arheološko najdišče.

2.2.1 ZAHODNA STRAN MALE GORE

Opis Male gore in njeno zamejitev v prostoru je najnatančneje podal A. Kranjc[9]: "Ribniška Mala gora je izrazit podolgovat hrib, lahko bi mu rekli kar sleme, ki se vleče v dinarski smeri (severozahod–jugovzhod) 24 km daleč in je v povprečju 3–4 km široko. Zavzema okoli 115 km² površine. Je slemenasto hribovje, ki predstavlja prehod med nizkim planotastim dolenjskim na eni strani ter visokim notranjskim krasom na drugi strani, tako po višinah kot tudi po oblikovanosti površja.

V večjem delu je Mala gora relativno visoka, 300–500 m. Od okolice je povsod dobro in jasno ločena, ponekod je meja še posebej izrazita. Na severu je od turjaško-grosupeljskega hribovja ločena z izrazito vrezano in ponekod precej široko dolino Rašice ter severnim delom Dobrepolja (Predstruge). Na zahodu Malo goro omejuje Laška pokrajina in globoko vrezana dolina Tržiščice, dalje pa Ribniško polje. Proti vzhodu jo od suhokrajinske planote loči Dobrepolje, proti ka-

[8] Glej 7. Gosposka jama, v tem prispevku.

[9] 1980, 32.

2.2 THE SITES

The list of sites begins below Rašica, where a probable communication route in the direction of Ribniška dolina and towards Kočevska and Kolpa is divided by Mala gora. On the eastern side of Mala gora lies Kompoljsko-struška dolina, which splits at Struge. Towards the east is a communication route to Zvirče and across Suha krajina to Dvor pri Žužemberku. Towards the south-east the route follows the foot of Mala gora to Kočevska. Natural communication route on the western side of Mala gora passes Velike Lašče and continues towards Ribniška dolina and Kočevje.

Just as important as the main communication route between Ribnica and Kočevje is the route between Ribnica and Kočevska, which runs through Goteniška dolina. Both routes lead towards south and join at Štalcerji, where the terrain starts descending towards the Kolpa valley, which is considered an important communication route or network.

From Kočevska towards the basin of Novo mesto is a possible communication route via Kočevski rog. An overview of caves with archaeological finds therefore also includes western and north-western parts of Kočevski rog and, in the direction of the river Kolpa, a fraction of Poljanska gora.

The area we decided to overview in the basin of Kolpa spreads from its spring, although this is located in Croatia, to the settlement of Bilpa or the area below Stari trg ob Kolpi (*Fig. 2.1*).

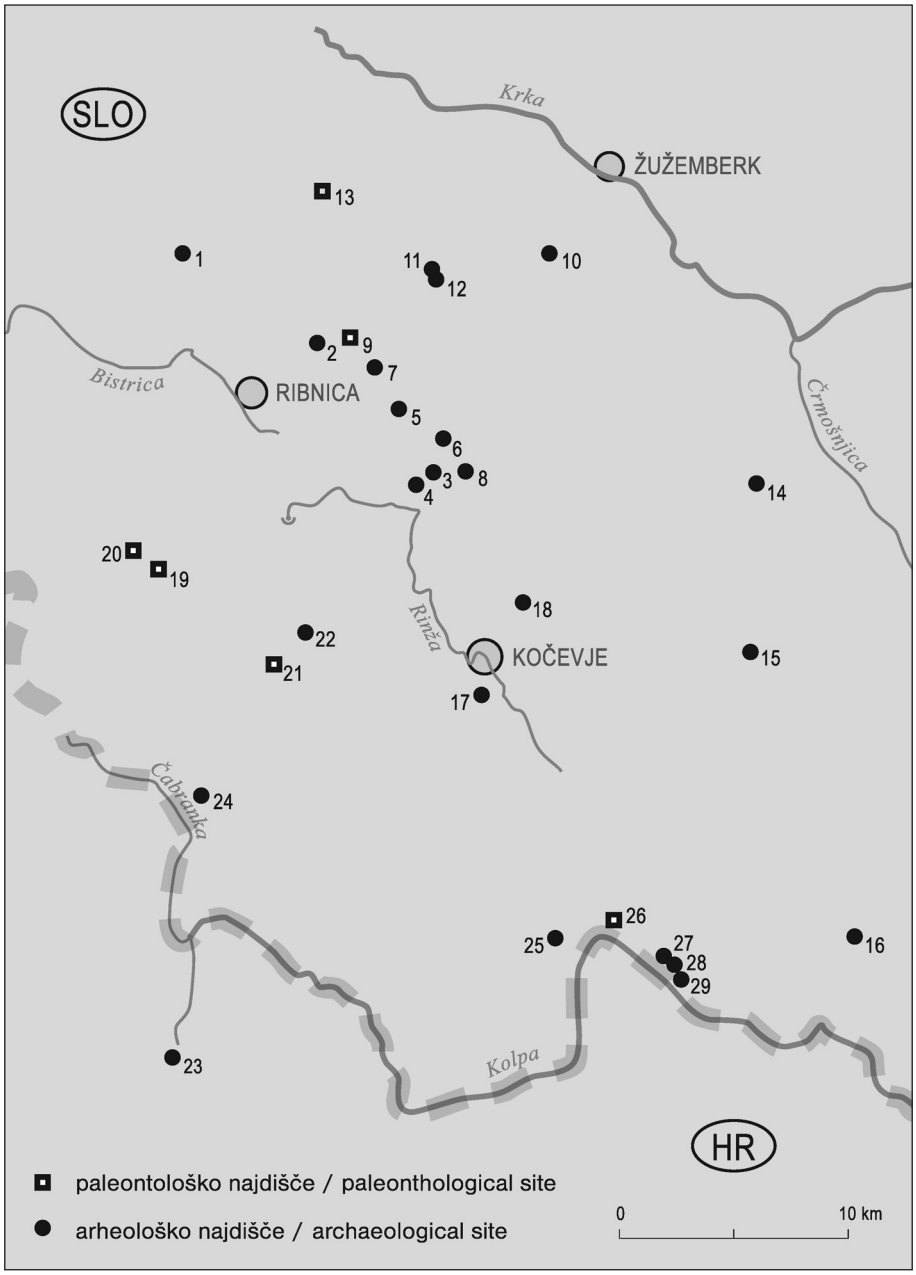
In this paper, we discuss 29 cave sites. Among them is a cave[8] where no archaeological, i.e. artefacts, or paleontological remains have been found, but after a visit to the cave almost no doubt remains that the cave is a potential archaeological site.

2.2.1 WESTERN SLOPES OF MALA GORA

The description of Mala gora and its position in the landscape was most accurately described by A. Kranjc. "Ribniška Mala gora is a distinctively elongated hill or ridge, which stretches 24 km in the Dinaric direction (NW–SE) and is on average 3–4 km wide. It occupies an area of about 115 km². This ridge represents a transition between the low plateau of the Dolenjska Karst on one side and a higher region of the Notranjska Karst on the other, in height as well as the shape of the surface."

"Mala gora is relatively high, 300–500 m. It is clearly separated from its surroundings. This separation is particularly distinct on some locations, towards the north of Turjak-Grosuplje hills it is separated by a pronounced and a fairly wide valley of Rašica and the northern part of Dobrepolje (Predstruga). Mala gora is limited by the

[8] See 7. Gosposka jama, in this paper.



Sl. 2.1: Karta obravnavanega območja z označenimi jamskimi najdišči.
Fig. 2.1: Map of the studied area with marked cave sites.

1 Mala tkalčja jama, **2** Živinska jama, **3** Koblarska jama, **4** Lisičja jama, **5** Grozdna jama, **6** Vrbovška ali/or Popisna jama, **7** Gosposka jama, **8** Gregčeva jama, **9** Podtaborska ali/or Andolškova jama, **10** Dolga jama, **11** Antonkov skedenj, **12** Gornja vodena jama, **13** Cvarova jama, **14** Mala knežja jama, **15** Spodmol pri Macesnovi gorici, **16** Mali brlog, **17** Merešloh ali/or Medvedova oz./or Črna jama, **18** Ciganska jama, **19** Brezno Linija, **20** Franc - Losova jama, **21** Tsinkelnova jama, **22** Grčmanova jama, **23** Hajdučka pećina, **24** Polična jama, **25** Lukova jama, **26** Jama treh bratov, **27** Bilpa II, **28** Bilpa III in **29** Bilpa IV.

teremu je meja še posebno jasna. Še najslabše je Mala gora ločena od sosednjih ozemelj proti jugovzhodu, kjer se podobno hribovje nadaljuje v Kočevski Mali gori. Vendar sta obe gori ločeni z dolinskim pretržjem pri bivši vasi Mala gora v višini 480 m n. m. Od roškega višavja v okolici Poloma ločuje Malo goro suha dolina, v kateri sta bili nekoč vasi Kukovo in Vrbovec. Ta dolina

land of Laška and a pronounced valley of Tržiščica towards the west, followed by Ribniško polje. Dobrepolje separates it from Suhokrajinska planota (Suha krajina plateau) towards the east. This margin is particularly clear. The least pronounced boundary can be seen in the direction of neighbouring territories to the southeast, where similarly formed hills continue to Kočevska

se vleče proti jugovzhodu kot nadaljevanje Dobrepolja oziroma Strug."

Z območja Male gore je arheoloških podatkov izredno malo. S. Rutar in J. Pečnik že leta 1893 omenjata prazgodovinsko naselbino in okoli nje gomilno grobišče na hribu sv. Ane.[10] Pod območje Male gore lahko štejemo tudi bronastodobno naselbino pri Žlebiču na začetku Ribniške doline.[11] Do začetka sistematičnega pregledovanja jam na Mali gori so bila v literaturi omenjana tudi tri jamska arheološka najdišča: Koblarska jama s skeletnimi ostanki,[12] Živinski spodmol nad vasjo Zapuže pri Ribnici[13] in Lisičja jama.[14]

1. Mala tkalčja jama (kat. št. JZS 7045; *t. 2.1:* 1–3)

Nekdanji vodni rov se za lepo obokanim vhodom poševno spušča v danes le še 30 m dolgo jamo. Po dnu jame so skalni bloki, za vhodom, po pobočju je verjetno odloženo kar več deset centimetrov sedimenta. Leta 2002 so člani DZRJ Ribnica na površju našli različno staro keramiko (*t. 2.1:* 1–3), med katero je tudi nekaj prazgodovinskih, podrobneje neopredeljenih fragmentov (npr. *t. 2.1:* 1), kar dokazuje, da je bila Mala tkalčja jama obiskovana in vsaj kot zavetišče uporabljana v več arheoloških obdobjih.

2. Živinska jama (Živinski spodmol) (kat. št. JZS 3100)

Nad vasjo Zapuže pri Ribnici je velik spodmol, ki ga domačini imenujejo Živinski spodmol. V njem je leta 1975 sondiral M. Brodar. Profil je enostaven. Pol metra humusne plasti, navzdol do dosežene globine 2,84 m pa debelogruščnata, močno ilovnata plast rdečkaste barve. V humusu so bili najdeni maloštevilni fragmenti keramike in en kos kremena, na prehodu med humusom in spodnjo plastjo pa neretuširana klinica. V vrhnjem delu spodnje plasti pa še 2 kosa zelenega roženca, od katerih je eden po robu retuširan, in drobec kosti, ki še ni fosilizirana. Ker so najdbe obetale odkritje kulturne plasti, je bila ob prvi sondi skopana še ena iste velikosti, do globine, kjer so se v prvi sondi pojavile najdbe, vendar v drugi sondi najdb ni bilo. Po odkritih kosih kremena kulturne pripadnosti ni bilo mogoče določiti.[15]

V devetdesetih letih so člani DZRJ Ribnica poskušali najti nadaljevanje jame ob zadnji jamski steni. Po oceni je to okoli 7 m od Brodarjevih sond. Nihče od jamarjev, ki so sodelovali pri kopanju pod zadnjo steno, se ne spominja nikakršnih najdb, kar seveda ne pomeni, da jih ni bilo. Obstaja namreč velika verjetnost, da tudi, če bi v plasti bili posamezni kosi kremena, jamarji nanje verjetno ne bi bili pozorni.

[10] Po Slabe 1996, 839.
[11] Puš 1988–1989, 345–366; Toškan 2005, 91–97.
[12] Leben 1970, 30.
[13] Brodar 1985, 28.
[14] Leben 1970, 31.
[15] Brodar 1985, 28.

Mala gora. However, the two hills are separated by a valley near a former village of Mala gora, located at 480 m a.s.l. A dry valley, with former villages of Vrbovec and Kukovo, separates Mala gora from Rog highlands near Polom. This valley runs towards the south-east as a continuation of Dobrepolje or Struge."[9]

Archaeological data regarding the area of Mala gora is scarce. As early as in 1893, S. Rutar and J. Pečnik mention a prehistoric settlement with a barrow cemetery around it, located on the hill of Sv. Ana.[10] A Bronze Age settlement near Žlebič in Ribniška dolina can also be considered as a part of the area of Mala gora.[11] Before the systematic examination of caves at Mala gora was established, only three archaeological cave sites were mentioned in literature: Koblarska jama with skeletal remains,[12] Živinski spodmol above the village of Zapuže pri Ribnici[13], and Lisičja jama.[14]

1. Mala tkalčja jama (cat. no. JZS 7045; *Pl. 2.1:* 1–3)

Behind a beautiful arched entrance, a former water channel obliquely descends in what is now a barely 30 m long cave. Bedrock at the bottom of the cave is probably covered with several decimetres of sediment. In 2002, members of DZRJ Ribnica found here several fragments of pottery (*Pl. 2.1:* 1–3), some of which were prehistoric (e.g. *Pl. 2.1:* 1), which confirms that people were using Mala tkalčja jama during several archaeological periods at least as a shelter.

2. Živinska jama (Živinski spodmol) (cat. no. JZS 3100)

Above the village of Zapuže pri Ribnici there is a large rock shelter, the so-called Živinski spodmol. In 1975, M. Brodar performed sample trenching in the cave. The profile is simple; half a meter of humus on top and a layer of coarse reddish clay to the depth of 2.84 m. Scarce fragments of pottery and a piece of chert were found in the humus layer, while an unretouched bladelet was discovered at the transition between the two layers. Top of the bottom layer revealed two pieces of green chert, one of which had a retouched edge, and a fragment of bone, which was not fossilised. These finds indicated a cultural layer and therefore a second trench was dug next to the first. It was of the same size and excavated to the depth where the finds occurred in the first trench, but the second trench did not reveal any finds. Pieces of chert that were found could not determine any cultural affiliation.[15]

[9] 1980, 32.
[10] According to Slabe 1996, 839.
[11] Puš 1988–1989, 345–366; Toškan 2005, 91–97.
[12] Leben 1970, 30.
[13] Brodar 1985, 28.
[14] Leben 1970, 31.
[15] Brodar 1985, 28.

3. Koblarska jama (Dolga jama) (kat. št. JZS 94)

Vhod v Koblarsko jamo se nahaja na nadmorski višini 660 m, na jugozahodnem pobočju Male gore, slabih 200 m pod vrhom Koblarskega hriba (832 m n. m.). Jama je bila poznana tudi pod imeni Dolga jama, Velika jama pri Koblarjih, Weites Loch in Kofler Grotte.[16] Izoblikovana je v krednih apnencih, ki so tudi drugače v pretežni meri osnovna kamnina Male gore.

Koblarsko jamo kot arheološko najdišče prvi omenja K. Moser, ki je iz zasigane gomile izkopal kostne ostanke skupno osmih starejših in mlajših oseb. Poleg so ležale kosti goveda, spodnji čeljustnici srne, kot grobni pridatki pa še fragmenti treh posod. Kamnitega orodja ali kovinskih predmetov ob pokojnikih ni bilo.[17]

V času, ko je v jami kopal Moser, je bilo po jami nedvomno precej človeških kosti, vidnih že po jamskih tleh. Žal ni podatka ali je iz jame jemal tudi ta material. Ohranjen pa je *Zapisnik terenskih ogledov DZRJS*, z dne 20. maja 1929. V njem avtor omenja, da je v oddelku "C" našel človeške kosti. Po njegovi navedbi naj bi leta 1901 J. Müller iz Trsta in preparator ljubljanskega deželnega muzeja F. Schulz iz jame odpeljala več zabojev antropološkega materiala, za katerim se je izgubila vsaka sled. Leta 1929 pa je v ljubljanski muzej človeške kosti iz jugovzhodnega rova jame prinesel tudi M. Bukovec.[18]

Moser je za kulturne ostanke, ki jih je izkopal v Koblarski jami, menil, da spadajo v nek zgodnji prazgodovinski čas.[19] Leben je v pregledu arheološke podobe dolenjskih jam zapisal, da "najdb časovno in kulturno ne moremo natančneje označiti, ker ne vemo kje in kakšni so ostanki posodja."[20] V svoji doktorski disertaciji je v poglavju o človeških kostnih ostankih iz jam zapisal, da je Moser kot pridatke izkopal še ostanke poznobronastodobnih posod.[21]

Leta 1995 so člani DZRJ Ribnica v izogib uničevanju človeških kostnih ostankov, po katerih so hodili številni obiskovalci jame, opravili sistematičen pregled jame. Ob tem so dokumentirali arheološke in osteološke najdbe.

Skupno je bilo pobrano 21 fragmentov keramike.[22] Kot najstarejši je mogoče opredeliti fragment oboda posode z okrasom visečega trikotnika, ki je bil izdelan v tehniki brazdastega vreza.[23] A. Velušček[24] fragment uvrsti v obdobje keramike z brazdastim vrezom, ki kronološko sledi obdobju lasinjske kulture. V isti čas lahko uvrstimo tudi odlomke globokih posod.[25]

[16] Leben 1970, 30.
[17] Leben 1970, 30.
[18] Leben 1970, 31.
[19] Po Leben 1970, 30.
[20] Leben 1970, 31.
[21] Leben 1971, 251.
[22] Jamnik et al. 2002, t. 1; 2: 1–6,11.
[23] Jamnik et al. 2002, t. 1: 14.
[24] 2004c, 242, 260.
[25] Jamnik et al. 2002, t. 1: 1–3; glej še Velušček 2004c, 242, sl. 5.3.8.

During the nineties, members of DZRJ Ribnica attempted to find a continuation of the cave at the back cave wall, which is probably some 7 m away from the two trenches dug by Brodar. None of the participating cavers, who were digging next to the rear wall, remembers finding any archaeological or paleontological finds. This, of course, does not mean that there were not any. There is a strong possibility that, if the layers revealed individual pieces of chert, cavers would perhaps not recognise them.

3. Koblarska jama (Dolga jama) (cat. no. JZS 94)

The entrance to Koblarska jama is located at an altitude of 660 m, on the south-western slope of Mala gora, less than 200 m below the top of Koblarski hrib (832 m a.s.l.). The cave is also known as Dolga jama, Velika jama pri Koblarjih, Weites Loch, and Kofler Grotte.[16] It was formed in cretaceous limestone, which is also the core rock of Mala gora.

K. Moser was the first researcher who mentioned Koblarska jama as an archaeological site. He excavated skeletal remains of eight individuals from a sintered tumulus. Cattle bones and a deer mandible were lying next to them and fragments of three vessels that were placed there as grave goods were discovered. No stone tools or metal objects were placed next to the deceased.[17]

At the time when Moser was excavating in the cave, there were undoubtedly many human bones scattered over the floor of the cave. Unfortunately, we do not have any information whether he collected this material or not. However, *Zapisnik terenskih ogledov DZRJS* (DZRJS field visits), dated 20 May 1929, still exists. There the author mentions that he found some human bones in section 'C'. According to his statements, J. Müller from Trieste and a laboratory assistant of the Provincial Museum of Ljubljana, F. Schulz, took several boxes of anthropological material from the cave. This material is now lost. In 1929, M. Bukovec brought human bones from the south-eastern passage of the cave to the Museum of Ljubljana.[18]

Moser claimed that the cultural remains, which yielded from Koblarska jama, date to an early prehistoric period.[19] Leben, in his archaeological review of caves of Dolenjska, declared that "the finds cannot be dated nor culturally determined because we do not know where the fragments of pottery are and what they look like."[20] In his doctoral thesis, in the chapter on human skeletal remains found in caves, he wrote that Moser excavated remains of Late Bronze Age vessels, which were placed there as grave goods.[21]

[16] Leben 1970, 30.
[17] Leben 1970, 30.
[18] Leben 1971, 31.
[19] According to Leben 1970, 30.
[20] Leben 1970, 31.
[21] Leben 1971, 251.

Drugo, pri Jamniku s sodelavci obravnavano keramiko pa brez stratigrafskih podatkov zaenkrat ni smiselno točneje umeščati v nek kulturni okvir, saj obsega netipične elemente okrasja in oblike posod, ki segajo vse do antike in morda še v poznejši čas.[26]

Po navedbah[27] in kasnejših opažanjih[28] sta v jami prisotna dva načina pokopa: pokopavanje v gomile in izpostavljanje mrtvih ob jamskih stenah. Že ta ugotovitev nakazuje, da je bila jama v funkciji grobišča verjetno v več arheoloških obdobjih. Po jami so bili pobrani kostni ostanki 13 osebkov, 7 otrok in 6 odraslih. S kostnimi ostanki, ki jih je iz gomile izkopal Moser, torej skupno 21 oseb.[29]

Na vprašanje o tem, zakaj so si prazgodovinski ljudje izbrali za grobišče ravno Koblarsko jamo, še ne moremo podati zadovoljivega odgovora. V neposredni okolici Koblarske jame sta namreč vsaj še dve jami (Črna jama in Vančeva jama), ki bi lahko služili enakemu namenu kot Koblarska. Vhoda imata enako markantna, zato so jih prazgodovinski ljudje verjetno poznali. Gledano z našimi očmi sta enako primerni, po videzu celo lepši od Koblarske. V nobeni od jam tudi ni tekoče vode. Nekaj več meteorne vode je morda danes le v Koblarski jami. To bi bilo sicer lahko odločilno, če je bila situacija v prazgodovini podobna, vendar se nam zdi pomembneje nekaj drugega. Vizualno zaznavna razlika z okoliškimi jamami so izrazite skalne niše v Koblarski jami. V teh nišah so ljudje odlagali svoje pokojnike. Prav te niše bi lahko vzbudile asociacijo na maternico, vulvo oz. na vhod, vrnitev v Mater-Zemljo.[30]

Drugo vprašanje je, kje so živeli ljudje, ki so svoje mrtve nosili v jamo. Tudi nanj odgovora še ni mogoče podati. V neposredni okolici jame ne poznamo prazgodovinske naselbine. Tako lahko le domnevamo, da je moralo biti bivališče nekje na grebenu Male gore. Kot najbližji vrh je treba upoštevati predvsem Koblarski hrib.

4. Lisičja jama (kat. št. JZS 6155)

V zvezi z Lisičjo jamo je bilo kar nekaj desetletij nejasno, kje se sploh nahaja. Iskalo se jo je po Mali gori in celo v okolici Željnskih jam.[31]

V jami je v zadnjih letih 19. stoletja izkopaval koblarski učitelj Wolsegger. Takrat je našel 3 velike halštatske žare z dvema ročajema, ki so pri dvigovanju razpadle.[32] Moser je žare sprva datiral v prazgodovinsko obdobje, pozneje pa omenja keltsko-rimsko starost.[33] Pred drugo svetovno vojno so bile najdbe razstavljene

[26] Glej še Jamnik et al. 2002, 42–43.
[27] Leben 1970, 30 in tam navedena literatura.
[28] Glej Jamnik et al. 2002.
[29] Jamnik et al. 2002.
[30] Jamnik et al. 2002, 43–45.
[31] Ustna informacija F. Leben.
[32] F. Leben, Lisičja jama, v: *Arheološka najdišča Slovenije,* 1975, 237.
[33] Leben 1970, 31 in tam navedena literatura.

In 1995, members of DZRJ Ribnica conducted a systematic assessment of the cave, in order to avoid further destruction of human skeletal remains. Archaeological and osteological remains were documented.

A total of 21 fragments of pottery have been discovered.[22] The earliest identifiable fragment is a fragment of the girth of a vessel, decorated with a hanging triangle, which was made with furrowed incisions.[23] A. Velušček dated the fragment to the period of pottery with furrowed incisions, which chronologically follows the period of the Lasinja culture.[24] Fragments of deep vessels can be dated to the same period.[25]

The rest of the pottery, presented in Jamnik et al. 2002, has no stratigraphic data and is therefore not prudent to assign to any cultural framework, as it comprises atypical forms of decoration and vessels, which date up to the Roman period or later.[26]

Leben's references[27] and subsequent observations[28] specify two methods of burial: the deceased were buried in tumuli or exposed along the cave walls. This finding alone indicates that the cave was probably used as a burial ground over several archaeological periods. The bone material collected on the surface of the cave belongs to 13 individuals, seven children and six adults. Together with the bones, excavated by Moser, a total of 21 individuals were discovered.[29]

We cannot yet give a satisfactory answer as to why the ancient people chose Koblarska jama as a burial site. There are at least two other caves in the immediate vicinity of Koblarska jama (Črna jama and Vančeva jama), which could be used for the same purpose. The entrances of both are equally prominent so the prehistoric people probably knew they existed. In our opinion, they are also equally appropriate and even more attractive than Koblarska jama. Water does not run through any of them. Today, Koblarska jama perhaps shows evidence of some more meteoric water as the other two caves. This could be decisive if the situation was similar in prehistoric times, but one other fact is perhaps more important. One visually perceptible difference to the nearby caves is the presence of distinct rock niches in Koblarska jama. The deceased were placed in these niches, which could have awoken the association to the uterus, vulva or the entrance to return to the Mother-Earth.[30]

Another question that arises is where the people who used the cave as a burial ground lived. We cannot

[22] Jamnik et al. 2001, Pl. 1; 2: 1–6,11.
[23] Jamnik et al. 2002, Pl. 1: 14.
[24] 2004c, 242, 260.
[25] Jamnik et al. 2002, Pl. 1: 1–3; see also Velušček 2004c, 242, Fig. 5.3.8.
[26] See also Jamnik et al. 2002, 42–43.
[27] Leben 1970, 30 and there cited bibliography.
[28] See Jamnik et al. 2002.
[29] Jamnik et al. 2002.
[30] Jamnik et al. 2002, 43–45.

v kočevski gimnaziji, kje so danes in če so še sploh ohranjene, ni znano.

V letu 2008 je bilo v okviru Jamarskega društva Železničar opravljenih več pregledov Male gore z namenom odkriti nove arheološko zanimive jame. Raziskave je vodil M. Hornak, takrat zaposlen na Oddelku za arheologijo Univerze v Ljubljani. Lisičjo jamo so odkrili nekoliko pod Koblarsko jamo in sicer v vrtači, ki je zaradi skalnih sten dostopna le z ene strani. Skozi vhod velikosti 2 × 1,5 m se pride v 17 m dolg rov. V vhodnem delu so ob levi steni še vidni sledovi sonde, ki jo je v zadnjih letih 19. stoletja izkopal koblarski učitelj.[34]

2.2.2 VZHODNA STRAN MALE GORE

5. Grozdna jama (kat. št. JZS 3330; *t. 2.1:* 4)

Je 75 m dolga poševna jama. Jama obsega le en rov, ki se na dveh mestih iz širine nekaj metrov razširi na okoli 10 m. Na mestu, kjer se poševno spuščanje v jamo nekoliko izravna, so člani DZRJ Ribnica leta 2001 med podornimi skalami našli fragment dna keramične posode, ki je bila narejena na lončarskem vretenu (*t. 2.1:* 4), in tri manjše prazgodovinske fragmente.

6. Vrbovška ali Popisana jama (kat. št. JZS 7013; *sl. 2.2, 2.3*; *t. 2.1:* 5,6; *2.2*)

Je poševna jama z okoli štiridesetmetrskim strmim spustom do najnižje točke vhodne dvorane. Jama se nahaja okoli 1,5 kilometer južno od vasi Vrbovec, na nadmorski višini 650 m. 27. maja 2001 so jo obiskali člani DZRJ Ribnica in v njej na površju našli arheološke ostanke.

Dno jame je v večjem delu prekrito s podornimi skalami. Ob najnižji točki vhodne dvorane se rov spusti v nadaljevanje jame preko večjega podora. Ta rov se nadaljuje še okoli 70 m. Drug rov oziroma nadaljevanje vhodne dvorane pa se poševno vzpenja okoli 50 m in se s podorom zaključi v višini vhoda na nasprotni strani dvorane. V jami ni tekoče vode, je pa na več mestih nekaj meteorne vode ujete v manjših kotanjah. Kjer voda kaplja iz stropa na ilovico, je mogoče opaziti več drobcev oglja.

Dno vhodne dvorane, na delu, ki ga ne prekriva podorno skalovje, tvori suha ilovica, ki je zaradi prisotnosti oglja temnejša od ostale ilovice v jami. Že pogled z dvignjenega nadaljevanja jame zaradi temnejše ilovice daje slutiti mesto prazgodovinskega bivanja (*sl. 2.2*). Med skalnimi bloki in posameznimi večjimi kamni so ležali fragmenti keramike vsaj dveh posod. V predelu, kjer se začne podorno skalovje, je manjša kotanja. V njej je med skalami veliko živalskih kosti. Nekatere so že delno prekrite s sigovo skorjo. Površen pregled kosti kaže, da gre za kostne ostanke drobnice in morda srnjadi in jelenjadi. Skupaj s kostmi sta bila med podornim skalovjem najdena 2 kosa obdelanega jelenovega roga

[34] Hornak, Stepišnik 2008, 45.

answer this question yet. No prehistoric settlements are known from the immediate vicinity of the cave. We can only assume that a settlement was located somewhere on the ridge of Mala gora. The nearest peak is Koblarski hrib.

4. Lisičja jama (cat. no. JZS 6155)

The location of Lisičja jama had been unknown for several decades. People were searching for it on Mala gora and even near Željnske jame.[31]

In the last years of the 19th century, the cave was partly excavated by Wolsegger, a teacher from Koblarji. He discovered three large double-handled Hallstatt urns that were destroyed at lifting.[32] Moser initially dated the urns to the prehistoric period but he later referred to the Celtic-Roman period.[33] Before World War II the finds were exhibited in the Kočevje high-school. It is not known where they are today nor if they are still preserved.

In 2008, the Železničar Cave Society conducted a survey on Mala gora in order to discover new caves of archaeological interest. The survey was supervised by M. Hornak, who was at the time employed at the Department of Archaeology, University of Ljubljana. Lisičja jama was discovered just below Koblarska jama, in a sinkhole, which is only accessible from one side due to a rock wall. The entrance measures 2 × 1.5 m and is followed by a 17 m long passage. Traces of excavations done by a teacher from Koblarji in the last years of the 19th century are still visible along the left wall near the entrance.[34]

2.2.2 EASTERN SLOPES OF MALA GORA

5. Grozdna jama (cat. no. JZS 3330; *Pl. 2.1:* 4)

Grozdna jama is a 75 m long sloping cave. There is only one passage in the cave, which widens from a few metres to about 10 m on two occasions. In 2001, at the point where the sloping ground of the cave is slightly levelled and covered with rockfall, members of DZRJ Ribnica found a fragment of a base of a wheel-made vessel (*Pl. 2.1:* 4) and three smaller prehistoric fragments.

6. Vrbovška or Popisana jama (cat. no. JZS 7013; *Figs. 2.2, 2.3; Pls. 2.1:* 5,6; *2.2*)

Vrbovška jama is a sloping cave with a steep descent measuring approx. 40 m, leading to the lowest point of the entry hall. The cave is located about 1.5 km south of the village Vrbovec at an altitude of 650 m. Members of

[31] F. Leben, pers. comm.

[32] F. Leben, Lisičja jama, in: *Arheološka najdišča Slovenije,* 1975, 237.

[33] Leben 1970, 31 and there cited bibliography.

[34] Hornak, Stepišnik 2008, 45.

Sl. 2.2: Vrbovška jama, pogled na vhodno dvorano. Zaradi oglja temnejša ilovica kaže na območje človekove dejavnosti v jami.
Fig. 2.2: Vrbovška jama, the entry hall. Darker area of charcoal on the clay floor indicates an area of human activity in the cave.

(*t. 2.1:* 5,6). V enem primeru gre za pribl. 30 cm dolg jelenov parožek, ki ima eno stran obsekano z ostrim predmetom. Drug odlomek predstavlja odsekan, 9,5 cm velik končni del parožka.

Na mestu, kjer leži keramika, je suha ilovica. V to ilovico jazbeci kopljejo rove in prestavljajo keramične in druge najdbe. Med keramiko prevladujejo prazgodovinski fragmenti (*t. 2.2*), verjetno poznobronastodobne starosti.[35] Poleg teh pa se pojavlja še nekaj mlajših fragmentov, ki so narejeni na lončarskem vretenu.

Leta 2007 je Vrbovško jamo obiskala tudi že omenjena skupina, ki je iskala nove arheološke jame na Mali gori. Za obisk jame so se odločili na podlagi zapisnika JZS, v katerem ribniški jamarji poročajo o odkritju keramike. V delu, kjer je bila že leta 2001 pobrana keramika, so izkopali "testni jarek velikosti 1 × 1 m, do globine 50 cm, kjer se že pojavi intaktno podorno nasutje."[36] Avtorja navajata 8 kulturnih plasti in v treh, do globine 25 cm, so naleteli tudi na najdbe poznobronastodobne keramike.[37]

[35] Prim. npr. z Dular et al. 1995, 102, t. 5: 11.
[36] Hornak, Stepišnik 2008, 45.
[37] Hornak, Stepišnik 2008, 45.

DZRJ Ribnica visited the cave on 27th May 2001 and discovered some archaeological remains on the cave floor.

The cave floor is mostly covered with rockfall. At the lowest point of the entry hall the passage descends over a larger rockfall and continues for approx. 70 m. The second passage or the continuation of the entry hall ascends for about 50 m and ends with a large rockfall in the height of the entrance on the opposite side of the hall. The cave has no running water but some meteoric water is trapped in small depressions all over the cave. On locations where water is dripping from the ceiling onto clay, several fragments of charcoal can be seen. Areas of the entry hall floor that are not covered with rockfall show dry clay, which is darker than the rest of the clay in the cave due to the presence of charcoal. A glance from the elevated continuation of the cave onto darker clay in the cave suggests that the cave was inhabited in prehistory (*Fig. 2.2).* Fragments of at least two vessels were scattered among stone blocks and individual larger stones. There is a smaller hollow on the edge of the rockfall, which yielded a large amount of animal bones. Some are already partially sintered. Quick examination of the bones suggests that they belong to sheep and goat and perhaps roe deer and red deer. Moreover, two pieces of worked deer antler were found (*Pl. 2.1:* 5,6). One is approx. 30 cm long tine, cut with a sharp object. The second fragment is a 9.5 cm long tip of a tine that was chopped off from the tine itself.

Dry clay covers the area where the pottery has been found. Badgers have been tunnelling through this clay and moving pottery and other finds. Prehistoric pottery fragments prevail and they most probably date to the Late Bronze Age (*Pl. 2.2*).[35] In addition, some later wheel-made fragments are also present.

In 2007, members of DZRJ Ribnica visited Vrbovška jama while searching for new caves of archaeological interest on Mala gora. They decided to visit the cave because of the notes of JZS, where cavers from Ribnica mentioned some pottery finds. They dug a "test trench measuring 1 × 1 m, 50 cm deep, with intact rockfall on the bottom of it."[36] This trench was excavated in the area where fragments of pottery were found in 2001. The authors encountered eight cultural layers. Three of them, all lying less than 25 cm deep, yielded Late Bronze Age pottery fragments. [37]

Important information that is not mentioned by Hornak and Stepišnik comes from the sequence of layers in the test trench. At the discovery of the archaeological site, the area with pottery fragments showed several fills of sediment, created by badgers while digging their setts. As the sequence of layers was clearly seen in one of the profiles, this was cleaned and photographed. Most of the black or charcoal layers, Hornak and Stepišnik list eight

[35] e.g. Dular et al. 1995, 102, Pl. 5: 11.
[36] Hornak, Stepišnik 2008, 45.
[37] Hornak, Stepišnik 2008, 45.

Sl. 2.3: Vrbovška jama. Plasti pepela in vmesnih prog oglja.
Fig. 2.3: Vrbovška jama. Layers of ash with intermediate charcoal lines.

Sl. 2.4: Gosposka jama. Koščki oglja v gruščnati plasti.
Fig. 2.4: Gosposka jama. Pieces of charcoal in rubble.

Glede zaporedja plasti v testni sondi je pomemben vsaj še podatek, ki ga Hornak in Stepišnik ne omenjata. Že ob odkritju arheološkega najdišča je bilo na območju najdb keramike več posutij sedimenta, ker so ga spodkopali jazbeci pri kopanju svojih brlogov. Ker se je lepo videlo zaporedje plasti, je bil eden od takih podorov nekoliko očiščen in fotografiran. Večina črnih oz. ogljenih plasti, ki jih Hornak in Stepišnik naštejeta osem in jih poimenujeta s "kulturnimi plastmi"[38] in kasneje s "stratigrafskimi enotami",[39] je v plasti pepela. V takem primeru bi bilo po našem mnenju smotrneje celotno pepelnato plast s posameznimi od nekaj milimetrov do največ nekaj centimetrov debelimi črnimi progami oglja, šteti le za eno kulturno plast, ki predstavlja več zaporednih dogodkov v času ene kulture. Na fotografiji, ki je bila posneta ob odkritju arheološkega najdišča, je že v pepelnati plasti vidnih več kot 8 takšnih črnih prog (*sl. 2.3*). Tako mnenje podpira tudi najdena keramika, ki jo Hornak in Stepišnik uvrščata v čas pozne bronaste dobe, in keramika, ki je bila pobrana v jami ob odkritju. Že Hornak in Stepišnik pa sta podala oceno, da "glede na maloštevilne najdbe in razkrito stratigrafsko situacijo, ki ne kažejo sledov dolgotrajne poselitve, domnevamo, da je bila jama uporabljena le za občasno skrivališče."[40]

7. Gosposka jama (kat. št. JZS 6510; *sl. 2.4*)

V tej jami sicer ni bilo najdenih arheoloških materialnih ostalin, kot so keramika, kosti, kamnita orodja, vendar pa se glede na obliko jame in ostale pokazatelje zdi potrebno jamo upoštevati kot potencialno arheološko najdišče.

[38] Hornak, Stepišnik 2008, 45.
[39] Hornak, Stepišnik 2008, 46, sl. 4.
[40] Hornak, Stepišnik 2008, 45.

of them and label them as 'cultural layers'[38] and later as 'stratigraphic units',[39] lie within a layer of ash. In our opinion, it would perhaps be more sensible to consider this ash layer with individual, from a few millimetres up to several centimetres thick black stripes of charcoal, as a single cultural layer with multiple events within one culture. The photograph that was taken upon the discovery of the archaeological site shows more than eight black stripes (*Fig. 2.3*). Our opinion is furthermore supported by pottery, dated to the Late Bronze Age by Hornak and Stepišnik, and pottery, which was collected in the cave at the discovery. Hornak and Stepišnik stated that "a small number of finds and the revealed stratigraphy do not show long-term occupation. We therefore assume that the cave was used only as an occasional shelter."[40]

7. Gosposka jama (cat. no. JZS 6510; *Fig. 2.4*)

Archaeological remains such as pottery, bones, and stone tools have not yet been found in this cave but the appearance of the cave and other indicators demon-

[38] Hornak, Stepišnik 2008, 45.
[39] Hornak, Stepišnik 2008, 46, Fig. 4.
[40] Hornak, Stepišnik 2008, 45.

Gosposka jama je veličasten spodmol. Od kapa do zadnje stene je 10 m, širina vhoda je 17,80 m, višina vhoda okoli 6 do 7 m.

Spodmol je ostanek podora vrtače. Skalna stena s spodmolom danes omejuje vrtačo. Dno vrtače se nekoliko spušča v spodmol, tako da jamska tla niso ravna. Tla spodmola so prekrita z redkimi skalnimi bloki in drobnim gruščem, ki nastaja zaradi krušenja stropa. Ko so jamarji leta 1993 poskušali ob zadnji jamski steni odkriti nadaljevanje, so odstranili nekaj skalnih blokov in se poglobili v grušč do globine približno 40 cm. Nadaljevanje ni bilo možno, zato so delo opustili. V odkopanem grušču se je v globini 25 cm pokazala 1,5 do 2,5 cm debela temna proga z drobci oglja (*sl. 2.4*), drugih arheoloških najdb ni bilo. Edina verjetna razlaga je ta, da gre za ostanek kurišča, ki je moralo biti nekje v bližini vkopa.

8. Gregčeva jama (kat. št. JZS 4671; *t. 2.3:* 1–4)

Gregčeva jama je jamski sistem s petimi vhodi. Osrednji ali bolje rečeno največji od vseh je vhod v obliki spodmola. Proti vzhodu se je iz spodmola moč spustiti v nekaj več kot 40 m dolg rov, ki ima prav na najnižji točki tudi izhod iz jame. Na severozahodni strani spodmola je ozek, za človeka že neprehoden rov, ki se po 3–4 m razširi in strop toliko dvigne, da je v rovu kmalu moč stati. Poleg vhoda skozi spodmol ima ta rov še poseben vhod 10 m severozahodno od spodmola. Nekaj metrov za tem vhodom je ostanek nekdaj v suhi zid zloženih kamnov. Za zidom se odpre nekaj metrov visok in okoli 2 do 3 m širok rov. Tla rova so prekrita z mokro ilovico. V osrednjem prostoru rova iz tal gleda osamljen vrhnji del stalagmita. Rov se v smeri proti vhodnemu spodmolu nekoliko dvigne, strop pa se spušča. V tem končnem delu jamskega rova so v ilovico jazbeci izkopali globoke rove. Med izkopanim materialom ni bilo opaziti arheoloških najdb. Najden pa je bil fosilen meljak jamskega medveda (*Ursus spelaeus*). Žvekalna površina zoba je zglajena, kar pomeni, da je zob pripadal starejšemu osebku. Zob je ležal v mokri ali vsaj vlažni ilovici, saj je bil že ob odkritju sveže razpokan in je razpadel na več delov.

Na površini jamskega rova ob kapniku so ležali štirje fragmenti metličasto ornamentirane keramike (npr. *t. 2.3:* 2), vsi od iste posode. Ob zahodni jamski steni, za manjšimi kapniki, pa sta ležala še koščeno šilo in odlomek rogovja (*t. 2.3:* 3,4) ter pet manjših fragmentov verjetno prazgodovinske, a tudi mlajše keramike (*t. 2.3:* 1). Arheološke ostaline so v jami našli člani DZRJ Ribnica ob svojih raziskavah leta 2001.

9. Podtaborska ali Andolškova jama (kat. št. JZS 95)

Jama je zanimiva predvsem v okviru preučevanja srednjeveškega utrjevanja. Tik nad jamo je nekoč stal obsežen kamnit objekt. Po virih naj bi material porabili za gradnjo cerkve sv. Avguština v Strugah.[41] Pred leti je

[41] Otorepec 1996, 91.

strate that this cave should be considered as a potential archaeological site.

Gosposka jama is a magnificent rock shelter. It is 10 m long, the entrance is 17.8 m wide and approx. 6–7 m high.

The rock shelter is a residue of a collapsed sinkhole. Today, the sinkhole is confined by a rock wall with a rock shelter. The base of the sinkhole is slightly descending into the rock shelter and the cave floor is therefore not flat. The cave floor is covered with a few stones and fine gravel, formed by disintegration of the cave ceiling. In 1993, the cavers attempted to find the continuation of the cave, removed a few boulders and dug into the rubble to a depth of approx. 40 cm. They could not dig any further and the project was finished. The gravel that was excavated revealed 1.5 to 2.5 cm thick dark line with fragments of charcoal (*Fig. 2.4*) at a depth of 25 cm. There were no other archaeological finds. The only possible explanation is that this is a residue of a hearth, which had to be somewhere close to the excavated trench.

8. Gregčeva jama (cat. no. JZS 4671; *Pl. 2.3:* 1–4)

Gregčeva jama is a cave system with five entrances. The central or rather the largest entrance is the entrance formed as a rock shelter. Towards the east from the rock shelter it is possible to descend to over 40 m long passage with an exit from the cave at the lowest point. On the north-western side of the rock shelter there is a narrow impassable passage, which widens after 3 or 4 m and the ceiling raises so that it is possible to stand up straight. In addition to the entrance through the rock shelter, this passage has another entrance, located 10 m to the north-west of the rock shelter. A few metres from this entrance one can see some stones, which used to form a dry-stone wall. Behind the wall, there is a few metres high and about 2 to 3 m wide passage. The floor is covered with wet clay. In the centre of the passage there is an isolated top of a stalagmite protruding from the floor. The passage slightly ascends in the direction of the rock shelter, while the ceiling lowers. Badgers have dug deep tunnels in this final part of the cave passage. No archaeological material was found in the clay, dug by badgers. However, a fossilised cave bear molar (*Ursus spelaeus*) was discovered. The occlusal wear facet is smooth, which means that the tooth belonged to an older specimen. The tooth was found lying in wet or at least damp clay and it was freshly cracked and broken into several parts already at the unveiling.

On the surface of the cave passage, at the speleothem, four fragments of pottery carrying brush decoration (e.g. *Pl. 2.3:* 2) were found. All of them belong to a single vessel. At the western wall of the cave, behind lower speleothems, a bone awl, a fragment of an antler (*Pl. 2.3:* 3,4) and five small, probably prehistoric but also later, pottery fragments were discovered (*Pl. 2.3:* 1). These archaeological remains were found by the members of DZRJ Ribnica during their exploration in 2001.

zdajšnji lastnik vhod v jamo z betonskim zidom nekoliko popravil. Verjetno je jamo nameraval uporabljati za hladilnico. Za tem prvim vhodnim zidom je ob jamskih stenah ohranjen še en zid. Po nekajmetrskem položnem spustu se danes jamski rov izravna. Vidi se, da je bil po celotni dolžini rova odstranjen jamski sediment, ponekod skoraj v višini 1 m. Na nekaj mestih ga je nekaj ostalo ob jamski steni. Na enem od takih mest je bil v profilu najden fosiliziran medvedov podočnik in dva manjša fragmenta fosilne kosti. Verjetno gre za kostne ostanke jamskega medveda (*Ursus spelaeus*). Po jami leži še nekaj srednjeveške in novoveške keramike, najden je bil tudi del roženega glavnika.

2.2.3 KOMUNIKACIJSKA POVEZAVA PREKO SUHE KRAJINE

10. Dolga jama (kat. št. JZS 2149; *sl. 2.5*; *t. 2.3:* 5–8)

Vhod v jamo je mogočen, od 15 do 20 m širok in pod kapom okoli 8 m visok spodmol (*sl. 2.5*). Današnji vhod v jamo je nastal ob podoru stropa dvorane, tako da se sedaj jamsko dno od vhoda v jamo do prve izravnave spušča približno 20 m po tem starem podoru. Od izravnave za vhodom se jama nadaljuje v več 10 m široko in dolgo dvorano. Danes jama ne nudi dobre zaščite, saj je zaradi manjšega podora stropa pri koncu jame v jami prepih, pozimi pa so tla celotne jame v notranjosti zmrznjena in prekrita z ledom.

Tik za vhodom, kjer se začne izravnava, je desna jamska stena nekoliko vbočena, tako da je v veliki dvorani to edini primeren prostor, ki nudi relativno zaščito pred prepihom. Tik ob jamski steni, na površju jamskih tal, so bili decembra 2002, ob obisku DZRJ Ribnica, pobrani fragmenti prazgodovinske keramike (kot npr. *t. 2.3:* 6), fragment mlajše keramike z valovnico (*t. 2.3:* 5), kamniti brus (*t. 2.3:* 7) in fragment artefakta iz železa (*t. 2.3:* 8).

Dolga jama, glede na predvidevanje, da je vhodni podor precej starejši od keramičnih najdb, ni mogla služiti kot poselitveni prostor, temveč je bila verjetno le občasna postaja za ljudi, ki so nanjo naleteli na svoji poti.

11. Antonkov skedenj (kat. št. JZS 448; *sl. 2.6*) in

12. Gornja (Gorenja) vodena jama (kat. št. JZS 447)

Vhoda v obe jami se nahajata nekaj metrov narazen med naseljema Žvirče in Višnje. Na nasprotni strani vrtače, na dnu katere je na jugovzhodni strani vhod v Antonkov skedenj, se nahaja še vhod v Dolnjo vodeno jamo (kat. št. JZS 446), ki je verjetno v času uporabe jame služila kot mesto za oskrbo z vodo.

Dolenja jama in Antonkov skedenj sta ostanek nekdanje jame, ki jo je podor ločil. Arheološke ostaline so bile v jamah odkrite ob obisku jamarjev DZRJ Ribnica leta 2000, osnovni podatki o najdišču pa so bili objavljeni leta 2001.[42]

[42] Bizjak, Jamnik, Oberstar 2001, 118–127.

Sl. 2.5: Vhod v Dolgo jamo pri Hinjah.
Fig. 2.5: Entrance to Dolga jama near Hinje.

9. **Podtaborska or Andolškova jama** (cat. no. JZS 95)

The cave is particularly interesting from the point of medieval fortification study. A large stone structure used to stand just above the cave. References mention that people used the material from this structure to build the church of St Augustine (sv. Avguštin) in Struge.[41] Several years ago, the current owner built a concrete wall at the entrance to the cave. He probably intended to use the cave as a cold storage. Another wall along the cave walls is preserved behind this first wall. The cave passage levels after a few metres of a slight descent. It is evident that the sediment on the floor of the cave was removed along the whole length of the passage, at some places almost 1 m in depth. Traces of it are still preserved along the cave walls. One of these preserved sediments yielded a fossilised bear canine and two small fragments of fossilised bones. These are most probably cave bear remains (*Ursus spelaeus*). Fragments of medieval and early modern pottery, along with a fragment of an antler comb were also discovered scattered on the cave floor.

2.2.3 THE COMMUNICATION ROUTE ACROSS SUHA KRAJINA

10. Dolga jama (cat. no. JZS 2149; *Fig. 2.5*; *Pl. 2.3:* 5–8)

A magnificent entrance to the cave is formed as a rock shelter and is 15 to 20 m wide and at the highest point approx. 8 m high (*Fig. 2.5*). The entrance, as we see it today, was created with a collapse of the cave hall ceiling. Because of this old rockfall the cave floor descends for approx. 20 m from the entrance to the first levelled surface. From it the cave continues to an over 10 m wide and long hall. The cave does not offer good protection today, a smaller collapse of the cave hall ceiling makes it exposed to drafts, while the cave floor is frozen and covered with ice during winter.

[41] Otorepec 1996, 91.

Sl. 2.6: Antonkov skedenj. Talilna peč.
Fig. 2.6: Antonkov skedenj. Smelting furnace.

Takoj za vhodom v Antonkov skedenj se rov strmo spusti 6 m navzdol, kjer se prostor zravna v 10 × 12 m veliko dvorano z ravnim dnom. Iz tega osrednjega prostora jame se rov nadaljuje še 25 m. V zahodnem delu dvorane, tik pod vhodnim poševnim spustom do dvorane, je iz zloženega kamenja narejena 80 cm visoka talilna peč (*sl. 2.6*). Zunanji krog peči meri 2 m, notranji 1–1,2 m. Zgornji nivo polnila peči je danes viden kot črnosiva žlindra, ki je nekoliko že pomešana z jamskim sedimentom. Žlindra leži v precejšnjih količinah tudi okoli peči. Analiza ni pokazala, da bi vsebovala veliko železa.[43] V dvorani s pečjo je v posutih jazbečevih rovih videti več zaporednih plasti oglja in pepela, kar nakazuje, da je bila peč v funkciji večkrat. Okoli peči ali v posutih jazbečevih rovih ni bilo najdenih nikakršnih drugih arheoloških ostankov. Se pa za tem osrednjim jamskim prostorom na jugozahodni strani odpira 1 meter visok prehod v nadaljevanje jame. Po nekaj metrih se nizek strop dvigne in v rovu je mogoče stati. Po jamskih tleh tega rova je ležalo precej prazgodovinske keramike. Nekaj je je že prekrite s sigo, nekaj pa poškodovane zaradi modernih obiskovalcev, ki zahajajo v jamo. Na za hojo najbolj izpostavljenem delu rova je bila na površini 6 m² keramika pobrana. Pripada najmanj sedmim posodam, ki jih lahko okvirno datiramo v bronasto dobo.[44] Na mestu, kjer se v rovu s keramiko strop dvigne, je po celotni širini rova opaziti, da je bil umetno odstranjen velik del kalcificiranega sedimenta, ki je zapolnjeval prostor med dvema generacijama trdih sig. Domneva, da bi iz neznanega vzroka v talilni peči pražili prav to polnilo, se na podlagi kemične analize ni potrdila,[45] obstaja pa možnost, da je tak sediment služil kot neke vrste obloga pri pripravi peči.

Le nekaj deset metrov južneje od Antonkovega skednja in Dolnje vodene jame, se v sosednji, nekoliko plitvejši vrtači odpira mogočen vhod v Gornjo vodeno jamo. Tudi v tej jami je na dnu petnajstmetrskega strme-

[43] Bizjak, Jamnik, Oberstar 2001, 124.
[44] Glej Bizjak, Jamnik, Oberstar 2001, sl. 3.
[45] Bizjak, Jamnik, Oberstar 2001, 124.

Immediately behind the entrance, where the levelled floor begins, the right cave wall is slightly concave and this is the only suitable place in the great hall that offers some protection against drafts. In December 2002, members of DZRJ Ribnica visited the cave and collected fragments of prehistoric pottery (e.g. *Pl. 2.3:* 6), a fragment of later pottery decorated with a wavy line (*Pl. 2.3:* 5), a whetstone (*Pl. 2.3:* 7), and a fragment of an iron artefact (*Pl. 2.3:* 8). These finds were uncovered on the surface, right next to the cave wall.

Assuming that the rockfall at the entrance predates the pottery fragments, Dolga jama could not serve as a settlement but was probably only used as an occasional shelter.

11. Antonkov skedenj (cat. no. JZS 448; *Fig. 2.6*) and
12. Gornja (Gorenja) vodena jama (cat. no. JZS 447)

Entrances to both caves are located only a few metres apart, between the villages of Zvirče and Višnje. On the opposite side of a sinkhole, on the bottom of which we can on the south-eastern side find the entrance to Antonkov skedenj, there is also the entrance to Dolnja vodena jama (cat. no. JZS 446), which was probably used as a place of water supply at the time when Antonkov skedenj was inhabited.

Dolenja jama and Antonkov skedenj used to form a single cave, which was divided in two by a rockfall. Cavers of DZRJ Ribnica visited both caves in 2000 and discovered some archaeological remains. Basic information about the site was published in 2001.[42]

Immediately behind the entrance to Antonkov skedenj there is a steep 6 m long descend. After the descend, the passage levels to a 10 × 12 m large hall with levelled floor. From this central area, the passage continues for another 25 m. In the western part of the hall, just after the descent from the entrance to the hall, there is a smelting furnace, made of 80 cm high stack of stones (*Fig. 2.6*). The external diameter of the furnace is 2 m and the internal 1–1.2 m. The top fill of the furnace is now black and grey slag, mixed with some cave sediment. Substantial quantities of slag are scattered around the furnace. The analysis showed only small amounts of iron in the slag.[43] In the hall with the furnace, the strewn badger tunnels show several successive layers of charcoal and ash, which indicate that the furnace was repeatedly used. No other archaeological finds were discovered around the furnace or in the strewn badger tunnels. However, from this central area of the cave, on the south-western side of the hall, one meter high passage, representing a continuation of the cave can be seen. After a few metres, the ceiling raises and it is possible to stand upright. A large amount of prehistoric pottery was discovered scattered on the floor of this passage. Some of the fragments have already been

[42] Bizjak, Jamnik, Oberstar 2001, 118–127.
[43] Bizjak, Jamnik, Oberstar 2001, 124.

ga spusta jamsko dno izravnano. Takoj ob izravnavi je viden suhozidni kvadratni tloris velikosti 2,2 × 2,2 m, ob njem pa leže veliki kosi žlindre, ki je kemično podobna žlindri iz Antonkovega skednja.[46] Na zahodni strani, nekako sredi strmega spusta proti izravnanemu dnu jame, je vhod v ozek rov, ki se v nadaljevanju dvigne tudi do višine okoli 10 m. Takoj za ožino leži po tleh nekaj fragmentov identične keramike kot v Antonkovem skednju. Tudi tu so bili nekoč v preteklosti odstranjeni deli kalcificiranih plasti, ki pa jih ni na jamskih tleh in so bile očitno odnešene iz rova.

13. Cvarova jama (kat. št. JZS 873; *sl. 2.7*)

40 m dolga jama se nahaja dobrih 100 m nad vasjo Tisovec. Jama ima po vhodnem, štirimetrskem breznu le en raven rov, ki ga je izdolbla voda. Danes je rov zapolnjen z ilovico, večina jamskega dna pa je pokrita s sigo. Na nekaj mestih so se oblikovale ponvice. Član DZRJ Ribnica A. Oberstar je leta 2005 v eni od ponvic našel sprane fragmente fosilnih kosti jamskega medveda (*Ursus spelaeus*).

Ob ogledu meseca marca 2005 je bilo ugotovljeno, da je v zadnjem delu jamskega rova po tleh še nekaj močno fragmentiranih kosov fosilnih kosti. Fragmenti so obdani s črnim oprhom in imajo v večini primerov zglajene robove, kar govori o transportu v sedimentu. Kdaj naj bi do tega prihajalo, ni jasno, saj se danes jama po približno 40 m dolžine konča. Prav na sredi jamskega rova je okoli pol metra širok vhod v brezno. Morda bi bilo bolje reči, da gre za udor ilovnatega sedimenta, ki daje vtis vhoda v brezno. Vanj se je mogoče spustiti do globine 6–7 m, potem se zaključi. Gre za neke vrste požiralnik v ilovnatem sedimentu. Že takoj na robu udora ilovice je moč videti posamezne fosilne kosti, ki se nadaljujejo v globino do nekako sredine brezna. Kosti v ilovici so v večini primerov cele in brez črnega oprha ter sledov zgladitve robov, ni pa vtisa, da bi bili kostni ostanki v anatomski legi. Cvarova jama je očitno služila kot brlog jamskemu medvedu.

Na jamskih tleh v okolici vhoda v ilovnato brezno je bila najdena tudi petnica mladega jamskega medveda. Delno je fragmentirana, robovi odlomkov in izpostavljenih delov kosti so zglajeni zaradi premikanja v sedimentu. Najdba ne bi bila nič posebnega, če vzdolžno po kosti ne bi bilo 2,5 cm dolgega žleba (*sl. 2.7*), ki nas je spomnil na podoben žleb na dveh fosilnih kosteh iz Dolarjeve jame pri Logatcu, kjer je bilo v fosilnih nosorogovih kosteh odkritih več lukenj in dva žleba.[47] Brodar piše, da so žlebovi v kosteh poznani in da lahko nastanejo "če potezamo z mehkim tkivom, npr. kito, sem in tja." Še naprej pa ugotavlja, da "ne poznamo primera, da bi kdo tak žleb poskušal razložiti kot naravni pojav."[48] Jamnik je nekaj let kasneje še enkrat obravnaval luknje v omenjenih nosorogovih kosteh in takrat odkril še en

[46] Bizjak, Jamnik, Oberstar 2001, 126.
[47] Brodar 1989; Jamnik 1997a.
[48] Brodar 1989, 98.

sintered and some of them were damaged by modern visitors of the cave. Some pottery was collected on the most exposed part of the passage measuring 6 m². Fragments belong to at least seven vessels, which can be broadly dated to the Bronze Age.[44] At the point where the ceiling rises, the full width of the passage indicated artificially removed large proportion of calcified sediment that used to fill the space between two generations of hard sinter. Chemical analysis did not confirm that people would, for an unknown reason, roast this fill in the furnace,[45] but there is a possibility that such sediment could serve as a sort of coating of the smelting furnace.

Only a few dozen metres towards the south of Antonkov skedenj and Dolnja vodena jama, in the adjacent and slightly shallower sinkhole, a magnificent entrance to Gornja vodena jama can be seen. The cave floor levels after a steep 15 m descent. Right when this levelled surface starts, a dry-stone wall with square floor plan of 2.2 × 2.2 m in size can be seen, with large pieces of slag scattered around it. This slag is chemically similar to the slag from Antonkov skedenj.[46] On the western side, halfway down the steep descent, there is a narrow passage with an ascend of approx. 10 m. A few fragments of pottery, identical to the ones from Antonkov skedenj were found scattered on the floor at the start of the passage. Here, too, calcified sediment was once removed but there is no sign of it on the cave floor and was therefore most likely taken out of the cave.

13. Cvarova jama (cat. no. JZS 873; *Fig. 2.7*)

This 40 m long cave is located some 100 m above the village of Tisovec. After a four-metre deep shaft, which presents the entrance to the cave, there is only one levelled passage, which was formed by water. The passage is now filled with clay and most of the cave floor is covered with sinter. Some gours can be seen. In 2005, A. Oberstar, a member of DZRJ Ribnica, uncovered washed fragments of fossilised cave bear bones (*Ursus spelaeus*) in one of the gours.

In March 2005, several highly fragmented pieces of fossilised bones were discovered on the surface in the back part of the passage. The fragments are covered with black coating, most of them show smoothened edges, which indicates that they were transported in sediment. It is not known when this occurred, as the cave is only about 40 metres long today. In the middle of the cave passage we can see approx. half a meter wide shaft. It might be better to say that this is a residue of the collapsed clay sediment, which gives an impression of a shaft. It is 6–7 m deep. It is a sort of a swallow hole in the clayey sediment. Right on the edge of the collapsed clay sediment we can see some fossilised bones, which are present roughly to mid-depth of the shaft. Bones in the clay are mostly in

[44] See Bizjak, Jamnik, Oberstar 2001, Fig. 3.
[45] Bizjak, Jamnik, Oberstar 2001, 124.
[46] Bizjak, Jamnik, Oberstar 2001, 126.

Sl. 2.7: Cvarova jama. Žleb na fosilni medvedovi petnici.
Fig. 2.7: Cvarova jama. Groove on a cave bear heel bone.

podoben žleb. Nastanek žlebov je nato poskušal pojasniti z delovanjem pritiskov v sedimentu in zapisal, da "z vodo prepojena kost, predvsem spongioza postane nekoliko prožnejša / spužvasta. … Če bi torej namočen in z vodo prepojen fragment kosti sediment pritiskal oz. tiščal na nek rob kamnine, bi se ta rob vtisnil v spongiozo. Žleb, ki bi tako nastal, bi imel zaradi malenkostnega premikanja kosti skozi daljše časovno obdobje, zaokroženo in zglajeno dno."[49]

Pri medvedovi petnici iz Cvarove jame ni nikakršnega dvoma, da ni bila nikoli v rokah kamenodobnega človeka. Jama je služila izključno kot brlog medvedom, saj je za kakršnokoli prebivanje ali zavetišče ljudem popolnoma neprimerna. Kosti v jami so bile izpostavljene le naravnim procesom, zato se zdi, da žleb na petnici govori v prid tezi, da so tudi žlebovi na nosorogovih kosteh iz Dolarjeve jame le rezultat premikanja kosti v sedimentu.

[49] Jamnik 1997a, 426.

one piece and are not covered by black coating, they do not have smooth edges but they do give an impression that they do not lie in an anatomical position. Cvarova jama apparently served as a cave bear den.

Moreover, on the cave floor near the entrance to the clay shaft a heel bone of a cave bear was discovered. It is partially fragmented, the edges of fragments and exposed parts of the bone are smoothed due to the movement in the sediment. This find is exceptional because of a 2.5 cm long groove running in longitudinal direction to the bone (*Fig. 2.7*). It is similar to the grooves that were discovered on two fossilised bones in Dolarjeva jama near Logatec. These were fossilised rhinoceros bones, carrying several holes and two grooves.[47] Brodar writes that bones with grooves on them are known from other sites as well and that they can be made "if we keep pulling a soft tissue, such as a ligament, back and forth." Furthermore, he notes that "to our knowledge, no one has tried to explain such grooves as a natural phenomenon." [48] A few years later, Jamnik studied the holes in these rhinoceros bones anew and found another similar groove. He then tried to explain the formation of the grooves with the pressure that occurs in sediments and concluded that "bones, especially spongy bones, become more flexible when they are saturated. ... If wet and water-soaked bone fragment would be pushed against an edge of a rock or a stone, this edge would leave an impression in a spongy bone. This would be seen as a groove in the bone, which would, with minimal movement of the bone over time, show rounded and smoothed bottom."[49]

There is no doubt that the cave bear heel bone from Cvarova jama was never touched by a prehistoric man. The cave was used exclusively as a bear den and is not suitable for human inhabitation or shelter. Bones in the cave were only exposed to natural processes and we can therefore assume that the groove on the heel bone proves the thesis that the grooves on rhinoceros bones from Dolarjeva jama are merely the result of being transported in the sediment.

2.2.4 WESTERN AND SOUTHERN PARTS OF KOČEVSKI ROG AND POLJANSKA DOLINA TO STARI TRG OB KOLPI

14. Mala knežja jama (cat. no. JZS 667; *Pl. 2.4:* 1,2)

The entrance to Mala knežja jama[50] is located in a collapsed cave near Rugarski klanci along the road from

[47] Brodar 1989; Jamnik 1997a.
[48] Brodar 1989, 98.
[49] Jamnik 1997a, 426.
[50] Although the cave is located in the eastern part of Kočevski rog, we estimated that it is close enough to the studied area, relatively close to Spodmol pri Macesnovi gorici, which yielded similar cultural remains. This cave was therefore included in the present overview.

2.2.4 ZAHODNI IN JUŽNI DEL KOČEVSKEGA ROGA IN POLJANSKA DOLINA DO STAREGA TRGA OB KOLPI

14. Mala knežja jama (kat. št. JZS 667; *t. 2.4:* 1,2)

Vhod v Malo knežjo jamo[50] se odpira v vdornici pri Rugarskih klancih, ob cesti, ki povezuje Dvor pri Žužemberku s Kočevjem. Po strmem, več deset metrov dolgem spustu po podornem kamenju, ki je ob vdoru zgrmel proti notranjosti jame, se jamsko dno izravna. Nadaljevanje jame je le še prostorna in visoka dvorana. A. Špelič, član DZRJ Ribnica, je leta 2003 med podornima blokoma ob zadnji jamski steni našel 3 fragmente prazgodovinske keramike (kot npr. *t. 2.4:* 1,2).

15. Spodmol pri Macesnovi gorici (kat. št. JZS 6157)

A. Mihevc je v začetku devetdesetih let pri raziskovanju množičnih grobišč v Kočevskem rogu raziskal tudi jamo Spodmol pod Macesnovo gorico. Ker so bile v zapisniku JZS iz leta 1991 v jami omenjene človeške kosti, je jamo natančno pregledal in pod 15 m dolgim poševnim spustom v jamo, pod strmim odsekom pobočja, že v prvi jamski dvorani našel prazgodovinsko keramiko in kamniti izdelek. Najdbe je izročil Notranjskemu muzeju v Postojno in kasneje z arheologinjo A. Bavdek opravil še manjše sondiranje, pri katerem so v sedimente posegli le do globine 35 cm. Najdbe so bile skoncentrirane v vrhnji plasti iz keramike in humusa. Poleg keramike je bilo v njej tudi nekaj živalskih kosti, našli pa so še en kamniti izdelek.

Navaja se, da so "dobili kar 3 posode, pri katerih manjka le nekaj koščkov do celote. Več posod pa smo sestavili do take mere, da lahko vidimo njihovo obliko."[51] O obliki posod se omenja, da "tako za posode, ki smo jih mogli sestaviti, kot za večino drugih fragmentov keramike lahko rečemo, da so po obliki še najbolj podobni loncem." Zapisan je tudi podatek, da so "značilnost keramike iz spodmola tudi bradavičasti držaji različnih oblik in velikosti. Največkrat so prilepljeni na zgornjem koncu posode, tik pod ustjem. Na posodi so lahko trije ali štirje bradavičasti držaji." Okrasje na posodah je redko. Najden je bil fragment s plastičnim rebrom, ki je razčlenjeno z odtisi prstov, na drugem kosu je na notranji steni vidno metličenje in na tretjem okras nekontroliranih vrezov.[52]

Avtorja sta pri kulturni opredelitvi keramike previdna in se odločita za zelo široko možnost. Zapišeta, da so bile "take oblike loncev v uporabi v daljšem časovnem

[50] Čeprav je jama že na vzhodnem delu Kočevskega roga, smo ocenili, da je dovolj blizu območja, ki ga obravnavamo, in relativno blizu Spodmola pri Macesnovi gorici, s katerim sta po najdenih kulturnih ostankih najdišči blizu, zato v pregled vključujemo tudi to jamo.

[51] Bavdek, Mihevc 1995, 81.

[52] Bavdek, Mihevc 1995, 81.

Dvor pri Žužemberku to Kočevje. After a steep, several dozen metres long descent over a rockfall, which collapsed towards the cave, the cave floor levels. The rest of the cave is a large and high hall. In 2003, A. Špelič, a member of DZRJ Ribnica, found three fragments of prehistoric pottery (e.g. *Pl. 2.4:* 1,2) among the collapsed stones at the back wall of the cave.

15. Spodmol pri Macesnovi gorici (cat. no. JZS 6157)

In the early nineties, A. Mihevc was researching mass graves in Kočevski Rog and visited the cave Spodmol pri Macesnovi gorici. The JZS report from 1991 mentioned the presence of human bones in this cave, so he thoroughly examined the cave and just at the base of a 15 m long descent into the first cave hall, below a steep section, discovered prehistoric pottery and a stone artefact. The finds were handed over to the Notranjska Museum in Postojna and he later completed trial trenching in collaboration with the archaeologist A. Bavdek. They only dug 35 cm deep into the sediments. The finds were concentrated in the top humus layer. In addition to plenty of pottery, a few animal bones and a stone object were discovered.

The researches state that they found "three vessels, which were almost complete once they were assembled. Moreover, several vessels were assembled to such an extent that their form is clearly visible."[51] The form of "all three vessels and most of the other fragments are most similar to pots." They furthermore mention that "another characteristic of pottery from Spodmol are appliqué lugs of various shapes and sizes. Most of them are attached to the upper part of vessels, just below the lip. Vessels carry three or four of them." Vessels are rarely decorated. One fragment carries a plastic cordon with fingertip imprints, the second one carries brush-decoration on the inner wall and the third fragment shows a decoration of random incisions.[52]

The authors are very cautious with the cultural definition of pottery and give only a vague time frame. They write that "such forms of pots were in use for a very long time, over a vast area of Slovenian territory. Flat or slightly inverted lips, appliqué lugs below the lip and coarse ware is known from the Eneolithic onwards. Similar forms are also typical for the Bronze Age."[53] The two stone tools that were also discovered on the site are probably whetstones.[54]

16. Mali brlog (cat. no. JZS 2859; *Pl. 2.4:* 3–5)

Several tens of metres long cave with an approx. 5 m high entrance is located in a smaller sinkhole at the foot of Okrožnik (813 m a.s.l.), between the villages

[51] Bavdek, Mihevc 1995, 81.

[52] Bavdek, Mihevc 1995, 81.

[53] Bavdek, Mihevc 1995, 82, Figs. 4 and 5.

[54] Bavdek, Mihevc 1995, Fig. 6.

obdobju na širšem slovenskem prostoru. Oblikovne značilnosti posod, ravna ali rahlo uvihana ustja, bradavičasti držaji pod ustjem ter keramiko z grobo fakturo, poznamo že v eneolitiku. Podobne oblike pa so značilne tudi skozi vso bronasto dobo."[53] Za kamniti orodji se domneva, da gre za brusa.[54]

16. Mali brlog (kat. št. JZS 2859; *t. 2.4:* 3–5)

Nekaj deset metrov dolga jama z okoli 5 m visokim vhodom se odpira v manjši vrtači pod vznožjem Okrožnika (813 m n. m.) med Starim trgom ob Kolpi in Tančo goro na Poljanski gori. Po poševnem spustu, ki se nadaljuje z roba vrtače v jamo, se po približno 10 m jamsko dno nekoliko zravna. Vhodni rov se zalomi in se kmalu zoži v komaj 0,7 m visok prehod v nadaljevanje jame. Pred vhodom v nadaljevanje jame je viden ostanek v suhi zid zloženega kamenja, ki je nekoč zapiral pot v jamo. V tem vhodnem rovu je med kamenjem, ki leži po dnu jame, T. Oberstar, član DZRJ Ribnica, leta 2004 pobral nekaj kosov prazgodovinske (*t. 2.4:* 3,5) in mlajše (*t. 2.4:* 4) keramike ter odlomke živalskih kosti.

2.2.5 OKOLICA KOČEVJA

17. Merešloh ali Medvedova oz. Črna jama (kat. št. JZS 89; *sl. 2.8*)

M. Brodar v članku, kjer poroča o iskanju novih paleolitskih postaj v letih 1971 do 1982, omenja tudi poskusno sondiranje v jami Merešloh pri Kočevju leta 1973. Sondiranje nekaj metrov za vhodom, na razmeroma strmem spustu v jamo, so po odstranitvi 20 cm humusnih jamskih tal zaključili, ker so naleteli na skalno dno.[55] Leto kasneje je akademski slikar S. Jarm[56] iz Kočevja na krtini, na travniku pred vhodom v jamo našel koščeno šivanko (*sl. 2.8*). Šivanka je dolga 5,3 cm in na delu, kjer ima narejeno luknjo, ki ni na sredini, temveč je nekoliko zamaknjena, široka 0,8 cm. Kost ni fosilizirana. Iz katerega obdobja je šivanka, ni mogoče reči. V poštev prideta celotna prazgodovina in tudi antika. Jarm se ne spominja, da bi v okolici, kjer je pobral šivanko, opazil tudi keramiko. Če že ne jama, pa vsekakor prostor pred jamo ostaja zanimiv kot potencialno arheološko najdišče.

18. Ciganska jama (jamski sistem Željnskih jam) (kat. št. JZS 12)

Leta 1963 je bila s poskusnim sondiranjem pod velikim in lepo obokanim vhodom v Cigansko jamo v

[53] Bavdek, Mihevc 1995, 82, sl. 4 in 5.

[54] Bavdek, Mihevc 1995, sl. 6.

[55] Brodar 1985, 27.

[56] Leta 1978 je gospod Jarm koščeno šivanko posodil Pokrajinskemu muzeju Kočevje za razstavo. Leta 1997 pa jo je s potrdilom št. 113/97, ki je bilo izdano dne 18. avgusta 1997 prevzel v osebno hrambo. Najditelju se najlepše zahvaljujemo za prijaznost, ker je najdbo pokazal in jo dovolil fotografirati.

Sl. 2.8: Koščena šivanka, ki je bila najdena pred vhodom v Medvedovo jamo.
Fig. 2.8: Bone needle, found in front of Medvedova jama.

Stari trg ob Kolpi and Tanča gora on Poljanska gora. After approx. 10 m long sloping descent from the edge of the sinkhole to the cave, the floor of the cave levels. The entrance passage turns sharply and lowers to just 0.7 m high passage, which represents a continuation of the cave. Remains of a dry-stone wall that used to block the path into the cave can still be seen here. In 2004, in this entrance passage, among the stones lying on the surface of the cave, T. Oberstar, a member of DZRJ Ribnica, discovered a few pieces of prehistoric (*Pl. 2.4:* 3,5) and later (*Pl. 2.4:* 4) pottery and fragments of animal bones.

2.2.5 SURROUNDINGS OF KOČEVJE

17. Merešloh or Medvedova or Črna jama (cat. no. JZS 89; *Fig. 2.8*)

M. Brodar in his paper, where he reported of searching for new Palaeolithic sites from 1971 to 1982, mentioned trial trenching in the cave Merešloh near Kočevje, which was conducted in 1973. A trench was opened on a relatively steep descent into the cave, a few metres from the entrance. After the removal of 20 cm of humus the trench was closed as they hit the bedrock.[55] A year later, S. Jarm,[56] an academic painter from Kočevje, found a bone needle lying in grass in front of the cave (*Fig. 2.8*). The needle is 5.3 cm long, with a hole which

[55] Brodar 1985, 27.

[56] In 1978, Mr Jarm lent the bone needle to the Kočevje Provincial Museum for exhibition. In 1997, it was handed back to him, with certificate No. 113/97, issued on 18th August 1997. We are most grateful to Mr Jarm for his kindness of showing us the find and allowing us to take some photographs of the find.

sistemu Željnskih jam pri vasi Željne pri Kočevju odkrita paleolitska postaja.[57]

Sistematično raziskovanje novega paleolitskega najdišča se je začelo leta 1971 in teklo vse do leta 1976. Paleolitske najdbe so bile objavljene leta 1991[58] in leta 2009 umeščene v pregled slovenskih starokamenodobih najdišč.[59]

Izkopavanje se je začelo nekoliko pred kapom, na levi strani jamskega vhoda, in skupaj seglo v globino do 5,40 m, kjer še vedno ni bilo doseženo skalno dno. Identificiranih je bilo 5 plasti[60]:

plast 1: humusni kompleks;
plast 2: sigasta plast;
plast 3: drobnogruščnata plast;
plast 4: naplavljena ilovica;
plast 5: gruščnato-ilovnati kompleks.

Paleolitski kulturni ostanki so bili odkriti v plasteh 3 in 5. V obeh gre za ostanke gravettienske kulture. M. Brodar zgornjo kulturno plast uvrsti v "razviti gravettien v poudarjeno mikrolitski obliki."[61] Med kulturnima plastema je glede na material za orodja opazna velika razlika. V zgornji kulturni plasti, v kateri je bilo odkritih "okoli 1400 sileksov, ki jim je treba prišteti še množico drobnih lusk", je več kot polovica (60 %) sileksov iz "svetlosivega marmoriranega kresilnika." V spodnji plasti je bilo odkritih 114 sileksov, iz marmoriranega svetlosivega krasilnika pa sta le dva primerka. Ostalo orodje je v večini primerov iz "slabših vrst kremena, rožencev, tufov, zrnatega kremena, raznih sileksov" in po Brodarju gre "morda v zgornji kulturni plasti za nove priseljence ali pa je časovna razlika med njima vendarle precejšnja."[62]

V objavi paleolitskih najdb[63] je kot najdba, ki je bila odkrita leta 1963, omenjen tudi fragment kosti s črtami. Brodar poda različne možnosti nastanka črt na kosteh v sedimentu, za fragment iz Ciganske jame pa previdno pravi: "čeprav *črke* niso narejene s sileksom, pa taka razporeditev zbuja dvom o naravnem nastanku in kar vsiljuje se misel, da je to naredil človek."[64] Leta 1968 so bile v dolini Rena najdene skrilaste plošče z vgraviranimi risbami, leta 1979 v paleolitski postaji Petersfels pa odlomek golenice severnega jelena z nekaj vrezanimi znaki. Brodar kostni fragment iz Ciganske jame primerja s temi najdbami in ugotovi: "kost iz Ciganske jame smo gledali napačno in zato se nam je kazala "črka" Y. Po navedenih primerih je rešitev preprosta. Kost moramo obrniti in imamo pred sabo oblikovno identičen pojav kakor v obeh nemških najdiščih. Razlika je le v izvedbi. Nemške risbe so vse vrezane s sileksom, v našem primeru se pa

[57] Brodar 1964–1965, 172; 1974, 180–181.
[58] Brodar 1991.
[59] Brodar 2009.
[60] Po Brodar 1991, 24.
[61] Brodar 1991, 23.
[62] Brodar 1991, 33, 38.
[63] Brodar 1991.
[64] Brodar 1991, 40.

is not bored in the centre of the needle but slightly off it and is 0.8 cm wide. The bone is not fossilised. The needle cannot be precisely dated, it could originate from prehistory or the Roman era. Jarm does not remember seeing any pottery near the findspot of the needle. We can conclude that, if not the cave itself, at least the area in front of the cave remains a potential archaeological site.

18. Ciganska jama (cave system Željnske jame) (cat. no. JZS 12)

In 1963, a trial trenching at an enormous and beautifully arched entrance to Ciganska jama, which is included in the system of Željnske jame near the village of Željne near Kočevje, confirmed an archaeological site, dating to the Palaeolithic.[57]

The systematic exploration of the new Palaeolithic site began in 1971 and was completed in 1976. Palaeolithic finds were published in 1991[58] and included in the review of Slovenian Palaeolithic sites in 2009.[59]

The excavation started in front of and left of the cave entrance. They reached the depth of 5.40 m but the bedrock had not been reached. Five layers were identified:[60]

layer 1: humus complex;
layer 2: sintered layer;
layer 3: layer of fine-grained rubble;
layer 4: clay alluvium;
layer 5: rubble and clay complex.

Palaeolithic cultural remains were found in layers 3 and 5. Both belong to the culture of Gravettien. M. Brodar assigned the upper cultural layer the "developed Gravettien with a pronounced microlithic form."[61] A great difference between the two cultural layers can be noticed in the material used for making the tools. In the upper cultural layer with "approx. 1400 silexes and a number of small chips", 60% of silexes were made of "light gray marbled chert." The bottom layer yielded 114 silexes and only two of them were made of light gray marbled chert. Other tools were mostly made of "poor-quality quartz, chert, tuffs, granular quartz, various silexes." According to Brodar "the upper cultural layer perhaps indicates the presence of new settlers, or there is a significant time gap between the two cultural layers."[62]

The publication of Palaeolithic finds[63] mentions a special find, which was discovered in 1963. It is an engraved fragment of a bone. Brodar mentioned several possibilities for the creation of incisions on the bones in sediments. However, while discussing the fragment from Ciganska jama, he cautiously stated, "although *the letters*

[57] Brodar 1964–1965, 172; 1974, 180–181.
[58] Brodar 1991.
[59] Brodar 2009.
[60] According to Brodar 1991, 24.
[61] Brodar 1991, 23.
[62] Brodar 1991, 33, 38.
[63] Brodar 1991.

jasno vidi, da črt ni vrezal sileks. So zelo podobne črtam, ki jih povzročijo zverski kanini. Z volčjim podočnjakom je bilo npr. gotovo možno vtisniti (ker vrezati v tem primeru ne moremo reči) črte, ki jih vidimo na naši kosti."[65] Ravno podatek, da črte niso bile vrezane s sileksom in da so podobne črtam, ki jih povzročijo kanini, pa se vseeno zdi dovolj tehten argument, da bi bilo pri dokončni odločitvi o tem ali gre za paleolitsko umetnost ali zgolj za naravno (če sem štejemo tudi zveri) poškodovano kost, potrebno biti previden. Kljub temu se v kasnejših objavah kost objavlja kot "umetnostni izdelek"[66] s tem, da je kost ponovno predstavljena obrnjeno, kot je predlagal Brodar, torej tako, da črte spominjajo na "Y". V zadnji objavi kosti s črtami iz Ciganske jame S. Petru opozori, da "je pri primerku iz Ciganske jame velika verjetnost, da gravure niso antropogenega izvora, temveč naravni kanali na kosti", za dokončno potrditev pa bi bile potrebne natančne raziskave, ki pa do sedaj še niso bile opravljene.[67]

V času izkopavanja paleolitskega najdišča so v vrhnjem humusnem kompleksu naleteli na "prazgodovinske najdbe in druge sledi življenja, ostanke kurišč, žganino, lege pepela."[68] Več let kasneje je bilo v zdrsu sedimenta v dvorani z imenom Stranska jama, v nadaljevanju Ciganske jame najdenih še nekaj fragmentov prazgodovinske keramike in koščena izdelka,[69] že v šestdesetih letih pa v rovu za t. i. Pasjim breznom tudi človeška lobanja, sekira iz serpentina in kos jelenovega roga.[70] Prazgodovinske ostanke je obdelal A. Velušček[71] in na podlagi analize lončenine ugotovil, da je Ciganska jama služila kot občasno zatočišče človeku tudi v treh obdobjih mlajše prazgodovine: v času savske skupine, v obdobju lasinjske kulture in v obdobju horizonta keramike z brazdastim vrezom (HKBV). V danes nedostopnem rovu, ki se nadaljuje za t. i. Pasjim breznom, pa je bila morda nekropola oz. grob oz. sakralni prostor, katere starost, čeprav najdbe kažejo na neo-eneolitik, brez radiometričnega datiranja fragmenta človeške lobanje ni mogoče podrobneje opredeliti.[72]

2.2.6 GOTENIŠKA DOLINA DO KOLPE

19. brezno Linija (brez kat. št. JZS)

Pri Glažuti nad Ribnico so člani DZRJ Ljubljana leta 1913 v jami, ki se v literaturi omenja kot brezno Linija,[73] našli kostne ostanke losa (*Alces alces* L.). Kasneje

[65] Brodar 1991, 40.
[66] Turk 1999, 45.
[67] Petru 2008, 35.
[68] Brodar 1991, 24.
[69] Jamnik 1997b, 160.
[70] Gabrovec 1965.
[71] 2011.
[72] Glej še Jamnik 1997b.
[73] Kunaver 1932.

were not made with a silex, such an arrangement of the incisions raises doubts whether they are a product of nature and enforces the idea that they are man-made."[64] In 1968, some slate slabs with engraved drawings were discovered in the Rhine valley, and in 1979, a fragment of a reindeer tibia with incisions was found at the Palaeolithic site of Petersfels. Brodar compared the bone fragment from Ciganska jama with those finds and concluded that "we were looking at the bone from Ciganska jama incorrectly thus we perceived the engraving of the 'letter' Y. Following other similar examples, a simple solution is obvious. The bone has to be turned upside down and we can clearly see an identical design as found on the bones from the two German sites. The only difference is in execution of the engravings. German drawings are all engraved by silex and our example is clearly not. The incisions are very similar to incisions engraved by carnivore canines. Wolf canine could certainly impress (engrave is not the best word to use here) incisions that can be seen on the studied bone."[65] The fact that the incisions were not made by silex and that similar incisions can be made by canines, however, has to be considered with caution when making the final decision on whether we can describe this bone as a Palaeolithic art or just naturally (if damage made by beasts belongs to this category) damaged bone. Despite, later publications mention this bone as a 'work of art'.[66] Moreover, the bone is once again represented upside down and not as suggested by Brodar, i.e. so that the incisions are reminiscent of the letter 'Y'. In the most recent publication of the engraved bone from Ciganska jama S. Petru notes that "there is a high probability that the engravings on the example from Ciganska jama are not of an anthropogenic origin, but are natural to the bone." Nevertheless, in order to make the final confirmation we need a detailed study, which has not been performed yet.[67]

During the excavation of the Palaeolithic site the top humus complex yielded "prehistoric artefacts and other traces of human activity, remains of hearths and ash."[68] Several years later, a slipped sediment in the cave hall called Stranska dvorana (Side hall) yielded additional fragments of prehistoric pottery and two bone tools,[69] while in the sixties, behind the so-called Pasje brezno (Dog's shaft) a human skull, an axe made of serpentine and a piece of a deer antler were discovered.[70] Prehistoric remains were processed by A. Velušček[71] who determined, based on the analysis of pottery, that Ciganska jama served as an occasional shelter during three periods in prehistory: during the period of the

[64] Brodar 1991, 40.
[65] Brodar 1991, 40.
[66] Turk 1999, 45.
[67] Petru 2008, 35.
[68] Brodar 1991, 24.
[69] Jamnik 1997b, 160.
[70] Gabrovec 1965.
[71] 2011.

je najdbe obdelal F. Kos[74] in ugotovil, da so bili v jami kostni ostanki treh losovih osebkov, fragment konjske lobanje, deli dveh srnjakovih okostij in del skeleta jelena. Vsi ti kostni ostanki so po F. Kosu[75] nedvomno mlajši od losovih ostankov. O starosti slednjih pa se Kos ne izreče. I. Rakovec v pregledu razvoja kvartarne favne v Sloveniji losove ostanke iz jame pri Glažuti omeni v poglavju o najdbah holocenskih kostnih ostankov, vendar pravi, da "jim ne moremo pripisati natančnejše geološke starosti."[76]

Kje je jama oziroma brezno, kjer so bili najdeni losovi osteološki ostanki, dolgo ni bilo znano. Člani DZRJ Ribnica so sistematično pregledali predel, ki ga omenja P. Kunaver[77] kot lokacijo vhoda v brezno, vendar vhoda v jamo danes ni več. Ker je bila vhodna vrtača tik ob cesti, ki je peljala v Glažuto, so vhod zasuli in kasneje v vrtačo navozili smeti. Obstaja celo domneva, da je bilo prav to brezno uporabljeno za eno od množičnih grobišč po 2. svetovni vojni.

20. Franc - Losova jama (brez kat. št. JZS)

Pri iskanju brezna Linija so člani DZRJ Ribnica pregledovali tudi nekoliko širše območje Glažute. Pri tem so odkrili 35 m globoko brezno. Na dnu brezna so bili, delno že prekriti s sedimenti, kostni ostanki losa (*Alces alces* L.). Iz jame so potegnili kosti, ki niso bile zakopane in to skoraj celotno okostje. Po oceni V. Pohar gre za 3–5 let star osebek.[78] Tudi v tem primeru je vprašanje, kdaj je los na tem območju živel, ostalo še neodgovorjeno. Glede na to, da kosti niso fosilizirane in da je radiokarbonska datacija losovih kosti s Soriške planine pokazala, da je tam živel okoli leta 400 po Kr.,[79] so lahko tudi losovi ostanki iz Franc - Losove jame in brezna Linija podobne starosti.

21. Tsinkelnova jama (kat. št. JZS 189)

Jama se nahaja med Grčaricami in Gotenico. Po poševnem spustu se jama izravna v dokaj široko jamsko dvorano. Celotno jamsko dno je prekrito z neznano debelino plasti gvana. V skalni niši ob koncu jame je B. Grčman, takrat kot član DZRJ Ribnica, našel fosiliziran mlečni zob jamskega medveda (*Ursus spelaeus*).

22. Grčmanova jama (kat. št. JZS 9886; *sl. 2.9*)

Član DZRJ Krka B. Grčman je jeseni leta 2009 med Grčaricami in Kočevsko reko odkril 181 m dolgo jamo. V zadnjem delu jame je na jamskih tleh našel nekaj živalskih kosti in sledi kurišča z ogljem in pepelom ter sledeče arheološke predmete (*sl. 2.9*)[80]:

[74] 1921–1923.
[75] 1921–1923, 26.
[76] Rakovec 1973, 260.
[77] 1932.
[78] Jamnik, Kljun 2004, 268.
[79] Jamnik 2004, 293.
[80] Gospodu Grčmanu se najlepše zahvaljujemo za foto-

Sava group, in the period of the Lasinja culture, and during the horizon of pottery with furrowed incisions. There is a possibility that the today inaccessible passage which continues behind Pasje brezno contained a necropolis or a grave or a sacral area, the period of which cannot be defined without radiometric dating of the human skull fragment, although the finds suggest Neo-Eneolithic era.[72]

2.2.6 GOTENIŠKA DOLINA UP TO THE RIVER KOLPA

19. Linija shaft (no JZS cat. no.)

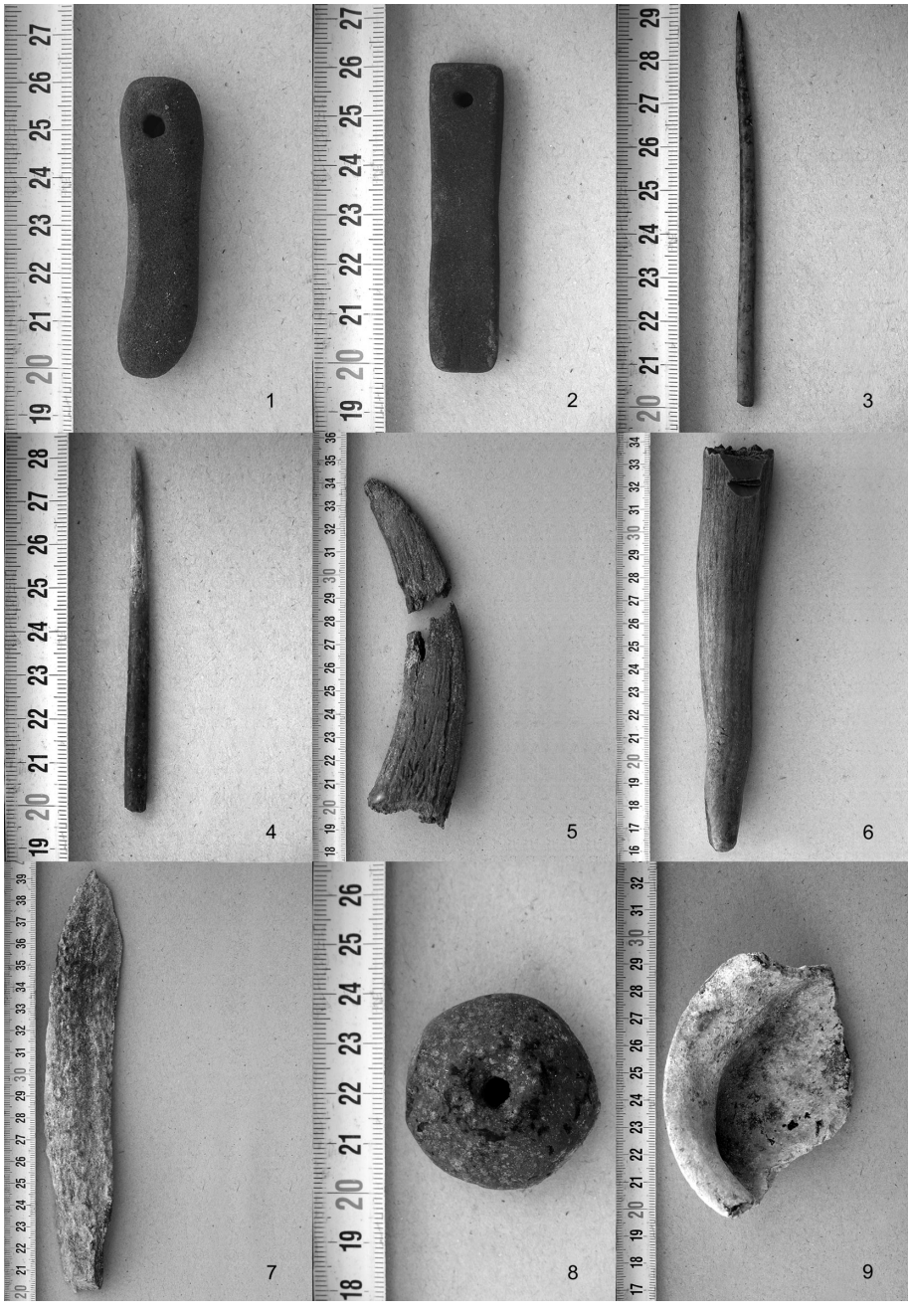
In 1913, members of DZRJ Ljubljana visited the cave near Glažuta above Ribnica, which is known as the Linija shaft,[73] and found some moose bones (*Alces alces* L.). These bones were later processed by F. Kos,[74] who determined three moose specimens, a fragment of a horse skull, two roe deer specimens and a deer specimen. According to F. Kos, moose bones are earlier than all other bones from the cave.[75] However, he did not date them. I. Rakovec mentioned these bones in a review of Quaternary fauna in Slovenia, in the chapter on Holocene finds of skeletal remains, but he mentioned that "they cannot be attributed to a precise geological era."[76]

The location of the cave or shaft where osteological moose remains were discovered remained unknown for a long time. Members of DZRJ Ribnica systematically examined the area where, according to P. Kunaver,[77] the entrance to the cave should be. However, the cave entrance no longer exists. The sinkhole with the entrance was right next to the road leading to Glažuta and the entrance was filled up and the sinkhole was later filled with rubbish. Some even suspect that this shaft was used as a mass grave after World War II.

20. Franc - Losova jama (no JZS cat. no.)

When members of DZRJ Ribnica were searching for the shaft Linija, they also examined the wider area of Glažuta. They discovered a 35 m deep shaft, at the bottom of it they discovered moose bones (*Alces alces L.*) that were partly covered with sediment. Bones that were not buried in sediment, i.e. almost the entire skeleton, were lifted out of the cave. V. Pohar, who made an evaluation of the skeleton, concluded that this is a 3–5 year-old specimen.[78] The question of when the moose occupied this area still remains unanswered. Based on the fact that the bones are not fossilised and that the

[72] See also Jamnik 1997b.
[73] Kunaver 1932.
[74] 1921–1923.
[75] 1921–1923, 26.
[76] Rakovec 1973, 260.
[77] 1932
[78] Jamnik, Kljun 2004, 268.



Sl. 2.9: Grčmanova jama. Najdbe.
Fig. 2.9: Grčmanova jama. Finds.

najdba št. 1: 6,3 cm dolg brus rjave barve iz peščenca z luknjo;

najdba št. 2: 6,3 cm dolg brus sive barve iz lapornatega peščenjaka z luknjo;

najdba št. 3: 9,1 cm dolg fragment bronaste igle;

najdba št. 4: 8,3 cm dolgo koščeno šilo;

najdba št. 5: nastavek za kozji rog s sledmi sekanja;

najdba št. 6: 18 cm dolg jelenov parožek s sledmi sekanja;

grafije predmetov in dovoljenje, da njegovo odkritje lahko uvrstimo v pregled jamskih arheoloških najdišč.

radiocarbon dating of moose bones found at Soriška planina revealed a date of approx. 400 AD,[79] we can perhaps assume that the bones from Franc - Losova jama and from the Linija shaft are of a similar age.

21. Tsinkelnova jama (cat. no. JZS 189)

The cave is located between Grčarice and Gotenica. After a sloping descent, the cave opens to a fairly wide hall. The entire cave floor is covered with a layer of guano of an unknown thickness. In a niche in the back

[79] Jamnik 2004, 293.

najdba št. 7: 19,6 cm dolga lamela jelenovega rogovja s sledmi obdelave; izdelek bi lahko služil kot neke vrste nož;

najdba št. 8: 3,9 cm široko keramično vretence;

najdba št. 9: fragment ostenja skodele.

Grčman je o odkritju najdb obvestil ZVKD Ljubljana, ki je predmete prevzel novembra 2009, predstavniki Zavoda pa so si jamo nato tudi ogledali.[81]

Na podlagi fotografij je časovna umestitev najdb nemogoča, med določljivimi predmeti pa prevladujejo prazgodovinske najdbe. Odlomek bronaste igle morda kaže na bronasto dobo.

2.2.7 OD IZVIRA KOLPE DO ZASELKA LAZE

23. Hajdučka pećina ob izviru Kolpe (Republika Hrvaška; *sl. 2.10*)

Jama Hajdučka pećina ob izviru reke Kolpe leži na ozemlju Republike Hrvaške. Ker je bilo o tej jami tudi v slovenski arheološki literaturi objavljenih kar nekaj podatkov, se nam je zdelo prav, da jo vključimo v pregled jam na tem območju.

Celotno kronologijo odkrivanja in dogajanja okoli iskanja jame je podal M. Brodar.[82] V neki jami pri izviru Kolpe naj bi rudarski inženir J. Šimečki leta 1890 videl na steni narisanega mamuta. O tem je pisno obvestil S. Brodarja, ki jame s slikarijami ni uspel najti. Leta 1976 je na podlagi ohranjene korespondence med S. Brodarjem in J. Šimečkim, M. Brodar postavil domnevo, da je imel Šimečki v mislih t. i. Hajdučko pećino tik nad izvirom Kolpe. Z ekipo jamarjev so poskušali priti v nadaljevanje danes neprehodne jame, vendar so prišli le 10 m v jamo. Naslednji poskus priti v nadaljevanje jame je bil leta 1981. Takrat je M. Frelih uspel priti 50 m globoko, kjer je slišal šumenje vode, kar napeljuje na misel, da so za ožino morda res še večji podzemni prostori.[83]

Septembra 2005 so člani DZRJ Ribnica skupaj z nadzornikom Nacionalnega parka Risnjak poskušali opraviti ogled jame. Ker je bilo ravno po večdnevnem deževju, je bil zaradi visokega vodostaja Kolpe običajen dostop do jame onemogočen. Jamarji so zato poskušali priti do jame z vrha prepadnega pobočja nad izvirom Kolpe. Na pobočju so ob tem odkrili dve manjši jami, ki sta sicer v nadaljevanju s podori zaprti, vendar je podatek morda pomemben, ker dokazuje, da je v pobočju nad izvirom ohranjenih še nekaj sledov nekdanjega jamskega sistema, ki so mu verjetno pripadala tudi današnja brezna, iz katerih izvira Kolpa in morda tudi Hajdučka pećina. Ob obisku je voda segala nekaj centimetrov pod vhod v Hajdučko pećino, zato je bil poskus dostopa v nadaljevanje jame onemogočen.

[81] Ustna informacija B. Grčman.

[82] 1978.

[83] Josipovič 1987.

wall of the cave, B. Grčman, then a member of DZRJ Ribnica, found a fossilised deciduous tooth of a cave bear (*Ursus spelaeus*).

22. Grčmanova jama (cat. no. JZS 9886; *Fig. 2.9*)

In the autumn of 2009, B. Grčman, a member of DZRJ Krka, discovered a 181 m long cave, located between Grčarice and Kočevska Reka. He also found some animal bones, remains of a hearth containing charcoal and ash, and archaeological finds (*Fig. 2.9*), which were all lying on a surface at the back of the cave. Archaeological finds are listed below[80]:

Find no. 1: 6.3 cm long whetstone with a hole, brown sandstone;

Find no. 2: 6.3 cm long whetstone with a hole, gray marly sandstone;

Find no. 3: 9.1 cm long fragment of a bronze needle;

Find no. 4: 8.3 cm long bone awl;

Find no. 5: processus cornualis of a goat with traces of cutting;

Find no. 6: 18 cm long deer tine with traces of cutting;

Find no. 7: 19.6 cm long worked deer antler lamella with traces of processing, which

could have served as a knife;

Find no. 8: 3.9 cm wide ceramic spindle whorl;

Find no. 9: fragment of wall of a bowl.

Grčman informed the Institute for Protection of Cultural Heritage in Ljubljana about the discovery, members of which came to take over the finds in November 2009 and they also visited the cave.[81]

It is not possible to date the finds based only on photographs but the identifiable objects are mostly prehistoric. The bronze needle fragment might be dated to the Bronze Age.

2.2.7 FROM THE SPRING OF THE RIVER KOLPA TO THE VILLAGE OF LAZE

23. Hajdučka pećina at the spring of the river Kolpa (Republic of Croatia; *Fig. 2.10*)

Hajdučka pećina at the spring of the river Kolpa is located on the territory of the Republic of Croatia. This cave is often mentioned in the Slovenian archaeological literature and therefore we felt that it should be included in the overview of the caves in the area studied.

M. Brodar published an extensive chronology of the events that occurred while searching for this cave.[82] In 1890, a mining engineer J. Šimečki noticed a cave painting of a mammoth in a cave near the spring of the

[80] We thank Mr Grčman for the photographs of objects and for allowing us to include his discovery in this overview of cave archaeological sites.

[81] B. Grčman, pers.comm

[82] 1978.

Sl. 2.10: Vhod v Hajdučko pećino ob izviru Kolpe, Hrvaška.
Fig. 2.10: Entrance to Hajdučka pećina at the spring of the river Kolpa, Croatia.

Junija 2007 je prišlo do nenavadnega naključja. Ob snemanju množičnega grobišča Konfin II nad Grčaricami je pogovor nanesel tudi na jamo ob izviru Kolpe in domnevne jamske slikarije. Snemalec RTV Slovenija J. Jagrič se je ob poslušanju spomnil na dogodek izpred jugoslovanskih vojn. Ob neki priložnosti je snemalec hrvaške televizije po imenu Zoran v družbi kazal črno bele fotografije jamskih slik, ki da jih je posnel v neki jami med Osilnico in izvirom reke Kolpe. Jagriča takrat pripoved ni pretirano zanimala, zapomnil pa si je, da so bile podobe na fotografijah podobne tistim, ki jih je videval v šolskih knjigah. Kasnejše preverjanje, kje se Zoran nahaja danes, je žal pripeljalo do ugotovitve, da je bil med vojno ubit nekje v okolici Karlovca. Da bi vseeno nekoliko bolj potrdili to pripoved, se je V. Fugina pozanimal v Osilnici, kjer naj bi Zoran prenočeval. Dobil je podatek, da je tja pred vojno res zahajal nek snemalec Zoran, ki pa ni nikoli govoril o jamskih slikarijah.

Avgusta 2009 si je Hajdučko pećino ogledal tudi soavtor tega prispevka P. Jamnik. Ob vsem ugibanju in pisanju o jami namreč ni bilo mogoče zaslediti podatka

Kolpa. He wrote a letter to S. Brodar, who failed to find this cave. On the basis of the preserved correspondence between S. Brodar and J. Šimečki, M. Brodar in 1976 conjectured that Šimečki probably visited the so-called Hajdučka pećina, located just above the spring of the river Kolpa. Brodar and a team of cavers tried to get into the continuation of the today impassable cave but they only managed to get 10 m deep into the cave. The next attempt was done in 1981. At that time, M. Frelih managed to get 50 m deep, where he heard a distant roar of tumbling water, which could imply the existence of large underground halls behind the narrow passage.[83]

In September 2005, members of DZRJ Ribnica, together with the supervisor of the Risnjak National Park, tried to inspect the cave. This was done after several days of rain and, due to the high water level of the Kolpa, the usual access to the cave was impassable. The cavers therefore tried to descent from the top of a steep slope above the spring of the Kolpa. In doing this, they discovered two smaller caves, which are impassable due to rockfalls but the information may be important because it demonstrates that the slope above the spring retained some traces of the former cave system; shafts that represent springs of the Kolpa and Hajdučka pećina probably also belonged to this cave system. When the cavers reached Hajdučka pećina, the water level was a few centimetres below the entrance to the cave and the inspection of the cave was not possible.

In June 2007, a strange coincidence occurred. While recording a clip about the mass grave Konfin II above Grčarice, the subject stumbled upon a cave at the spring of the Kolpa and the alleged cave painting. J. Jagrič, a cameraman of RTV Slovenia, remembered an event from the time before the Yugoslav war. On one occasion, a Croatian cameraman named Zoran showed some black and white photographs of cave paintings, which were shot in a cave between the village of Osilnica and the spring of the river Kolpa. Jagrič was not very interested in this story at the time but he remembered that the images on photographs were similar to those pictured in school books. They tried to find Zoran but unfortunately found out that he was killed during the war, somewhere in the vicinity of Karlovac. In order to confirm the story about the paintings, V. Fugina made inquiries in Osilnica, where Zoran supposedly stayed overnight several times. He found out that there was a cameraman named Zoran, who spent some time there before the war but he never mentioned any cave paintings.

In August 2009, P. Jamnik, the co-author of this paper, visited the cave of Hajdučka pećina. Namely, despite all the guesswork and notes about the cave, it was not clear whether the cave's geo-morphological context is suitable for the preservation of cave paintings. The entrance to the cave is formed between two

[83] Josipovič 1987.

o tem, ali Hajdučka pećina v geomorfološkem pogledu sploh lahko pride v poštev kot jama, v kateri bi se ohranile jamske slikarije. Vhod v jamo je izoblikovan med dvema skladoma apnenca, ki gradi pobočje nad izvirom (*sl. 2.10*). Dno jame je prekrito z alohtonim sedimentom, ki ga sestavlja ilovica in manjši kosi drobnega grušča. Na površju ilovnate zapolnitve, v začetnem delu jamskega rova leže kosi skal odpadlih od stropa. Približno 6 m od vhoda skalnih kosov ni več in po tleh jame je le še ilovnato polnilo. 8 m od vhoda se manjši, sicer neprehoden rov začne vzpenjati navpično v pobočje. V tem rovu je videti nekaj starih sigastih kop, ki so pomembne, saj nakazujejo na nekoč drugačne pogoje v jami. Kapniško sigo je v nekaj kosih mogoče videti tudi prav na ožini, preko katere brez razširitve prehod ni možen. Če so se torej ohranile stare sige še v tem vhodnem delu jame, ki je danes izpostavljen občasnemu vodnemu toku, skoraj ne more biti dvoma, da bi se jamske slikarije lahko ohranile in sicer v primeru, da nadaljevanje jame res obstaja in da je to jama, v kateri je slikarije videl Šimečki.

24. Polična jama nad Žurgami (kat. št. JZS 1290)

Vhod v jamo je pod vrhom Goteniškega Snežnika, nad dolino Čabranke na višini 900 m n. m. Leta 1961 je v jami, s ciljem iskanja paleolitske postaje, M. Brodar izkopal sondo velikosti 2 × 3 m. Sonda je segla 3,6 m globoko. Že v površinski plasti do globine 0,20 m je ležalo nekaj zob in kosti jamskega medveda (*Ursus spelaeus*), med njimi pa tudi črepinje prazgodovinskih in srednjeveških loncev. Nekoliko globlje, v globini 0,60 do 0,70 m sta bila najdena še dva zoba jamskega medveda. Brodar ugotavlja, da v jami ni prisotnih holocenskih sedimentov.[84] Podrobneje prazgodovinska lončenina ni opisana, Leben pa jo umešča v obdobje kulture žarnih grobišč.[85]

25. Lukova jama (kat. št. JZS 91)

Odpira se pod robom skalne stene nad vasjo Podstene, na nadmorski višini 420 m. Na podlagi prvih najdb prazgodovinske lončenine in kosti jamskega medveda v manjšem vkopu takoj za vhodom v jamo je Inštitut za arheologijo ZRC SAZU leta 1992 opravil nekoliko večje sondiranje na mestu prvega vkopa. V izkopu so bili do globine 2 m, do koder je segla sonda, identificirani trije različni sedimentacijski nivoji. Prvo plast, debeline 20–30 cm, sestavlja holocenski humus in grušč s humusom. V plasti je bilo najdenih med seboj pomešanih 211 prazgodovinskih in novoveških keramičnih fragmentov, med katerimi so bili fragment zajemalke s tulastim držajem, fragment ostenja posode, ki je na ramenu ornamentiran s pasom visečih šrafiranih trikotnikov, fragment ostenja posode, ornamentiran z vrezanim motivom ribje kosti ali cikcakastim motivom.[86]

[84] Brodar 1964–1965, 171.

[85] F. Leben, Polična jama, v: *Arheološka najdišča Slovenije,* 1975, 238.

[86] Turk et al. 1996, 43–44, sl. 4.

blocks of limestone, which also builds the slope above the spring (*Fig. 2.10*). The bottom of the cave is covered with allochthonous sediment, consisting of clay and smaller pieces of fine gravel. On the clay surface, at the beginning of the cave passage, lie several stones that fell off the ceiling. Approximately 6 m from the cave entrance, the cave floor is only covered with clay. 8 m from the entrance, a small impassable passage begins to vertically ascend. Some old sinter piles can be seen in this passage. This is an important information as it indicates that conditions in the cave used to be different than they are today. Some calcareous sinter can also be seen in the narrowest part of the passage, which is not possible to pass without broadening. If these old sinter remain preserved in the entrance part of the cave, which is now occasionally exposed to water, there can hardly be any doubt that the cave paintings could be preserved if the continuation of the cave really exists and if this was the cave where Šimečki noticed the paintings.

24. Polična jama above Žurge (cat. no. JZS 1290)

The entrance to the cave opens just below the peak of Goteniški Snežnik, above the valley of Čabranka, at a height of 900 m a.s.l. In 1961, M. Brodar opened a 2 × 3 m large trench in the cave, with the aim of finding Palaeolithic remains. The trench was 3.6 m deep. The surface layers, to a depth of 0.20 m, yielded some cave bear teeth and bones (*Ursus spelaeus*) as well as sherds of prehistoric and medieval pottery. Somewhat deeper, at a depth of 0.60 to 0.70 m, two cave bear teeth were discovered. Brodar noted that no Holocene sediments were present in the cave.[84] Prehistoric pottery was not studied in detail. However, Leben dated it to the Urnfield Culture.[85]

25. Lukova jama (cat. no. JZS 91)

The cave is located on the edge of rocky cliffs above the village of Podstene at an altitude of 420 m. In 1992, based on finds of prehistoric pottery and cave bear bones, which were discovered in a small pit just behind the entrance to the cave, the Institute of Archaeology of the Scientific Research Centre of the Slovenian Academy of Sciences and Arts (ZRC SAZU) excavated a larger trench on the same area. The trench was 2 m deep. Three separate sedimentation levels were identified. The first layer was 20–30 cm thick and it consisted of Holocene humus and gravel with humus. The layer yielded 211 prehistoric and early modern pottery fragments, among which it is worth to mention a fragment of a ladle with a socketed handle, a wall fragment of a vessel with decoration of hanging hatched triangles on shoulder, a fragment of a wall of a vessel, ornamented

[84] Brodar 1964–1965, 171.

[85] F. Leben, Polična jama, in: *Arheološka najdišča Slovenije* 1975, 238.

Najdbe je obdelal Velušček in jih, kot zapiše, "kljub nekaterim pomislekom, najverjetneje lahko datiramo v zgodnji eneolitik. Lukovi jami najbližji in verjetno delno sočasni naselbini sta izpričani na bližnjem Kostelu ter na nekoliko bolj oddaljeni Spahi."[87]

Druga in tretja plast vsebujeta ostanke pleistocenske favne. Največ je ostankov jamskega medveda (*Ursus spelaeus*), sledijo mu ostanki svizca (*Marmota marmota*) in navadnega jelena. V plasti 3 je poleg teh vrst prisoten še rjavi medved in kozorog ali gams, ki pa sta zastopana samo z nekaj ostanki. Pomembna je najdba repnega vretenca (plast 2) in proksimalnega in distalnega odlomka levega femurja (plast 3) jamskega leva (*Panthera leo spelaea*), saj je to šele šesto najdišče z njegovimi ostanki v Sloveniji.[88]

26. Jama treh bratov (kat. št. JZS 529)

Rakovec je že pred 2. svetovno vojno objavil članek o najdbah kozorogovih kosti in zoba jamskega medveda iz Jame treh bratov, ki jih je leta 1935 v njej našel I. Dolar.[89] Ugotovil je, da je Dolar izkopal v jami kostne ostanke treh kozorogov in sicer dveh samcev in samice[90] ter kostnim ostankom pripisal ledenodobno starost.

Jamo sta si v šestdesetih letih želela ogledati M. Brodar in F. Leben, vendar je nista uspela najti. Na pobudo Brodarja smo jo ponovno iskali leta 1992.[91] Tokrat nam je uspelo, v jami je bil še lepo viden profil Dolarjevih vkopov iz leta 1935. Dolar je v jami tudi pustil vse ostale izkopane kosti, razen lobanj kozorogov. Najdene kosti so bile pobrane in vključene v osteološko zbirko Univerze v Ljubljani. V Dolarjevi prvi sondi je bila najdena še rožnica gamsa (*Rupicapra rupicapra*),[92] ki do takrat ni bil poznan med favno Jame treh bratov, med katero naj navedemo tudi prisotnost alpskega svizca (*Marmota marmota*).

Današnji vhod v jamo je le ozek rov. V jami se lepo vidi, da je prvotni vhod v obliki spodmola zasut, zato se zdi vprašanje, ali niso morda jamo kdaj obiskali celo ledenodobni lovci, še vedno odprto.

27. Bilpa II (kat. št. JZS 631) in
28. Bilpa III (kat. št. JZS 632)

Jami se odpirata tik nad strugo reke Kolpe pred zaselkom Spodnja Bilpa. Člani društva za raziskovanje jam Kočevje naj bi konec sedemdesetih ali v začetku osemdesetih let prejšnjega stoletja v jamah našli redke odlomke halštatske lončenine in ostanke favne ovce in goveda.[93]

[87] Turk et al. 1996, 44.
[88] Turk et al. 1996, 50.
[89] Rakovec 1939.
[90] Rakovec 1940, 57.
[91] Jamnik 1993.
[92] Turk et al. 1996, 51.
[93] Dirjec, Hirschbäck - Merhar, Turk 1984, 202.

with an incised fishbone design or a zigzag motif.[86] The finds were processed by Velušček, who concluded that "despite some uncertainties, they can most likely be dated to the early Eneolithic. The closest and probably partly contemporaneous settlements to Lukova jama can be found on the nearby Kostel and slightly more distant Spaha."[87]

The second and the third layer contained remains of Pleistocene fauna. Most of the remains belong to cave bear (*Ursus spelaeus*), followed by the remains of marmot (*Marmota marmota*) and red deer. In addition to these animals, layer 3 contained scarce remains of brown bear and ibex or chamois. The most important finds are a tail vertebra (layer 2) and proximal and distal fragments of the left femur (layer 3) of cave lion (*Panthera leo spelaea*), as this is merely the sixth finding spot of cave lions in Slovenia.[88]

26. Jama treh bratov (cat. no. JZS 529)

Before World War II, Rakovec published a paper on discovery of ibex bones and a cave bear tooth in Jama treh bratov, found by I. Dolar in 1935.[89] He noted that Dolar dug a pit in the cave and discovered bone remains of three ibexes, two males and one female, [90] and dated the bones to the Ice Age.

During the sixties, M. Brodar and F. Leben wished to visit the cave but did not manage to find it. On Brodar's initiative, we searched for the cave again in 1992.[91] This time we succeeded and found out that Dolar's pits from 1935 were still clearly visible. Apart from ibex skulls, Dolar left all the excavated bones in the cave. These were gathered and included in the osteological collection of the University of Ljubljana. In the Dolar's first pit, a chamois processus cornualis (*Rupicapra rupicapra*)[92] was discovered, which was until then unknown among the fauna of the cave, among which the presence of the Alpine marmot (*Marmota marmota*) has to be mentioned.

Today's entrance to the cave is merely a narrow passage. Once inside, it is evident that the primary entrance, in the form of a rock shelter, is buried, so the question of Ice Age hunters visiting the cave remains unanswered.

27. Bilpa II (cat. no. JZS 631) and
28. Bilpa III (cat. no. JZS 632)

Entrances to the caves open just above the bed of the river Kolpa, near the hamlet of Spodnja Bilpa. In the late seventies or early eighties of the former century, members of DZRJ Kočevje found a few Hallstatt

[86] Turk et al. 1996, 43–44, Fig. 4.
[87] Turk et al. 1996, 44.
[88] Turk et al. 1996, 50.
[89] Rakovec 1939.
[90] Rakovec 1940, 57.
[91] Jamnik 1993.
[92] Turk et al. 1996, 51.

29. Bilpa IV (kat. št. JZS 5512)

Tik ob prvih hišah pred Spodnjo Bilpo ob Kolpi je nekaj deset metrov nad strugo Kolpe vhod v 16 m dolgo jamo. Inštitut za arheologijo ZRC SAZU je leta 1983 opravil v njej sondiranje z namenom preveriti možnost obstoja paleolitskega najdišča. Pri sondiranju so v sondi našli nekaj nedoločljivih živalskih kosti, prstni členek jelena, oglje bukve in gabra, ter majhen kremenov odbitek brez znakov obdelave ali uporabe.[94] V poročilu so avtorji omenili tudi arheološke ostaline, ki so jih jamarji DZRJ Kočevje v jami izkopali v istem obdobju kot arheološke ostanke v Bilpi II in III in sicer navajajo: "ca. 80 majhnih odlomkov keramike, med katerimi je precej metličasto in grebeno ornamentiranih kosov. Večina jih pripada bronasti dobi."[95] Jamarji so ob kopanju v jami skupaj z lončenino našli še prevrtan volčji kanin, z vrezi ornamentiran fragment lobanjske kosti ali lopatice[96] in grobo obtesan fragment parožka jelena ali srnjaka. Med odkopanimi kostnimi ostanki je bilo mogoče določiti kosti goveda, drobnice in svinje.[97]

Naj na tem mestu navedemo še sicer nepreverjen podatek, ki nam ga je leta 1992 posredoval domačin iz Spodnje Bilpe. Omenil je, da je bila pred desetletji nad vasjo najdena kamnita sekira, ki pa jo je najditelj izročil nekomu, ki je ni nikoli več prinesel nazaj. Če je bila sekira res najdena, je morda kje v bližini Spodnje Bilpe tudi starejše najdišče od bronaste in železne dobe, ki ju izpričuje gradivo iz bližnjih jam.

2.3 SKLEP

V prispevku predstavljamo 29 arheoloških oz. paleontoloških jamskih najdišč, od tega 28 iz Slovenije in 1 s Hrvaške. Eno najdišče je datirano v mlajši paleolitik (Ciganska jama), 3 v neolitik oz. eneolitik (Ciganska jama, Lukova jama in Koblarska jama), 3 v bronasto dobo (Vrbovška jama, Antonkov skedenj in Gornja vodena jama), druge pa le na splošno v prazgodovino; sicer gre najverjetneje za mlajše obdobje prazgodovine, bronasto ali železno dobo. V velikem številu jam smo prepoznali v večini primerov poleg prazgodovinske tudi keramiko iz mlajših, že zgodovinskih obdobij, ki pa je nismo podrobneje opredeljevali (npr. Grozdna jama, Vrbovška jama, Ciganska jama).

Analiza je pokazala, da je človek zahajal v jame zaradi različnih vzgibov. Tako se je dogajalo v prazgodovini in se dogaja tudi danes.[98] V nekaterih jamah, kot npr. v Mali tkalčji jami, Grozdni jami, Vrbovški jami, Gregčevi jami, je ugotovljeno, da si je v njih našel občasno zatočišče. Jame je uporabljal kot delovni prostor,

[94] Dirjec, Hirschbäck - Merhar, Turk 1984, 202.
[95] Dirjec, Hirschbäck - Merhar, Turk 1984, 202.
[96] Dirjec, Hirschbäck - Merhar, Turk 1984, 202, sl. 9.
[97] Dirjec, Hirschbäck - Merhar, Turk 1984, 202.
[98] Straus 1997, 1–8.

pottery fragments and remains of sheep and cattle in both caves.[93]

29. Bilpa IV (cat. no. JZS 5512)

Adjacent to the first houses at Spodnja Bilpa, a few tens of metres above the riverbed of the Kolpa, there is an entrance to a 16 m long cave. In 1983, the Institute of Archaeology of the Scientific Research Centre of the Slovenian Academy of Sciences and Arts (ZRC SAZU) dug a trench in the cave in order to verify the possibility of a Palaeolithic site. The trench yielded some unidentifiable animal bones, deer phalanx, beech and hornbeam charcoal, and a small unworked quartz flake with no traces of use.[94] The report also mentions some archaeological remains, which were found by cavers of DZRJ Kočevje at the same time as the ones from Bilpa II and III. The authors stated that these are "ca. 80 small fragments of pottery, a lot of them carrying brush decoration and scratched ornaments. Most of them date to the Bronze Age."[95] In addition, the cavers discovered a pierced wolf canine, a fragment of a skull bone or scapula, ornamented with incisions,[96] and a roughly worked fragment of a red or roe deer antler. Among the excavated bones, cattle, sheep and pig were possible to identify.[97]

Let us mention an otherwise unverified information here, which was provided to us in 1992, by a local from Spodnja Bilpa. He stated that decades ago a stone axe was found above the village but the finder handed it to someone who never brought it back. If this is true then perhaps somewhere near Spodnja Bilpa lies a site, which is earlier than the Bronze and Iron Ages that are attested by the material from the nearby caves.

2.3 CONCLUSION

The above paper presents 29 archaeological or paleontological cave sites, 28 of which are located in Slovenia and one in Croatia. One of these sites dates to the late Palaeolithic (Ciganska jama), three to the Neolithic or Eneolithic (Ciganska jama, Lukova jama, and Koblarska jama), three to the Bronze Age (Vrbovška jama, Antonkov skedenj, and Gornja vodena jama), while others are only known as prehistoric sites and most probably date to late prehistory, i.e. Bronze or Iron Age. Many of these caves produced, in addition to prehistoric remains, pottery from later, historic periods (e.g. Grozdna jama, Vrbovška jama, Ciganska jama). We did not further categorise these remains.

[93] Dirjec, Hirschbäck - Merhar, Turk 1984, 202.
[94] Dirjec, Hirschbäck - Merhar, Turk 1984, 202.
[95] Dirjec, Hirschbäck - Merhar, Turk 1984, 202.
[96] Dirjec, Hirschbäck - Merhar, Turk 1984, 202, Fig. 9
[97] Dirjec, Hirschbäck - Merhar, Turk 1984, 202.

kar kažejo ostanki talilne peči v Antonkovem skednju in morda tudi Gornji vodeni jami. Druge jame, kot npr. Koblarska jama, pa so lahko služile kot kultni prostor oz. za nekropolo.

Zanimive so tudi paleontološke najdbe. V Lukovi jami so bili odkriti ostanki jamskega leva (*Panthera leo spelaea*). Prisotnost jamskega medveda (*Ursus spelaeus*) je izpričana v šestih jamah (Gregčeva jama, Podtaborska jama, Cvarova jama, Tsinkelnova jama, Polična jama in Lukova jama). Iz Lukove jame in Jame treh bratov poznamo ostanke alpskega svizca (*Marmota marmota*). Na pleistocensko ali že holocensko favno[99] kažejo kosti kozoroga (*Capra ibex*) in gamsa (*Rupicapra rupicapra*), ki so jih našli v Jami treh bratov in Lukovi jami. Zelo verjetno holocenske starosti pa so ostanki losa (*Alces alces* L.), ki jih poznamo iz dveh jam (brezno Linija in Franc - Losova jama).

2.4 KATALOG

Tabla 2.1

1. Frag. vratu z ostenjem; keramika; ornament: odtisi; površina: temnorjava; zrnatost: groba; najdišče: 1. Mala tkalčja jama; leto pridobitve: 2002.

2. Frag. ustja z ostenjem; keramika; ornament: žlebovi (vitice, valovnica); površina: siva; zrnatost: groba; najdišče: 1. Mala tkalčja jama; leto pridobitve: 2002.

3. Frag. ustja z ostenjem; keramika; ornament: žlebovi; površina: svetlorjava / oranžna; zrnatost: groba; najdišče: 1. Mala tkalčja jama; leto pridobitve: 2002.

4. Frag. dna z ostenjem; keramika; ornament: metličast okras (zunaj); površina: temnorjava; zrnatost: groba; najdišče: 5. Grozdna jama; leto pridobitve: 2001.

5. Frag. kopače(?); iz rogovja; površina: svetlorjava; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

6. Frag. kopače(?); iz rogovja; površina: svetlorjava; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

Tabla 2.2

1. Frag. ustja z ostenjem; keramika; ornament: plastično rebro; površina: temnorjava; zrnatost: groba; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

2. Frag. ustja z ostenjem; keramika; ornament: razčlenjeno rebro; površina: temnorjava; zrnatost: groba; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

3. Frag. ustja z ostenjem; keramika; ornament: razčlenjeno rebro; površina: temnorjava; zrnatost: groba; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

4. Frag. ostenja; keramika; ornament: plastično rebro; površina: temnorjava; zrnatost: groba; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

5. Frag. ostenja; keramika; ornament: razčlenjeno rebro; površina: rjava; zrnatost: groba; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

[99] Turk et al. 1996, 51.

The analysis revealed that people used to visit caves for various reasons, thus in prehistoric times and still today.[98] Some caves, such as Mala tkalčja jama, Grozda jama, Vrbovška jama, and Gregčeva jama indicate that they were occasionally used as refuges. Other caves were used as working space, as shown by the remains of a smelting furnace in Antonkov skedenj and perhaps in Gornja vodena jama. Moreover, some caves, such as Koblarska jama, were used as a place of worship or as a necropolis.

Paleontological finds are also interesting. Lukova jama revealed cave lion remains (*Panthera leo spelaea*). The presence of cave bear (*Ursus spelaeus*) was confirmed in six caves (Gregčeva jama, Podtaborska jama, Cvarova jama, Tsinkelnova jama, Polična jama and Lukova jama). Remains of Alpine marmot (*Marmota marmota*) are known from Lukova jama and Jama treh bratov. Pleistocene or Holocene fauna[99] is indicated by bones belonging to ibex (*Capra ibex*) and chamois (*Rupicapra rupicapra*), which were found in Jama treh bratov and Lukova jama. Moose (*Alces alces* L.) remains, known from two caves (brezno Linija and Franc - Losova jama), are very likely of a Holocene age.

2.4 CATALOGUE

Plate 2.1

1. Frag. of a neck with a wall; pottery; ornament: fingertip imprints; surface: dark brown; granularity: coarse; site: 1. Mala tkalčja jama; year of acquisition: 2002.

2. Frag. of a lip with a wall; pottery; ornament: grooves (tendrils, wavy line); surface: grey; granularity: coarse; site: 1. Mala tkalčja jama; year of acquisition: 2002.

3. Frag. of a lip with a wall; pottery; ornament: grooves; surface: light brown / orange; granularity: coarse; site: 1. Mala tkalčja jama; year of acquisition: 2002.

4. Frag. of a bottom with a wall; pottery; ornament: brush decoration (exterior); surface: dark brown; granularity: coarse; site: 5. Grozdna jama; year of acquisition: 2001.

5. Frag. of a hoe(?); made of antler; surface: light brown; site: 6. Vrbovška jama; year of acquisition: 2001.

6. Frag. of a hoe(?); made of antler; surface: light brown; site: 6. Vrbovška jama; year of acquisition: 2001.

Plate 2.2

1. Frag. of a lip with a wall; pottery; ornament: plastic cordon; surface: dark brown; granularity: coarse; site: 6. Vrbovška jama; year of acquisition: 2001.

2. Frag. of a lip with a wall; pottery; ornament: cordon; surface: dark brown; granularity: coarse; site: 6. Vrbovška jama; year of acquisition: 2001.

3. Frag. of a lip with a wall; pottery; ornament: cordon; surface: dark brown; granularity: coarse; site: 6. Vrbovška jama; year of acquisition: 2001.

[98] Straus 1997, 1–8.

[99] Turk et al. 1996, 51.

6. Frag. ostenja z nastavkom za ročaj; keramika; površina: rjava; zrnatost: groba; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

7. Frag. ostenja z razčlenjenim držajem; keramika; ornament: odtis; površina: rjava; zrnatost: fina; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

8. Frag. dna; keramika; površina: svetlorjava; zrnatost: groba; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

9. Frag. dna; keramika; ornament: barbotin; površina: temnorjava; zrnatost: groba; najdišče: 6. Vrbovška jama; leto pridobitve: 2001.

Tabla 2.3

1. Frag. vratu; keramika; ornament: žlebovi oz. metličast okras (zunaj in znotraj); površina: temnorjava; zrnatost: groba; najdišče: 8. Gregčeva jama; leto pridobitve: 2001.

2. Frag. ostenja; keramika; ornament: žlebovi oz. metličast okras (zunaj in znotraj); površina: temnorjava; zrnatost: groba; najdišče: 8. Gregčeva jama; leto pridobitve: 2001.

3. Šilo; kost; površina: svetlorjava; najdišče: 8. Gregčeva jama; leto pridobitve: 2001.

4. Frag. kopače(?); iz rogovja; površina: svetlorjava; najdišče: 8. Gregčeva jama; leto pridobitve: 2001.

5. Frag. ostenja; keramika; ornament: žlebovi (ravne linije in valovnici); površina: temnosiva; zrnatost: fina; najdišče: 10. Dolga jama; leto pridobitve: 2002.

6. Frag. ostenja; keramika; ornament: razčlenjeno rebro; površina: rjava; zrnatost: groba; najdišče: 10. Dolga jama; leto pridobitve: 2002.

7. Frag. brusa; kamen; površina: siva; zrnatost: fina; najdišče: 10. Dolga jama; leto pridobitve: 2002.

8. Frag. dleta(?); železo; površina: rjavordeča (rjasta); najdišče: 10. Dolga jama; leto pridobitve: 2002.

Tabla 2.4

1. Frag. dna z ostenjem; keramika; površina: svetlorjava; zrnatost: groba; najdišče: 14. Mala knežja jama; leto pridobitve: 2003.

2. Frag. dna; keramika; površina: svetlorjava; zrnatost: groba; najdišče: 14. Mala knežja jama; leto pridobitve: 2003.

3. Frag. ostenja; keramika; površina: rjava; zrnatost: groba; najdišče: 16. Mali brlog; leto pridobitve: 2004.

4. Frag. ostenja; keramika; ornament: žlebovi oz. metličast okras (zunaj); površina: svetlorjava; zrnatost: fina; najdišče: 16. Mali brlog; leto pridobitve: 2004.

5. Frag. ostenja z držajem; keramika; površina: temnorjava; zrnatost: groba; najdišče: 16. Mali brlog; leto pridobitve: 2004.

4. Frag. of a wall; pottery; ornament: plastic cordon; surface: dark brown; granularity: coarse; site: 6. Vrbovška jama; year of acquisition: 2001.

5. Frag. of a wall; pottery; ornament: cordon; surface: brown; granularity: coarse; site: 6. Vrbovška jama; year of acquisition: 2001.

6. Frag. of a lip with a handle nozzle; pottery; surface: brown; granularity: coarse; site: 6. Vrbovška jama; year of acquisition: 2001.

7. Frag. of a wall with a grip with finger imprints; pottery; ornament: imprint; surface: brown; granularity: fine; site: 6. Vrbovška jama; year of acquisition: 2001.

8. Frag. of a bottom; pottery; surface: light brown; granularity: coarse; site: 6. Vrbovška jama; year of acquisition: 2001.

9. Frag. of a bottom; pottery; ornament: barbotine; surface: dark brown; granularity: coarse; site: 6. Vrbovška jama; year of acquisition: 2001.

Plate 2.3

1. Frag. of a neck; pottery; ornament: grooves or brush decoration (exterior and interior); surface: dark brown; granularity: coarse; site: 8. Gregčeva jama; year of acquisition: 2001.

2. Frag. of a wall; pottery; ornament: grooves or brush decoration (exterior and interior); surface: dark brown; granularity: coarse; site: 8. Gregčeva jama; year of acquisition: 2001.

3. Awl; bone; surface: light brown; site: 8. Gregčeva jama; year of acquisition: 2001.

4. Frag. of a hoe(?); made of antler; surface: light brown; site: 8. Gregčeva jama; year of acquisition: 2001.

5. Frag. of a wall; pottery; ornament: grooves (straight lines and two wavy lines); surface: dark grey; granularity: fine; site: 10. Dolga jama; year of acquisition: 2002.

6. Frag. of a wall; pottery; ornament: cordon; surface: brown; granularity: coarse; site: 10. Dolga jama; year of acquisition: 2002.

7. Frag. of a whetstone; stone; surface: grey; granularity: fine; site: 10. Dolga jama; year of acquisition: 2002.

8. Frag. of a chisel(?); iron; surface: brown red (rusty); site: 10. Dolga jama; year of acquisition: 2002.

Plate 2.4

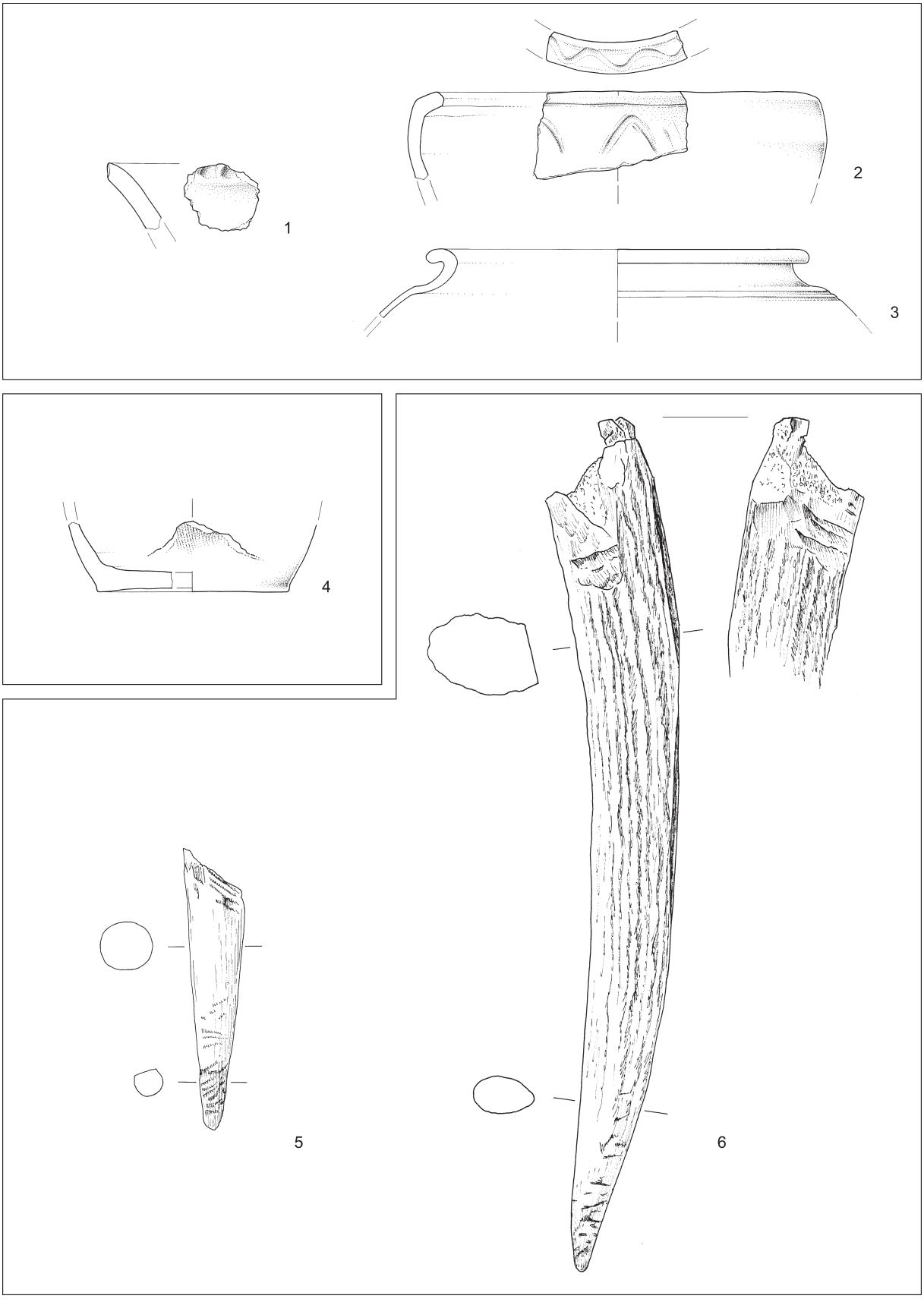
1. Frag. of a bottom with a wall; pottery; surface: light brown; granularity: coarse; site: 14. Mala knežja jama; year of acquisition: 2003.

2. Frag. of a bottom; pottery; surface: light brown; granularity: coarse; site: 14. Mala knežja jama; year of acquisition: 2003.

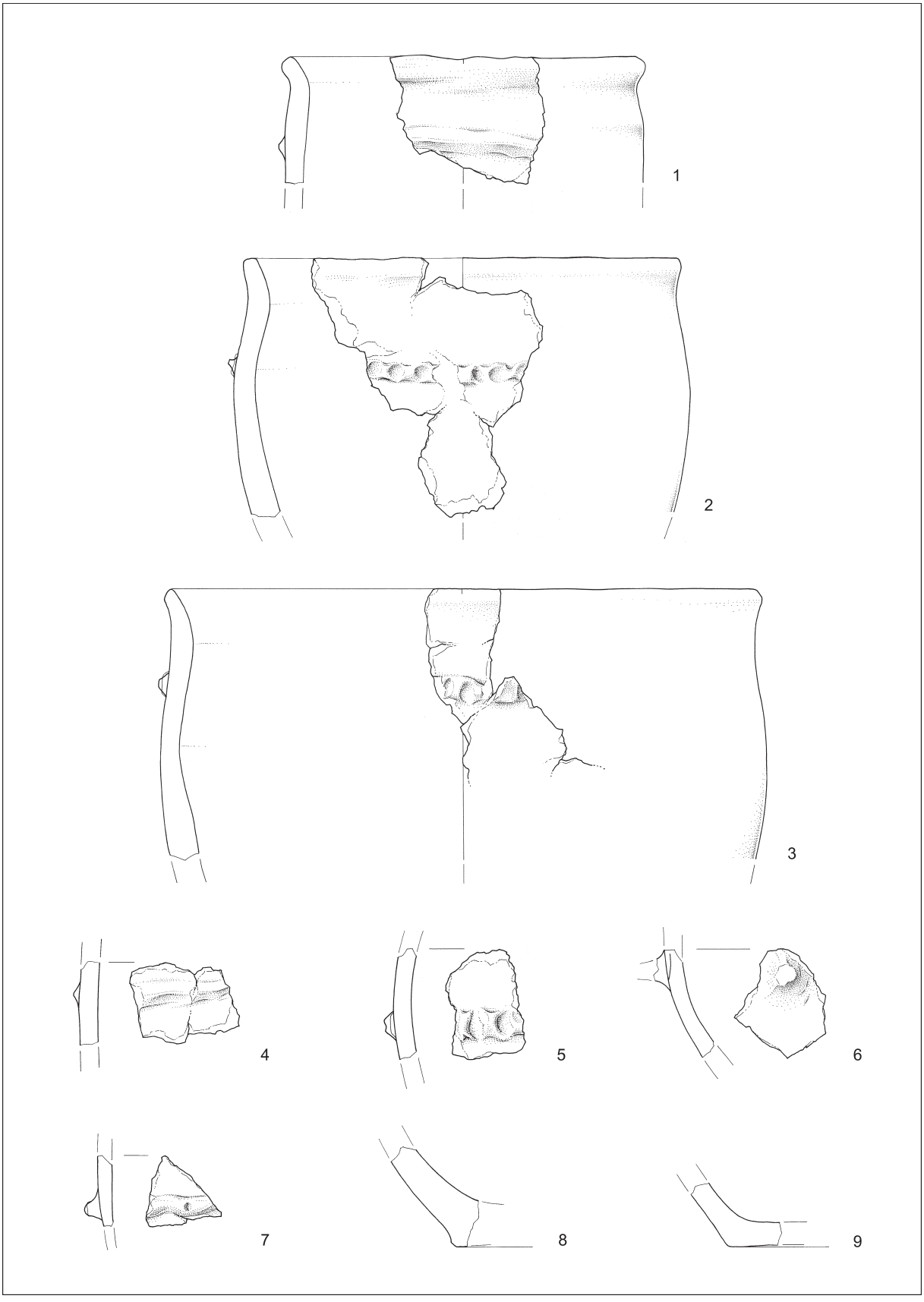
3. Frag. of a wall; pottery; surface: brown; granularity: coarse; site: 16. Mali brlog; year of acquisition: 2004.

4. Frag. of a wall; pottery; ornament: grooves or brush decoration (exterior); surface: light brown; granularity: fine; site: 16. Mali brlog; year of acquisition: 2004.

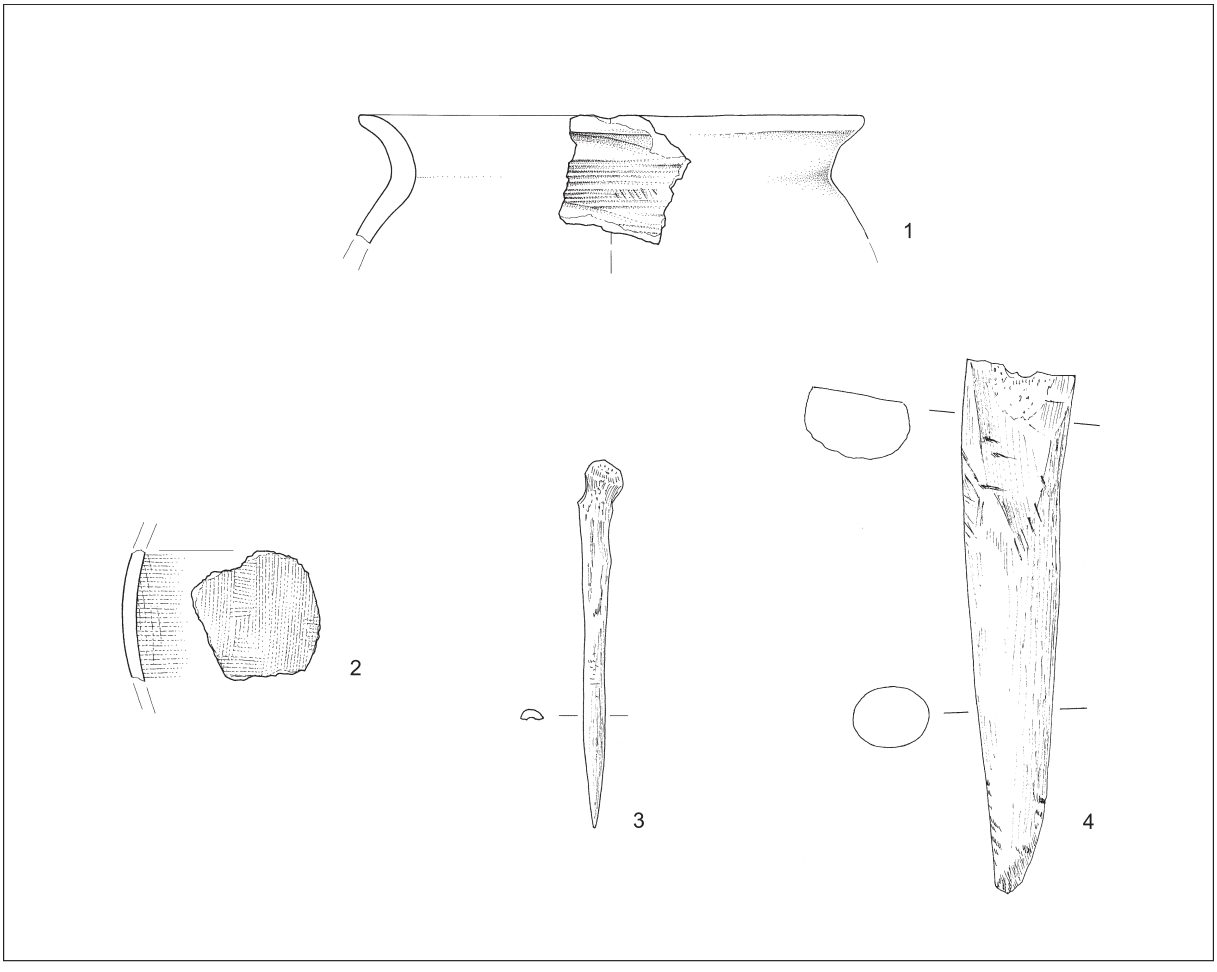
5. Frag. of a wall with a grip; pottery; surface: dark brown; granularity: coarse; site: 16. Mali brlog; year of acquisition: 2004.

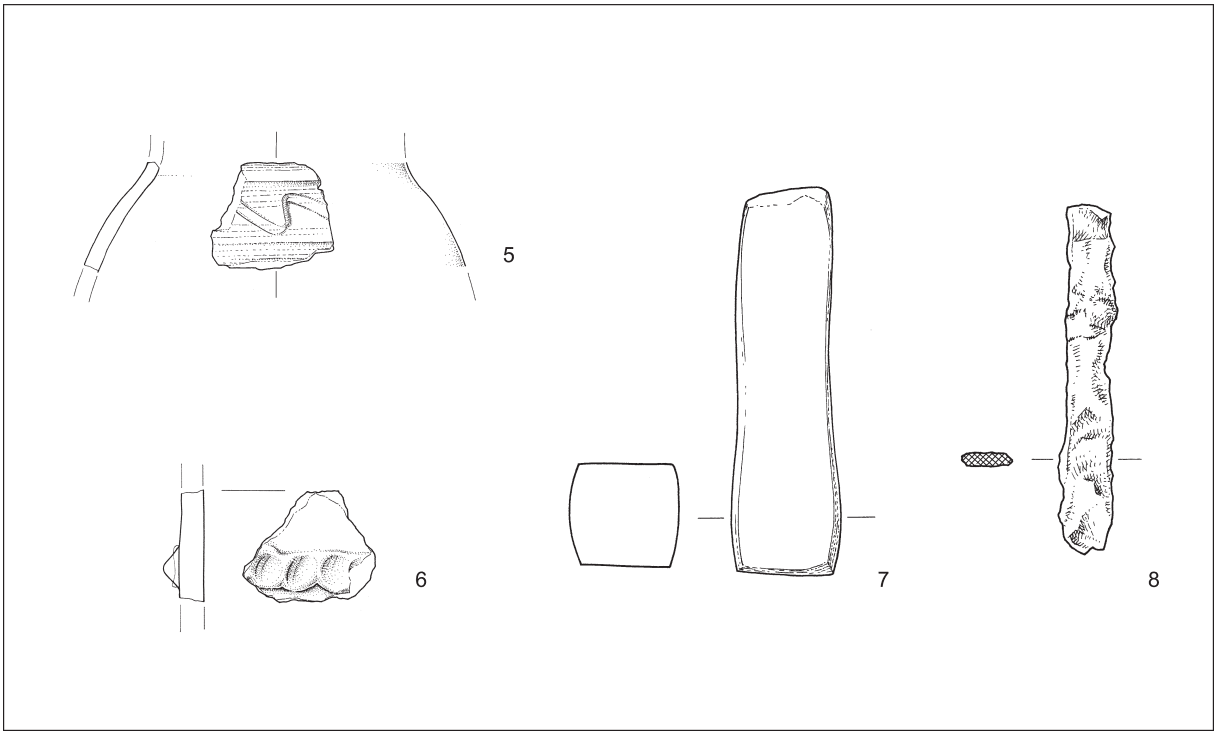


T. 2.1: Mala tkalčja jama (1–3), Grozdna jama (4) in Vrbovška jama (5, 6). Keramika (1–4). M = 1 : 3. Rogovje (5, 6) M = 1 : 2.
Pl. 2.1: Mala tkalčja jama (1–3), Grozdna jama (4) and Vrbovška jama (5, 6). Pottery (1–4). Scale = 1 : 3. Antler (5, 6) Scale = 1 : 2.

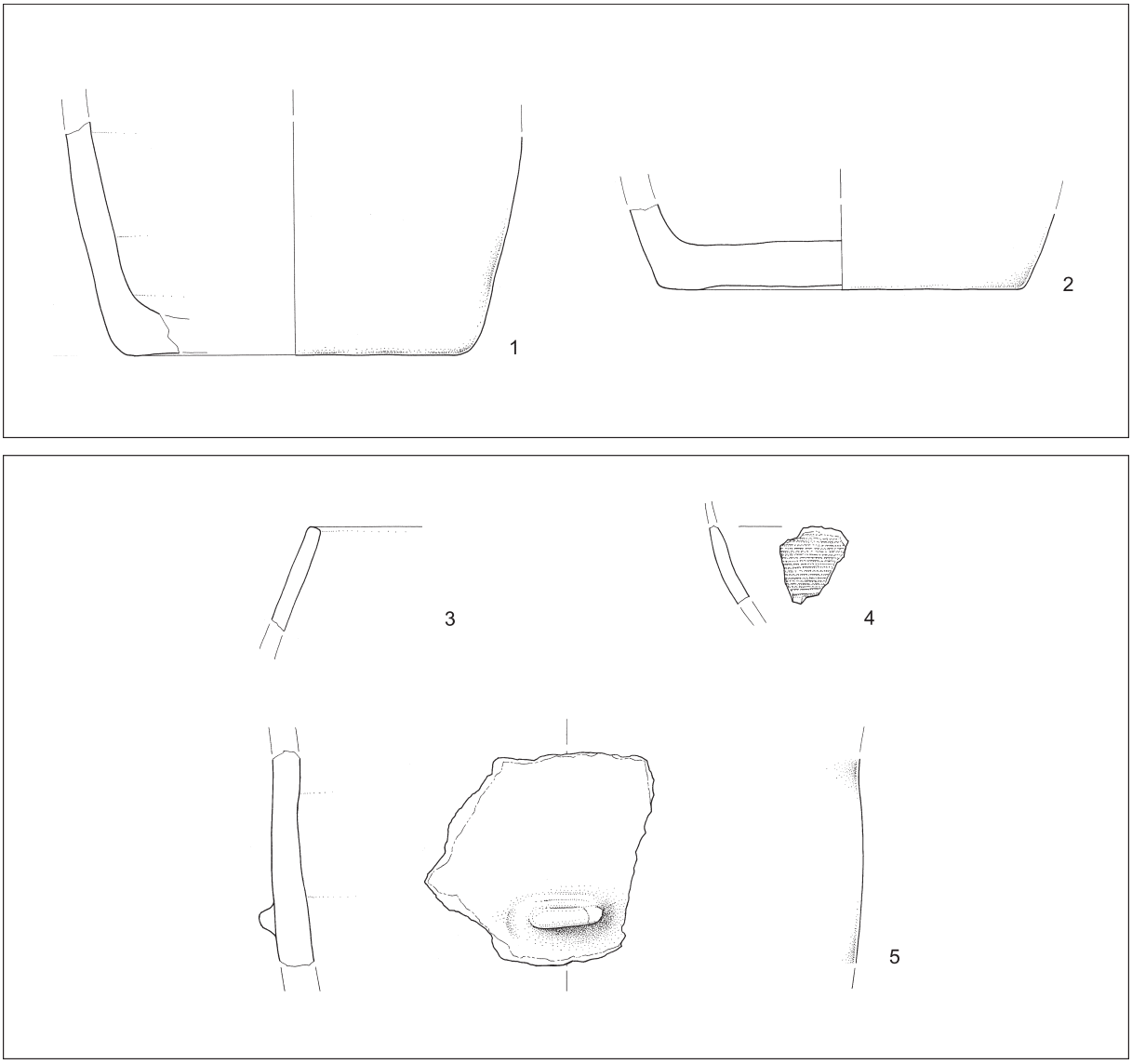


T. 2.2: Vrbovška jama. Keramika. M = 1 : 3.
Pl. 2.2: Vrbovška jama. Pottery. Scale = 1 : 3.





T. 2.3: Gregčeva jama (1–4) in Dolga jama (5–8). Keramika (1, 2, 5, 6). M = 1 : 3. Kost (3), rogovje (4), kamen (7) in železo (8). M = 1 : 2.
Pl. 2.3: Gregčeva jama (1–4) and Dolga jama (5–8). Pottery (1, 2, 5, 6). Scale = 1 : 3. Bone (3), antler (4), stone (7) and iron (8). Scale = 1 : 2.



T. 2.4: Mala knežja jama (1, 2) in Mali brlog (3–5). Keramika. M = 1 : 3.
Pl. 2.4: Mala knežja jama (1, 2) and Mali brlog (3–5). Pottery. Scale = 1 : 3.

3. SPAHA: ARHEOLOŠKE RAZISKAVE IN NASELBINSKE STRUKTURE

3. SPAHA: ARCHAEOLOGICAL RESEARCH AND SETTLEMENT STRUCTURES

Anton VELUŠČEK

Izvleček

V prispevku predstavljamo arheološke raziskave na Spahi. Na podlagi terenske dokumentacije podajamo opise sond, horizontalno in vertikalno stratigrafijo. Preučujemo tudi razpršenost arheoloških najdb (keramike in hišnega ometa) v prostoru (horizontalna stratigrafija) in času (vertikalna stratigrafija).

Določili smo približno lego 13 prazgodovinskih hiš, ki jih datiramo od savske skupine pa vse do kulture žarnih grobišč. Prostor za hiše so izbrali med skalami, kjer je prst nekoliko debelejša. Največje število ugotovljenih hiš je iz obdobja savske skupine in lasinjske kulture.

Ugotavljamo tudi, da je bil v obdobju savske skupine na južni strani zgornjega platoja postavljen obrambni zid in da sta bila v obdobju horizonta keramike z brazdastim vrezom poseljena oba platoja.

V času turških vpadov na slovensko ozemlje je bilo na Spahi kresišče z leseno kolibo – stražnico.

Ključne besede: višinsko naselje, stražnica, arheološke raziskave, stratigrafija, naselbinske strukture, metodologija.

Abstract

This article presents the archaeological research at Spaha. Descriptions of trenches, horizontal and vertical stratigraphy are introduced on the basis of the site documentation. The dispersion of archaeological finds (pottery and house plaster) in space (horizontal stratigraphy) and time (vertical stratigraphy) are also studied.

We determined the approximate position of 13 prehistoric houses which belong to the time from the Sava group until the Urnfield culture. The location for houses was chosen among the rocks where the soil is somewhat thicker. The highest number of the determined houses is from the Sava group and Lasinja culture.

We also established that in the time of the Sava group there was a defence wall built at the south side of the upper plateau and that in the period of the horizon of pottery with furrowed incisions both plateaus were inhabited.

In the time of the Turkish invasions to the Slovenian territory a beacon with a wooden hut – a watchtower was located at Spaha.

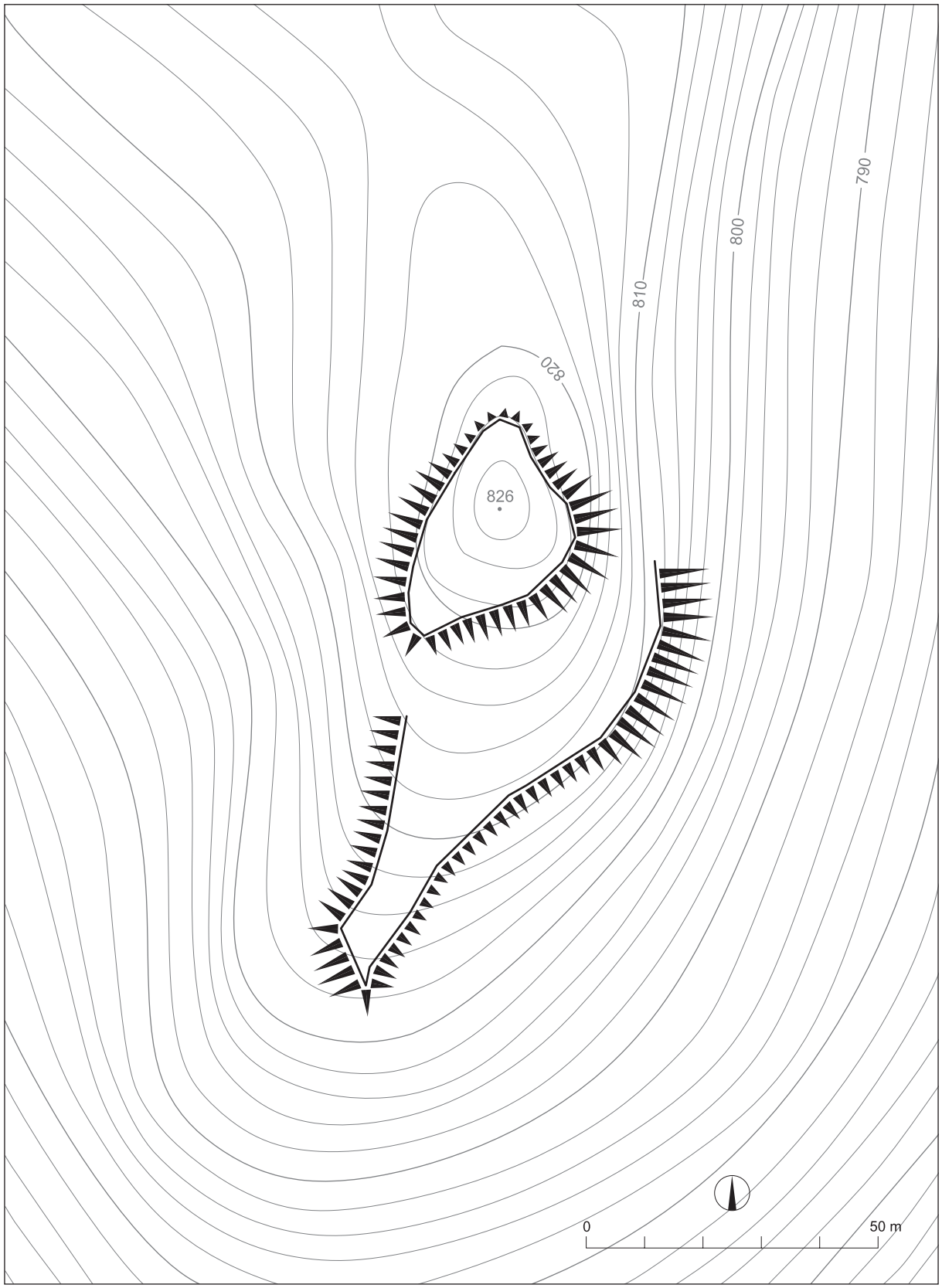
Keywords: hilltop settlement, watchtower, archaeological research, stratigraphy, settlement structures, methodology.

3.1 UVOD

Arheološko najdišče Spaha leži na strateški točki 826 m visokega južnega grebena Straže, kopasto oblikovanega vrha Kočevske Male gore. Za poselitev sta bila izbrana dva manjša platoja, katerih položaj je zelo dobro naravno zavarovan z južne, vzhodne in zahodne smeri, medtem ko je dostop s severa lažji (*sl. 3.1*).

3.1 INTRODUCTION

The archaeological site Spaha is located at a strategic point of the 826 m high south ridge of Straža, the domed top of the Kočevska Mala gora. Two smaller plateaus were chosen for settlement, the position of which is naturally well sheltered from the southern, eastern, and western directions, while the access from the north is easier (*Fig. 3.1*).



Sl. 3.1: Južni greben z naselbinskima platojema, ki sta zelo dobro naravno zavarovana z južne, vzhodne in zahodne smeri, medtem ko je dostop s severa lažji. M = 1 : 1000. (Vir: Arhiv Inštituta za arheologija, inv. št. 320.)
Fig. 3.1: The south ridge with settlement plateaus which are naturally well sheltered from the southern, eastern, and western directions, while the access from the north is easier. Scale = 1 : 1000. (Source: Archives of the Institute of Archaeology, inv. no. 320.)

Poselitev se je skoncentrirala na apnenčasti podlagi. Prazgodovinska bivališča so bila locirana med skalami, ki sicer prekrivajo del zgornjega in skoraj celotno površje spodnjega platoja. Manjša zaplata ravnine, na kateri je najti plasti humusa, je 50–100 m severno od naselja. Tam je verjetno iskati primeren prostor za skromno poljedelsko in živinorejsko dejavnost. Najbližje njivske površine so pri Nemški Loki (475 m n. m.), pribl. 1 km oddaljene od Spahe, in npr. pri Koprivniku (625 m n. m.), oddaljene pribl. 5 km.

Tudi za preskrbo z vodo je bilo poskrbljeno. Najbližji stalni izvir pitne vode je tik pod spodnjim naselbinskim platojem, ca. 250 m vzhodno od vasi Prerigelj,[1] tj. ob vaški stezi, ki je povezovala Prerigelj z Brezovico. Najbližje moderno vodno zajetje pri vasi Brezovica je manj kot 750 m oddaljeno od arheološkega najdišča.[2] Približno 150 m severozahodno od arheološkega najdišča pa je najti tudi manjšo mlako, v kateri je stalno voda.

Danes, verjetno je bilo podobno tudi v prazgodovini, ko sta bila platoja poseljena, okolico pokriva mešani jelovo-bukov gozd.[3]

Spomladi leta 1979 je na zgornjem platoju Spahe skupina pod vodstvom arheologinje G. Hirschbäck - Merhar iz Pokrajinskega muzeja Kočevje ob topografskem ogledu terena ugotovila obrise manjšega gradišču primerljivega prostora in ostanke "stolpiča",[4] s katerega je lep razgled na celo Poljansko dolino.

Gre za manjši in s strmimi pobočji hriba naravno zavarovan plato trikotne oblike s stranicami pribl. 50, 30 in 40 m (*sl. 3.1*), kar znese pribl. 600 m^2, ki bi bil lahko primeren za prazgodovinsko poselitev. Slednje se je kmalu potrdilo z izkopavanji. Kmalu je bilo tudi razvidno, da je prazgodovinske naselbinske ostanke dodobra uničila kasnejša gradnja "stolpiča" oz. verjetneje stražnice[5] in da se je naselbina razprostirala tudi na severnem delu sicer veliko bolj skalnatega spodnjega platoja, ki se od južnega roba zgornjega platoja jezičasto širi v smeri proti jugozahodu (*sl. 3.1*).

Podkvasta struktura kamnitega temelja stražnice se nahaja na vzhodnem delu zgornjega platoja, ki je tudi precej skalnat. Notranja širina zidu znaša pribl. 4,60 m, v dolžino pa je meril več kot 5 m (*sl. 3.2*). Zahodno od stražnice so opazili ca. 20 m oddaljen nasip, ki je bil ohranjen v dolžini 4–5 m.

Območje zgornjega platoja, ki spominja na gradišče, in podatka, prvi je pisni vir, da se je nekdaj hrib

[1] Vas Prerigelj je stala na jugozahodnem pobočju Straže, na nadmorski višini 710 m. Med 2. svetovno vojno je bila opuščena in nato požgana (Ferenc 2005).

[2] Vir: Hirschbäck - Merhar, *Elaborati arheoloških izkopavanj – Spaha: 1980, 1981,* Pokrajinski muzej Kočevje, mapa št. 2.

[3] Glej poglavje 1, v tem zborniku.

[4] Hirschbäck - Merhar 1979, 232.

[5] Simonič 1939, 80.

The settlement was situated on the limestone. The prehistoric dwellings were located among rocks which cover a part of the upper and almost the entire surface of the lower plateau. A smaller patch of flatland with layers of humus can be found 50–100 m north of the settlement. This is probably the appropriate place for moderate farming and animal-husbandry activities. The nearest field surfaces are at Nemška Loka (475 m a. s. l.), approx. 1 km away from Spaha, and e.g. at Koprivnik (625 m a. s. l.) which is approx. 5 km away.

The water supply was also not difficult. The nearest spring of drinkable water is right under the lower settlement plateau, ca. 250 m east of the village Prerigelj,[1] i.e. along the village path connecting Prerigelj to Brezovica. The nearest modern water reservoir at the village of Brezovica is less than 750 m away from the archaeological site.[2] About 150 m northwest to the archaeological site is also a smaller puddle which constantly holds water.

Today the surroundings are covered by a mixed fir-beech forest and the situation must have been similar in the prehistory when both plateaus were inhabited.[3]

In the spring of 1979, a group under the leadership of the archaeologist G. Hirschbäck - Merhar from the Regional museum Kočevje discovered at the upper plateau of Spaha upon topographic inspection of the terrain the outline of a smaller, fort-like space and the remains of a "small tower",[4] which offers a nice view over the entire Poljanska dolina.

This is a smaller and by steep slopes naturally sheltered plateau of triangular shape with sides of approx. 50, 30, and 40 m (*Fig. 3.1*), which amounts to approx. 600 m^2, and which could be appropriate for prehistoric settlement. Excavations soon confirmed these predictions. It was also soon clear that the prehistoric settlement remains were significantly destroyed by later construction of a "tower" or more likely a watchtower[5] and that the settlement reached also the northern part of the generally much rockier lower plateau, which spreads in a form of a tongue from the southern edge of the upper plateau in the direction towards the southwest (*Fig. 3.1*).

The horseshoe structure of the watchtower foundation is located at the eastern part of the upper plateau which is also fairly rocky. The inner width of the wall is approx. 4.60 m and it was over 5 m long (*Fig. 3.2*). West of the watchtower a ca. 20 m distant embankment was noticed which is preserved in the length of 4–5 m.

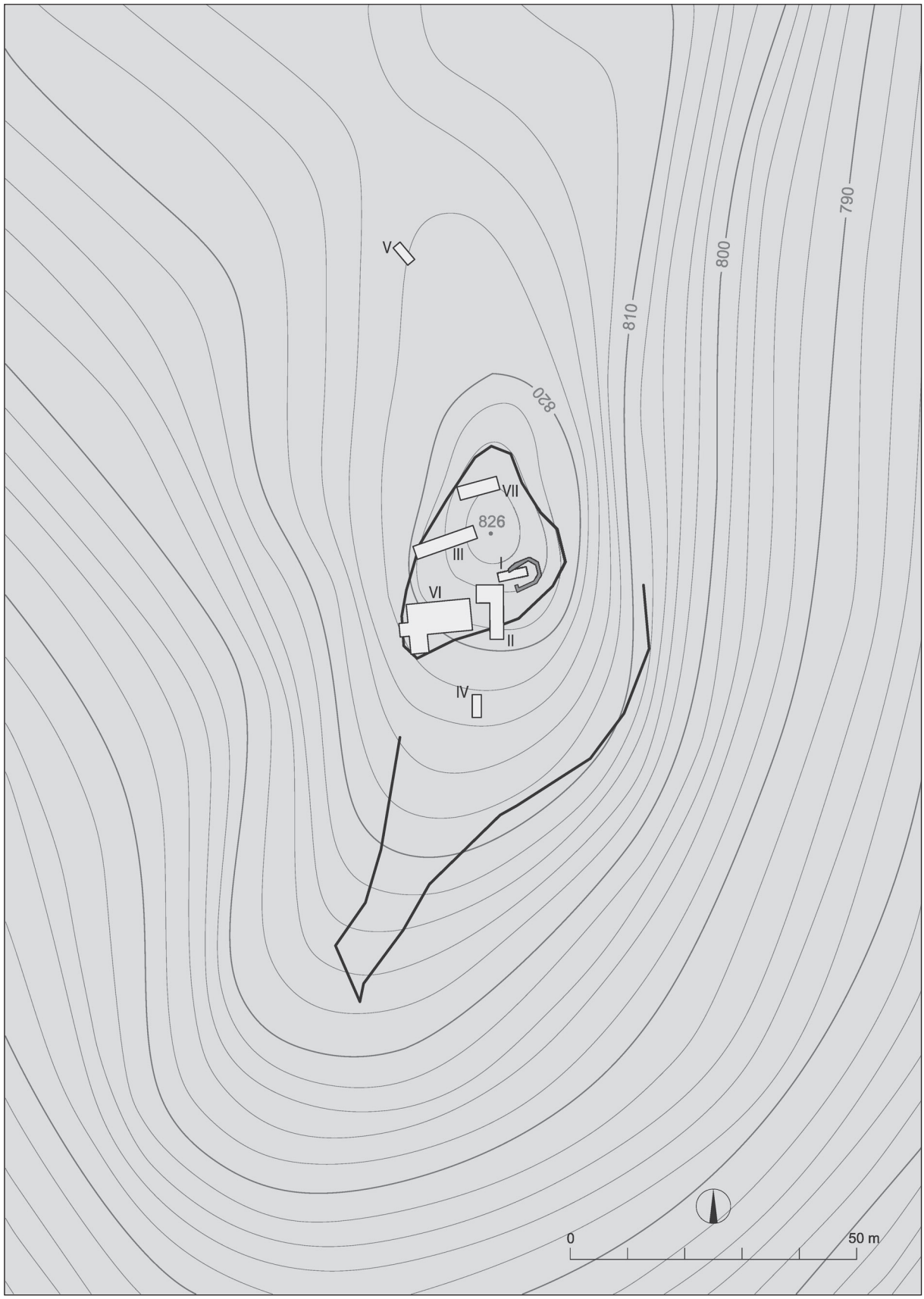
[1] The village Prerigelj was located on the south-western slope of Straža, at an altitude of 710 m. During the Second World War it was abandoned and then burned (Ferenc 2005).

[2] Source: Hirschbäck - Merhar, *Elaborati arheoloških izkopavanj – Spaha: 1980, 1981,* Pokrajinski muzej Kočevje, folder no. 2.

[3] See chapter 1, in this monograph.

[4] Hirschbäck - Merhar 1979, 232.

[5] Simonič 1939, 80.



Sl. 3.2: Spaha – načrt s sondami in kamnitim temeljem stražnice. M = 1 : 1000.
Fig. 3.2: Spaha – the plan with trenches and the watchtower stone foundation. Scale = 1 : 1000.

imenoval Grädisch,[6] drugi pa, da je bila pred 1. svetovno vojno v Preriglju najdena halštatska železna sulična ost, ki jo pod inv. št. P 12291 hranijo v Narodnem muzeju Slovenije,[7] so raziskovalce napotili, da so na Spahi začeli z arheološkimi raziskavami.

Spaha se kot potencialno arheološko najdišče v literaturi prvikrat[8] omenja v poročilu o zaščitnem arheološkem sondiranju v kraju Čeplje,[9] ki je trajalo od 6. do 12. avgusta 1979. Dve leti prej so namreč skozi poljanske vasi napeljevali vodovod in pri kopanju jarka v nekem sadovnjaku našli več fragmentov prazgodovinske keramike.

Sondi sta bili zastavljeni v sadovnjaku z ledinskim imenom Vrt, par. št. 593, k. o. Čeplje. Obe naj bi bili negativni, čeprav je bila v zgornji sondi najdena keramika. Po mnenju izkopavalke je bila na to mesto pripeljana z zemljo od drugod. Na obisk sta prišla tudi sodelavca Inštituta za arheologijo SAZU S. Ciglenečki in J. Dular, pri čemer je slednji predlagal, da naj se sondi zasuje in raje začne z izkopavanjem na Spahi, kar se je zgodilo 13. avgusta 1979.

3.2 IZKOPAVANJA MED LETOMA 1979 IN 1984[10]

3.2.1 LETI 1979 IN 1980

3.2.1.1 SONDA I (1979) IN PODALJŠANA SONDA I (1980) – 10 m² + 3 m² (*sl. 3.3–3.4*)

Pokrajinski muzej Kočevje je začel z arheološkim izkopavanjem na Spahi 13. in z deli nadaljeval do 15. avgusta leta 1979. V letu 1980 pa so raziskave potekale od 20. maja do 4. junija.

Sonda I je bila zastavljena na zgornjem platoju, na parc. št. 2680/191, k. o. Nemška Loka. Sprva je merila 2 × 5 m, v maju 1980 pa je bila podaljšana za 1,5 m proti zahodu. Orientirana je bila zahod–vzhod, z rahlim od-

[6] Simonič 1939, 80, 90; Hirschbäck - Merhar 1979, 232.

[7] F. Truhlar, Prerigel, v: *Arheološka najdišča Slovenije*, 1975, 238.

[8] J. Dular (1985, 97) sicer meni, da J. Pečnik v pismu J. Szombathyju z dne 3. 6. 1900, katerega navaja tudi P. Petru (glej Brezovica pri Predgradu, v: *Arheološka najdišča Slovenije*, 1975, 244), prvi omenja prazgodovinsko naselje na Spahi.

[9] Hirschbäck - Merhar 1979, 231–233; 1981, 307.

[10] Podatki o sondiranju so pridobljeni iz dokumentacijskega gradiva, kot so: *Elaborati arheoloških izkopavanj Spaha,* Pokrajinski muzej Kočevje, mapa št. 2, leto 1980, 1981; *Spaha – geodetska izmera,* Pokrajinski muzej Kočevje, Arheološki oddelek, mapa št. 3, leto 1981; *Poročila arheoloških izkopavanj – Spaha,* Pokrajinski muzej Kočevje, mapa št. 8, leto 1979, 1980, 1981, 1982, 1983, katerih avtor je G. Hirschbäck - Merhar in iz Hirschbäck - Merhar 1979, 232, 233; 1982, 139.

The area of the upper plateau, which reminds us of a fort, and the data, the first of which is a written source about this hill once being called Grädisch,[6] and the second mentioning that prior to the Great War a Hallstatt iron spearhead was found at Prerigelj which is under inv. no. P 12291 kept at the National museum of Slovenia,[7] directed the researchers to start archaeological excavations at Spaha.

Spaha as a potential archaeological site appears in expert writings for the first time[8] in a report about rescue archaeological trenching at Čeplje,[9] which lasted from 6th until 12th August 1979. Two years prior, during the plumbing installation through the Poljanska dolina villages, several fragments of prehistoric pottery were found while digging a ditch in an orchard.

Two trenches were set at the orchard with a common name Vrt, plot no. 593, land reg. Čeplje. Both were supposedly negative although there were some pottery finds in the upper one. The excavator believes that is was driven here with the soil from elsewhere. Two associates of the Institute of archaeology of the Slovenian Academy of Sciences and Arts (ZRC SAZU), S. Ciglenečki and J. Dular, visited the site when the latter suggested that the trenches be filled and excavations start at Spaha, which actually happened on 13th August 1979.

3.2 EXCAVATIONS BETWEEN 1979 AND 1984[10]

3.2.1 YEARS 1979 AND 1980

3.2.1.1 TRENCH I (1979) AND EXTENDED TRENCH I (1980) – 10 m² + 3 m² (*Figs. 3.3–3.4*)

The Regional museum Kočevje started archaeological excavations at Spaha on 13th and continued until

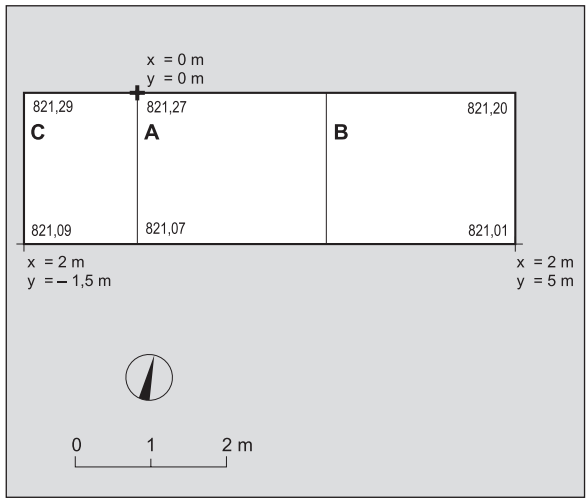
[6] Simonič 1939, 80, 90; Hirschbäck - Merhar 1979, 232.

[7] F. Truhlar, Prerigel, in: *Arheološka najdišča Slovenije*, 1975, 238.

[8] J. Dular (1985, 97) believes that J. Pečnik in his letter to J. Szombathy dated 3rd June 1900, which is also cited by P. Petru (see Brezovica pri Predgradu, in: *Arheološka najdišča Slovenije*, 1975, 244), is the first to mention the prehistoric settlement at Spaha.

[9] Hirschbäck - Merhar 1979, 231–233; 1981, 307.

[10] The data about sample trenching are acquired from the documentation material like: *Elaborati arheoloških izkopavanj Spaha,* Pokrajinski muzej Kočevje, folder no. 2, leto 1980, 1981; *Spaha – geodetska izmera,* Pokrajinski muzej Kočevje, Arheološki oddelek, folder no. 3, leto 1981; *Poročila arheoloških izkopavanj – Spaha,* Pokrajinski muzej Kočevje, folder no. 8, leto 1979, 1980, 1981, 1982, 1983, the author of which is G. Hirschbäck – Merhar, and from Hirschbäck - Merhar 1979, 232, 233; 1982, 139.



Sl. 3.3: Sonda I (1979, 1980) – načrt.
Fig. 3.3: Trench I (1979, 1980) – the plan.

Sl. 3.4: Sonda I, pogled proti vzhodu (2010). Foto: T. Korošec.
Fig. 3.4: Trench I, a view towards the east (2010). Photo: T. Korošec.

klonom proti severu (os y), in je delno presekala zidan temelj stražnice iz 16. stoletja (*sl. 3.2*).

Leta 1979 je bila izhodiščna točka x = 0 in y = 0 postavljena na severozahodnem robu sonde. Vrednosti x so naraščale proti jugu, vrednosti y proti vzhodu. Leta 1980 so sondo, kot rečeno, podaljšali proti zahodu, vrednosti x so naraščale proti jugu, vrednosti y so padale proti zahodu. Razdeljena je bila na 3 kvadrante A do C, pri čemer je bil kvadrant C raziskan leta 1980.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[11]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1: *do gl. 0,30/0,40 m;*[12]
reženj 2: *gl. 0,45*–0,80/1,00 *(0,75)* m.

3.2.1.1.1 Stratigrafska opažanja

Sonda I pomembnih stratigrafskih podatkov ni dala, saj je bila plast skorajda enovita t. i. gozdna rjavica (plast 4) in sicer od plasti na površju z ruševinami stražnice do dna sonde v gl. 0,80–1,00 m.

[11] Absolutne višine površja tal ob sondi I, izmerjene 15. 04. 2010: pri x = 2, y = – 1,5 je 824,29 m; pri x = 0, y = – 1,5 je 824,51 m; pri x = 0, y = 5 je 824,34; pri x = 2, y = 5 je 824,21 m (prim s *sl. 3.3*).

[12] Pri podajanju globin režnjev smo podatke zajemali iz dveh virov: prvič iz opisne dokumentacije – kar je zapisano s pokončno pisavo – in drugič iz rubrike *Popisni listi arheoloških najdb (keramično posodje),* Pokrajinski muzej Kočevje, mapa št. 5 – ti podatki so zabeleženi v kurzivi.

15th August 1979. In 1980 the research was carried out between 20th May and 4th June.

Trench I was set at the upper plateau, at plot no. 2680/191, land reg. Nemška Loka. At first it measured 2 × 5 m but it was extended for 1.5 m toward the west in May 1980. It was oriented west–east, with slight deflection towards the north (axis y), and it partly cut the built foundation of the watchtower from the 16th century (*Fig. 3.2*).

In 1979 the starting point x = 0 and y = 0 was set at the north-western edge of the trench. Values x increased towards the south and values y towards the east. In 1980 the trench was, as stated before, extended towards the west, values x increased towards the south and values y decreased towards the west. It was divided into 3 squares A to C, square C was researched in 1980.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[11]

The excavation was done in slices. Hereon we present relative depths of individual slices measured from the surface by the trench:

slice 1: *down to the depth of 0.30/0.40 m;*[12]
slice 2: *depth of 0.45*–0.80/1.00 *(0.75)* m.

[11] Absolute heights of the ground surface by trench I, measured on 15th April 2010: at x = 2, y = – 1.5 is 824.29 m; at x = 0, y = – 1.5 is 824.51 m; at x = 0, y = 5 is 824.34; at x = 2, y = 5 is 824.21 m (cf. *Fig. 3.3*).

[12] While stating the slice depth we acquired data from two sources: first, from the descriptive documentation – written here in normal font – and second, from the column *Popisni listi arheoloških najdb (keramično posodje),* Pokrajinski muzej Kočevje, folder no. 5 – these data are written in italics.

Sl. 3.5: Ostanki kamnitega temelja stražnice, pogled proti jugu (1980). Foto: G. Hirschbäck - Merhar.
Fig. 3.5: Stone foundation fragments of the watchtower, view towards the south (1980). Photo: G. Hirschbäck - Merhar.

Zidan temelj verjetno lesene[13] stražnice je bil vezan z malto in debel pribl. 0,85 m. Ohranil se je do višine pribl. 0,8 m. Gre za arhitekturo iz časa turških vpadov, ko je bilo na Spahi t. i. kresišče, o čemer govore pisni viri iz 16. stoletja.[14] Datacijo naj bi potrjevale tudi najdbe – večidel je šlo za fragmente poznosrednje- oz. zgodnjenovoveške keramike in kose zidne malte –, ki so jih našli znotraj zidovja v ruševinski plasti in v t. i. gozdni rjavici. Izven zidanega objekta v zahodnem delu sonde pa so našli veliko prazgodovinskih fragmentov keramike, ostanke prazgodovinskega hišnega ometa in fragment brusa.

3.2.2 LETO 1980

3.2.2.1 SONDA II (1980) – 30 m^2 (*sl. 3.2, 3.7, 3.8*)

Sonda II je bila locirana jugozahodno od sonde I na južnem delu zgornjega naselbinskega platoja. Široka je bila 3 m, v dolžino je merila 10 m. Orientirana je bila v smeri sever–jug; postavljena je bila skoraj pravokotno na sondo I. Izhodiščna točka x = 0 in y = 0 je stala na severovzhodnem robu sonde. Vrednosti x so naraščale proti zahodu, vrednosti y proti jugu. Razdeljena je bila na tri kvadrante (kv. 1 pri x = 0–3, y = 0–2; kv. 2 pri x = 0–3, y = 2–6; kv. 3 pri x = 0–3, y = 6–10). Šest dolžinskih metrov je teklo po zgornjem platoju naselbine, preostali štirje pa so bili zastavljeni na južnem pobočju oz. na prehodu v spodnji naselbinski plato.

[13] Simonič 1939, 80.
[14] Glej Simonič 1939, 80.

Sl. 3.6: Ostanki kamnitega temelja stražnice, pogled proti jugu (2010). Foto: T. Korošec.
Fig. 3.6: Stone foundation fragments of the watchtower, view towards the south (2010). Photo: T. Korošec.

3.2.1.1.1 Stratigraphic observations

Trench I did not yield any stratigraphic data because the layer was almost uniform s.c. brown soil (layer 4), which means from the layer at the surface with remains of the watchtower to the bottom of the trench at the depth of 0.80–1.00 m.

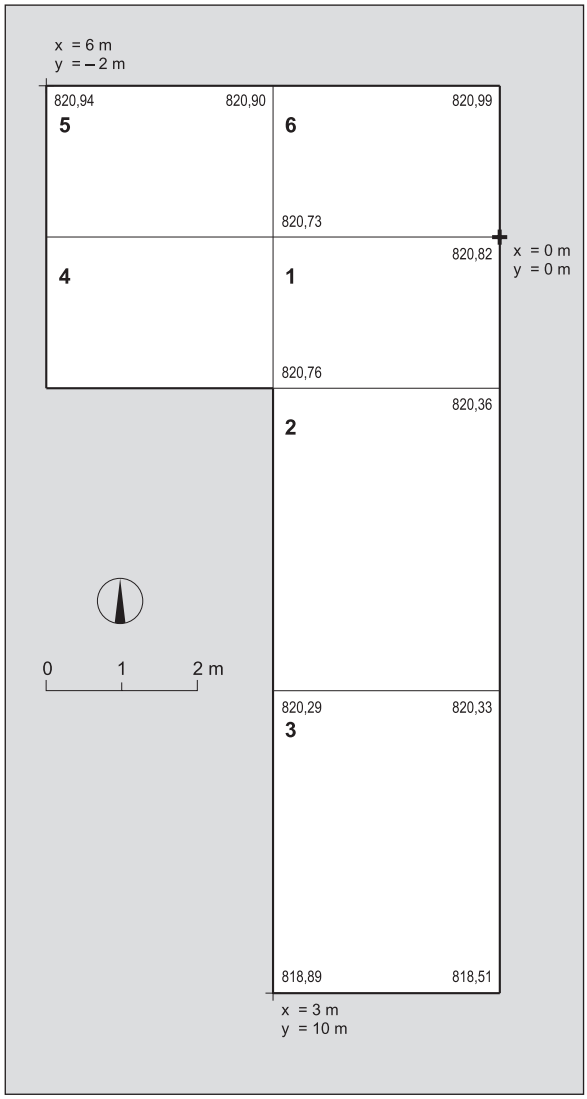
The built foundation of probably wooden[13] watchtower was bound by mortar and was approx. 0.85 m thick. It is preserved up to the height of approx. 0.8 m. This is the architecture from the time of the Turkish invasions when the s.c. beacon was located at Spaha, which is testified to by the written sources of the 16th century.[14] This dating is supposedly confirmed also by the finds – mostly fragments of the Late Middle Age or Early Modern Period pottery and pieces of wall mortar – which were discovered within the walls in the destruction layer and in the s.c. brown soil. Outside the built facility in the western part of the trench numerous prehistoric pottery fragments, remains of prehistoric house plaster, and a whetstone fragment were discovered.

3.2.2 THE YEAR 1980

3.2.2.1 TRENCH II (1980) – 30 m^2 (*Figs. 3.2, 3.7, 3.8*)

Trench II was located southwest of trench I, at the southern part of the upper settlement plateau. It was 3 m wide and 10 m long. It was oriented in the direction north–south and set almost perpendicular to trench I. Starting point x = 0 and y = 0 was placed in the north-eastern edge of the trench. Values x increased towards the west and values y towards the south. It was divided into three squares (sq. 1 at x = 0–3, y = 0–2; sq. 2 at x = 0–3,

[13] Simonič 1939, 80.
[14] See Simonič 1939, 80.



Sl. 3.7: Sonda II (1980, 1981) – načrt.
Fig. 3.7: Trench II (1980, 1981) – the plan.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[15]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1: do gl. 0,20/0,25 m;
reženj 2: gl. 0,20/0,25–0,40 m;
reženj 3: gl. 0,40–0,60 m;
reženj 4: gl. 0,60–0,80 m;
reženj 5: gl. 0,80–1,00 m (1. poglobitev), 1,00–1,20 m (2. poglobitev).

[15] Absolutne višine površja tal ob sondi II (1980 in 1981), izmerjene 15. 04. 2010: pri x = 0, y = – 2 je 824,05 m; pri x = 0, y = 10 je 821,62 m; pri x = 3, y = 2 je 823,38; pri x = 6, y = 2 je 823,74; pri x = 6, y = – 2 je 823,91 m (prim s *sl. 3.7*).

Sl. 3.8: Sonda II, pogled proti jugu (2010). Foto: T. Korošec.
Fig. 3.8: Trench II, a view towards the south (2010). Photo: T. Korošec.

y = 2–6; sq. 3 at x = 0–3, y = 6–10). Six linear metres ran along the upper plateau of the settlement, the remaining four were set at the southern slope or at the transition to the lower settlement plateau.

Heights of corner points at the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standingpoint" at 822.9 m.[15]

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1: down to the depth of 0.20/0.25 m;
slice 2: depth of 0.20/0.25–0.40 m;
slice 3: depth of 0.40–0.60 m;
slice 4: depth of 0.60–0.80 m;
slice 5: depth of 0.80–1.00 m (1st deepening), 1.00–1.20 m (2nd deepening).

3.2.2.1.1 Stratigraphic observations

Description of planums I, II, and IV, which were drawn in years 1980 and 1981

Planum I: the planum was drawn after the excavation of the first slice in the depth of 0.20–0.25 m. In the planum prevails the s.c. layer of brown soil (layer 4). In it, immediately beneath the humus (layer 1) at the edge of the plateau or of the settlement, remains of the wall made of smaller and bigger stones appeared and these were scattered around randomly in the transition from sq. 2 to sq. 3. Numerous stones, probably the remains of

[15] Absolute heights of ground surface along trench II (1980 and 1981), measured on 15th April 2010: at x = 0, y = – 2 is 824.05 m; at x = 0, y = 10 is 821.62 m; at x = 3, y = 2 is 823.38; at x = 6, y = 2 is 823.74; at x = 6, y = – 2 is 823.91 m (cf. *Fig. 3.7*).

3.2.2.1.1 Stratigrafska opažanja

Opis planumov I, II in IV, ki so bili narisani v letih 1980 in 1981

Planum I: planum je bil narisan po izkopu prvega režnja v gl. 0,20–0,25 m. Na planumu prevladuje t. i. plast gozdne rjavice (plast 4). V njej so se takoj pod rušo (plast 1) na robu platoja oz. naselbine pojavili ostanki obzidja iz velikih in manjših kamnov, ki so bili brez reda nametani na prehodu iz kv. 2 v kv. 3. Številni kamni, verjetno gre za ostanke podrtega obzidja, so ležali tudi na strmini od y = 6 do y = 10 v kv. 3. V kv. 2 je bilo opaziti tudi veliko zaplato apna in malte (plast 3).

Planum II: planum je bil risan v gl. 0,40 m, po izkopu drugega režnja. V kvadrantih 1 in 2 prevladuje rjava zemlja z ilovico (plast 2), ki je bila precej zbita. V njej so bili posamezni koščki oglja, keramični fragmenti in predvsem v kv. 2 večja količina hišnega ometa. Mestoma je bila rjava zemlja še pomešana s peskom (kv. 2). Kamnita struktura na prehodu iz kv. 2 v kv. 3 je postala dobro razpoznavna. Na strmem pobočju v kv. 3 je bilo veliko kamnov v t. i. gozdni rjavici (plast 4).

Planum IV: planum je bil risan leta 1981 v gl. 0,80 m, po izkopu četrtega režnja. Na njem je še vedno dobro vidna kamnita struktura (zid) med kv. 2 in kv. 3. Na pobočju je dokumentirana ruševinska plast v t. i. gozdni rjavici (plast 4). V severnem delu kv. 2 je zbita ilovica (plast 1). V severnem delu sonde pa sicer prevladuje rjava zemlja z ilovico (plast 2). Na severozahodnem robu kv. 1 je močno zbita ilovica rdečkasto rumene barve, t. i. žganica (plast 1), prekrita z drobci oglja in hišnega ometa, ki se nadaljuje v sondo II iz leta 1981. Po mnenju izkopavalke naj bi šlo za ohranjeno hodno površino hiše (*sl. 3.9*).

3.2.2.1.2 Vertikalna stratigrafija

Izpovedna sta dva profila, vzhodni in severni.

Opis vzhodnega profila sonde II (kv. 6, 1–3), ki je bil narisan leta 1981 (sl. 3.10)

Celotna dolžina vzhodnega profila, pri x = 0 in y = 0–10, znaša 10 m.

Glede na vzhodni profil je bilo dno sonde v gl. pribl. 0,80 m, na nekaterih mestih, kot npr. pri x = 0 in y = 10, pa veliko višje, samo 0,30 m pod površjem.

Plast 1: najglobljo plast je predstavljala ilovica z rjavo zemljo. Pojavila se je na platoju od y = 2–5,20, v njej so našli fragmente prazgodovinske keramike in ostanke hišnega ometa.

Plast 2: nad plastjo ilovice z rjavo zemljo se je pojavila bolj zemljena rjava plast z ilovico, ki je na y = 0–2 in the fallen wall, were found also on the steep from y = 6 to y = 10 in sq. 3. In sq. 2 a big patch of lime and mortar could be noticed (layer 3).

Planum II: the planum was drawn at the depth of 0.40 m, after the excavation of the second slice. In squares 1 and 2 the brown earth with loam (layer 2) prevails which was fairly pressed. It contained individual pieces of charcoal, pottery fragments, and, mostly in sq. 2, a large amount of house plaster. In places the brown earth was still mixed with sand (sq. 2). The stone structure at the transition from sq. 2 to sq. 3 became easily recognisable. At the steep slope in sq. 3 there were many stones in the s.c. brown soil (layer 4).

Planum IV: the planum was drawn in 1981 at the depth of 0.80 m, after the excavation of slice 4. On it the stone structure (wall) between sq. 2 and sq. 3 is still well visible. At the slope a destruction layer is documented within the brown soil (layer 4). In the northern part of sq. 2 is pressed loam (layer 1) while in the northern part of the trench the brown earth with loam is prevalent (layer 2). At the north-western edge of sq. 1 there is heavily beaten loam of reddish yellow colour, the s.c. "žganica (i.e. baked soil)" (layer 1), covered by tiny pieces of charcoal and house plaster, which continues into trench II from 1981. In the excavator's opinion this is the preserved house floor (*Fig. 3.9*).

3.2.2.1.2 Vertical stratigraphy

Two profiles are declaratory, the eastern and the northern.

Description of the eastern profile of trench II (squares 6, 1–3), which was drawn in 1981 (Fig. 3.10)

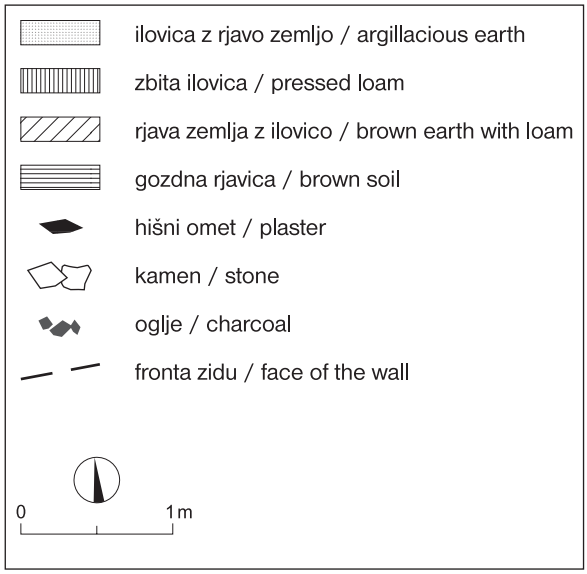
The complete length of the eastern profile, at x = 0 and y = 0–10, amounts to 10 m.

Considering the eastern profile the bottom of the trench was at the depth of approx. 0.80 m, in some places, as for example at x = 0 and y = 10, it was slightly higher, only 0.30 m beneath the surface.

Layer 1: the deepest layer was argillaceous earth. It appeared on the plateau from y = 2–5.20, in it fragments of prehistoric pottery and remains of house plaster were found.

Layer 2: above the layer of argillaceous earth a less argillaceous brown earth appeared, which presented the bottom of the trench at y = 0–2 and 5.20–6. It was approx. 0.25 to 0.50 m thick. Most of the artefacts and other archaeological finds were found within it. At approx. y = 3.70–5.20 this layer also covers the lower group of bigger defensive wall stones. At the steep slope from y = 6 to y = 10 this layer did not appear.

Layer 3: from the southern edge of sq. 1 at y = 1.60 to approx. y = 5.70 in sq. 2, the layer of brown earth with loam is covered by up to 0.10 m thick layer of lime.



5,20–6 predstavljala dno sonde. Debela je bila od pribl. 0,25 do 0,50 m. V njej je bilo najti večino artefaktov in drugih arheoloških najdb. Pri pribl. y = 3,70–5,20 plast prekriva tudi spodnjo skupino večjih kamnov obrambnega zidu. Na strmem pobočju od y = 6 do y = 10 se ta plast ni pojavila.

Plast 3: od južnega roba kv. 1 pri y = 1,60 pa do pribl. y = 5,70 v kv. 2, plast rjave zemlje z ilovico prekriva do 0,10 m debela plast apna.

Plast 4: apneno plast prekriva plast t. i. gozdne rjavice, debeline tudi do 0,6 m. V kv. 1, na severnem delu profila, plast 4 leži neposredno na plasti 2. V plasti 4 na y = 6–10 se nahaja prav tako večina kamnov, ki so ostanek obrambnega zidu. Na tem mestu je plast 4 predstavljala dno sonde. V plasti 4 je bilo še najti kulturne ostanke.

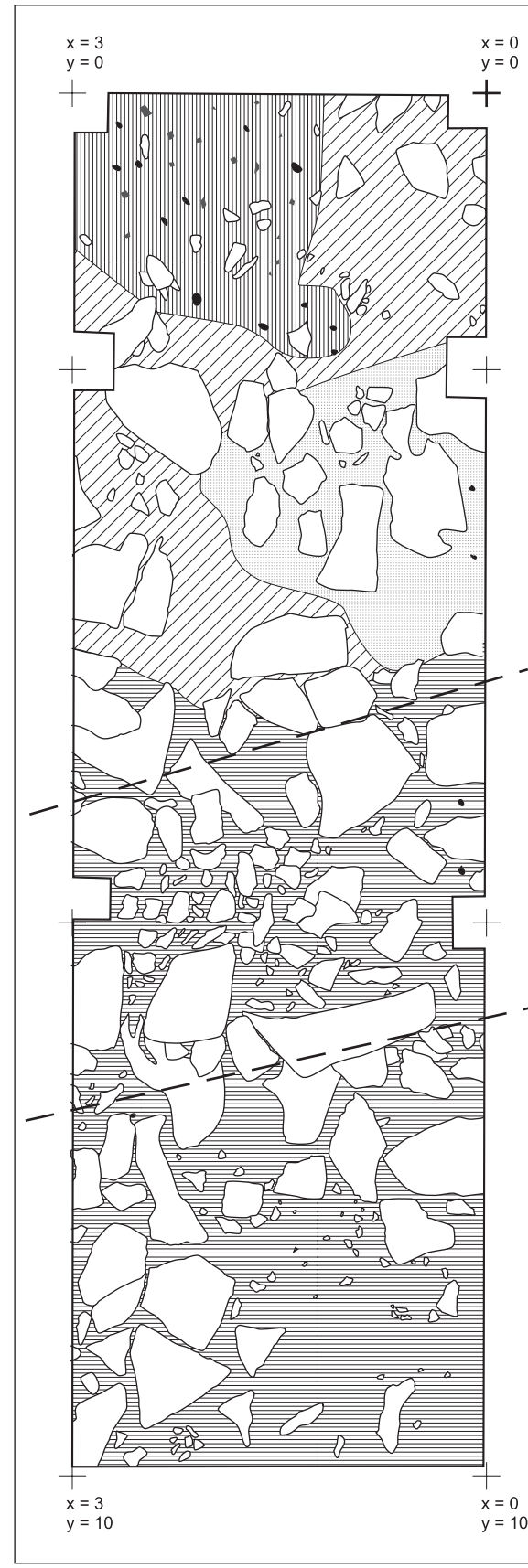
Plast 5: plast 4 po celotnem profilu prekriva površinska humusna plast 5 oz. ruša.

Opis severnega profila sonde II (kv. 1), ki je bil narisan leta 1980 (sl. 3.11)

Dolžina severnega profila, pri x = 0–3 in y = 0, znaša 3 m.

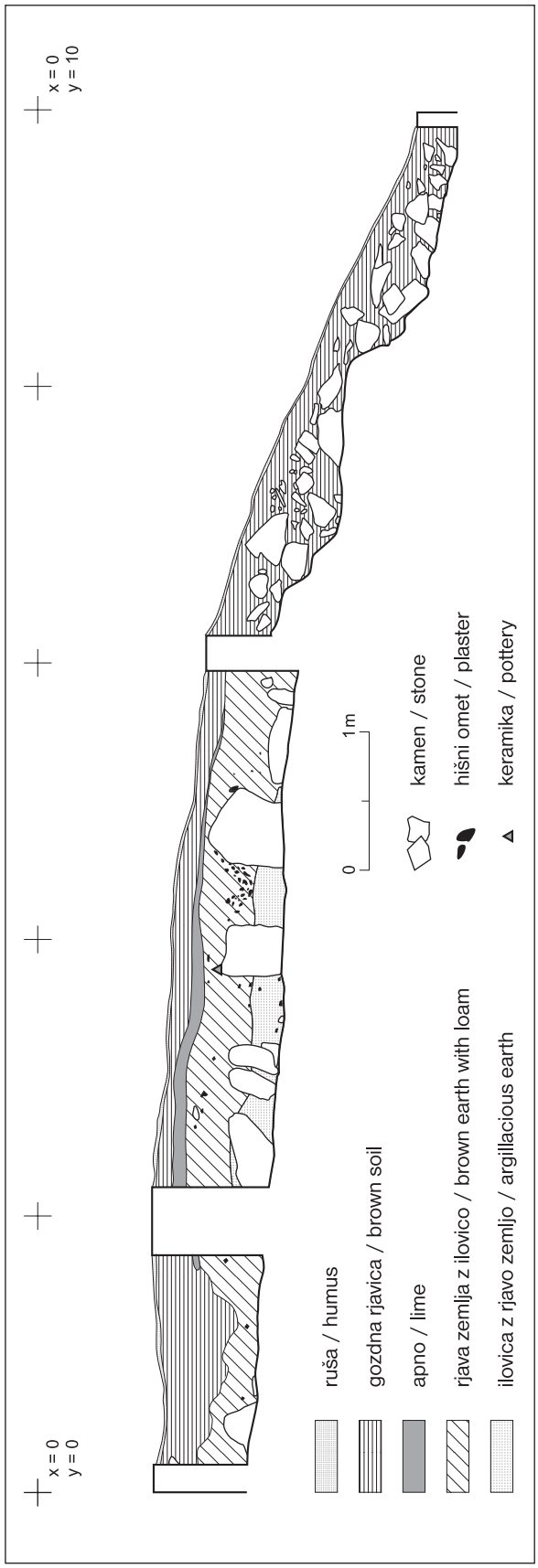
Glede na profil je bilo dno sonde v gl. pribl. 0,80 m pod površjem.

Plast 1: najglobljo plast predstavlja plast 1. Pojavlja se v globini med 0,95 m in 0,80 m,[16] na x = 1,06 do x = 1,51 in x = 1,66 do x = 2,76. Šlo naj bi za hodno površino, ki se je nadaljevala tudi v zahodni profil v smeri razširjene sonde II iz leta 1981. Šlo naj bi za plast ilovice z rjavo zemljo (plast 1), ki pa je bila na tem mestu močneje zbita in rdečkasto rumene barve. Na njej so bili drobci oglja in hišni omet. V njej pa so našli tudi nekaj fragmentov



Sl. 3.9: Sonda II (1980, 1981), kv. 1–3, planum IV.
Fig. 3.9: Trench II (1980, 1981), squares 1–3, planum IV.

[16] V severnem profilu je omenjena plast dokumentirana med globinama 0,80 in 0,70 m (*sl. 3.11*).



Sl. 3.10: Sonda II (1980, 1981), vzhodni profil.
Fig. 3.10: Trench II (1980, 1981), eastern profile.

Layer 4: the lime layer is covered by a layer of brown soil, which is up to 0.6 m thick. In sq. 1, at the northern part of the profile, layer 4 lies directly over layer 2. In layer 4 at y = 6–10 most of the stones are the remains of the defensive wall. At this point layer 4 represented the bottom of the trench. In layer 4 cultural remains could still be found.

Layer 5: layer 4 is along the entire profile covered by surface humus layer 5.

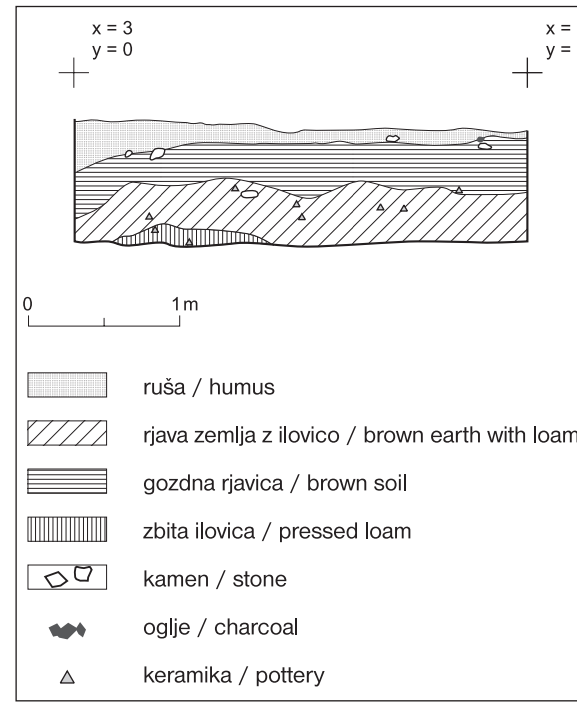
Description of the northern profile of trench II (sq. 1), which was drawn in 1980 (Fig. 3.11)

The length of the northern profile, at x = 0–3 and y = 0, amounts to 3 m.

Considering the profile the bottom of the trench was at the depth of approx. 0.80 m beneath the surface.

Layer 1: the deepest layer is represented by layer 1. It appears at the depth between 0.95 m and 0.80 m,[16] at x = 1.06 to x = 1.51 and x = 1.66 to x = 2.76. This is supposedly a house floor which continued into the western profile in the direction of extended trench II from 1981. This was to be a layer of argillaceous earth (layer 1), which was in this place more heavily beaten and of reddish yellow colour. Fragments of charcoal and house plaster were on it, while in it some pottery fragments were found. The documented thickness of the layer was up to 0.13 m, which can also be seen from the drawing of the northern profile.

[16] In the northern profile the mentioned layer is documented between the depths of 0.80 and 0.70 m (*Fig. 3.11*).



Sl. 3.11: Sonda II (1980), kv. 1, severni profil.
Fig. 3.11: Trench II (1980), sq. 1, the northern profile.

keramike. Dokumentirana debelina plasti je bila do 0,13 m, kar je razvidno tudi iz risbe severnega profila.

Plast 2: nad plastjo 1, na nekaterih mestih tudi na dnu sonde, leži plast 2, tj. rjava zemlja z ilovico. Plast je bila debela do pribl. 0,40 m, v njej je bilo zelo veliko arheoloških najdb.

Plast 4: plast 4, t. i. gozdna rjavica, prekriva plast 2. Pojavila se je v gl. 0,40 m, pri x = 3 celo v gl. 65 cm, in je segala do ruše. V njej so našli veliko število artefaktov, od kamnitega orodja do fragmentov keramike.

Plast 5: po celotnem severnem profilu plast 4 prekriva humusna plast 5 oz. ruša. Najdebelejša je bila pri x = 3, kjer je dosegla debelino 0,20 m.

3.2.3 LETO 1981

3.2.3.1 RAZŠIRJENA SONDA II (1981) – 18 m^2 (*sl. 3.2* in *3.7*)

V letu 1981 je izkopavanje potekalo od 25. maja do 13. junija. Razširjena sonda II je predstavljala severni (kv. 6), severozahodni (kv. 5) in zahodni (kv. 4) podaljšek sonde II iz leta 1980. Posamezen kvadrant je meril 3 × 2 m. Vrednosti x so naraščale proti zahodu, vrednosti y so naraščale proti jugu oz. padale proti severu (kv. 5 in 6).

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[17]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1: od površja sonde do nivoja planuma I (pribl. gl. 0,20 *(0,25)* m);

reženj 2: od nivoja planuma I (pribl. 0,20 oz. *0,25* m) do pribl. gl. 0,50 m;

reženj 3: gl. 0,50–0,70 m;

reženj 4: gl. 0,70–0,80/0,90 *(0,90)* m;

reženj 5: gl. 0,80/0,90 *(0,90)*–100 m.

3.2.3.1.1 Stratigrafska opažanja

Opis planuma IV, ki je bil narisan leta 1981 (sl. 3.12)

Planum IV: gl. 0,80–0,90 m. Iz kv. 1 se vleče zbita ilovnata plast (plast 1), ki je segala do začetka kv. 4. V slednjem sicer prevladuje plast 2 (rjava zemlja z ilovico), v kateri je bilo veliko kamnov različne velikosti. Podobna situacija je bila odkrita tudi v kv. 5. Plast 2 s kamni je prevladovala tudi v kv. 6. V kv. 5 je bil dokumentiran domnevno krajši kamniti zid, v širino je meril ok. 0,40 m in v dolžino ok. 1,20 m.

[17] Glej op. 15, *sl. 3.7*.

Layer 2: above layer 1, in some places also at the bottom of the trench, is layer 2, s.c. brown earth with loam. The layer was up to approx. 0.40 m thick and contained numerous archaeological finds.

Layer 4: layer 4, the s.c. brown soil, covers layer 2. It appeared in the depth of 0.40 m, at x = 3 even at the depth of 65 cm, and reached all to the humus. A large number of artefacts, all from stone tools to pottery fragments, were found within it.

Layer 5: along the entire northern profile layer 4 is covered by humus layer 5. It is the thickest at x = 3, where it reaches the thickness of 0.20 m.

3.2.3 THE YEAR 1981

3.2.3.1 EXTENDED TRENCH II (1981) – 18 m^2 (*Figs. 3.2* and *3.7*)

In 1981, the excavations took place from 25th May until 13th June. Extended trench II represented the northern (sq. 6), north-western (sq. 5), and western (sq. 4) extension of trench II from 1980. Individual squares measured 3 × 2 m. Values x increased towards the west, while values y increased towards the south or decreased towards the north (squares 5 and 6).

Heights of corner points at the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standingpoint" at 822.9 m.[17]

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1: from the trench surface to the level of planum I (approx. depth of 0.20 *(0.25)* m);

slice 2: from the level of planum I (approx. 0.20 or *0.25* m) to approx. 0.50 m;

slice 3: depth of 0.50–0.70 m;

slice 4: depth of 0.70–0.80/0.90 *(0.90)* m;

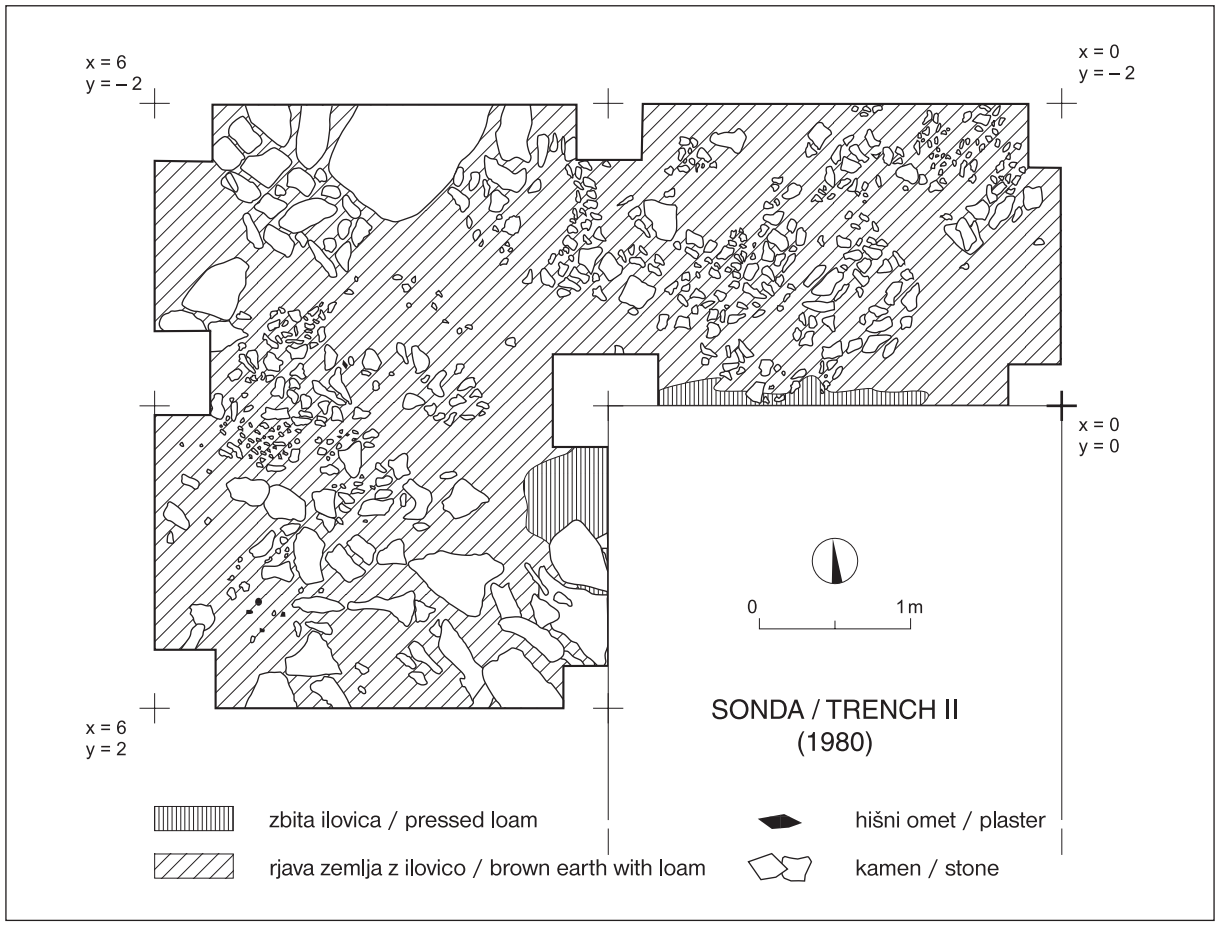
slice 5: depth of 0.80/0.90 *(0.90)*–100 m.

3.2.3.1.1 Stratigraphic observations

Description of planum IV, which was drawn in 1981 (Fig. 3.12)

Planum IV: the depth of 0.80–0.90 m. A pressed loam layer (layer 1) continues from sq. 1which reached all to the beginning of sq. 4. In the latter layer 2 prevails (brown earth with loam) which contained many stones of various sizes. A similar situation was discovered in sq. 5. Layer 2 with stones prevailed also in sq. 6. In sq. 5 a presumably shorter stone wall was documented, which was approx. 0.40 m wide and approx. 1.20 m long.

[17] See footnote 15, *Fig. 3.7*.



Sl. 3.12: Sonda II (1981), kv. 4–6, planum IV.
Fig. 3.12: Trench II (1981), squares 4–6, planum IV.

Opis severnega profila v kv. 5 razširjene sonde II iz leta 1981 (sl. 3.13)

Dolžina narisanega dela severnega profila, pri x = 3–6 in y = – 2, znaša manj kot 3 m.

Glede na profil je bilo dno sonde v gl. pribl. 1,10 m pod površjem.

Plast 2: najglobljo plast predstavlja rjava zemlja pomešana z ilovico (plast 2). Pojavlja se na dnu sonde do gl. 0,80–0,75 pod površjem. Iz zahodnega dela profila je razvidno, da je domnevni kamniti zid v kv. 5 segal v to najglobljo plast.

Plast 4: na rjavi zemlji pomešani z ilovico leži plast 4, t. i. gozdna rjavica. Plast se pojavlja od gl. 0,80 m do tik pod površjem. V njej je veliko skal in kamnov, ki se pojavijo v gl. ok. 0,20 m. V gl. pribl. 0,40 m je bilo na zahodnem robu profila opaziti zgornjo fronto zidu.

Plast 5: v profilu je bila dokumentirana izredno tanka plast ruše (plast 5).

Description of the northern profile in sq. 5 of extended trench II from 1981 (Fig. 3.13)

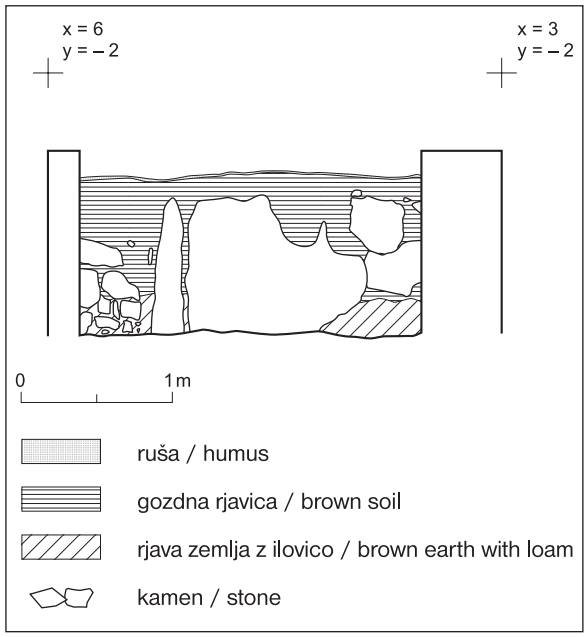
The length of the drawn part of the northern profile is, at x = 3–6 and y = – 2, less than 3 m.

Considering the profile the bottom of the trench was at the depth of approx. 1.10 m beneath the surface.

Layer 2: the deepest layer is represented by brown earth mixed with loam (layer 2). It appears at the bottom of the trench up to the depth of 0.80–0.75 beneath the surface. It is clear from the western part of the profile that the presumed stone wall in sq. 5 reached this deepest layer.

Layer 4: brown earth mixed with loam is covered by layer 4, the s.c. brown soil. The layer appears from the depth of 0.80 m to right beneath the surface. It contains many rocks and stones appearing at the depth of approx. 0.20 m. The upper front of the wall was noticeable at the western profile edge at the depth of approx. 0.40 m.

Layer 5: an extremely thin layer of humus was documented in the profile (layer 5).



Sl. 3.13: Sonda II (1981), kv. 5, severni profil.
Fig. 3.13: Trench II (1981), sq. 5, the northern profile.

3.2.4 LETO 1982

V letu 1982 je izkopavanje potekalo med 10. in 28. avgustom. V tem času so bile raziskane štiri sonde: III, IV, V in VI.

3.2.4.1 SONDA III (1982) – 42 m² (*sl. 3.2, 3.14, 3.15*)

Sonda III je bila zastavljena na zahodnem robu zgornjega naselbinskega platoja, severozahodno od sonde I in II. Razdeljena je bila na 7 kvadrantov (1–7), ki so merili 3 × 2 m. Široka je bila 3 m, dolga pa 14 m. Orientirana je bila v smeri vzhod–zahod, z rahlim odklonom proti vzhodu (os x) oz. jugu (os y). Izhodiščna točka x = 0 in y = 0 je stala na severovzhodnem robu sonde. Vrednosti x so naraščale proti jugu, vrednosti y proti zahodu.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[18]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1: do gl. 0,15 m;

reženj 2: gl. 0,15–0,25/0,30 *(0,40)* m;

[18] Absolutne višine površja tal ob sondi III, izmerjene 15. 04. 2010: pri x = 0, y = 0 je 825,55 m; pri x = 3, y = 0 je 825,75 m; pri x = 3, y = 12 je 824,06 m; pri x = 0, y = 12 je 823,98 m (prim s *sl. 3.14*).

3.2.4 THE YEAR 1982

In 1982 the excavations were carried out between 10th and 28th August. During this time four trenches were researched: III, IV, V, and VI.

3.2.4.1 TRENCH III (1982) – 42 m² (*Figs. 3.2, 3.14, 3.15*)

Trench III was set at the western edge of the upper settlement plateau, northwest to trenches I and II. It was divided into 7 squares (1–7), each measuring 3 × 2 m. It was 3 m wide and 14 m long. It was oriented in the direction east–west, with a slight deflection towards the east (axis x) or south (axis y). The starting point x = 0 and y = 0 was set at the north-eastern edge of the trench. Values x increased towards the south and values y towards the west.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[18]

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1: down to the depth of 0.15 m;

slice 2: depth of 0.15–0.25/0.30 *(0.40)* m;

slice 3: depth of 0.25/0.30 *(0.40)*–0.50/60 *(0.70)* m;

slice 4: depth of 0.50/0.60 *(0.70)*–0.80/0.90 *(0.90)* m;

slice 5: depth of 0.80/0.90 *(0.90)*–1.10 m (1st deepening); depth of 1.10–1.20/1.25 *(1.20)* m (2nd deepening).

3.2.4.1.1 Stratigraphic observations (*Fig. 3.16*)

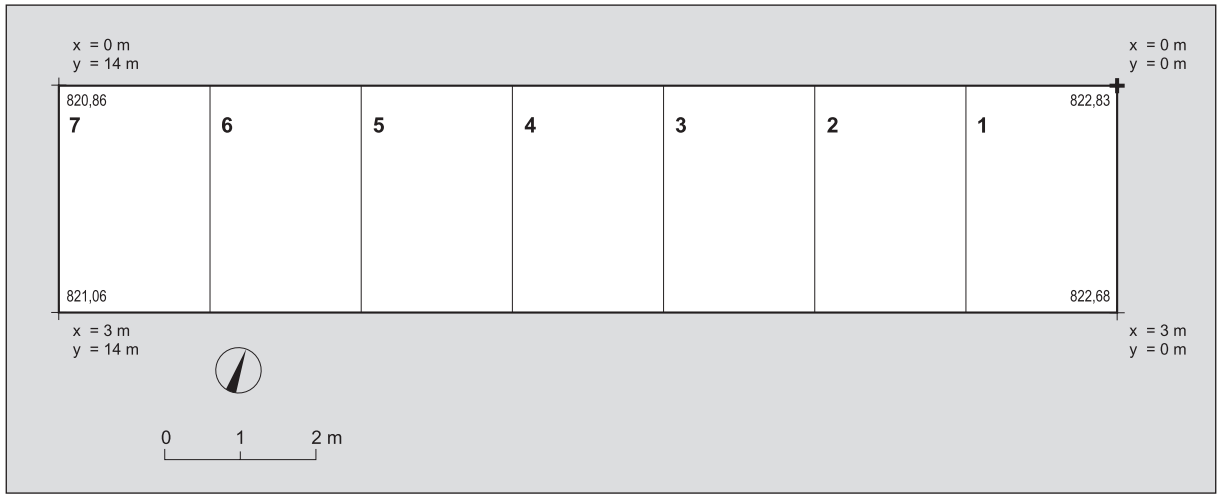
The trench is characterised by the occurrence of rocky base in the southern parts of squares 3–5 at the depth of 0.15 m. In sq. 1 at this depth a wall made of mortar was discovered that was approx. 0.40 m wide.

The Middle or Early Modern Age finds occurred up to the depth of 0.30 m. In all squares at this depth prehistoric finds also begin to appear. Most of them are from sq. 7, where the layer is a more brown earth with loam (layer 2). There is also a lot of house plaster.

At the depth of 0.50 m in sq. 3 pieces of house plaster were found (layer 2), while prehistoric finds are the most frequent in squares 6 and 7 (layer 2).

Only these two squares were deepened down to the depth of 0.80–0.90 m. This is still layer 2. A larger number of house plaster pieces and fragments of charcoal can be found here and the sediment seemed burned

[18] Absolute heights of ground surface along trench III, measured on 15th April 2010: at x = 0, y = 0 is 825.55 m; at x = 3, y = 0 is 825.75 m; at x = 3, y = 12 is 824.06 m; at x = 0, y = 12 is 823.98 m (cf. *Fig. 3.14*).



Sl. 3.14: Sonda III – načrt.
Fig. 3.14: Trench III – the plan.

reženj 3: gl. 0,25/0,30 *(0,40)*–0,50/60 *(0,70)* m;
reženj 4: gl. 0,50/0,60 *(0,70)*–0,80/0,90 *(0,90)* m;
reženj 5: gl. 0,80/0,90 *(0,90)*–1,10 m (1. poglobitev); gl. 1,10–1,20/1,25 *(1,20)* m (2. poglobitev).

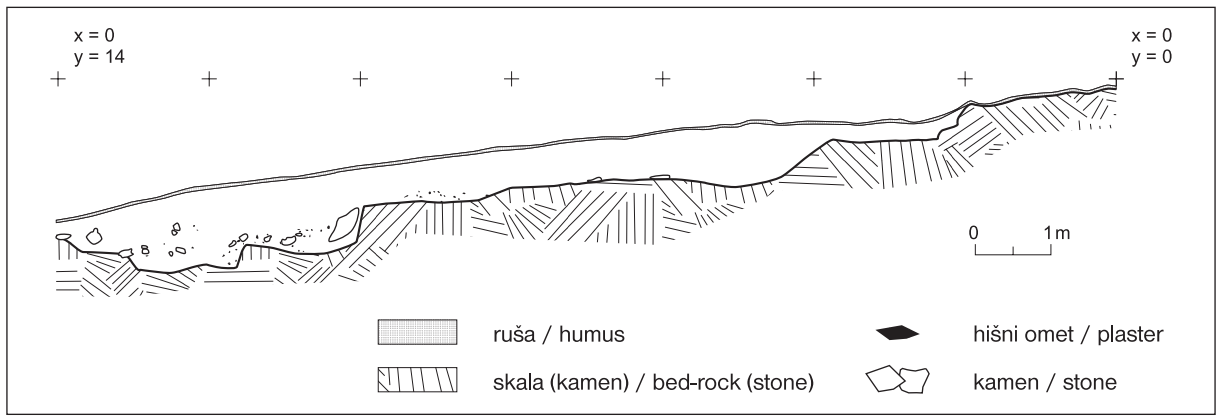
3.2.4.1.1 Stratigrafska opažanja (*sl. 3.16*)

Sondo opredeljuje pojav skalne osnove v južnih delih kv. 3–5 v globini 0,15 m. V kv. 1 je v tej globini odkrit zid iz malte, širok pribl. 0,40 m.

Srednje- oz. zgodnjenovoveške najdbe so se pojavljale do globine 0,30 m. V vseh kvadrantih pa se na tej globini začnejo pojavljati tudi prazgodovinske najdbe. Še največ jih je v kv. 7, kjer je plast že bolj rjava zemlja z ilovico (plast 2). Veliko je tudi hišnega ometa.

V gl. 0,50 m so v kv. 3 najdeni kosi hišnega ometa (plast 2), prazgodovinske najdbe pa so najpogostejše v kv. 6 in 7 (plast 2).

Sl. 3.15: Sonda III, pogled proti jugozahodu (2010). Foto: T. Korošec.
Fig. 3.15: Trench III, a view towards the southwest (2010). Photo: T. Korošec.



Sl. 3.16: Sonda III, kv. 1–7, severni profil (obris).
Fig. 3.16: Trench III, squares 1–7, the northern profile (outline).

Do gl. 0,80–0,90 m se je poglabljalo samo v teh dveh kvadrantih. Še vedno gre za plast 2. Najti je večje število kosov hišnega ometa, drobce oglja in tudi sediment je deloval ožgano (kv. 7) – domnevno gre za območje prazgodovinske hiše.

Pribl. 0,20 m globlje (z = – 1,10 m) sediment postane bolj ilovnat (plast 1). Število najdb se zmanjša, pojavljajo se redki keramični fragmenti. Na x = 0,50 in y = 12,50 se pojavi manjši skupek keramičnih fragmentov in kostnih ostankov.

Skalna podlaga je po celem kv. 6 in 7 dosežena v gl. 1,25 m. V plasti 1 se tu in tam še pojavljajo arheološke najdbe.

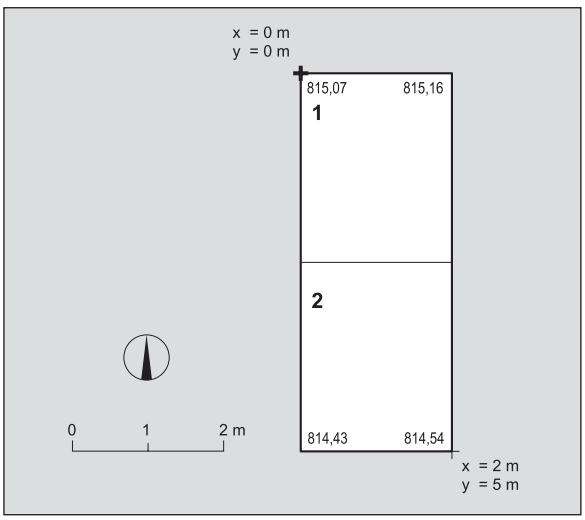
Pogled na severni profil sonde III razkriva, da se na zahodni strani skalna osnova terasasto spušča z zgornjega naselbinskega platoja proti pobočju (*sl. 3.16*).

3.2.4.2 SONDA IV (1982) – 10 m² (*sl. 3.2, 3.17, 3.18*)

Sonda IV je bila zastavljena na severni strani spodnjega naselbinskega platoja, na samem izteku južnega pobočja zgornjega platoja. Orientirana je bila v smeri sever–jug. Razdeljena je bila na dva kvadranta po 2,0 × 2,5 m. Izhodiščna točka je bila postavljena na severozahodnem robu sonde. Vrednosti x so naraščale proti vzhodu, vrednosti y pa proti jugu.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[19]

[19] Absolutne višine površja tal ob sondi IV, izmerjene 15. 04. 2010: pri x = 0, y = 0 je 818,44 m; pri x = 2, y = 0 je 818,14 m; pri x = 2, y = 5 je 817,60 m; pri x = 0, y = 5 je 817,77 m (prim s *sl. 3.17*).



Sl. 3.17: Sonda IV – načrt.
Fig. 3.17: Trench IV – the plan.

(sq. 7) – supposedly this is the location of a prehistoric house.

Approx. 0.20 m deeper (z = – 1.10 m) the sediment becomes loamier (layer 1). The number of finds decreases, rare pottery fragments appear. At x = 0.50 and y = 12.50 a smaller cluster of pottery fragments and bone remains appears.

A rocky base was along complete squares 6 and 7 reached at the depth of 1.25 m. In layer 1 here and there archaeological finds appear.

A look at the northern profile of trench III reveals that on the western side the rocky base descends terrace-like from the upper settlement plateau towards the slope (*Fig. 3.16*).

3.2.4.2 TRENCH IV (1982) – 10 m² (*Figs. 3.2, 3.17, 3.18*)

Trench IV was set at the northern side of the lower settlement plateau, at the end of the southern slope of the upper plateau. It was oriented in the direction north–south. It was divided into two squares, each measuring 2.0 × 2.5 m. The starting point was set at the north-western edge of the trench. Values x increased towards the east and values y towards the south.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[19]

[19] Absolute heights of ground surface along trench IV, measured on 15th April 2010: at x = 0, y = 0 is 818.44 m; at x = 2, y = 0 is 818.14 m; at x = 2, y = 5 is 817.60 m; at x = 0, y = 5 is 817.77 m (cf. *Fig. 3.17*).

Sl. 3.18: Sonda IV, pogled proti severu (2010). Foto: T. Korošec.
Fig. 3.18: Trench IV, a view towards the north (2010). Photo: T. Korošec.

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja sonde:

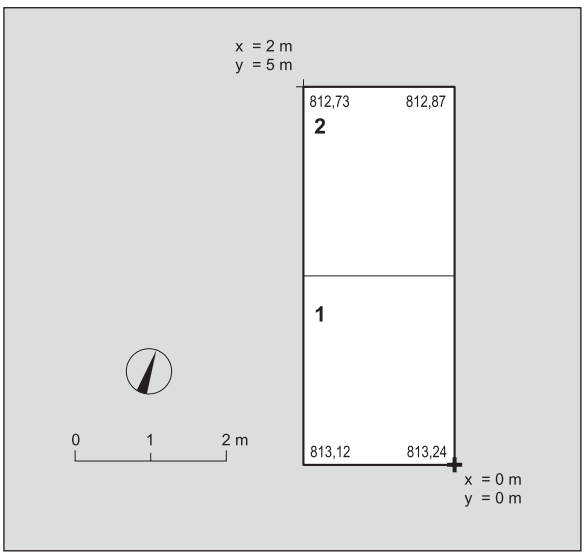
reženj 1: *do gl. 0,20 m;*
reženj 2: gl. *0,20*–0,30/0,40 *(0,35)* m;
reženj 3: gl. 0,30/0,40 *(0,35)*–0,40/0,50 *(0,60)* m;
reženj 4: gl. 0,40/0,50 *(0,60)*–0,65/0,75 *(0,80)* m.

3.2.4.2.1 Stratigrafska opažanja

V prvem in drugem režnju se pojavlja t. i. gozdna rjavica (plast 4). Takoj pod površjem ob severnem profilu kv. 1 je pas naključno razvrščenega kamenja, širok pribl. 0,70 m. V gl. pribl. 0,30/0,40 se v vzhodnem delu kv. 1 v večjem številu pojavljajo kosi hišnega ometa. T. i. gozdna rjavica (plast 4) je tudi v 3. režnju, kjer pa je veliko arheoloških najdb. Sonda je bila poglobljena do gl. 0,65/0,75 m, kjer je dosežena skalna podlaga; najdbe so bile redke.

3.2.4.3 SONDA V (1982) – 10 m² (*sl. 3.2, 3.19, 3.20*)

Sonda V je bila zastavljena na južnem delu zaplate ravnine ob vznožju severnega pobočja zgornjega naselbinskega platoja. Od severnega roba naselbine je bila oddaljena pribl. 45 m. Orientirana je bila v smeri jugovzhod–severozahod. Razdeljena je bila na dva kvadranta po 2,0 × 2,5 m. Izhodiščna točka je bila postavljena na jugovzhodnem robu sonde. Vrednosti x so naraščale proti jugozahodu, vrednosti y pa proti severozahodu.



Sl. 3.19: Sonda V – načrt.
Fig. 3.19: Trench V – the plan.

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1: *down to the depth of 0.20 m;*
slice 2: depth of *0.20*–0.30/0.40 *(0.35)* m;
slice 3: depth of 0.30/0.40 *(0.35)*–0.40/0.50 *(0.60)* m;
slice 4: depth of 0.40/0.50 *(0.60)*–0.65/0.75 *(0.80)* m.

3.2.4.2.1 Stratigraphic observations

In slices 1 and 2 there is the s.c. brown soil (layer 4). Right beneath the surface along the northern profile of sq. 1 there is a stripe of randomly set stones, which is approx. 0.70 m wide. At the depth of approx. 0.30/0.40 m in the eastern part of sq. 1 pieces of house plaster appear in greater numbers. The brown soil (layer 4) is also in slice 3 where there are numerous archaeological finds. The trench was deepened down to the depth of 0.65/0.75 m, where the rocky base was reached; finds were rare.

3.2.4.3 TRENCH V (1982) – 10 m² (*Figs. 3.2, 3.19, 3.20*)

Trench V was set at the southern part of the flat patch along the foot of the northern slope of the upper settlement plateau. It was approx. 45 m away from the northern edge of the settlement. It was oriented in the direction southeast–northwest and divided into two squares, each measuring 2.0 × 2.5 m. The starting point was set at the south-eastern edge of the trench. Values x increased towards the southwest and values y towards the northwest.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m)

Sl. 3.20: Sonda V, pogled proti severu (2010). Foto: T. Korošec.
Fig. 3.20: Trench V, a view towards the north (2010). Photo: T. Korošec.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[20]

Izkopavanje je potekalo po režnjih. Relativna globina režnja je merjena s površja sonde:

reženj 1: od površja (plast 4) do drobljive skalne podlage (gl. 0,20–0,40 m).

3.2.4.3.1 Stratigrafska opažanja

Debelina plasti v sondi V znaša do 0,20, mestoma do 0,40 m. O najdbah iz sonde V ni podatkov, verjetno jih ni bilo.

3.2.4.4 SONDA VI (1982) – 18 m² (*sl. 3.2, 3.21, 3.22*)

Sonda VI je bila zastavljena na jugozahodnem delu zgornjega naselbinskega platoja. Razdeljena je bila na tri kvadrante, ki so merili 3 × 2 m. Široka je bila 3 m, dolga pa 6 m. Orientirana je bila vzhod–zahod. Izhodiščna točka x = 0 in y = 0 je stala na severovzhodnem robu sonde. Vrednosti x so naraščale proti jugu, vrednosti y proti zahodu.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[21]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev merjene s površja ob sondi:

reženj 1: do gl. 0,25 m;
reženj 2: gl. 0,25–0,50 m;
reženj 3: gl. 0,50–0,70 m;
reženj 4: gl. 0,70–0,90 m;
reženj 5: gl. 0,90–1,00 m.

3.2.4.4.1 Stratigrafska opažanja

Arheološke najdbe se pojavijo v gl. 0,25 m, med njimi je fragmentirano kamnito orodje. Že v režnju 1 ter nato v režnju 2 (plast 2), kv. 1 in 2, je veliko hišnega ometa, najti je oglje, nekaj je tudi keramike. V režnju 3, na prehodu iz kv. 1 v 2, je odkrito veliko keramike, hišnega ometa in oglja. V celotnem režnju je bil sediment trd in rumene barve. Z izkopom četrtega režnja se je v 2.

[20] Absolutne višine površja tal ob sondi V, izmerjene 15. 04. 2010: pri x = 0, y = 0 je 816,50 m; pri x = 2, y = 0 je 816,21 m; pri x = 2, y = 5 je 815,91 m; pri x = 2, y = 0 je 816,02 m (prim s *sl. 3.19*).

[21] Absolutne višine površja tal ob sondi VI (VI, VI/1–4), izmerjene 15. 04. 2010: pri x = 7, y = 0 je 821,68 m; pri x = 7, y = 4 je 821,66 m; pri x = – 4, y = 4 je 822,54 m; pri x = – 4, y = – 10 je 823,69 m; pri x = 3, y = – 10 je 822,62 m; pri x = 3, y = 0 je 822,52 m (prim s *sl. 3.21*).

of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[20]

The excavation was done in slices. The relative slice depth is measured from the surface of the trench:

slice 1: from the surface (layer 4) to the crumbly rocky base (depth of 0.20–0.40 m).

3.2.4.3.1 Stratigraphic observations

The layer thickness in trench V is up to 0.20, in parts also up to 0.40 m. There is no data about the finds from trench V, there probably were none.

3.2.4.4 TRENCH VI (1982) – 18 m² (*Figs. 3.2, 3.21, 3.22*)

Trench VI was set at the south-western part of the upper settlement plateau. It was divided into three squares, each measuring 3 × 2 m. It was 3 m wide and 6 m long and it was oriented in the direction east–west. The starting point x = 0 and y = 0 was set at the north-eastern edge of the trench. Values x increased towards the south and values y towards the west.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[21]

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

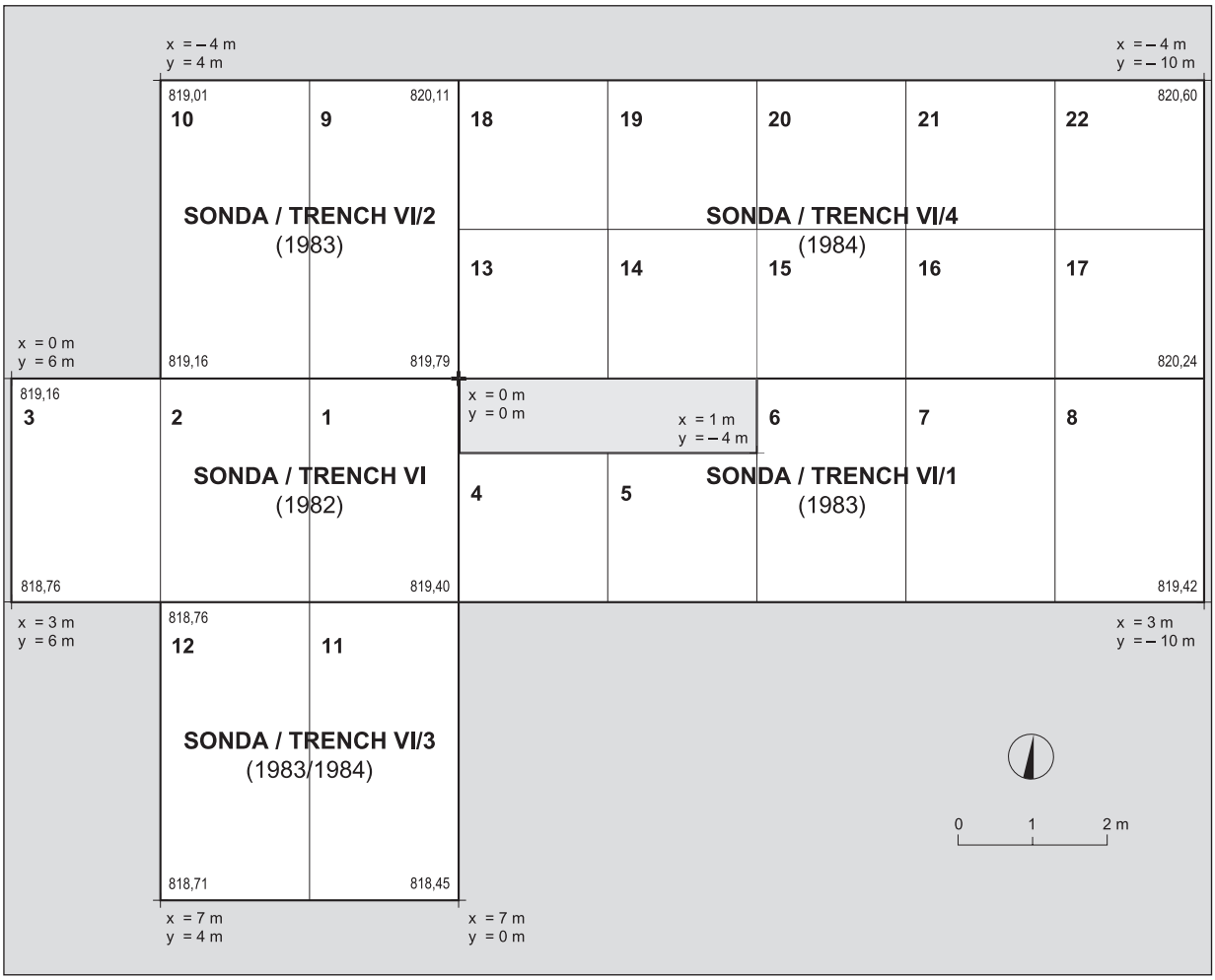
slice 1: down to the depth of 0.25 m;
slice 2: depth of 0.25–0.50 m;
slice 3: depth of 0.50–0.70 m;
slice 4: depth of 0.70–0.90 m;
slice 5: depth of 0.90–1.00 m.

3.2.4.4.1 Stratigraphic observations

Archaeological finds appear at the depth of 0.25 m, among them are also fragmented stone tools. Already in slice 1 and then in slice 2 (layer 2), squares 1 and 2, there is a lot of house plaster, also charcoal and some pottery can be found. In slice 3, at the transition from sq. 1 to 2, a lot of pottery, house plaster, and charcoal were found. The entire slice contained hard yellow sediment. With

[20] Absolute heights of ground surface along trench V, measured on 15th April 2010: at x = 0, y = 0 is 816.50 m; at x = 2, y = 0 is 816.21 m; at x = 2, y = 5 is 815.91 m; at x = 2, y = 0 is 816.02 m (cf. *Fig. 3.19*).

[21] Absolute heights of ground surface along trench VI (VI, VI/1–4), measured on 15th April 2010: at x = 7, y = 0 is 821.68 m; at x = 7, y = 4 is 821.66 m; at x = –4, y = 4 is 822.54 m; at x = –4, y = –10 is 823.69 m, at x = 3, y = –10 is 822.62 m, at x = 3, y = 0 is 822.52 m (cf. *Fig. 3.21*).



Sl. 3.21: Sonde VI (1982), VI/1 (1983), VI/2 (1983), VI/3 (1983, 1984) in VI/4 (1984) – načrt.
Fig. 3.21: Trenches VI (1982), VI/1 (1983), VI/2 (1983), VI/3 (1983, 1984), and VI/4 (1984) – the plan.

Sl. 3.22: Sonda VI (združena), pogled proti jugozahodu (2010). Foto: T. Korošec.
Fig. 3.22: Trench VI (combined), a view towards the southwest (2010). Photo: T. Korošec.

kv. v gl. 0,80 m pojavila zelo ožgana zemlja s fragmenti keramike, nekaj kosi hišnega ometa in tudi kostnimi ostanki. Plast je večinoma pepelnato siva (plast 1(?)), the excavation of slice 4 in sq. 2 at the depth of 0.80 m very burned soil with pottery fragments, a few pieces of house plaster, and bone remains appeared. The layer is mostly ash grey (layer 1(?)), as in sq. 1. Along the northern edge of sq. 2 there is grey brown soil (layer 1(?)), as is in sq. 3, where finds are scarce.

3.2.5 YEARS 1983 AND 1984

In 1983 the excavation was carried out between 6th and 24th June, while in 1984 it was in the second half of August. During this time five trenches were researched: VI/1, VI/2, VI/3, VI/4, and VII.

3.2.5.1 TRENCH VI/1 (1983) – 24 m² (*Figs. 3.2, 3.21*)

In 1983, trench VI was extended, first towards the east (trench VI/1) for 10 m in length and 2 or 3 m in width. It was oriented in the direction west–east and di-

kot tudi v kv. 1. Ob severnem robu kv. 2 je sivo rjava zemlja (plast 1(?)), kot tudi v kv. 3, kjer je najdb malo.

3.2.5 LETI 1983 IN 1984

V letu 1983 je izkopavanje potekalo med 6. in 24. junijem, v letu 1984 pa v drugi polovici avgusta. V tem času je bilo raziskanih pet sond: VI/1, VI/2, VI/3, VI/4 in VII.

3.2.5.1 SONDA VI/1 (1983) – 24 m² (*sl. 3.2, 3.21*)

Leta 1983 je bila podaljšana sonda VI, najprej v smeri proti vzhodu (sonda VI/1) in sicer v dolžino 10 m, širina pa je bila 2 oz. 3 m. Orientirana je bila v smeri zahod–vzhod. Razdeljena je bila na pet kvadrantov (kv. 4 in 5: 2 × 2 m; kv. 6–8: 3 × 2 m). Izhodišče je bilo postavljeno na točko x = 0, y = 0 iz leta 1982 (sonda VI). Vrednosti x so naraščale proti jugu, vrednosti y so padale proti vzhodu.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[22]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1: gl. do 0,20 *(0,15)* m;
reženj 2: gl. 0,20 *(0,15)*–0,40 *(0,30)* m;
reženj 3: gl. 0,40 *(0,30)*–0,60 *(0,50)* m;
reženj 4: gl. 0,60 *(0,50)*–0,80/0,90 *(0,70)* m.

3.2.5.1.1 Stratigrafska opažanja

V 2. režnju prevladuje t. i. gozdna rjavica (plast 4) z redkimi najdbami, a veliko kamni in skalami. Globlje je plast po strukturi podobna zgornji, a najdb je več. V kv. 7 je ugotovljen temelj zidu (*sl. 3.23*). Četrti reženj je bil raziskan samo v kv. 4 in 5 ter delno tudi v 7 in 8, kjer se večina najdb (keramika, hišni omet in kosti) pojavlja ob zidu, najti pa jih je tudi med kamni v zidu.

3.2.5.2 SONDA VI/2 (1983) – 16 m² (*sl. 3.2, 3.21*)

Leta 1983 je bila sonda VI razširjena tudi v smeri proti severu. Merila je 4 × 4 m. Razdeljena je bila na dva kvadranta 9 in 10, po 4 × 2 m. Izhodišče je bilo postavljeno na točko x = 0, y = 0 iz leta 1982 (sonda VI). Vrednosti x so padale proti severu, vrednosti y so naraščale proti zahodu.

[22] Glej op. 21.

vided into five squares (squares 4 and 5: 2 × 2 m; squares 6–8: 3 × 2 m). The starting point was set at point x = 0, y = 0 from 1982 (trench VI). Values x increased towards the south, while values y decreased towards the east.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[22]

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1: down to the depth of 0.20 *(0.15)* m;
slice 2: depth of 0.20 *(0.15)*–0.40 *(0.30)* m;
slice 3: depth of 0.40 *(0.30)*–0.60 *(0.50)* m;
slice 4: depth of 0.60 *(0.50)*–0.80/0.90 *(0.70)* m.

3.2.5.1.1 Stratigraphic observations

In slice 2 brown soil is prevalent (layer 4) and it contains few finds but many stones and rocks. Deeper down the layer is structurally similar to the above but there are more finds. In sq. 7 a foundation of a wall was discovered (*Fig. 3.23*). Slice 4 was researched only in squares 4 and 5, and partly in 7 and 8, where the majority of finds (pottery, house plaster, and bones) appears near the wall and can also be found among the stones of the wall.

3.2.5.2 TRENCH VI/2 (1983) – 16 m² (*Figs. 3.2, 3.21*)

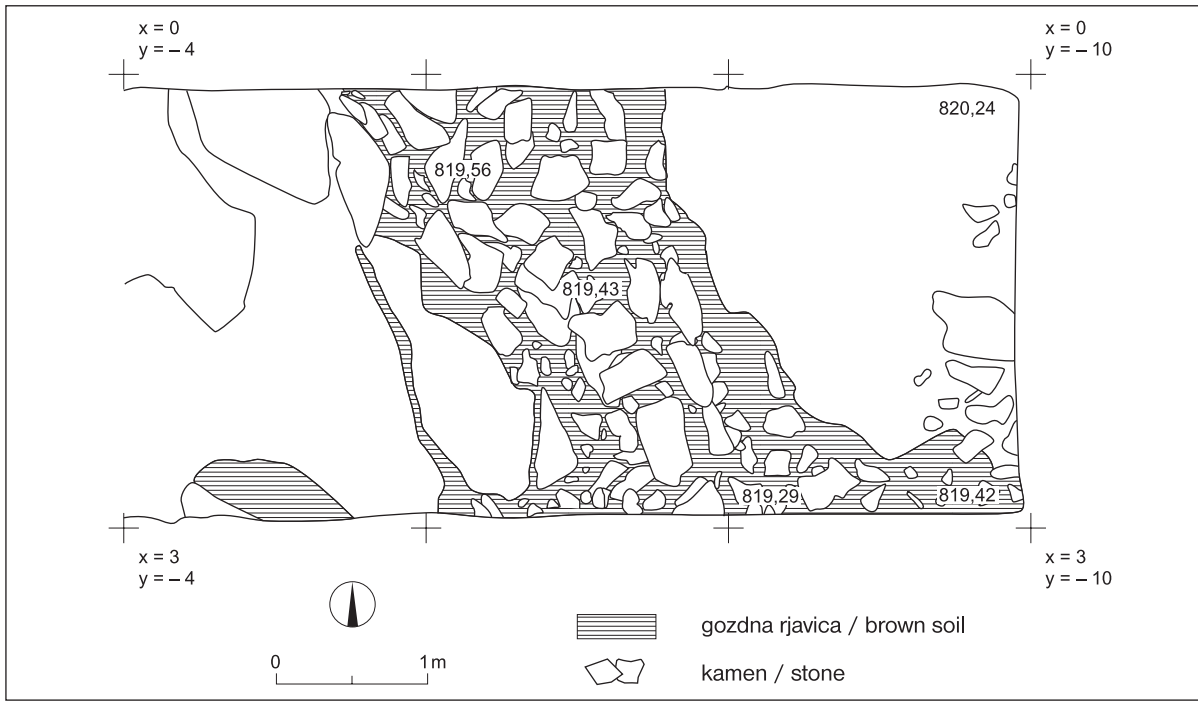
In 1983, trench VI was extended also towards the north. It measured 4 × 4 m and was divided into two squares, 9 and 10, each measuring 4 × 2 m. The starting point was set at point x = 0, y = 0 from 1982 (trench VI). Values x decreased towards the north, while values y increased towards the west.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[23]

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1: *down to the depth of 0.15 m;*
slice 2: depth of *0.15*–0.30 m;
slice 3: depth of 0.30–0.50 m;
slice 4: depth of 0.50–0.70 m;
slice 5: depth of 0.70–0.90 m;
slice 6: depth of 0.90–1.00 m.

[22] See footnote 21.
[23] See footnote 21.



Sl. 3.23: Sonda VI/1, kv. 6–8, planum IV.
Fig. 3.23: Trench VI/1, squares 6–8, planum IV.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[23]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1: *gl. do 0,15 m;*
reženj 2: gl. *0,15*–0,30 m;
reženj 3: gl. 0,30–0,50 m;
reženj 4: gl. 0,50–0,70 m;
reženj 5: gl. 0,70–0,90 m;
reženj 6: gl. 0,90–1,00 m.

3.2.5.2.1 Stratigrafska opažanja

V 2. režnju prevladuje rjava zemlja (plast 2). V njej se pojavljajo arheološke najdbe in strnjena, 1,80 × 1,70 m velika zaplata hišnega ometa in močno zbite rumene ilovice. Verjetno gre za ostanek bivanjskega objekta. Hišni omet se pojavlja tudi drugod po sondi. V sondi je bilo najdeno veliko število glinastih uteži.[24]

Peti reženj je segel do gl. 0,90 m. V njem je malo najdb. Plast je postala bolj ilovnata. V sondi VI/2 je kulturna plast debela 0,50 m, od gl. 0,30 do 0,80 m.

[23] Glej op. 21.
[24] Glej poglavje 4: *t. 4.25:* 1–4, v tem zborniku.

3.2.5.2.1 Stratigraphic observations

In slice 2 brown earth (layer 2) is prevalent and contains archaeological finds and one unified, 1.80 × 1.70 m big patch of house plaster and strongly beaten yellow loam. These are probably remains of a housing facility. House plaster also occurs elsewhere in the trench, where a great number of clay weights were also found.[24]

Slice 5 reached to the depth of 0.90 m. A few finds were found here. The layer became loamier. In trench VI/2 the cultural layer is 0.50 m thick, from the depth of 0.30 to 0.80 m.

3.2.5.3 TRENCH VI/3 (1983 AND 1984) – 16 m² (*Figs. 3.2, 3.21*)

Trench VI was extended also in the direction towards the south and this was done in two stages: the first lasted from June 1983 and the second was carried out in the second half of August 1984. The trench measured 4 × 4 m and was divided into two squares, 11 and 12, each measuring 4 × 2 m. The starting point was set at point x = 0, y = 0 from 1982 (trench VI). Values x increased towards the south and values y towards the west.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m)

[24] See chapter 4: *Pl. 4.25:* 1–4, in this monograph.

3.2.5.3 SONDA VI/3 (1983 IN 1984) – 16 m² (*sl. 3.2, 3.21*)

Sonda VI je bila razširjena tudi v smeri proti jugu in sicer v dveh etapah: prva je trajala junija 1983, druga pa v drugi polovici avgusta 1984. Sonda je merila 4 × 4 m. Razdeljena je bila na dva kvadranta 11 in 12, po 4 × 2 m. Izhodišče je bilo postavljeno na točko x = 0, y = 0 iz leta 1982 (sonda VI). Vrednosti x so naraščale proti jugu, vrednosti y proti zahodu.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[25]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1 (1983): *gl. do 0,15 m;*

reženj 2 (1983): gl. *0,15*–0,30 m;

reženj 3 (1983): gl. 0,30–0,45/0,50 *oz. 0,30–0,40 (1. poglobitev), 0,40–0,50 m (2. poglobitev);*

reženj 4 (1983): gl. 0,45/0,50–0,50 m; (1984): gl. 0,50–1,20 *(1,15)* m;

reženj 5 (1984): gl. 1,20 *(1,15)*–1,45 m;

reženj 6 (1984): gl. ?.

3.2.5.3.1 Stratigrafska opažanja

V vrhnjem režnju se pojavlja rjava zemlja (plast 2), le na južnem delu sonde t. i. gozdna rjavica (plast 4). V drugem režnju (plast 2) je zelo veliko najdb, med njimi se omenja tudi žrmlje. V tretjem režnju je veliko oglja in ožgane zemlje oz. se pojavljajo zaplate ožgane ilovice. V to globino sežejo tudi korenine bukve (*Fagus sylvatica*). Velika količina najdb se nadaljuje tudi v četrtem režnju. Na tem mestu se je izkopavanje v letu 1983 prekinilo in nato nadaljevalo leta 1984.

Z nadaljevanjem izkopa četrtega režnja se je nadaljevala tudi plast rjave zemlje (plast 2), v njej so ostanki hišnega ometa (severovzhodni del kv. 12) in drugih najdb. Peti reženj je med skalami dosegel globino 1,45 m. Prevladuje sivo rjava ilovica (plast 1(?)), a na nekaterih mestih se še vedno pojavlja rjava zemlja (plast 2). Najdb (oglja, keramike, koščkov hišnega ometa), je malo.

3.2.5.4 SONDA VII (1983 IN 1984) – 27 m² (*sl. 3.2, 3.24, 3.25*)

Sonda VII je bila zastavljena leta 1983 na severni strani zgornjega naselbinskega platoja, leta 1984 pa samo poglobljena. Merila je 3 × 9 m. Razdeljena je bila na tri kvadrante 1, 2 in 3, po 3 × 3 m. Orientirana je bila vzhod–zahod, z rahlim odklonom proti vzhodu (os x) oz. proti jugu (os y). Izhodišče x = 0 in y = 0 je bilo po-

[25] Glej op. 21.

of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[25]

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1 (1983): *down to the depth of 0.15 m;*

slice 2 (1983): depth of *0.15*–0.30 m;

slice 3 (1983): depth of 0.30–0.45/0.50 *or 0.30–0.40 (1st deepening), 0.40–0.50 m (2nd deepening);*

slice 4 (1983): depth of 0.45/0.50–0.50 m; (1984): depth of 0.50–1.20 *(1.15)* m;

slice 5 (1984): depth of 1.20 *(1.15)*–1.45 m;

slice 6 (1984): depth ?.

3.2.5.3.1 Stratigraphic observations

Brown earth (layer 2) appears in the top slice; only in the southern part of the trench is the s.c. brown soil (layer 4). In slice 2 (layer 2), there are very many finds, among which querns are also mentioned. In slice 3 there is much charcoal and burned soil or there are patches of burned loam. Beech (*Fagus sylvatica*) roots also reach this depth. The high amount of finds continues also into slice 4, where the excavations of 1983 ended and continued in 1984.

With the progression of the excavation of slice 4 there was the continuation of the layer of brown earth (layer 2), in which remains of house plaster (north-eastern part of sq. 12) and other finds were found. Slice 5 reached the depth of 1.45 m among the rocks. Grey brown loam is prevalent (layer 1(?)) but in places brown earth can still be noticed (layer 2). Finds (charcoal, pottery, house plaster pieces) are few.

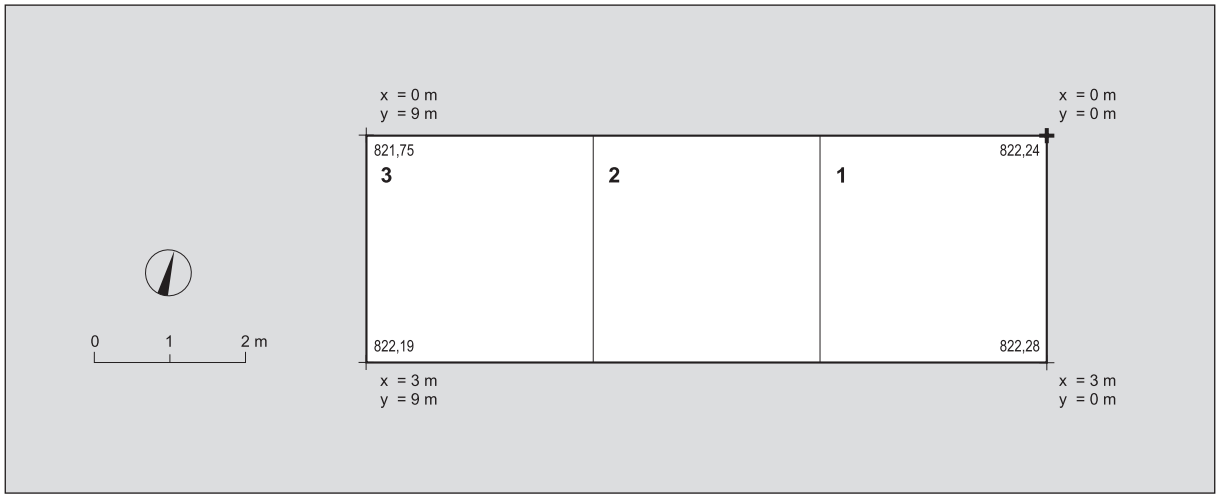
3.2.5.4 TRENCH VII (1983 AND 1984) – 27 m² (*Figs. 3.2, 3.24, 3.25*)

Trench VII was set in 1983 on the northern side of the upper settlement plateau and was in 1984 only deepened. It measured 3 × 9 m and was divided into three squares 1, 2, and 3, each measuring 3 × 3 m. It was oriented east–west, with a slight deflection towards the east (axis x) or towards the south (axis y). The starting point x = 0 and y = 0 was set at the north-eastern corner of the trench. Values x increased towards the south and values y towards the west.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[26]

[25] See footnote 21.

[26] Absolute heights of ground surface along trench VII, measured on 15th April 2010: at x = 0, y = 0 is 825.39 m; at x = 3, y = 0 is 825.35 m; at x = 3, y = 9 is 825.36 m; at x = 0, y = 9 is 824.99 m (cf. *Fig. 3.24*).



Sl. 3.24: Sonda VII – načrt.
Fig. 3.24: Trench VII – the plan.

stavljeno na severovzhodnem vogalu sonde. Vrednosti x so naraščale proti jugu, vrednosti y proti zahodu.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[26]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1 (1983): *do gl. 0,20 m;*
reženj 2 (1983): *gl. 0,20–0,40 m;*
reženj 3 (1983): gl. *0,40*–0,50 *(0,60)* m;
reženj 4 (1984): gl. 0,50 *(0,60)*–0,80 *(0,75)* m;
reženj 5 (1984): gl. 0,80 (*0,75)–0,85* m.

3.2.5.4.1 Stratigrafska opažanja

Po odstranitvi ruše (plast 5) se pojavi rjava zemlja (plast 2), v njej so že najdbe. V tretjem režnju se število najdb znatno poveča, pojavi se tudi večja zaplata hišnega ometa na x = 1,00–1,50 in y = 3,50–6,00 (kv. 2). Na večjih kosih hišnega ometa so opazni odtisi vej in brun. Pod hišnim ometom je plast zbite rumeno rjave zemlje. Na tem mestu se je izkopavanje v letu 1983 prekinilo in nato nadaljevalo leta 1984 z izkopoma četrtega in petega režnja.

3.2.5.5 SONDA VI/4 (1984) – 40 m² (*sl. 3.2, 3.21*)

Sonda VI/4 je bila zastavljena v drugi polovici avgusta leta 1984 in je predstavljala razširjanje sonde

[26] Absolutne višine površja tal ob sondi VII, izmerjene 15. 04. 2010: pri x = 0, y = 0 je 825,39 m; pri x = 3, y = 0 je 825,35 m; pri x = 3, y = 9 je 825,36 m; pri x = 0, y = 9 je 824,99 m (prim s *sl. 3.24*).

Sl. 3.25: Sonda VII, pogled proti jugozahodu (2010). Foto: T. Korošec.
Fig. 3.25: Trench VII, a view towards the southwest (2010). Photo: T. Korošec.

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1 (1983): *down to the depth of 0.20 m;*
slice 2 (1983): *depth of 0.20–0.40 m;*
slice 3 (1983): depth of *0.40*–0.50 *(0.60)* m;
slice 4 (1984): depth of 0.50 *(0.60)*–0.80 *(0.75)* m;
slice 5 (1984): depth of 0.80 (*0.75)–0.85* m.

3.2.5.4.1 Stratigraphic observations

After removing the humus (layer 5) brown earth appears (layer 2), in which finds can already be found. In slice 3 the number of finds increases significantly and a larger patch of house plaster appears at x = 1.00–1.50 and y = 3.50–6.00 (sq. 2). On the larger pieces of plaster

VI/2 (1983) proti vzhodu oz. sonde VI/1 (1983) proti severu. Merila je 4 × 10 m. Razdeljena je bila na deset kvadrantov, od kv. 13 do 22, po 2 × 2 m. Izhodišče je bilo postavljeno na točko x = 0, y = 0 iz leta 1982 (sonda VI). Vrednosti x so padale proti severu, vrednosti y proti vzhodu.

Višine vogalnih točk na sondi so bile merjene od kote 36 (834,54 m) katastrske mape Nemška Loka oz. s "stojišča" na 822,9 m.[27]

Izkopavanje je potekalo po režnjih. V nadaljevanju predstavljamo relativne globine posameznih režnjev, merjene s površja ob sondi:

reženj 1: do gl. 0,15 m;
reženj 2: gl. 0,15–0,30 m;
reženj 3: gl. 0,30–0,50 m.

3.2.5.5.1 Stratigrafska opažanja

Po odstranitvi ruše (plast 5) se pojavi rjava zemlja (plast 2). Na jugovzhodnem delu sonde je že skalna podlaga. Najdbe se pojavljajo po celi sondi. V tretjem režnju pa samo v kv. 13, 18 in 19.

3.3 INTERPRETACIJA NASELBINSKIH STRUKTUR

V idealnih razmerah je arheološko najdišče Spaha zagotovo eno izmed najpomembnejših naselbinskih točk v Sloveniji, kjer lahko preučujemo poselitvene strukture na višinski naselbini skozi čas. Žal pa raziskave na Spahi, kljub temu, da je bilo raziskano z arheološko metodo več kot 40 % celotnega zgornjega platoja, niso prinesle dovolj podatkov o tej problematiki.

Prazgodovinska poselitev na Spahi se je skoncentrirala na dveh platojih južnega grebena, na nadmorski višini med 821 in 826 m (zgornji plato) ter 817 in 818 m (spodnji plato).

Zgornji plato je naravno zavarovan s strmimi pobočji na vzhodni in zahodni strani, na južni strani prehaja v spodnji plato, medtem ko je na severni strani sestop s platoja položnejši.

Arheološke raziskave in topografija terena razkrivata, da je bil za osrednji poselitveni prostor izbran zgornji plato, ki je trikotne oblike s stranicami pribl. 50, 30 in 40 m (pribl. 600 m^2) in to predvsem severni, zahodni in jugozahodni del, medtem ko je vzhodni del veliko bolj skalnat (*sl. 3.26*).

Spodnji plato je še bolj skalnat (*sl. 3.27*), je jezičaste oblike in se na jugozahodni strani spušča v prepadne stene. Za poselitev je bila primerna samo severna stran platoja ob vznožju zgornjega platoja, kjer je bila zastavljena tudi sonda IV.

[27] Glej op. 21.

imprints of branches and logs can be seen. Under the house plaster is a layer of beaten yellow brown earth. At this point the excavation of 1983 ended and was continued in 1984 with the excavation of slices 4 and 5.

3.2.5.5 TRENCH VI/4 (1984) – 40 m² (*Figs. 3.2, 3.21*)

Trench VI/4 was set in the second half of August 1984 and was the extension of trench VI/2 (1983) towards the east or of trench VI/1 (1983) towards the north. It measured 4 × 10 m and was divided into ten squares, from sq. 13 to 22, each measuring 2 × 2 m. The starting point was set at point x = 0, y = 0 from 1982 (trench VI). Values x decreased towards the north and values y towards the east.

Heights of the corner points in the trench were measured from trigonometric point no. 36 (834.54 m) of cadastral map Nemška Loka or from the "standing-point" at 822.9 m.[27]

The excavation was done in slices. Hereon we present the relative depths of individual slices measured from the surface by the trench:

slice 1: down to the depth of 0.15 m;
slice 2: depth of 0.15–0.30 m;
slice 3: depth of 0.30–0.50 m.

3.2.5.5.1 Stratigraphic observations

After removing the humus (layer 5) brown soil (layer 2) appears. On the south-eastern part of the trench there is already a rocky base. Finds appear along the entire trench. In slice 3 there are only in squares 13, 18, and 19.

3.3 INTERPRETATION OF SETTLEMENT STRUCTURES

In ideal circumstances the archaeological site Spaha is one of the most important settlement points in Slovenia, where we can research settlement structures at the hilltop settlement through time. Unfortunately, the research at Spaha, regardless the fact that over 40 % of the entire upper plateau was researched by the archaeological method, did not give enough data about this issue.

Prehistoric settlement of Spaha was concentrated on two plateaus of the south ridge, at an altitude between 821 and 826 m (the upper plateau); and 817 and 818 m (the lower plateau). The upper plateau is naturally protected by steep slopes on the east and west side, at the south side it traverses into the lower plateau, while on the northern side the descent from the plateau is gentler.

[27] See footnote 21.

Sl. 3.26: Skalnat vzhodni del zgornjega platoja z ostanki stražnice. Foto: T. Korošec.
Fig. 3.26: Rocky eastern part of the upper plateau with remains of a watchtower. Photo: T. Korošec.

Debelina arheoloških plasti do skalne osnove je bila zelo spremenljiva: v sondi I od 0,80 do 1,0 m, v sondi II od 1,0 do 1,2 m, v sondi III od 0,15 do 1,25 m, v sondi IV do 0,75 m, v sondi VI od 0,30 do 1,45 m in v sondi VII do 0,85 m.

Podatki torej kažejo, da je bila poselitev na reliefno zelo razgibanem kraškem površju, zato velikih, globoko v tla vkopanih objektov oz. zemljank na tem najdišču ni pričakovati. Še več, razgibano površje in prisotnost velikih količin hišnega ometa (123,65 kg) kažeta na nadzemne hiše/koče iz vkopanih oz. položenih soh ali pa na objekte, ki so bili delno vkopani v zemljo, prekrivala pa jih je konstrukcija, ki v arheoloških plasteh praviloma ni pustila sledov,[28] kar nedvomno dokazujejo tudi kosi hišnega ometa, na katerih so se ohranili odtisi, najverjetneje vertikalnih brun oz. soh.

Analiza arheoloških najdb je razkrila, da je bilo v prazgodovini najdišče poseljeno najmanj štirikrat: v obdobju savske skupine, lasinjske kulture, horizonta keramike z brazdastim vrezom in v obdobju kulture žarnih grobišč.[29] Z vsako novo poselitvijo so se, v precejšnji meri, uničili ostanki predhodnih poselitev. Nezanemarljiva in za prazgodovinske arhitekturne ostaline dokončno pogubna pa je bila gradnja lesene stražnice s kamnitim temeljem v 16. stoletju po Kr. in z njo povezanih aktivnosti.[30] Posebej na udaru je bilo območje sond I, II, III in VI na vrhnjem platoju.

Če povzamemo, lahko rečemo, da se pri obravnavi arhitekturnih elementov ne moremo zanašati samo na podatke s terena. Zato smo poskušali rekonstruirati arhitekturne enote (hiše) na podlagi koncentracij arheoloških najdb v vertikalni in horizontalni smeri, kar je osrednja vsebina tega poglavja.

[28] Črešnar 2007, 48–55.
[29] Glej poglavje 5, v tem zborniku.
[30] Simonič 1939, 78–80.

Sl. 3.27: Pogled proti severovzhodu na skalnat jugozahodni del spodnjega platoja. A. Velušček in D. Valoh stojita blizu sonde IV, med drevesi v ozadju pa je vidna silhueta zgornjega naselbinskega platoja. Foto: T. Korošec.
Fig. 3.27: A view towards the northeast over the rocky southwestern part of the lower plateau. A. Velušček and D. Valoh stand near trench IV, while among the trees in the background the outline of the upper settlement plateau can be seen. Photo: T. Korošec.

The archaeological research and terrain topography reveal that the upper plateau was chosen for the central settlement point which is of triangular shape with sides of approx. 50, 30, and 40 m (approx. 600 m^2) and this mostly the northern, western, and south-western part, while the eastern part is much more rocky (*Fig. 3.26*).

The lower plateau is even rockier (*Fig. 3.27*), of tongue-like form and at the south-western side descends into the precipitous walls. Only the northern side of the plateau along the foot of the upper plateau was suitable for settlement, where trench IV was set.

The thickness of archaeological layers to the rocky base varied considerably: in trench I from 0.80 to 1.0 m, in trench II from 1.0 to 1.2 m, in trench III from 0.15 to 1.25 m, in trench IV to 0.75 m, in trench VI from 0.30 to 1.45 m, and in trench VII to 0.85 m.

The data thus show that the settlement spread over a very uneven Karst terrain and therefore we cannot expect any big, into the ground deeply burrowed structures or earth houses at this site. Moreover, the uneven terrain and the presence of a large amount of house plaster (123.65 kg) indicate that here above-ground houses/huts made of dug-in or laid logs were built, or to the structures partly sunk into the ground and covered by a construction which generally did not leave any traces in the archaeological layers,[28] which is undoubtedly proven also by the pieces of house plaster with preserved imprints of, probably, vertical logs and boards.

[28] Črešnar 2007, 48–55.

3.3.1 METODA DELA

Pri poskusu rekonstrukcije naselbinskih struktur smo se naslonili na uravnotežene stratigrafske podatke in podatke o koncentraciji najdb hišnega ometa in keramike. Sonde II (1980), II (1981), III, IV in V obravnavamo posamično. Sonde I (1979 in 1980), VI, VI/1–4 in VII (1983 in 1984) pa so obravnavane kot celote oz. združeno.

Prvi korak je bil uravnoteženje izkopanih režnjev, kar smo storili na podlagi dnevniških zapisov in druge razpoložljive muzejske dokumentacije. Idealni reženj (IR), tj. 100 % vrednost, predstavlja izkop nekega izmišljenega režnja z volumnom 5 m^3. Na *tabelah* od *3.1* do *3.7* je v odstotkih podan delež izkopanega režnja glede

Tab. 3.1: Deleži izkopanih režnjev po kvadrantih glede na volumen idealnega režnja (IR), izraženi v odstotkih.
Tab. 3.1: Percentage of the excavated slices according to squares with respect to the ideal slice volume (IR).

SONDA / TRENCH I (1979, 1980)	**% delež glede na IR / share regarding IR in %**	
	reženj / slice 1	**reženj / slice 2**
kv. / sq. B	35	40
kv. / sq. A	35	40
kv. / sq. C	21	24

The analysis of archaeological finds revealed that the site was populated at least four times in prehistory: in the period of the Sava group, Lasinja culture, horizon of pottery with furrowed incisions, and in the Urnfield culture.[29] Each new settlement destroyed to a great extent what was left from the previous one. Significant and for the prehistoric architectural remains completely devastating was the construction of the wooden watchtower with stone foundation in the 16th century AD and activities related to it.[30] Especially damaged was the area of trenches I, II, III, and VI of the upper plateau.

To sum up, we can say that in our discussion of the architectural elements we cannot rely solely on the data acquired in the field. Thus we tried to reconstruct the architectural units (houses) on the basis of the archaeological finds concentrations in vertical and horizontal direction, which is the main content of this chapter.

3.3.1 THE METHOD

The attempt of settlement structure reconstruction leaned on the balanced stratigraphic data and data about the concentration of house plaster and pottery finds. Trenches II (1980), II (1981), III, IV, and V are

[29] See chapter 5, in this monograph.
[30] Simonič 1939, 78–80.

Tab. 3.2: Deleži izkopanih režnjev po kvadrantih glede na volumen idealnega režnja (IR), izraženi v odstotkih.
Tab. 3.2: Percentage of the excavated slices according to squares with respect to the ideal slice volume (IR).

SONDA / TRENCH II (1980, 1981)	**% delež glede na IR / share regarding IR in %**						
	reženj / slice 1	**reženj / slice 2**	**reženj / slice 3**	**reženj / slice 4**	**reženj / slice 5**	**reženj / slice 5/1**	**reženj / slice 5/2**
kv. / sq. 1	27	21	24	24		24	24
kv. / sq. 2	54	42	48	48		48	48
kv. / sq. 3	54	42	48	48		48	48
kv. / sq. 4	27	33	24	20,4	15,6		
kv. / sq. 5	27	33	24	20,4	15,6		
kv. / sq. 6	27	33	24	20,4	15,6		

Tab. 3.3: Deleži izkopanih režnjev po kvadrantih glede na volumen idealnega režnja (IR), izraženi v odstotkih.
Tab. 3.3: Percentage of the excavated slices according to squares with respect to the ideal slice volume (IR).

SONDA / TRENCH III	**% delež glede na IR / share regarding IR in %**					
	reženj / slice 1	**reženj / slice 2**	**reženj / slice 3**	**reženj / slice 4**	**reženj / slice 5/1**	**reženj / slice 5/2**
kv. / sq. 1	18	20,4	33,6	31,2	27,6	14,6
kv. / sq. 2	18	20,4	33,6	31,2	27,6	14,6
kv. / sq. 3	18	20,4	33,6	31,2	27,6	14,6
kv. / sq. 4	18	20,4	33,6	31,2	27,6	14,6
kv. / sq. 5	18	20,4	33,6	31,2	27,6	14,6
kv. / sq. 6	18	20,4	33,6	31,2	27,6	14,6
kv. / sq. 7	18	20,4	33,6	31,2	27,6	14,6

Tab. 3.4: Deleži izkopanih režnjev po kvadrantih glede na volumen idealnega režnja (IR), izraženi v odstotkih.
Tab. 3.4: Percentage of the excavated slices according to squares with respect to the ideal slice volume (IR).

SONDA / TRENCH IV	% delež glede na IR / share regarding IR in %			
	reženj / slice 1	reženj / slice 2	reženj / slice 3	reženj / slice 4
kv. / sq. 1	20	15	15	23
kv. / sq. 2	20	15	15	23

Tab. 3.5: Deleži izkopanih režnjev po kvadrantih glede na volumen idealnega režnja (IR), izraženi v odstotkih.
Tab. 3.5: Percentage of the excavated slices according to squares with respect to the ideal slice volume (IR).

SONDA / TRENCH V	% delež glede na IR / share regarding IR in %
	reženj / slice 1
kv. / sq. 1	30
kv. / sq. 2	30

Tab. 3.6: Deleži izkopanih režnjev po kvadrantih glede na volumen idealnega režnja (IR), izraženi v odstotkih.
Tab. 3.6: Percentage of the excavated slices according to squares with respect to the ideal slice volume (IR).

SONDE / TRENCHES VI, VI/1–4	% delež glede na IR / share regarding IR in %							
	reženj / slice 1	reženj / slice 2	reženj / slice 3	reženj / slice 3/1	reženj / slice 3/2	reženj / slice 4	reženj / slice 5	reženj / slice 6
kv. / sq. 1	30	30	24			24	12	
kv. / sq. 2	30	30	24			24	12	
kv. / sq. 3	30	30	24			24	12	
kv. / sq. 4	14	14	16			20		
kv. / sq. 5	14	14	16			20		
kv. / sq. 6	21	21	24			30		
kv. / sq. 7	21	21	24			30		
kv. / sq. 8	21	21	24			30		
kv. / sq. 9	24	24	32			32	32	16
kv. / sq. 10	24	24	32			32	32	16
kv. / sq. 11	24	24		28	16	112	44	24(?)
kv. / sq. 12	24	24		28	16	112	44	24(?)
kv. / sq. 13	12	12	16					
kv. / sq. 14	12	12	16					
kv. / sq. 15	12	12	16					
kv. / sq. 16	12	12	16					
kv. / sq. 17	12	12	16					
kv. / sq. 18	12	12	16					
kv. / sq. 19	12	12	16					
kv. / sq. 20	12	12	16					
kv. / sq. 21	12	12	16					
kv. / sq. 22	12	12	16					

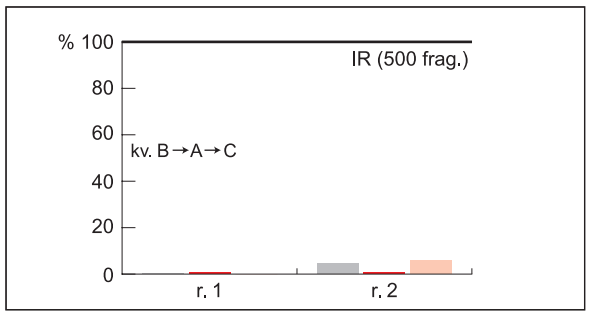
Tab. 3.7: Deleži izkopanih režnjev po kvadrantih glede na volumen idealnega režnja (IR), izraženi v odstotkih.
Tab. 3.7: Percentage of the excavated slices according to squares with respect to the ideal slice volume (IR).

SONDA / TRENCH VII	% delež glede na IR / share regarding IR in %				
	reženj / slice 1	reženj / slice 2	reženj / slice 3	reženj / slice 4	reženj / slice 5
kv. / sq. 1	36	36	27	40	14
kv. / sq. 2	36	36	27	40	14
kv. / sq. 3	36	36	27	40	14

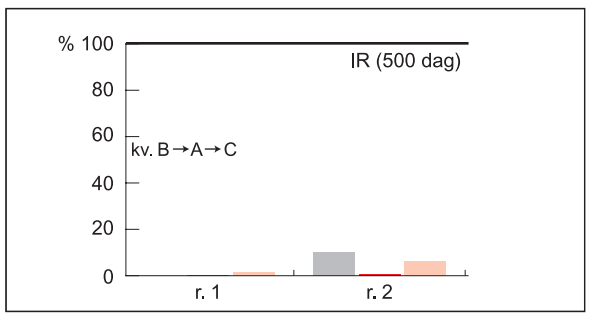
na IR.[31] Volumen drugega režnja v kv. B je 2 m^3 in tako predstavlja 40 % volumna idealnega režnja (glej *tab. 3.1*).

Ugotovljene volumenske deleže glede na IR smo nato upoštevali pri izračunu bodisi števila fragmentov ornamentirane ali fine keramike (*sl. 3.31, 3.35, 3.38, 3.41, 3.44, 3.47, 3.50*) bodisi količine grobe keramike ali hišnega ometa (*sl. 3.32, 3.33, 3.36, 3.37, 3.39, 3.40, 3.42, 3.43, 3.45, 3.46, 3.48, 3.49, 3.51, 3.52*). Zaradi preglednosti so na grafih od *sl. 3.28–3.33, 3.35* itd. vse vrednosti podane v odstotkovnem razmerju do vrednosti 500 (število frag. ali količina v dag), ki predstavlja poljubno določeno (dogovorjeno) število oz. količino na volumen idealnega režnja (IR). Tako smo na podlagi uravnoteženja prišli do primerljivih podatkov o številu ustij, značilnih ostenj, dna, ročajev in ornamentiranih fragmentov, o teži manj značilnih keramičnih fragmentov – večidel

[31] Npr.: volumen režnja 1 v kv. B sonde I predstavlja 35 % volumna idealnega režnja IR, glej *tab. 3.1*.



Sl. 3.28: Združena sonda I, kv. B, A in C. Surovi podatki o številu fragmentov ornamentirane ali fine keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.28: Combined trench I, squares B, A, and C. Raw data about fragment number of ornamented or fine pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).



Sl. 3.29: Združena sonda I, kv. B, A in C. Surovi podatki o količini neznačilne keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.29: Combined trench I, squares B, A, and C. Raw data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

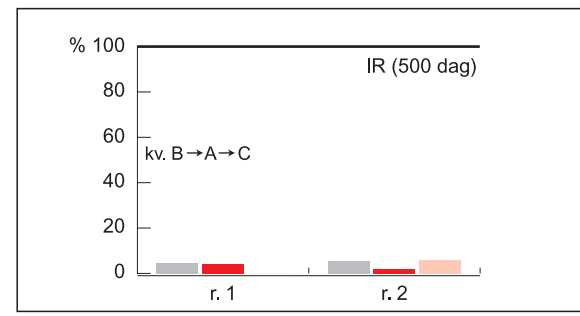
discussed separately, while trenches I (1979 and 1980), VI, VI/1–4, and VII (1983 and 1984) are dealt with as a whole or combined.

The first step was to balance the excavated slices, which was done on the basis of diary entries and other available museum documentation. Ideal slice (IR), the 100 % value, is represented by the excavation of an imaginary slice with the volume of 5 m^3. *Tables* from *3.1* to *3.7* show the percentage of the excavated slice with respect to IR.[31] The volume of slice 2 in sq. B is 2 m^3 and thus represents 40 % of the ideal slice volume (see *Tab. 3.1*).

The established volume shares with respect to IR have then been taken into account with the calculation of either the fragment number of ornamented or fine pottery (*Figs. 3.31, 3.35, 3.38, 3.41, 3.44, 3.47, 3.50*) or the amount of coarse pottery or house plaster (*Figs. 3.32, 3.33, 3.36, 3.37, 3.39, 3.40, 3.42, 3.43, 3.45, 3.46, 3.48, 3.49, 3.51, 3.52*). For greater clarity on graphs from *Figs. 3.28–3.33, 3.35* etc. all values are given in percentages to the value 500 (number of fragments or amount in dag), which presents a randomly defined (agreed) number or amount to the volume of IR. Thus on the basis of balance we reached the comparable data about the number of rims, characteristic walls, bottoms, handles, and ornamented fragments, about the weight of less characteristic pottery fragments – mostly unornamented walls – and about the weight of house plaster for each square and slice respectively.

Sometimes significant deviations between the s.c. raw data about number and weight occurred which were for all squares and slices prepared by the excavation leader G. Hirschbäck - Merhar, and the s.c. balanced data. The difference is apparent if we compare *Figures 3.29* and *3.32*, where the balanced amount of formally

[31] E.g.: volume of slice 1 in sq. B of trench I represents 35 % of volume of ideal slice IR, see *Tab. 3.1*.



Sl. 3.30: Združena sonda I, kv. B, A in C. Surovi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.30: Combined trench I, squares B, A, and C. Raw data about the amount of house plaster according to squares and slices, given in percentages with respect to the ideal slice (IR).

neornamentiranih ostenj – in o teži hišnega ometa za vsak kvadrant in reženj posebej.

Včasih je prišlo do znatnega odstopanja med t. i. surovimi podatki o številu ali teži, ki jih je za vse kvadrante in režnje pripravila vodja izkopavanj G. Hirschbäck - Merhar, in t. i. uravnoteženimi podatki. Razlika je dobro vidna, če primerjamo *sliki 3.29* in *3.32*, kjer je uravnotežena količina oblikovno neznačilnih fragmentov keramike v drugem režnju kv. C večja od primerljive vrednosti v drugem režnju kv. B (*sl. 3.32*). Do nasprotnega, tj. napačnega rezultata pa pridemo, če upoštevamo surove podatke (*sl. 3.29*), zato se bomo pri interpretaciji naslonili samo na podatke, ki smo jih predhodno uravnotežili.

3.3.2 DISKUSIJA

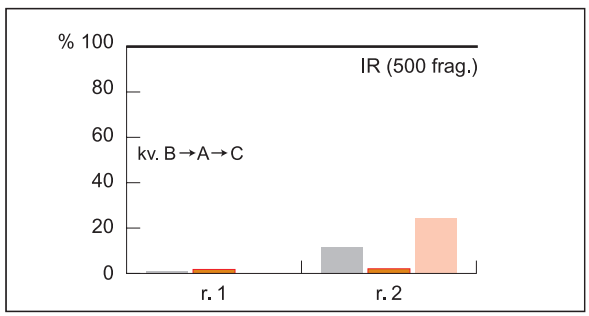
3.3.2.1 SONDI I IN II

Sonda I je bila zastavljena na vzhodni strani zgornjega platoja (*sl. 3.53*) in ni dala pomembnejših stratigrafskih podatkov. Uravnoteženje podatkov o najdbah kaže na rahlo povečano, a še vedno majhno zastopanost keramike in hišnega ometa v drugem režnju kv. B in C (glej *sl. 3.31–3.33*).

Kaže, da izkopavalci z izkopom sonde I niso naleteli na prazgodovinske hiše. Najdbe s tega območja lahko razvrstimo v 3 prazgodovinske poselitvene faze: v prvo (savska skupina),[32] drugo (lasinjska kultura)[33] in v tretjo (horizont keramike z brazdastim vrezom).[34]

V bližini sonde I je bila zastavljena sonda II (*sl. 3.53*). Na podlagi stratigrafskih opažanj in uravnoteženja podatkov o najdbah lahko rečemo, da je v sondi II zaznati bolj pestro dogajanje.

[32] Poglavje 4: npr. *t. 4.1:* 6,7,14, v tem zborniku.
[33] Poglavje 4: npr. *t. 4.1:* 2, v tem zborniku.
[34] Poglavje 4: npr. *t. 4.1:* 4,5, v tem zborniku.



Sl. 3.31: Združena sonda I, kv. B, A in C. Uravnoteženi podatki o številu fragmentov ornamentirane ali fine keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.31: Combined trench I, squares B, A, and C. Balanced data about the fragment number of ornamented and fine pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

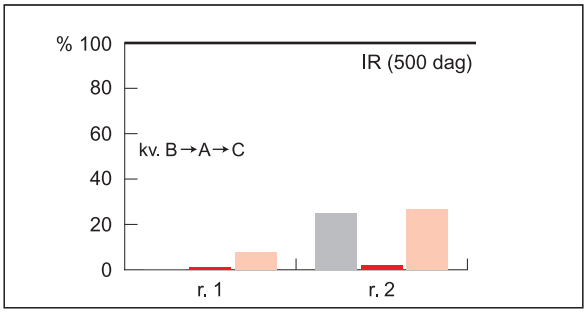
uncharacteristic pottery fragments in slice 2 of sq. C is greater from the comparable value in slice 2 of sq. B (*Fig. 3.32*). We reach the opposite, wrong result if we take into account the raw data (*Fig. 3.29*), therefore, the interpretation will be based solely on those data which had been previously balanced.

3.3.2 DISCUSSION

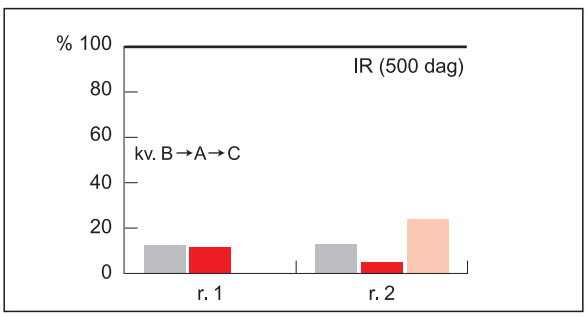
3.3.2.1 TRENCHES I AND II

Trench I was set at the eastern side of the upper plateau (*Fig. 3.53*) and did not yield any significant stratigraphic data. The balancing of data about the finds points to a slightly increased but still small number of pottery and house plaster in slice 2 of squares B and C (see *Figs. 3.31–3.33*).

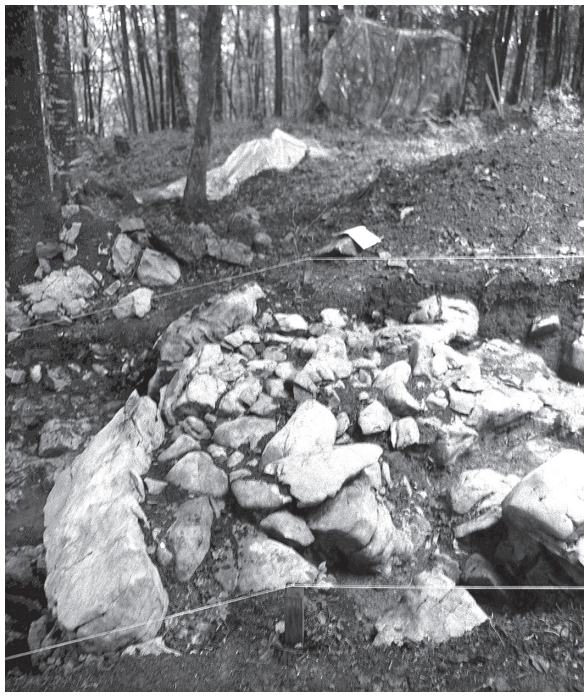
It seems that in trench I the excavators did not stumble across prehistoric houses. Finds from this area can be classified into 3 prehistoric settlement phases: first



Sl. 3.32: Združena sonda I, kv. B, A in C. Uravnoteženi podatki o količini neznačilne keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.32: Combined trench I, squares B, A, and C. Balanced data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).



Sl. 3.33: Združena sonda I, kv. B, A in C. Uravnoteženi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.33: Combined trench I, squares B, A, and C. balanced data about the amount of house plaster according to squares and slices, given in percentages with respect to the ideal slice (IR).



Sl. 3.34: Ostanki suhega zidu v sondi II. Foto: G. Hirschbäck - Merhar.
Fig. 3.34: A wall remains in trench II. Photo: G. Hirschbäck - Merhar.

Količina keramičnih fragmentov in hišnega ometa kaže, da je na mestu sonde II, v kv. 1, 2, 4 in 5 oz. v njeni neposredni bližini zagotovo stala hiša (*sl. 3.35–3.40*). Na podlagi najdb lahko sklepamo, da sta bili na tem območju celo dve hiši druga nad drugo. Na dnu sonde prevladuje najstarejša keramika,[35] medtem ko se v režnjih 3 in 2 pogosteje pojavljajo mlajši lasinjski fragmenti.[36]

Na meji med kv. 2 in 3 na južnem robu zgornjega platoja je bil odkrit suhi zid (*sl. 3.34*). Glede na stratigrafske podatke in keramične najdbe[37] sklepamo, da je bil postavljen v obdobju prve poselitvene faze, kar se ujema s starostjo obrambnega zidu z Gradca pri Mirni.[38] Zid s Spahe mu je bil najbrž po funkciji podoben, saj se je poselitev premaknila na spodnji plato šele kasneje, v obdobju horizonta keramike z brazdastim vrezom (glej v nadaljevanju).

3.3.2.2 SONDA III

Sonda III je bila zastavljena na zahodnem robu zgornjega platoja (*sl. 3.2, 3.53*). Povečano koncentra-

[35] Poglavje 4: npr. *t. 4.3:* 1–6; *4.4:* 1–19, v tem zborniku..
[36] Poglavje 4: npr. *t. 4.5:* 8–13; *4.6:* 1,6,13; *4.7:* 6; *4.8:* 3,4, v tem zborniku.
[37] Glej poglavje 4: *t. 4.4:* 1–19, v tem zborniku.
[38] Dular et al. 1991, 86, 88, 89.

(the Sava group),[32] second (the Lasinja culture)[33], and third (the horizon of pottery with furrowed incisions).[34]

Near trench I, trench II was set (*Fig. 3.53*). On the basis of stratigraphic observations and the balancing of finds data we can say that trench II reveals a livelier happening.

The amount of pottery fragments and house plaster reveals that at the spot of trench II, in squares 1, 2, 4, and 5 or in its immediate vicinity there was a house (*Figs. 3.35–3.40*). On the basis of the finds we can establish that there were even two houses in this area, one above the other. At the bottom of the trench the oldest pottery prevails,[35]while in slices 3 and 2 more frequently younger, Lasinja fragments appear.[36]

On the border between squares 2 and 3 at the south edge of the upper plateau a wall was discovered (*Fig. 3.34*). Considering the stratigraphic data and pottery finds[37] we assume that it was built during the first settlement phase which corresponds to the age of the defence wall from Gradec near Mirna.[38] The wall from Spaha was probably similar in function because the settlement moved to the lower plateau only later, during the horizon of pottery with furrowed incisions (see hereon).

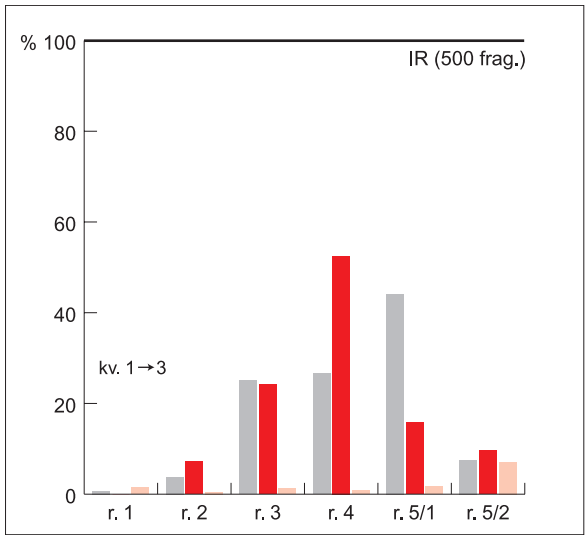
3.3.2.2 TRENCH III

Trench III was set at the western edge of the upper plateau (*Figs. 3.2, 3.53*). An increased concentration of house plaster can be detected in slices from 5 to 3 in squares 6 and 7, which allows us to deduce that there was a house in the vicinity, possibly even two (see *Fig. 3.43*). Finds point to a structure from the period of the Sava group[39] and another from the period of the Lasinja culture.[40]

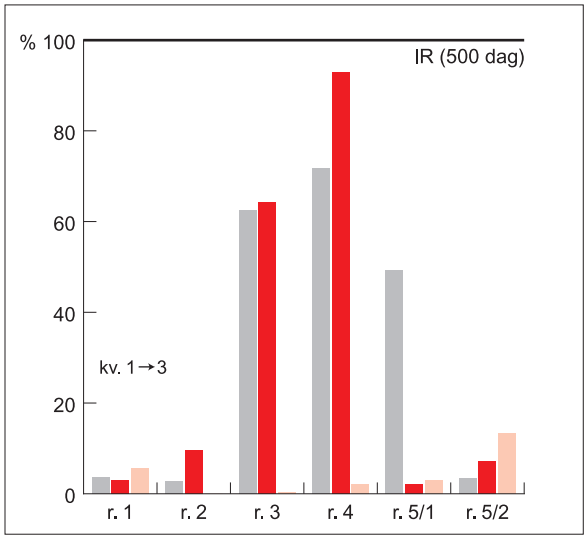
We can speak about another house on the basis of the increased concentration of house plaster in slice 3 of squares 3 (see *Fig. 3.43*). Considering the finds and vertical stratigraphy we can assume that a Lasinja culture structure was probably in the vicinity.[41]

In trench III just below the surface a smaller number of pottery finds were discovered, which can be distinguished from the others by appearance and can thus probably be dated to the period of the Urnfield

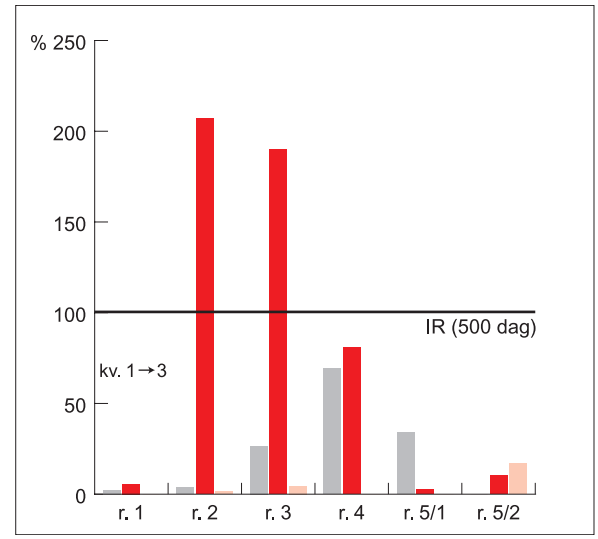
[32] Chapter 4: e.g. *Pl. 4.1:* 6,7,14, in this monograph.
[33] Chapter 4: e.g. *Pl. 4.1:* 2, in this monograph.
[34] Chapter 4: e.g. *Pl. 4.1:* 4,5, in this monograph.
[35] Chapter 4: e.g. *Pls. 4.3:* 1–6; *4.4:* 1–19, in this monograph.
[36] Chapter 4: e.g. *Pls. 4.5:* 8–13; *4.6:* 1,6,13; *4.7:* 6; *4.8:* 3,4, in this monograph.
[37] See chapter 4: *Pl. 4.4:* 1–19, in this monograph.
[38] Dular et al. 1991, 86, 88, 89.
[39] Chapter 4: e.g. *Pls. 4.9:* 5–7,11,14,15; *4.10:* 1–4, etc., in this monograph.
[40] Chapter 4: e.g. *Pls. 4.9:* 3,4,10; *4.10:* 7,9,13,14; *4.13:* 9,10; *4.14:* 2,3,5,7, etc., in this monograph.
[41] See chapter 4: *Pl. 4.12:* 8–13, in this monograph.



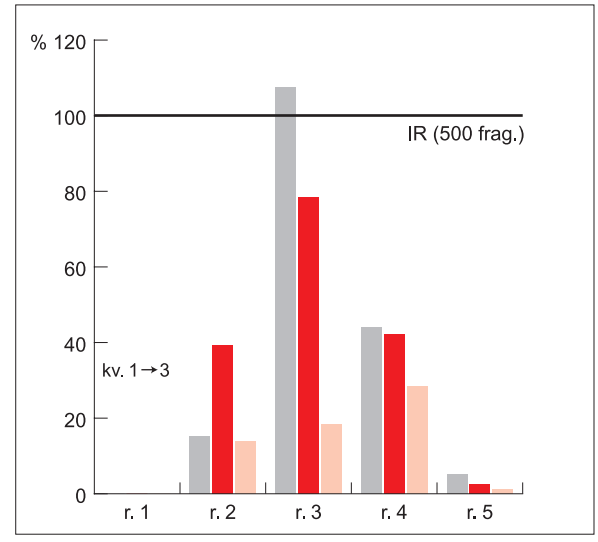
Sl. 3.35: Sonda II (1980), kv. 1–3. Uravnoteženi podatki o številu fragmentov ornamentirane ali fine keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.35: Trench II (1980), squares 1–3. Balanced data about the number of fragments of ornamented or fine pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).



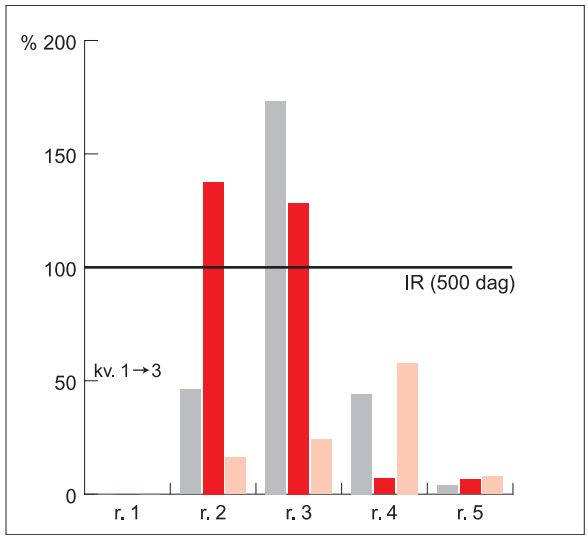
Sl. 3.36: Sonda II (1980), kv. 1–3. Uravnoteženi podatki o količini neznačilne keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.36: Trench II (1980), squares 1–3. Balanced data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).



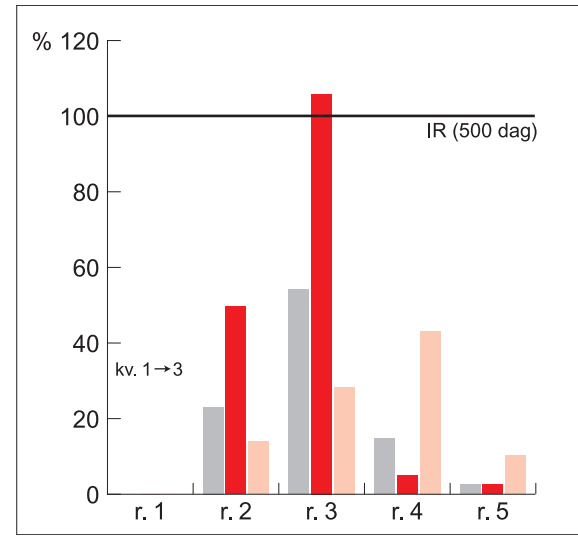
Sl. 3.37: Sonda II (1980), kv. 1–3. Uravnoteženi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.37: Trench II (1980), squares 1–3. Balanced data about the amount of house plaster according to squares and slices, given in percentages with respect to the ideal slice (IR).



Sl. 3.38: Sonda II (1981). Uravnoteženi podatki o številu fragmentov ornamentirane ali fine keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.38: Trench II (1981). Balanced data about the number of fragments of ornamented and fine pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).



Sl. 3.39: Sonda II (1981). Uravnoteženi podatki o količini neznačilne keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.39: Trench II (1981). Balanced data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

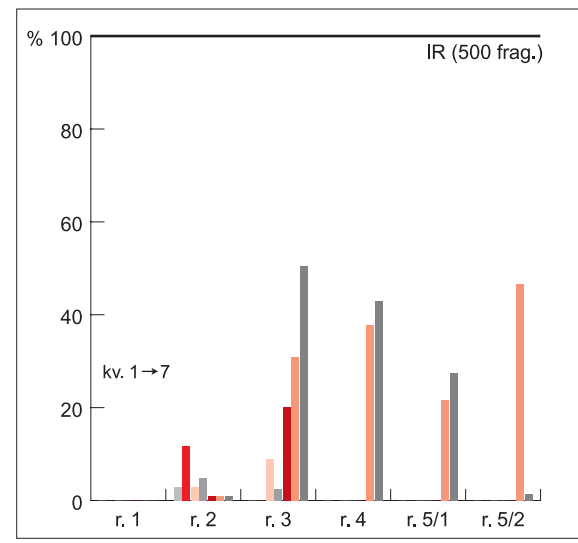


Sl. 3.40: Sonda II (1981). Uravnoteženi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.40: Trench II (1981). Balanced data about the amount of house plaster according to squares and slices, given in percentages with respect to the ideal slice (IR).

cijo hišnega ometa je zaznati v režnjih od 5 do 3 v kv. 6 in 7, kar dovoljuje sklepati, da je v bližini stala hiša, morda celo dve (glej *sl. 3.43*). Najdbe kažejo na objekt iz obdobja savske skupine[39] in na objekt iz obdobja lasinjske kulture.[40]

O še eni hiši lahko govorimo tudi na podlagi povečane koncentracije hišnega ometa v tretjem režnju 3. kvadranta (glej *sl. 3.43*). Glede na najdbe in vertikalno stratigrafijo sklepamo, da je bil v bližini verjetno lasinjski objekt.[41]

V sondi III so kmalu pod površjem naleteli tudi na manjše število keramičnih najdb, ki se po videzu ločijo od drugih in jih lahko najverjetneje datiramo v obdobje kulture žarnih grobišč.[42] Sicer pa se na območju kv. 3–5 v globini 0,15 m na nekaterih mestih že pojavlja skalna osnova. V kv. 1 je v tej globini odkrit tudi zid iz malte, širok pribl. 0,40 m.



Sl. 3.41: Sonda III. Uravnoteženi podatki o številu fragmentov ornamentirane ali fine keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.41: Trench III. Balanced data about the amount of fragments of ornamented and fine pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

culture.[42] In the area of squares 3–5 at the depth of 0.15 m the rocky base already appears in places. In sq. 1 a wall made of mortar, approx. 0.40 m wide, was discovered at this depth.

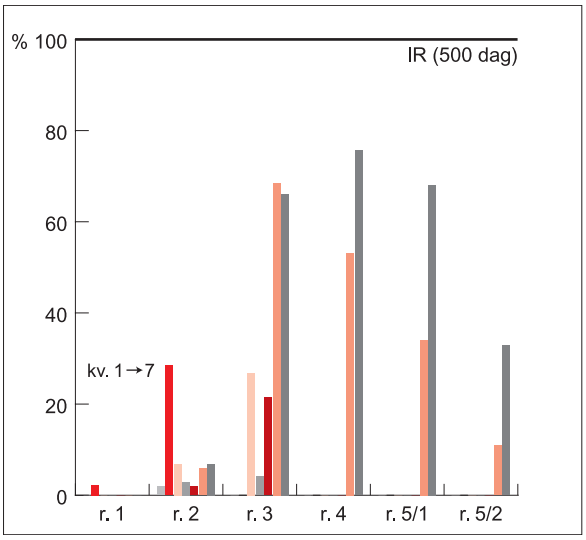
[39] Poglavje 4: npr. *t. 4.9:* 5–7,11,14,15; *4.10:* 1–4 itd., v tem zborniku.

[40] Poglavje 4: npr. *t. 4.9:* 3,4,10; *4.10:* 7,9,13,14; *4.13:* 9,10; *4.14:* 2,3,5,7 itd. , v tem zborniku.

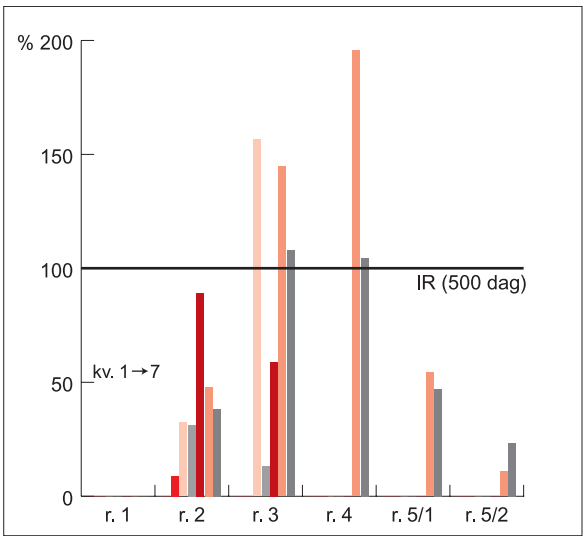
[41] Glej poglavje 4: *t. 4.12:* 8–13, v tem zborniku.

[42] Glej poglavje 4: *t. 4.15:* 3–5, v tem zborniku.

[42] See chapter 4: *Pl. 4.15:* 3–5, in this monograph.



Sl. 3.42: Sonda III. Uravnoteženi podatki o količini neznačilne keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.42: Trench III. Balanced data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).



Sl. 3.43: Sonda III. Uravnoteženi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.43: Trench III. Balanced data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

3.3.2.3 SONDA IV

Sonda IV je zelo pomembna, ker je v njej dokumentirana poselitev tudi zunaj očitno osrednjega dela naselja na zgornjem platoju.

Sonda IV je bila zastavljena na severnem delu spodnjega platoja (*sl. 3.53*). Na skalni osnovi se pojavljajo zgodnja keramika z rdečim premazom[43] in druga sočasna keramika,[44] a zaradi majhne količine keramike in hišnega ometa (*sl. 3.44–3.46*) je prenagljeno sklepati, da je bila točka poseljena tudi v eni izmed starejših naselbinskih faz.

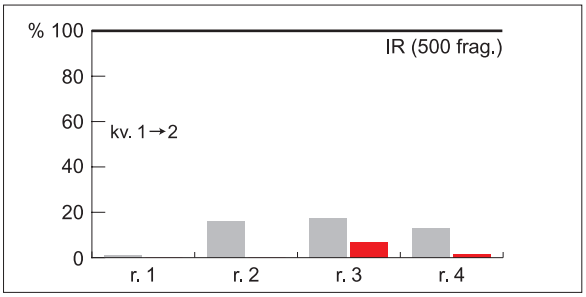
[43] Glej poglavje 4: *t. 4.16:* 5,7, v tem zborniku.
[44] Poglavje 4: npr. *t. 4.16:* 1,3, v tem zborniku.

3.3.2.3 TRENCH IV

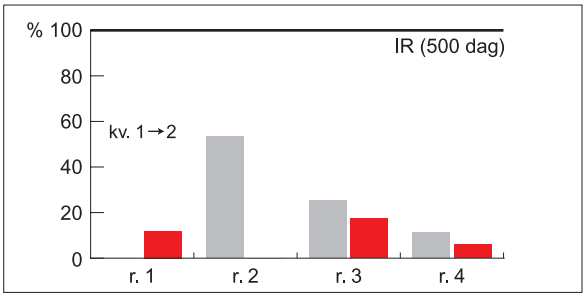
Trench IV is very important because settlement is here documented also outside of the apparently central part of the settlement at the upper plateau.

Trench IV was set at the northern part of the lower plateau (*Fig. 3.53*). On the rocky base early pottery with red coating[43] and other contemporary pottery[44] appear, nevertheless, due to the small amount of pottery and house plaster (*Figs. 3.44–3.46*) it would be hasty to assume that this point was populated also in one of the older settlement phases.

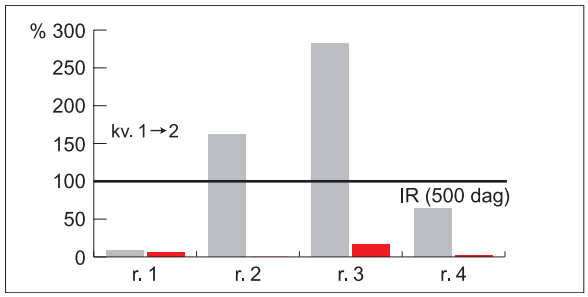
[43] See chapter 4: *Pl. 4.16:* 5,7, in this monograph.
[44] See chapter 4: e.g. *Pl. 4.16:* 1,3, in this monograph.



Sl. 3.44: Sonda IV. Uravnoteženi podatki o številu fragmentov ornamentirane ali fine keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.44: Trench IV. Balanced data about the number of fragments of ornamented and fine pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).



Sl. 3.45: Sonda IV. Uravnoteženi podatki o količini neznačilne keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.45: Trench IV. Balanced data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).



Sl. 3.46: Sonda IV. Uravnoteženi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.46: Trench IV. Balanced data about the amount of house plaster according to squares and slices, given in percentages with respect to the ideal slice (IR).

Pomembnejši podatki so iz višjih režnjev. Na prehodu iz tretjega v drugi reženj v kv. 1 (plast 4) so naleteli na večjo količino hišnega ometa (*sl. 3.46*). Stratigrafsko gledano gre za ostanke hiše iz obdobja tretje poselitvene faze (horizont keramike z brazdastim vrezom), kar potrjujejo tudi arheološke najdbe.[45]

3.3.2.4 SONDA V

Sonda V je bila zastavljena pribl. 45 m severno od severnega roba zgornjega platoja – na tem delu grebena Straže edini nekoliko večji zaplati ravnine, ki je tudi v neposredni bližini prazgodovinskega naselja (*sl. 3.2*). V njej ni bilo arheoloških najdb, zato sklepamo, da območje sonde in celotna ravnica nista bili poseljeni. Ravninski svet z najmanj od 0,20 do 0,40 m debelo plastjo humusa in gozdne rjavice[46] je bil očitno primernejši za druge dejavnosti, morda celo za skromno poljedelstvo.

3.3.2.5 SONDA VI

Združena sonda VI je pokrivala površino 114 m^2. Zastavljena je bila na jugozahodnem delu platoja (*sl. 3.53*).

Hišni omet se je pojavil pri izkopu petega in četrtega režnja v kv. 9 in 10, a hišo oz. bližino hiše iz obdobja savske skupine se zdi, da bolj potrjujejo najdbe.[47] Na večjo količino ometa so naleteli pri izkopu tretjega režnja v kv. 1, 9–12 in 18 (*sl. 3.49* in *tab. 3.8*). Po prevladujočih keramičnih najdbah iz kvadrantov 9, 11 in 12 lahko

[45] Glej poglavje 4: *t. 4.16:* 10,11, v tem zborniku; glej še *sl. 3.38*.

[46] Podatki o debelini plasti so zajeti iz podatkov o izkopavanju sonde V.

[47] Glej poglavje 4: *t. 4.23:* 2,7,11; *4.24:* 3,4,7, v tem zborniku.

More important data are from the higher slices. At the transition from slice 3 to 2 in sq. 1 (layer 4), a larger amount of house plaster was stumbled upon (*Fig. 3.46*). Stratigraphically speaking these are remains of a house from the period of the third settlement phase (horizon of pottery with furrowed incisions), which is confirmed also by the archaeological finds.[45]

3.3.2.4 TRENCH V

Trench V was set approx. 45 m north of the northern edge of the upper plateau – at the only slightly bigger patch of flatland at this side of the Straža ridge which is also in the immediate vicinity of the prehistoric settlement (*Fig. 3.2*). It did not yield any archaeological finds thus we conclude that the area of the trench and the entire flat were not populated. This flatland with at least 0.20 to 0.40 m thick humus and brown soil layer[46] was obviously more appropriate for other use, possibly even a modest form of agriculture.

3.3.2.5 TRENCH VI

Combined trench VI covered the area of 114 m^2. It was set at the south-western part of the plateau (*Fig. 3.53*).

House plaster appeared during the excavation of slices 4 and 5 in squares 9 and 10, yet it seems that the house or vicinity of a house from the period of the Sava group is more confirmed by the finds.[47] A greater amount of plaster was found while excavating slice 3 in squares 1, 9–12, and 18 (*Fig. 3.49* and *Tab. 3.8*). From the prevailing pottery finds from squares 9, 11, and 12 we can assume that this is a house or two houses of the second settlement phase.[48] Loom weights[49] reveal that in the area of squares 9, 10 people were obviously engaged in weaving or in making yarn.[50]

During the excavation of slice 3 in sq. 7 remains of a wall were found, which cannot be precisely delimited in time. Considering its position it could be a continuation of the defence wall which was established in trench II (*Fig. 3.53*).

A large amount of house plaster (*Fig. 3.49* and *Tab. 3.8*) also appeared immediately beneath the surface in

[45] See chapter 4: *Pl. 4.16:* 10,11, in this monograph; see also *Fig. 3.38*.

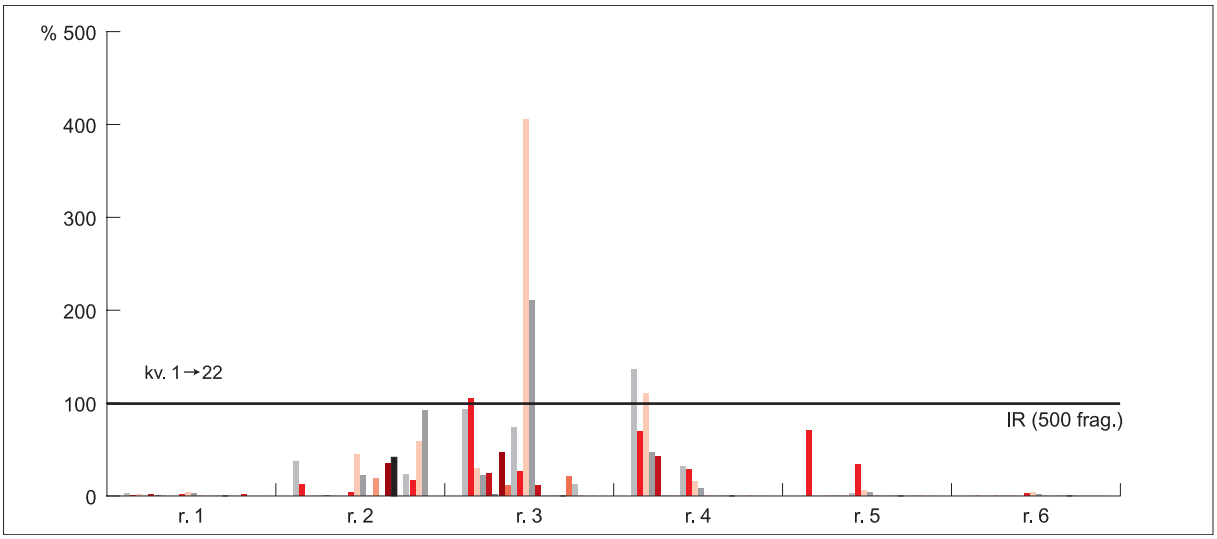
[46] Data about the layer thickness are taken from the data about the excavation of trench V.

[47] See chapter 4: *Pls. 4.23:* 2,7,11; *4.24:* 3,4,7, in this monograph.

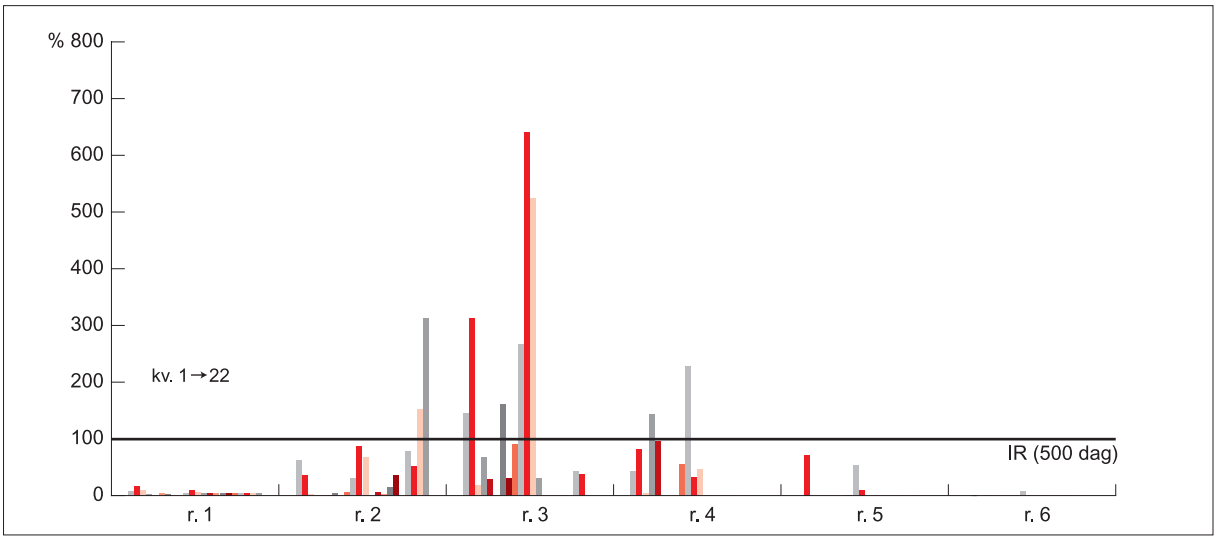
[48] Chapter 4: e.g. *Pls. 4.27:* 12; *4.28:* 3,8,11–13; *4.29:* 1,3,11,13; *4.30:* 16, in this monograph.

[49] See chapter 4: *Pl. 4. 25:* 1–4, in this monograph.

[50] See Greif 1997, 43–44.



Sl. 3.47: Združena sonda VI (1982–1984). Uravnoteženi podatki o številu fragmentov ornamentirane ali fine keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.47: Combined trench VI (1982–1984). Balanced data about the number of fragments of ornamented and fine pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

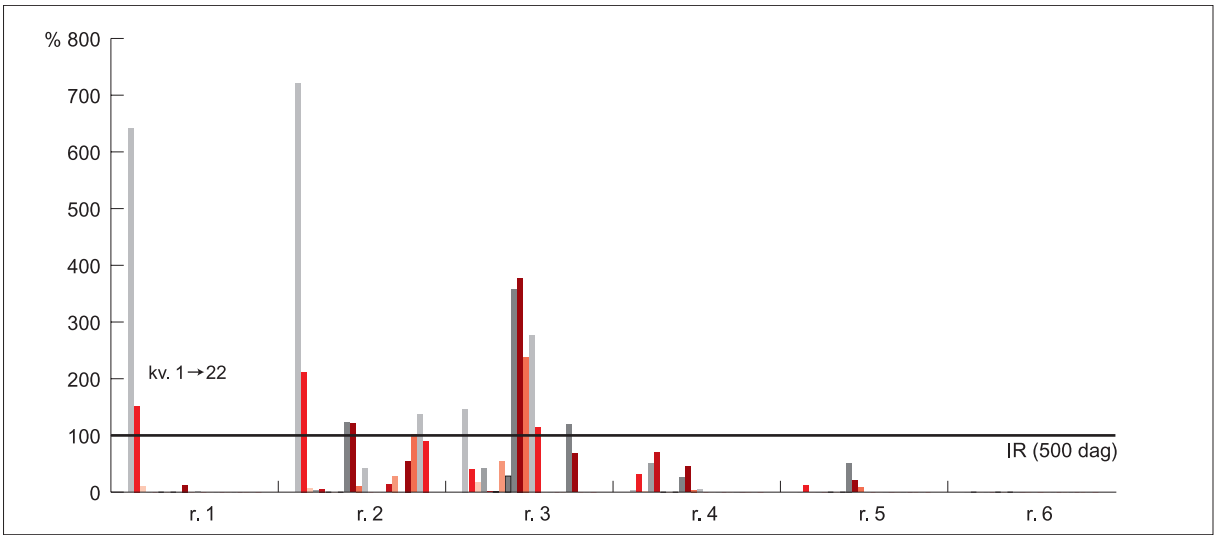


Sl. 3.48: Združena sonda VI (1982–1984). Uravnoteženi podatki o količini neznačilne keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.48: Combined trench VI (1982–1984). Balanced data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

sklepamo, da gre za hišo oz. hiši druge poselitvene faze.[48] Uteži za statve[49] kažejo, da so se na območju kv. 9, 10 očitno ukvarjali s tkanjem oz. s prejo.[50]

Pri izkopu tretjega režnja so v kv. 7 naleteli tudi na ostanke suhega zidu, ki ga ne moremo časovno natančsquares 1 and 2. Stratigraphically speaking this is layer 2 but due to the finds appearing here[51] the structure is assigned to the third settlement phase, which could also be confirmed by the pottery fragment[52] supposedly from sq. 9.[53]

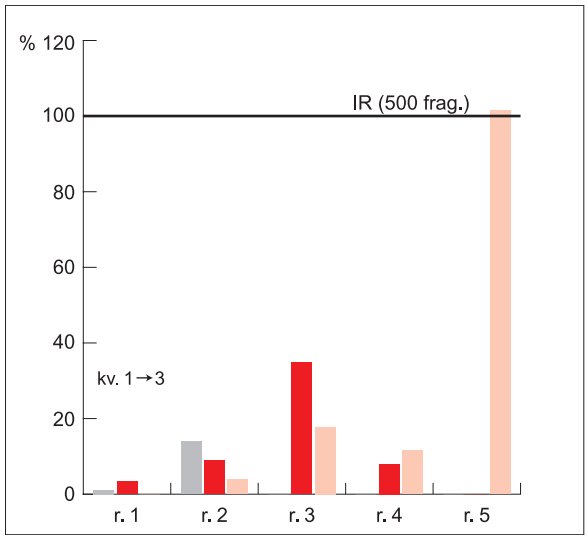
[48] Poglavje 4: npr. *t. 4.27:* 12; *4.28:* 3,8,11–13; *4.29:* 1,3,11,13; *4.30:* 16, v tem zborniku.
[49] Glej poglavje 4: *t. 4. 25:* 1–4, v tem zborniku.
[50] Glej Greif 1997, 43–44.
[51] See chapter 4: *Pl. 4.20:* 7,8,13, in this monograph.
[52] See chapter 4: *Pl. 4.25:* 6, in this monograph.
[53] See chapter 4, in this monograph.



Sl. 3.49: Združena sonda VI (1982–1984). Uravnoteženi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.49: Combined trench VI (1982–1984). Balanced data about the amount of house plaster according to squares and slices, given in percentages with respect to the ideal slice (IR).

Tab. 3.8: Združena sonda VI (1982–1984). Uravnoteženi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Tab. 3.8: Combined trench VI (1982–1984). Balanced data about the amount of house plaster according to squares and slices, given in percentages with respect to the ideal slice (IR).

SONDA / TRENCH VI (1982–1984)	**reženj / slice 1**	**reženj / slice 2**	**reženj / slice 3**	**reženj / slice 4**	**reženj / slice 5**	**reženj / slice 6**
kv. / sq. 1	641,34	720	146,66	3,34	0	0
kv. / sq. 2	152	212	40	31,66	11,66	0
kv. / sq. 3	10	7,34	17,5	0,84	0	0
kv. / sq. 4	0	2,86	41,26	51	0	0
kv. / sq. 5	0	5,77	1,26	70	0	0
kv. / sq. 6	0	0	0,84	0	0	0
kv. / sq. 7	0	0	54,16	0	0	0
kv. / sq. 8	0	0	28,34	0	0	0
kv. / sq. 9	0	123,34	357,5	26,26	51,26	0
kv. / sq. 10	12,5	120,84	377,5	45	20	0
kv. / sq. 11	0	10,84	238,22	3,58	7,72	0
kv. / sq. 12	0,84	42,5	276,62	4,64	0	0
kv. / sq. 13	0	0	115	0	0	0
kv. / sq. 14	0	0	0	0	0	0
kv. / sq. 15	0	0	0	0	0	0
kv. / sq. 16	0	13,34	0	0	0	0
kv. / sq. 17	0	28,34	0	0	0	0
kv. / sq. 18	0	0	118,76	0	0	0
kv. / sq. 19	0	55	68,76	0	0	0
kv. / sq. 20	0	101,66	0	0	0	0
kv. / sq. 21	0	136,66	0	0	0	0
kv. / sq. 22	0	90	0	0	0	0



Sl. 3.50: Združena sonda VII (1983–1984). Uravnoteženi podatki o številu fragmentov ornamentirane ali fine keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.50: Combined trench VII (1983–1984). Balanced data about the number of fragments of ornamented and fine pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

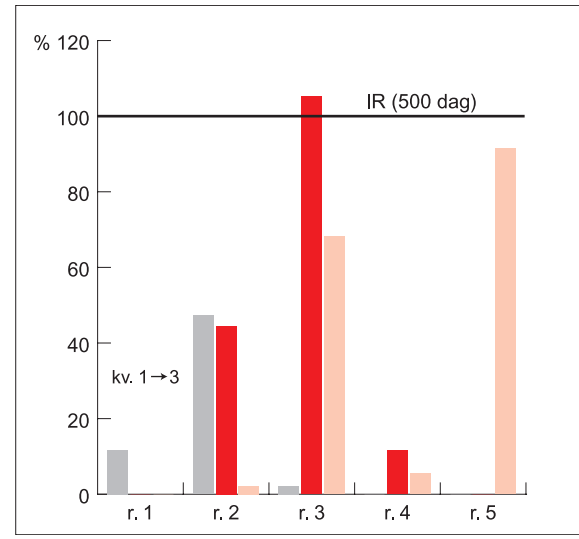
neje opredeliti. Glede na lego gre lahko za nadaljevanje obrambnega zidu, ki je bil ugotovljen v sondi II (*sl. 3.53*).

Velika količina hišnega ometa (*sl. 3.49* in *tab. 3.8*) se je pojavila tudi takoj pod površjem v kv. 1 in 2. Stratigrafsko gledano gre za plast 2, a zaradi najdb, ki se na tem mestu pojavljajo,[51] objekt pripisujemo tretji naselbinski fazi, kar morda potrjuje tudi fragment keramike[52] iz domnevno kv. 9.[53]

3.3.2.6 SONDA VII

Sonda VII je bila zastavljena na severnem delu platoja (*sl. 3.53*). Prva večja koncentracija hišnega ometa je bila odkrita v kv. 3 pri izkopu petega režnja. Čeprav najdbe, ki izvirajo iz tega kvadranta,[54] datacije hiše v obdobje prve poselitvene faze v glavnem ne podpirajo, jo lahko uvrstimo na podlagi vertikalne stratigrafije. Nad tem hišnim ometom je bila pri izkopu tretjega režnja v kv. 2 odkrita še ena večja koncentracija ometa, kar dokazuje, da je bila na tem mestu ponovno postavljena hiša. Na podlagi stratigrafije in najdb[55] jo datiramo v drugo poselitveno fazo. Prazgodovinske najdbe so se v sondi VII sicer pojavile takoj pod površjem.

[51] Glej poglavje 4: *t. 4.20:* 7,8,13, v tem zborniku.
[52] Glej poglavje 4: *t. 4.25:* 6, v tem zborniku.
[53] Glej poglavje 4, v tem zborniku.
[54] Glej poglavje 4: *t. 4.36:* 1–12, v tem zborniku.
[55] Glej poglavje 4: *t. 4.37:* 4–6, v tem zborniku.

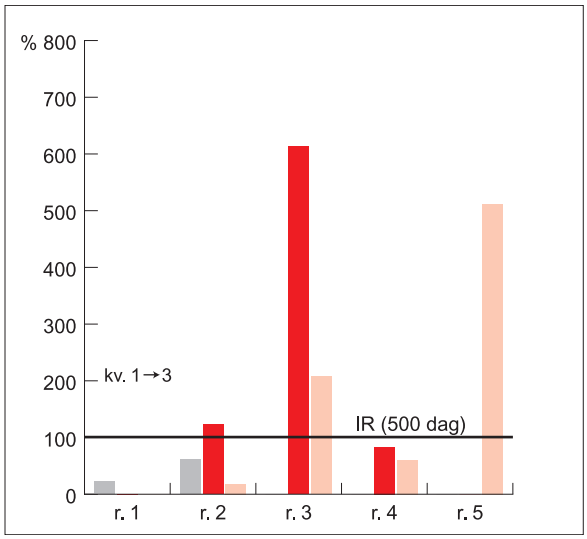


Sl. 3.51: Združena sonda VII (1983–1984). Uravnoteženi podatki o količini neznačilne keramike po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.51: Combined trench VII (1983–1984). Balanced data about the amount of uncharacteristic pottery according to squares and slices, given in percentages with respect to the ideal slice (IR).

3.3.2.6 TRENCH VII

Trench VII was set at the northern part of the plateau (*Fig. 3.53*). The first major concentration of house plaster was discovered in sq. 3 during the excavation of slice 5. Even though the finds originating from this square[54] mainly do not support the dating of this house into the first settlement phase, it can be assigned there based on vertical stratigraphy. Above this house plaster another major concentration of plaster was found during the excavation of slice 3 in sq. 2 and this proves that a house was built anew at this exact location. Considering the stratigraphy and finds[55] it is dated to the second settlement phase. Prehistoric finds in trench VII appeared immediately below the surface.

[54] See chapter 4: *Pl. 4.36:* 1–12, in this monograph.
[55] See chapter 4: *Pl. 4.37:* 4–6, in this monograph.



Sl. 3.52: Združena sonda VII (1983–1984). Uravnoteženi podatki o količini hišnega ometa po kvadrantih in režnjih, izraženi v odstotkih glede na idealni reženj (IR).
Fig. 3.52: Combined trench VII (1983–1984). Balanced data about the amount of house plaster according to squares and slices, given in percentages with respect to the ideal slice (IR).

3.4 SKLEP

Na Spahi je bilo raziskano 264 m^2 površine, od tega 244 m^2 na zgornjem naselbinskem platoju (sonde I, II, III, VI in VII), 10 m^2 na spodnjem naselbinskem platoju (sonda IV) in 10 m^2 na majhni zaplati ravnine, pribl. 45 m severno od severnega roba naselbine (sonda V).

Kljub relativno veliki raziskani površini – raziskano je bilo več kot 40 % celotne površine zgornjega platoja – pa so vertikalno-stratigrafski podatki s Spahe zelo pomanjkljivi. V največji meri je to posledica relativno tanke prsti in več poselitvenih faz, pri čemer so novi naseljenci za gradnjo hiš izrabljali vedno isti prostor ter z vsako novo poselitvijo delno uničili sledove predhodne poselitve, v kolikor so bili ti še ohranjeni.

Tlorisov hiš ni bilo mogoče rekonstruirati. V dokumentaciji o izkopavanju podatkov o jamah za sohe oz. stojke ni. Tako smo območja, kjer domnevamo, da so stale prazgodovinske hiše, poskušali odkriti s pomočjo uravnoteženja najdb (keramike in hišnega ometa). Zdi se, da so prazgodovinski prebivalci Spahe za gradnjo hiš izkoristili niše med skalami, kjer je prst debelejša. Z večjo ali manjšo zanesljivostjo smo uspeli identificirati kar 12 oz. 13 objektov (*sl. 3.53*).

Iz obdobja savske skupine (prva poselitvena faza) ugotavljamo 3 oz. 4 hiše. Tri so stale na območju ali v bližini sond II, III in VII. Najdbe[56] in rahlo povečana količina hišnega ometa pa morda kažejo na hišo v sondi VI (režnja 5 in 4, kv. 9 in 10), ki je bila v bližini obzidja. Na južnem robu zgornjega platoja (sonda II) je bil namreč v obdobju savske skupine postavljen suhi zid, ki je imel zelo verjetno funkcijo obrambnega zidu. Obrambni zid se je verjetno nadaljeval tudi po zahodnem robu naselja,[57] kjer je arheološko dokazan odsek v sondi VI/1 (*sl. 3.23, 3.53*).

[56] Glej poglavje 4: *t. 4.24:* 3,4,7, v tem zborniku.
[57] Dular 1985, 97.

3.4 CONCLUSION

At Spaha, 264 m^2 of surface were researched, 244 m^2 of these at the upper settlement plateau (trenches I, II, III, VI, and VII), 10 m^2 at the lower settlement plateau (trench IV), and 10 m^2 at a small patch of flatland approx. 45 m north of the northern settlement edge (trench V).

Despite the relatively vast researched area – over 40 % of the entire upper plateau surface was researched – the vertical stratigraphic data are very insufficient. This is mostly the consequence of relatively thin soil and several settlement phases during which for their houses the settlers used the same area over and over again. Every settlement thus partly destroyed the traces of the prior one if there were any left.

Ground plans of the houses were not possible to reconstruct. In the excavation documentation there is no data about the holes for pillars or logs. Thus we tried to establish the locations of where we presume the houses to had been with the help of balancing the finds (pottery and house plaster). It seems that the prehistoric settlers of Spaha used spaces among rocks, where soil is thicker, to build their houses. We managed to identify, with greater or lesser certainty, as many as 12 or 13 structures (*Fig. 3.53*).

From the period of the Sava group (the first settlement phase) we establish 3 or 4 houses. Three stood in the area or near trenches II, III, and VII. Finds[56] and slightly increased amount of house plaster could point to a house in trench VI (slices 5 and 4, squares 9 and 10), which was located near the defensive wall. At the southern edge of the upper plateau (trench II) a wall was built during the Sava group period which most probably functioned as a defensive wall. The defensive wall probably continued along the western edge of the

[56] See chapter 4: *Pl. 4.24:* 3,4,7, in this monograph.

Sl. 3.53: Načrt Spahe z označenimi območji, kjer smo locirali prazgodovinske hiše in ostanke obrambnega zidu v sondah II in VI.
Fig. 3.53: The plan of Spaha with marked locations in trenches II and VI where prehistoric houses and the remains of defensive wall were located.

Šest hiš je iz obdobja lasinjske kulture (druga poselitvena faza). Ugotovili smo jih v sondah II, III, VI in VII. Na nekaterih mestih v sondah II, III in VII prekrivajo ostanke hiš savske skupine, v sondi VI pa to ni zagotovo.

Zanimivi sta dve hiši horizonta keramike z brazdastim vrezom. Ugotavljamo ju v sondah IV in VI, nekaj keramičnih najdb pa izvira tudi z območja sonde I. Zdi se, da se je v tem času poselitev z zgornjega platoja razširila tudi na severno stran spodnjega platoja, ki je, kot že rečeno, predvsem na njegovem južnem delu veliko bolj skalnat.

In za konec še par besed o zadnji prazgodovinski poselitveni fazi, tj. o obdobju kulture žarnih grobišč. Najdbe iz tega časa so zelo skromne.[58] Vse se pojavljajo na območju sonde III (kv. 2, reženj 2). Morda je nekje v bližini sonde III stala hiša iz žarnogrobiščnega obdobja?

[58] Glej poglavje 4: *t. 4.15:* 3–5, v tem zborniku.

settlement[57] where archaeologically proven section lies in trench VI/1 (*Figs. 3.23, 3.53*).

Six houses originate in the period of the Lasinja culture (the second settlement phase). They were discovered in trenches II, III, VI, and VII. In some places in trenches II, III, and VII these cover the remains of the Sava group houses, while in trench VI this is not certain.

Two houses of the horizon of pottery with furrowed incisions are interesting. They were established in trenches IV and VI, some pottery finds originate also from the area of trench I. It seems that the settlement at this time spread from the upper plateau also to the northern side of the lower plateau which was, as stated above, especially at its southern side very rocky.

At the end a few words about the last prehistoric settlement phase, the Urnfield culture. Finds from this period are very scarce.[58] They all appear in the area of trench III (sq. 2, slice 2). Could there have been a house of the Urnfield period somewhere near trench III?

[57] Dular 1985, 97.

[58] See chapter 4: *Pl. 4.15:* 3–5, in this monograph.

4. SPAHA: PREDSTAVITEV IN TIPOLOGIJA ARHEOLOŠKIH NAJDB

4. SPAHA: PRESENTATION AND TYPOLOGY OF ARCHAEOLOGICAL FINDS

Anton VELUŠČEK

Izvleček

V prispevku predstavljamo arheološke najdbe s Spahe. Med njimi prevladuje keramika, ki smo jo tipološko razvrstili po oblikah, tipih in vrstah, ne glede na kronološko ali kulturno pripadnost.

Ključne besede: Spaha, arheološke najdbe, tipologija keramike.

Abstract

This article presents archaeological finds from Spaha. Pottery is prevalent and it was typologically classified according to forms, types, and kinds regardless the chronological or cultural belonging.

Keywords: Spaha, archaeological finds, typology of pottery.

4.1 UVOD

Na arheološkem najdišču Spaha prevladujejo prazgodovinske najdbe.[1] Med artefakti je največ prazgodovinskih keramičnih fragmentov, količinsko jih je več kot 85 kg, večidel ostenj,[2] le nekaj jih je srednje oz. novoveških, med njimi objavljamo tri (*t. 4.1:* 9; *4.33:* 6; *4.37:* 7). Sledijo žrmlje, več kot 200 fragmentov,[3] in kosti.[4] Drugih najdb, kot so npr. manjša kamnita orodja[5] in glinaste uteži, je malo. Vse kovinske najdbe so srednje oz. novoveške (*t. 4.15:* 6; *4.17:* 5,6).

[1] Najdbe s Spahe hrani Pokrajinski muzej Kočevje.

[2] 4195 fragmentov ustij, dna, ročajev, "izpovednih" ostenj, ornamentiranih fragmentov in 84,13 kg ostenj.

[3] Glej poglavje 8, v tem zborniku.

[4] Glej poglavje 9, v tem zborniku.

5 Glej poglavji 6 in 7, v tem zborniku.

4.1 INTRODUCTION

Prehistoric finds prevail at the archaeological site Spaha.[1] Among artefacts the majorities are prehistoric pottery fragments, which are over 85 kg, most of these are walls,[2] only a few are of Middle or Early Modern Age, of which we here publish three (*Pls. 4.1:* 9; *4.33:* 6; *4.37:* 7). Next are querns, of which we have over 200 fragments,[3] and bones.[4] There is few other finds such as, for example, smaller stone tools[5] and clay weights. All metal finds are from the Middle Ages or Modern Period (*Pls. 4.15:* 6; *4.17:* 5,6).

[1] The archaeological finds from Spaha are kept in the Regional museum of Kočevje.

[2] 4195 fragments of lips, bottom, handles, "declaratory" walls, ornamented fragments, and 84.13 kg of walls, e.g atypical shards.

[3] See chapter 8, in this monograph.

[4] See chapter 9, in this monograph.

[5] See chapters 6 and 7, in this monograph.

4.2 KERAMIKA

4.2.1 OBLIKE POSOD

V obravnavo smo vzeli vse inventarizirane prazgodovinske fragmente keramike, medtem ko več kot 84 kg ostenj in drugih netipičnih fragmentov študija ni zajela.

Med obravnavanimi fragmenti prevladuje kvalitetnejša keramika iz precej prečiščene gline. Približno ena tretjina fragmentov odpade na keramiko, ki je bila narejena iz gline s primesjo dokaj grobega peska. Glede na barvo rahlo prevladuje keramika temnih barvnih tonov (črna, temnosiva, temnorjava, rjava in siva), le nekoliko manj je keramike svetlejših barvnih tonov (rdeča, oranžna in rumena).

Keramika je ohranjena v fragmentih s starimi lomi. Takoj po izkopavanju so jo v muzeju v Kočevju poskušali sestavljati, a celih posod niso dobili. Drugi problem predstavljajo pomanjkljivi oz. ne dovolj natančni stratigrafski podatki. Najdišče je bilo kopano po režnjih, le-ti pa se večinoma ne ujemajo z dejanskimi plastmi. To so razlogi, da keramiko obravnavamo kot celoto, ne glede na pričakovano kronološko razliko.

Kljub temu keramiko lahko razdelimo:

1. po obliki: glede na podobno oblikovanost fragmentov;

2. po tipu: glede na tipološko primerljivost rekonstruiranih posod;

3. po vrsti: glede na primerljivo uporabnost.

Prepoznali smo globoke posode (lonce, vrče in amfore), plitve posode (sklede, skodele) in drugo (zajemalke, predilna vretenca in posebne oblike). Posebno kategorijo predstavljajo dna, največkrat loncev, in noge posod na nogi, ki so največkrat deli skled. Posebej predstavljamo tudi ročaje, držaje[6] in ornament.[7]

4.2.1.1 GLOBOKE POSODE

Med globoke posode uvrščamo vse fragmente, za katere na podlagi risb predvidevamo, da je višina posode vsaj dvakratnik njene širine. Zaradi slabe ohranjenosti je večidel teh posod nemogoče podrobneje tipološko razvrstiti, zato podajamo samo osnovne značilnosti, ki so razvidne iz oblike fragmenta ostenja, ustja z ostenjem ali dna z ostenjem.

4.2.1.1.1 Ostenja: oblike Ob1–Ob9

Med keramiko s Spahe je zelo veliko ostenj, ki smo jih razdelili na devet oblikovnih skupin.

[6] Poglavje 4.2.2, v tem prispevku.

[7] Poglavje 4.2.3, v tem prispevku.

4.2 POTTERY

4.2.1 VESSEL TYPES

We considered all inventoried prehistoric pottery fragments and excluded from our study over 84 kg of walls and other atypical fragments.

Pottery of higher quality made of pure clay prevails among the discussed fragments. Approximately one third of all fragments belong to pottery made of clay with the admixture of fairly coarse sand. With respect to colour, pottery of dark colour shades slightly predominates (black, dark grey, dark brown, brown, and grey), there is just little less pottery of lighter colour shades (red, orange, and yellow).

Pottery is preserved in fragments with old fractures. Immediately after the excavation they tried to reconstruct it at the museum in Kočevje but could not get the complete vessels. Another problem is insufficient or not precise enough stratigraphic data. The site was dug in slices which mostly do not match the actual layers. These are the reasons why we discuss the pottery as a whole, regardless the expected chronological difference.

Despite all, this pottery can be divided:

1. according to form: considering the similarity in form of fragments;

2. according to type: considering the typological comparability of reconstructed vessels;

3. according to kind: considering the comparable usability.

We recognised deep vessels (pots, pitchers, and amphorae), shallow vessels (dishes, bowls), and other objects (ladles, spindle whorls, and special forms). Bottoms, mostly of pots, and feet of vessels with feet which are most often parts of dishes, represent a special category. Handles, grips,[6] and ornaments[7] are also presented separately.

4.2.1.1 DEEP VESSELS

All fragments, for which we assume on the basis of the drawings, that the height of the vessels is at least twice the size of its width are classified as deep vessels. Due to the poor preservation most of these vessels are impossible to typologically precisely delimit thus we give only the basic characteristics evident from the form of the fragment of the wall, lip with a wall, or bottom with a wall.

4.2.1.1.1 Walls: forms 1–9 (Ob1–Ob9)

Pottery from Spaha contains many walls which have been classified into nine groups.

[6] Chapter 4.2.2.

[7] Chapter 4.2.3.

4.2.1.1.1.1 *Oblika 1*

Med predstavljenimi fragmenti globokih posod je veliko ostenj s kolenčastim prelomom. Zgornji del je izrazito izbočen, spodnji del pa vbočen (*sl. 4.1:* Ob1/1–5; npr. *t. 4.3:* 1,5; *4.4:* 17; *4.5:* 12; *4.6:* 13; *4.7:* 9; *4.8:* 3,4; *4.10:* 7; *4.18:* 2,9,10; *4.19:* 4,5; *4.24:* 6; *4.30:* 15; *4.32:* 4; *4.37:* 12,13).

Na posodah je rdeč (*sl. 4.1:* Ob1/1,4; npr. *t. 4.3:* 1,5; *4.4:* 17; *4.5:* 12; *4.6:* 13; *4.7:* 9; *4.8:* 3,4; *4.10:* 7; *4.18:* 2,9,10; *4.19:* 4,5; *4.24:* 6; *4.30:* 15; *4.32:* 4; *4.37:* 12,13) ali črn premaz (*sl. 4.1:* Ob1/2). Rame (npr. *sl. 4.1:* Ob1/2,3,5) je večidel ornamentirano z reliefnim ornamentom, pojavlja se tudi plastična aplikacija (*sl. 4.1:* Ob1/2). Okras je tudi na prelomu (*sl. 4.1:* Ob1/4).

Te vrste globoke posode imajo lahko vertikalno postavljen ročaj (oz. ročaja), ki je postavljen na prelomu ostenja (npr. *sl. 4.1:* Ob1/5).

4.2.1.1.1.2 *Oblika 2*

Ostenjem oblike 1 so podobna ostenja oblike 2, z izrazito izbočenim ramenom, ki se nadaljuje v tanek vratni del. Pod kolenčastim prelomom je ostenje vbočeno (*sl. 4.1:* Ob2/1,2; npr. *t. 4.18:* 4; *4.23:* 5; *4.36:* 4,6).

Rame je največkrat ornamentirano z reliefnim okrasom (*sl. 4.1:* Ob2/2).

4.2.1.1.1.3 *Oblika 3*

K obliki 3 uvrščamo ostenja z odebelitvijo na prelomu, ki se nadaljuje z ostrima prehodoma v vbočena vrat in spodnji del (*sl. 4.1:* Ob3/1–5; npr. *t. 4.5:* 1; *4.7:* 8; *4.9:* 8,10; *4.11:* 11,12; *4.18:* 5; *4.19:* 11; *4.22:* 5; *4.29:* 12).

Na fragmentih so sledovi rdečega (*sl. 4.1:* Ob3/4,5) in črnega premaza (*sl. 4.1:* Ob3/2). Z reliefnim ornamentom je ornamentirana odebelitev na prelomu (npr. *sl. 4.1:* Ob3/1), lahko pa tudi spodnji del posode in vrat (*sl. 4.1:* Ob3/3).

Na takšnih ostenjih se pojavlja vertikalni ročaj in sicer od najširšega oboda do ustja (*sl. 4.1:* Ob3/4) ali samo na ramenu oz. povezuje rame z vratom (*sl. 4.1:* Ob3/5).

4.2.1.1.1.4 *Oblika 4*

Nekoliko drugačna so ostenja oblike 4. Zanje je značilen kolenčast prehod iz vbočenega vratu v spodnji del posode (*sl. 4.2:* Ob4/1–4; npr. *t. 4.1:* 6; *4.2:* 2,3; *4.4:* 2,24; *4.14:* 16; *4.36:* 13).

Posode so včasih premazane z rdečim premazom (*sl. 4.2:* Ob4/2,3). Reliefni ornament se pojavlja na ramenu in se nadaljuje v vrat posode (*sl. 4.2:* Ob4/1), lahko je pa tudi pod ročajem (*sl. 4.2:* Ob4/3).

4.2.1.1.1.1 *Form 1 (Ob1)*

Among the discussed fragments of deep vessels there are many walls with a sharp break. The upper part is distinctly convex and the lower concave (*Fig. 4.1:* Ob1/1–5; e.g. *Pls. 4.3:* 1,5; *4.4:* 17; *4.5:* 12; *4.6:* 13; *4.7:* 9; *4.8:* 3,4; *4.10:* 7; *4.18:* 2,9,10; *4.19:* 4,5; *4.24:* 6; *4.30:* 15; *4.32:* 4; *4.37:* 12,13).

Vessels have red (*Fig. 4.1:* Ob1/1,4; e.g. *Pls. 4.3:* 1,5; *4.4:* 17; *4.5:* 12; *4.6:* 13; *4.7:* 9; *4.8:* 3,4; *4.10:* 7; *4.18:* 2,9,10; *4.19:* 4,5; *4.24:* 6; *4.30:* 15; *4.32:* 4; *4.37:* 12,13) or black slip (*Fig. 4.1:* Ob1/2). The shoulder (e.g. *Fig. 4.1:* Ob1/2,3,5) is mostly ornamented with a relief ornament, appliqués also appear (*Fig. 4.1:* Ob1/2). Decoration can be found also on the break (*Fig. 4.1:* Ob1/4).

This form of deep vessels can have a vertically set handle (or handles) which is positioned at the break of the wall (e.g. *Fig. 4.1:* Ob1/5).

4.2.1.1.1.2 *Form 2 (Ob2)*

Walls of form 2 are similar to walls of form 1 and have an expressly convex shoulder which continues into a slander neck. Beneath the sharp break the wall is concave (*Fig. 4.1:* Ob2/1,2; e.g. *Pls. 4.18:* 4; *4.23:* 5; *4.36:* 4,6).

The shoulder is most often ornamented by a relief decoration (*Fig. 4.1:* Ob2/2).

4.2.1.1.1.3 *Form 3 (Ob3)*

Form 3 comprises walls with thickening at the break which continues with sharp transitions into the concave neck and lower part (*Fig. 4.1:* Ob3/1–5; e.g. *Pls. 4.5:* 1; *4.7:* 8; *4.9:* 8,10; *4.11:* 11,12; *4.18:* 5; *4.19:* 11; *4.22:* 5; *4.29:* 12).

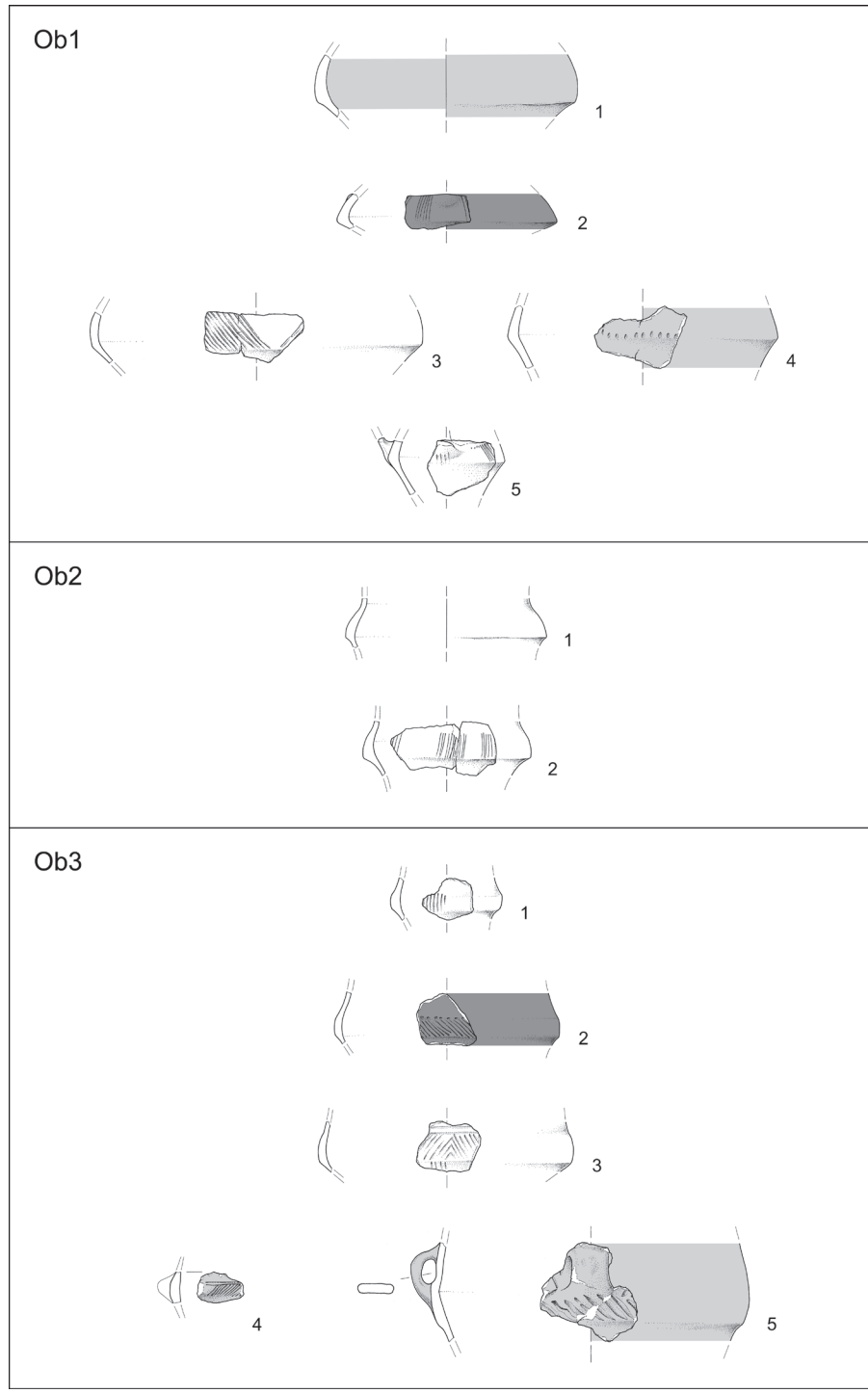
Fragments have traces of red (*Fig. 4.1:* Ob3/4,5) and black slip (*Fig. 4.1:* Ob3/2). The thickening at the break is ornamented with a relief ornament (e.g. *Fig. 4.1:* Ob3/1) and sometimes also the lower part of the vessels as well as the neck (*Fig. 4.1:* Ob3/3).

The vertical handle appears on these walls and it spreads from the widest rim to the lip (*Fig. 4.1:* Ob3/4) or just at the shoulder or connects the shoulder with the neck (*Fig. 4.1:* Ob3/5).

4.2.1.1.1.4 *Form 4 (Ob4)*

Form 4 walls are slightly different. Their characteristic is the sharp transition from the concave neck into the lower part of the vessel (*Fig. 4.2:* Ob4/1–4; e.g. *Pls. 4.1:* 6; *4.2:* 2,3; *4.4:* 2,24; *4.14:* 16; *4.36:* 13).

Vessels are sometimes coated with the red slip (*Fig. 4.2:* Ob4/2,3). The relief ornament appears at the

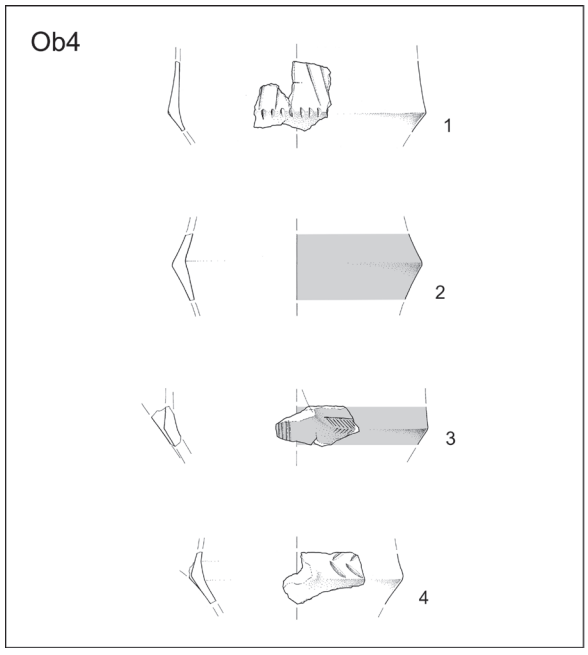


Sl. 4.1: Spaha. Značilne oblike globokih posod (Ob1–Ob3). M = 1 : 5.
Fig. 4.1: Spaha. Typical forms of deep vessels (Ob1–Ob3). Scale = 1 : 5.

Na najširšem obodu je najti vertikalni ročaj oz. ročaja (*sl. 4.2:* Ob4/3,4).

shoulder and continues towards the neck of the vessel (*Fig. 4.2:* Ob4/1) and can appear also under the handle (*Fig. 4.2:* Ob4/3).

The vertical handle or handles are at the widest rim (*Fig. 4.2:* Ob4/3,4).



Sl. 4.2: Spaha. Globoke posode oblike Ob4. M = 1 : 5.
Fig. 4.2: Spaha. Deep vessels of form Ob4. Scale = 1 : 5.

4.2.1.1.1.5 *Oblika 5*

Podobna je tudi oblika 5. Odebelitev na najširšem obodu tekoče prehaja v vbočena vrat in spodnji del (*sl. 4.3:* Ob5/1–4; npr. *t. 4.9:* 12; *4.22:* 3; *4.30:* 14; *4.31:* 12,14).

Posode so včasih premazane z rdečim premazom (*sl. 4.3:* Ob5/2). Z reliefnim ornamentom je lahko okrašen večidel posode (*sl. 4.3:* Ob5/3), največkrat pa samo rame (*sl. 4.3:* Ob5/1).

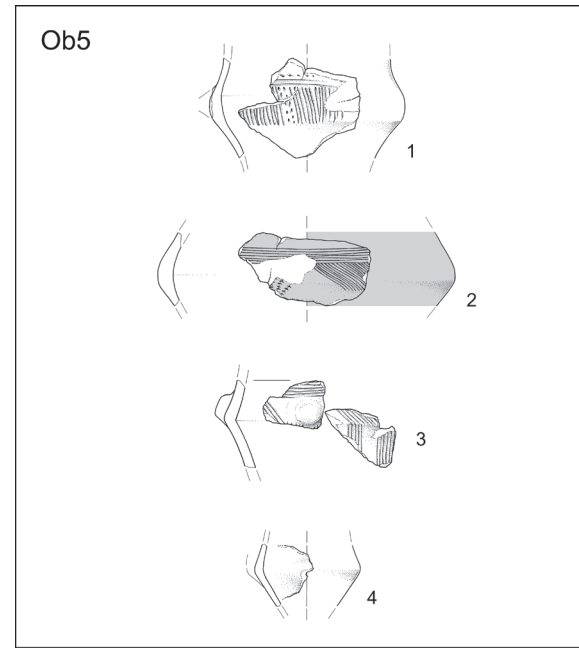
Tudi na teh ostenjih se pojavlja vertikalni ročaj (oz. ročaja), ki je postavljen na najširšem obodu in verjetno sega do ustja (*sl. 4.3:* Ob5/1) ali pa se konča na vratu (*sl. 4.3:* Ob5/4). Tik nad prelomom je lahko tudi plastična nalepka (*sl. 4.3:* Ob5/3).

4.2.1.1.1.6 *Oblika 6*

Za ostenja oblike 6 je značilen tekoč prehod iz izbočenega zgornjega v izbočeni spodnji del posode (*sl. 4.4:* Ob6/1,2; npr. *t. 4.20:* 9; *4.24:* 5; *4.28:* 13; *4.31:* 2).

Posode so včasih premazane z rdečim premazom (*sl. 4.4:* Ob6/2). Reliefni okras je na trebuhu oz. najširšem obodu (*sl. 4.4:* Ob6/1,2).

Na najširšem obodu je vertikalni ročaj (oz. ročaja), ki najbrž sega do ustja (*sl. 4.4:* Ob6/1).



Sl. 4.3: Spaha. Globoke posode oblike Ob5. M = 1 : 5.
Fig. 4.3: Spaha. Deep vessels of form Ob5. Scale = 1 : 5.

4.2.1.1.1.5 *Form 5 (Ob5)*

Form 5 is similar. The thickening at the wider rim fluently passes into the concave neck and the lower part (*Fig. 4.3:* Ob5/1–4; e.g. *Pls. 4.9:* 12; *4.22:* 3; *4.30:* 14; *4.31:* 12,14).

The vessels are sometimes coated with the red slip (*Fig. 4.3:* Ob5/2). A relief ornament can decorate the greater part of the vessel (*Fig. 4.3:* Ob5/3) but most frequently just the shoulder (*Fig. 4.3:* Ob5/1).

These walls also have the vertical handle (or handles), which is set at the widest rim and probably reaches all to the lip (*Fig. 4.3:* Ob5/1) or ends at the neck (*Fig. 4.3:* Ob5/4). An appliqué can appear right above the break (*Fig. 4.3:* Ob5/3).

4.2.1.1.1.6 *Form 6 (Ob6)*

Walls of form 6 typically have a smooth transition from the convex upper into the convex lower part of the vessel (*Fig. 4.4:* Ob6/1,2; e.g. *Pls. 4.20:* 9; *4.24:* 5; *4.28:* 13; *4.31:* 2).

The vessels are sometimes coated with the red slip (*Fig. 4.4:* Ob6/2). A relief decoration appears on the belly or the widest rim (*Fig. 4.4:* Ob6/1,2).

At the widest rim is a vertical handle (or handles) which probably reaches to the lip (*Fig. 4.4:* Ob6/1).

4.2.1.1.1.7 *Oblika 7*

Obliki 6 so zelo podobna ostenja oblike 7, le da je spodnji del posode pod prelomom plitvo postavljen, zaradi tega je bilo tudi težišče posode nižje in posoda plitvejša (*sl. 4.4:* Ob7/1,2; npr. *t. 4.29:* 2; *4.31:* 13; *4.35:* 6).

Na teh posodah se pojavlja črn premaz (*sl. 4.4:* Ob7/1,2). Z reliefnim ornamentom je okrašen najširši obod (*sl. 4.4:* Ob7/1), pa tudi vrat oz. drugi deli posode (*sl. 4.4:* Ob7/2).

4.2.1.1.1.8 *Oblika 8*

Naslednja kategorija ostenj so ostenja oblike 8. Gre za ostenja z vbočenim zgornjim in izbočenim spodnjim delom (*sl. 4.4:* Ob8/1,2; npr. *t. 4.12:* 1,2). Prelom je kolenčast in izrazit. Na najširšem obodu je postavljen vertikalni ročaj, ki je najbrž segal do ustja (*sl. 4.4:* Ob8/1) ali pa se končuje na ramenu oz. vratu (*sl. 4.4:* Ob8/2). Glede na obliko ostenja sklepamo, da so bile posode te vrste verjetno plitvejše, oz. je bil najširši obod postavljen nižje kot pri oblikah 1–6.

4.2.1.1.1.9 *Oblika 9*

Posebno obliko predstavlja globoka posoda na visoki nogi (*sl. 4.4:* Ob9/1; *t. 4.30:* 16).

4.2.1.1.2 Ustja z ostenji: oblike Ob10–Ob18

V tej skupini fragmentov je ohranjeno tudi ustje, zato jih predstavljamo kot samostojno skupino. Tudi v tem primeru smo se osredotočili samo na opis oblik. Ustja z ostenji so prav tako razvrščena v devet oblikovnih skupin.

4.2.1.1.2.1 *Oblika 10*

Fragmenti z navznoter zavihanim ustjem, kolenčastim prelomom in vbočenim spodnjim delom (*sl. 4.4:* Ob10/1; *t. 4.2:* 9; *4.4:* 21).

Z reliefnim okrasom sta ornamentirana visoko postavljeno rame in vrat (*sl. 4.4:* 10/1).

4.2.1.1.2.2 *Oblika 11*

Fragmenti z ravnim (navpičnim) ustjem, kolenčastim prelomom in izbočenim (*sl. 4.4:* Ob11/1; *t. 4.11:* 2) ali vbočenim (*sl. 4.4:* Ob11/2; *t. 4.18:* 8) spodnjim delom.

4.2.1.1.1.7 *Form 7 (Ob7)*

Form 7 walls are very similar to form 6 but here the lower part of the vessel is shallowly set beneath the break, due to which the barycentre of the vessel was lower and the vessel shallower (*Fig. 4.4:* Ob7/1,2; e.g. *Pls. 4.29:* 2; *4.31:* 13; *4.35:* 6).

These vessels have black slip (*Fig. 4.4:* Ob7/1,2). A relief ornament is on the widest rim (*Fig. 4.4:* Ob7/1) and also the neck or other parts of the vessel (*Fig. 4.4:* Ob7/2).

4.2.1.1.1.8 *Form 8 (Ob8)*

The next category of walls is form 8 walls. These are walls with concave upper and convex lower part (*Fig. 4.4:* Ob8/1,2; e.g. *Pl. 4.12:* 1,2). The break is sharp and distinct. At the widest rim is a vertical handle which probably reached to the lip (*Fig. 4.4:* Ob8/1) or ended at the shoulder or neck (*Fig. 4.4:* Ob8/2). According to the shape of the walls we think that vessels of this form were probably shallower or that the widest rim was set lower than with forms 1–6.

4.2.1.1.1.9 *Form 9 (Ob9)*

A special form is represented by the deep vessel on the high foot (*Fig. 4.4:* Ob9/1; *Pl. 4.30:* 16).

4.2.1.1.2 Lips with walls: forms 10–18 (Ob10–Ob18)

In this group of fragments lips are also preserved thus these fragments are represented as an independent group. We again focused solely on the description of the shape. Lips with walls are also divided into nine groups.

4.2.1.1.2.1 *Form 10 (Ob 10)*

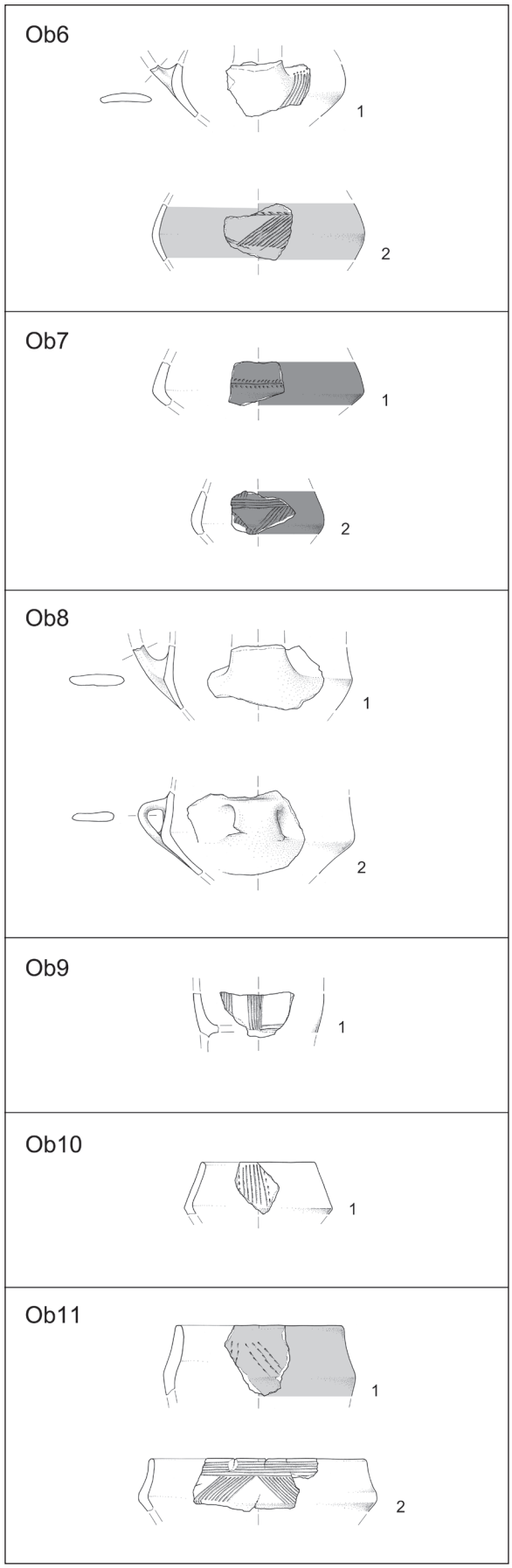
Fragments with inverted lips, sharp break, and concave lower part (*Fig. 4.4:* Ob10/1; *Pls. 4.2:* 9; *4.4:* 21).

The highly set shoulder and neck are ornamented with a relief decoration (*Fig. 4.4:* 10/1).

4.2.1.1.2.2 *Form 11 (Ob 11)*

Fragments with a flat (vertical) lip, sharp break, and convex (*Fig. 4.4:* Ob11/1; *Pl. 4.11:* 2) or concave (*Fig. 4.4:* Ob11/2; *Pl. 4.18:* 8) lower part.

The vessels have red slip (*Fig. 4.4:* Ob11/1). The highly set shoulder and neck are ornamented with a relief decoration (*Fig. 4.4:* 11/1,2).



Sl. 4.4: Spaha. Značilne oblike globokih posod (Ob6–Ob11). M = 1 : 5.
Fig. 4.4: Spaha. Typical shapes of deep vessels (Ob6–Ob11). Scale = 1 : 5.

4.2.1.1.2.3 *Form 12 (Ob 12)*

Fragments with slightly everted lip, distinctly sharp, somewhat thickened break, and concave lower part (*Fig. 4.5:* Ob12; *Pls. 4.5:* 11; *4.18:* 6; *4.29:* 11; *4.31:* 14).

A relief decoration appears at the break, shoulder, and neck (*Fig. 4.5:* Ob12/1–3).

From the lip an outstripped handle is modelled which ends at the break (*Fig. 4.5:* Ob12/3).

4.2.1.1.2.4 *Form 13 (Ob 13)*

A separate group consists of everted lips on the highly placed funnel neck of the thick walls (*Fig. 4.6:* Ob13/1–3; e.g. *Pl. 4.33:* 1,4,5).

Fragments have red slip (*Fig. 4.6:* Ob13/3). A relief decoration appears on the lip and neck (*Fig. 4.6:* Ob13/1–3). Right beneath the lip is an appliqué or a grip (*Fig. 4.6:* Ob13/1,3).

4.2.1.1.2.5 *Form 14 (Ob 14)*

Another group consists of slightly everted lips on highly set cylindrical neck of thin walls (*Fig. 4.6:* Ob14/1,2; e.g. *Pls. 4.10:* 13,14; *4.14:* 15).

Fragments are coated red (*Fig. 4.6:* Ob14/2). A relief decoration appears on the lip and neck (*Fig. 4.6:* Ob14/1,2).

4.2.1.1.2.6 *Form 15 (Ob 15)*

Vessels with everted lip and conical neck which can be wide (*Fig. 4.6:* Ob15/1; e.g. *Pls. 4.3:* 11; *4.23:* 6) or narrow (*Fig. 4.6:* Ob15/2,3; e.g. *Pl. 4.9:* 4,6).

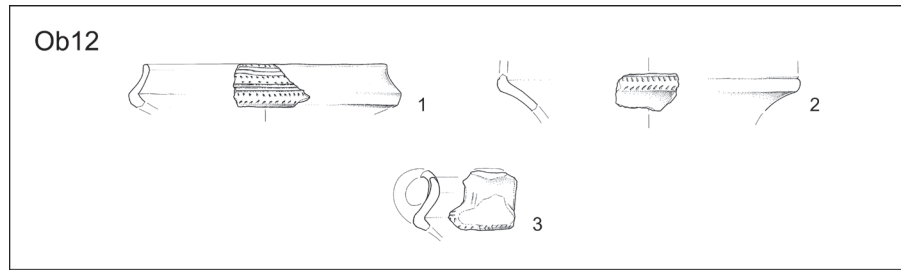
Fragments have red (*Fig. 4.6:* Ob15/2) and black slip (*Fig. 4.6:* Ob15/3). The neck is decorated by a relief ornament (*Fig. 4.6:* Ob15/3).

Vessels with narrower necks often have ears (*Fig. 4.15:* VP-h1/1,2)[8] and wide surpassing vertical handles can also be found (*Fig. 4.6:* Ob15/3).

4.2.1.1.2.7 *Form 16 (Ob 16)*

Similar are vessels with flat or slightly everted lip and conical neck which can be wide (*Fig. 4.6:* Ob16/1;

[8] See also chapter 4.2.1.3.1.1.



Sl. 4.5: Spaha. Globoke posode oblike Ob12. M = 1 : 5.
Fig. 4.5: Spaha. Deep vessels of form Ob12. Scale = 1 : 5.

Na posodah je rdeč premaz (*sl. 4.4:* Ob11/1). Z reliefnim okrasom sta ornamentirana visoko postavljeno rame in vrat (*sl. 4.4:* 11/1,2).

4.2.1.1.2.3 *Oblika 12*

Fragmenti z rahlo izvihanim ustjem, izrazito kolenčastim, rahlo odebeljenim prelomom in vbočenim spodnjim delom (*sl. 4.5:* Ob12; *t. 4.5:* 11; *4.18:* 6; *4.29:* 11; *4.31:* 14).

Reliefni okras se pojavlja na prelomu, ramenu in vratu (*sl. 4.5:* Ob12/1–3).

Iz ustja je modeliran presegajoči ročaj, ki se zaključi na prelomu (*sl. 4.5:* Ob12/3).

4.2.1.1.2.4 *Oblika 13*

Posebno skupino tvorijo izvihana ustja na visoko postavljenem lijakastem vratu debelih sten (*sl. 4.6:* Ob13/1–3; npr. *t. 4.33:* 1,4,5).

Na fragmentih je rdeč premaz (*sl. 4.6:* Ob13/3). Reliefni okras se pojavlja na ustju in vratu (*sl. 4.6:* Ob13/1–3). Takoj pod ustjem je plastičen okras oz. držaj (*sl. 4.6:* Ob13/1,3).

4.2.1.1.2.5 *Oblika 14*

Posebno skupino tvorijo rahlo izvihana ustja na visoko postavljenem cilindričnem vratu tankih sten (*sl. 4.6:* Ob14/1,2; npr. *t. 4.10:* 13,14; *4.14:* 15).

Na fragmentih je rdeč premaz (*sl. 4.6:* Ob14/2). Reliefni okras se pojavlja na ustju in vratu (*sl. 4.6:* Ob14/1,2).

4.2.1.1.2.6 *Oblika 15*

Posode z izvihanim ustjem in stožčastim vratom, ki je lahko širok (*sl. 4.6:* Ob15/1; npr. *t. 4.3:* 11; *4.23:* 6) ali ozek (*sl. 4.6:* Ob15/2,3; npr. *t. 4.9:* 4,6).

e.g. *Pls. 4.20:* 6; *4.34:* 2) or narrow (*Fig. 4.6:* Ob16/2–4; e.g. *Pls. 4.3:* 14; *4.9:* 5; *4.10:* 12; *4.26:* 4; *4.30:* 7,8).

Fragments have red slip (*Fig. 4.6:* Ob16/2). The lip and neck are decorated with a relief ornament (*Fig. 4.6:* Ob16/3,4).

Wide surpassing vertical handles can also be found (*Fig. 4.6:* Ob16/4).

4.2.1.1.2.8 *Form 17 (Ob 17)*

Vessels with flat or slightly everted lip and ring-like neck (*Fig. 4.7:* Ob17/1,3,4; e.g. *Pls. 4.7:* 7; *4.13:* 4; *4.14:* 14; *4.18:* 1; *4.20:* 7,8; *4.36:* 3). The lip can also be thickened (*Fig. 4.7:* Ob17/2; *Pl. 4.36:* 3).

The lip and neck are decorated with a relief ornament (*Fig. 4.7:* Ob17/2). An appliqué is situated right beneath the lip (*Fig. 4.7:* Ob17/3) and can be found also on the shoulder (*Fig. 4.7:* Ob17/4).

4.2.1.1.2.9 *Form 18 (Ob 18)*

A pot-bellied vessel with distinct and everted lip (*Fig. 4.7:* Ob18/1; *Pl. 4.20:* 12).

4.2.1.1.3 Bottoms with walls: forms 19–21 (Ob19–Ob21)

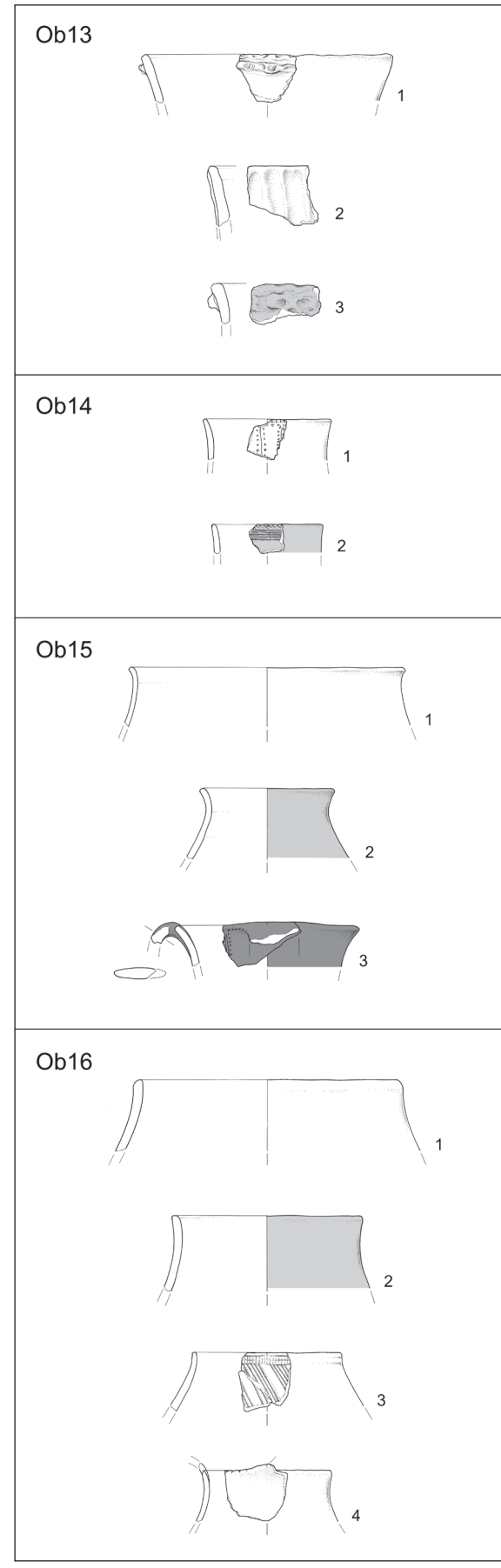
Numerous bottoms are also preserved. Among those that we publish the majority belongs to the group of deep vessels. They have been classified into three groups.

4.2.1.1.3.1 *Form 19 (Ob 19)*

Slightly concave bottoms prevail (*Fig. 4.8:* Ob19/1; *Pls. 4.2:* 13; *4.4:* 22,23; *4.6:* 15; *4.10:* 10; *4.35:* 7; *4.36:* 7).

A black slip can be found (*Fig. 4.8:* Ob19/1).

Sl. 4.6: Spaha. Značilne oblike globokih posod (Ob13–Ob16). M = 1 : 5.
Fig. 4.6: Spaha. Typical shapes of deep vessels (Ob13–Ob16). Scale = 1 : 5.



Na fragmentih je rdeč (*sl. 4.6:* Ob15/2) in črn premaz (*sl. 4.6:* Ob15/3). Vrat je okrašen z reliefnim ornamentom (*sl. 4.6:* Ob15/3).

Na posodah z ožjimi vratovi so pogosta ušesca (*sl. 4.15:* VP-h1/1,2),[8] najti je tudi široke presegajoče vertikalne ročaje (*sl. 4.6:* Ob15/3).

4.2.1.1.2.7 *Oblika 16*

Podobne so jim posode z ravnim ali rahlo izvihanim ustjem in stožčastim vratom, ki je lahko širok (*sl. 4.6:* Ob16/1; npr. *t. 4.20:* 6; *4.34:* 2) ali ozek (*sl. 4.6:* Ob16/2–4; npr. *t. 4.3:* 14; *4.9:* 5; *4.10:* 12; *4.26:* 4; *4.30:* 7,8).

Na fragmentih je rdeč premaz (*sl. 4.6:* Ob16/2). Ustje in vrat sta okrašena z reliefnim ornamentom (*sl. 4.6:* Ob16/3,4).

Prisotni so tudi široki presegajoči vertikalni ročaji (*sl. 4.6:* Ob16/4).

4.2.1.1.2.8 *Oblika 17*

Posode z ravnim ali rahlo izvihanim ustjem in prstanastim vratom (*sl. 4.7:* Ob17/1,3,4; npr. *t. 4.7:* 7; *4.13:* 4; *4.14:* 14; *4.18:* 1; *4.20:* 7,8; *4.36:* 3). Ustje je lahko tudi odebeljeno (*sl. 4.7:* Ob17/2; *t. 4.36:* 3).

Ustje in vrat sta okrašena z reliefnim ornamentom (*sl. 4.7:* Ob17/2). Tik pod ustjem je plastičen ornament (*sl. 4.7:* Ob17/3), ki ga najdemo tudi na ramenu (*sl. 4.7:* Ob17/4).

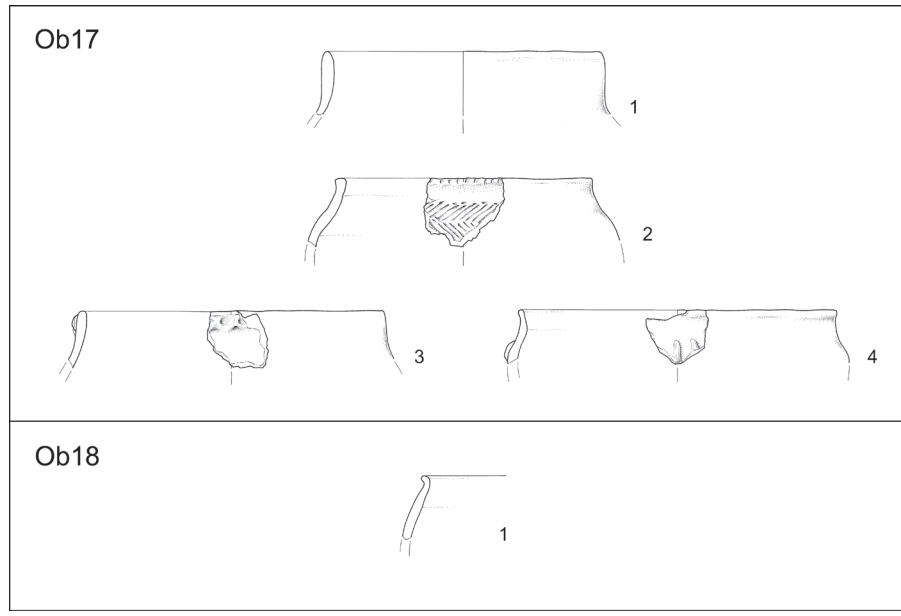
4.2.1.1.2.9 *Oblika 18*

Trebušasta posoda s poudarjenim in izvihanim ustjem (*sl. 4.7:* Ob18/1; *t. 4.20:* 12).

4.2.1.1.3 Dna z ostenji: oblike Ob19–Ob21

Ohranila so se tudi številna dna. Med tistimi, ki jih objavljamo, večidel spada v skupino globokih posod. Razvrstili smo jih v tri oblikovne skupine.

[8] Glej še poglavje 4.2.1.3.1.1, v tem prispevku.



Sl. 4.7: Spaha. Značilne oblike globokih posod (Ob17 in Ob18). M = 1 : 5.
Fig. 4.7: Spaha. Typical shapes of deep vessels (Ob17 and Ob18). Scale = 1 : 5.

4.2.1.1.3.1 *Oblika 19*

Prevladujejo dna, ki so rahlo vbočena (*sl. 4.8:* Ob19/1; *t. 4.2:* 13; *4.4:* 22,23; *4.6:* 15; *4.10:* 10; *4.35:* 7; *4.36:* 7).

Najti je črn premaz (*sl. 4.8:* Ob19/1).

4.2.1.1.3.2 *Oblika 20*

Včasih je dno izrazito vbočeno (*sl. 4.8:* Ob20/1,2; *t. 4.2:* 12; *4.16:* 5; *4.29:* 8; *4.36:* 8).

Najti je rdeč premaz (*sl. 4.8:* Ob20/1,2) in reliefni ornament (*sl. 4.8:* Ob20/2).

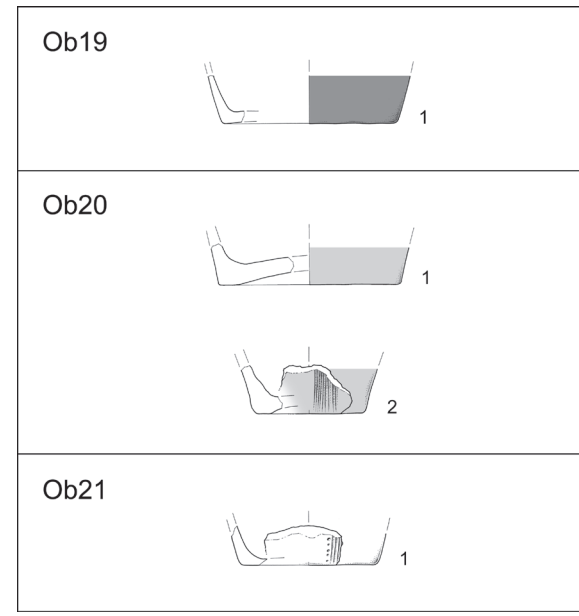
4.2.1.1.3.3 *Oblika 21*

Dno je lahko tudi ravno (*sl. 4.8:* Ob21/1; *t. 4.23:* 1; *4.35:* 8).

Na ostenju je reliefni ornament (*sl. 4.8:* Ob21/1).

4.2.1.2 PLITVE POSODE

Med plitve posode uvrščamo vse fragmente, za katere na podlagi risb predvidevamo, da je širina posode vsaj dvakratnik njene višine. V primerjavi z globokimi posodami je ohranjenost plitvih posod boljša, tako da je v večini primerov možna rekonstrukcija. Zaradi tega plitve posode obravnavamo drugače kot globoke, razvrščamo jih po tipih, ki se, vsaj v nekaterih primerih,



Sl. 4.8: Spaha. Dna (Ob19–Ob21). M = 1 : 5.
Fig. 4.8: Spaha. Bottoms (Ob19–Ob21). Scale = 1 : 5.

4.2.1.1.3.2 *Form 20 (Ob 20)*

Sometimes the bottom is distinctly concave (*Fig. 4.8:* Ob20/1,2; *Pls. 4.2:* 12; *4.16:* 5; *4.29:* 8; *4.36:* 8).

A red slip (*Fig. 4.8:* Ob20/1,2) and relief ornament can be found (*Fig. 4.8:* Ob20/2).

ujemajo s tipologijo plitvega posodja s kolišča Resnikov prekop.[9]

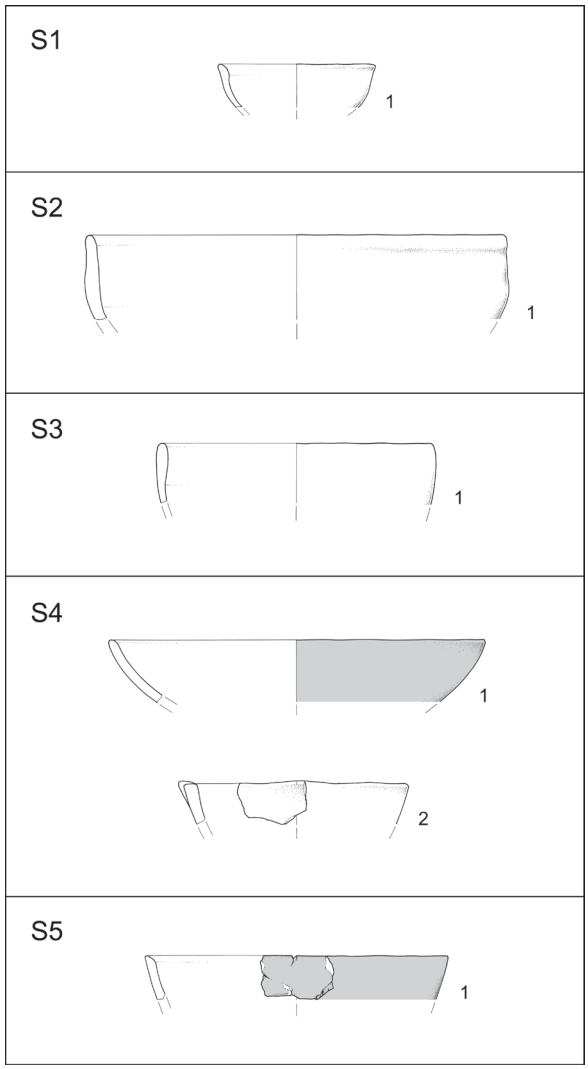
4.2.1.2.1 Sklede: tipi S1–S9

Sklede so značilne odprte, običajno plitvejše posode brez ročajev in različnih dimenzij – od majhnih do velikih.

4.2.1.2.1.1 *Tip S1*

Rahlo bikonična in polkroglasta skleda z blago izvihanim ustjem (*sl. 4.9:* S1/1; *t. 4.1:* 1).

[9] Glej Velušček 2006b, 27.



Sl. 4.9: Spaha. Sklede po tipih (S1–S5). M = 1 : 5.
Fig. 4.9: Spaha. Dishes according to type (S1–S5). Scale = 1 : 5.

4.2.1.1.3.3 *Form 21 (Ob 21)*

The bottom can also be flat (*Fig. 4.8:* Ob21/1; *Pls. 4.23:* 1; *4.35:* 8).

The walls have a relief ornament (*Fig. 4.8:* Ob21/1).

4.2.1.2 SHALLOW VESSELS

All fragments for which we assume on the basis of the drawings that their width is at least twice the size of its height are classified under shallow vessels. In comparison to deep vessels shallow vessels are better preserved thus the reconstruction was possible in most cases. Hence shallow vessels are discussed differently from the deep ones and are classified according to types which, at least in some cases, match the typology of shallow vessels from the pile-dwelling Resnikov prekop.[9]

4.2.1.2.1 Dishes: types S1–S9

Dishes are typical open, usually shallower vessels without handles and of various dimensions – from small to big.

4.2.1.2.1.1 *Type S1*

A slightly bi-conical and semicircular dish with gently everted lip (*Fig. 4.9:* S1/1; *Pl. 4.1:* 1).

4.2.1.2.1.2 *Type S2*

A slightly bi-conical and semicircular deep dish with gently everted lip and barely indicated neck (*Fig. 4.9:* S2/1; *Pl. 4.5:* 8).

4.2.1.2.1.3 *Type S3*

A conical, slightly semicircular deep dish with a thickened lip (*Fig. 4.9:* S3/1; *Pl. 4.30:* 4).

4.2.1.2.1.4 *Type S4*

A conical semicircular shallow dish with a plain (*Fig. 4.9:* S4/1; e.g. *Pls. 4.10:* 1; *4.13:* 2; *4.23:* 7; *4.30:* 2; *4.31:* 4) or deep dish with a distinct lip (*Fig. 4.9:* S4/2; *Pl. 4.31:* 9).

[9] See Velušček 2006b, 27.

4.2.1.2.1.2 *Tip S2*

Rahlo bikonična in polkroglasta globoka skleda z blago izvihanim ustjem in komaj nakazanim vratom (*sl. 4.9:* S2/1; *t. 4.5:* 8).

4.2.1.2.1.3 *Tip S3*

Konična rahlo polkroglasta globoka skleda z odebeljenim ustjem (*sl. 4.9:* S3/1; *t. 4.30:* 4).

4.2.1.2.1.4 *Tip S4*

Konična polkroglasta plitva skleda z nepoudarjenim (*sl. 4.9:* S4/1; npr. *t. 4.10:* 1; *4.13:* 2; *4.23:* 7; *4.30:* 2; *4.31:* 4) ali globlja skleda s poudarjenim ustjem (*sl. 4.9:* S4/2; *t. 4.31:* 9).

Na takšnih skledah je pogost rdeč premaz (*sl. 4.9:* S4/1). Na ustju globlje sklede je jezičasta odebelitev (*sl. 4.9:* S4/2).

4.2.1.2.1.5 *Tip S5*

Konična globoka skleda ravnih sten (*sl. 4.9:* S5/1; *t. 4.5:* 4).

Edina posoda tega tipa je premazana z rdečim premazom.

4.2.1.2.1.6 *Tip S6*

Zelo pogoste so sklede s poudarjenim, kolenčastim prelomom ostenja in rahlo izvihano postavljenim, a ravnim najširšim obodom pod ustjem. Kolenčast prelom ostenja je lahko bolj tekoč (npr. *sl. 4.10:* S6/1; npr. *t. 4.3:* 10; *4.6:* 7; *4.9:* 2; *4.11:* 1; *4.16:* 9; *4.27:* 7; *4.28:* 1) ali oster (npr. *sl. 4.10:* S6/2; npr. *t. 4.3:* 7,9; *4.4:* 1; *4.8:* 1; *4.10:* 5; *4.13:* 10; *4.36:* 1; *4.37:* 1). Ustje je lahko tudi rahlo odebeljeno (*sl. 4.10:* S6/3; npr. *t. 4.9:* 1; *4.36:* 1).

Sklede tipa S6 so lahko premazane z rdečim (*sl. 4.10:* S6/4) ali črnim premazom (*sl. 4.10:* S6/2). Reliefni ornament je na ustju (*sl. 4.10:* S6/3,5,7), na najširšem obodu (*sl. 4.10:* S6/6) in na kolenčastem prelomu (*sl. 4.10:* S6/3,5,6). Prisotni so jezičasti držaji (*sl. 4.10:* S6/2,7) in druge plastične aplikacije (*sl. 4.10:* S6/4).

4.2.1.2.1.7 *Tip S7*

Njim zelo podobne so sklede z navpično postavljenim in ravnim najširšim obodom. Kolenčast prelom ostenja je lahko bolj tekoč s širokim (npr. *sl. 4.11:* S7/1; npr. *t. 4.1:* 2; *4.10:* 2,4; *4.19:* 2; *4.20:* 2) oz. zoženim ustjem

These dishes often have a red slip (*Fig. 4.9:* S4/1). On the lip of the deeper dish is a tongue-shaped thickening (*Fig. 4.9:* S4/2).

4.2.1.2.1.5 *Type S5*

A conical deep vessel with flat walls (*Fig. 4.9:* S5/1; *Pl. 4.5:* 4).

The only vessel of this type has a red slip.

4.2.1.2.1.6 *Type S6*

Very frequent are dishes with distinct, sharp break of the wall and slightly everted but flat widest rim beneath the lip. The sharp break of the wall can be smoother (e.g. *Fig. 4.10:* S6/1; e.g. *Pls. 4.3:* 10; *4.6:* 7; *4.9:* 2; *4.11:* 1; *4.16:* 9; *4.27:* 7; *4.28:* 1) or sharper (e.g. *Fig. 4.10:* S6/2; e.g. *Pls. 4.3:* 7,9; *4.4:* 1; *4.8:* 1; *4.10:* 5; *4.13:* 10; *4.36:* 1; *4.37:* 1). The lip can also be slightly thickened (*Fig. 4.10:* S6/3; e.g. *Pls. 4.9:* 1; *4.36:* 1).

Dishes of type S6 can be coated with a red (*Fig. 4.10:* S6/4) or black slip (*Fig. 4.10:* S6/2). The relief ornament is on the lip (*Fig. 4.10:* S6/3,5,7), the widest rim (*Fig. 4.10:* S6/6), and on the sharp break (*Fig. 4.10:* S6/3,5,6). Tongue-shaped grips (*Fig. 4.10:* S6/2,7) and other appliqués are present (*Fig. 4.10:* S6/4).

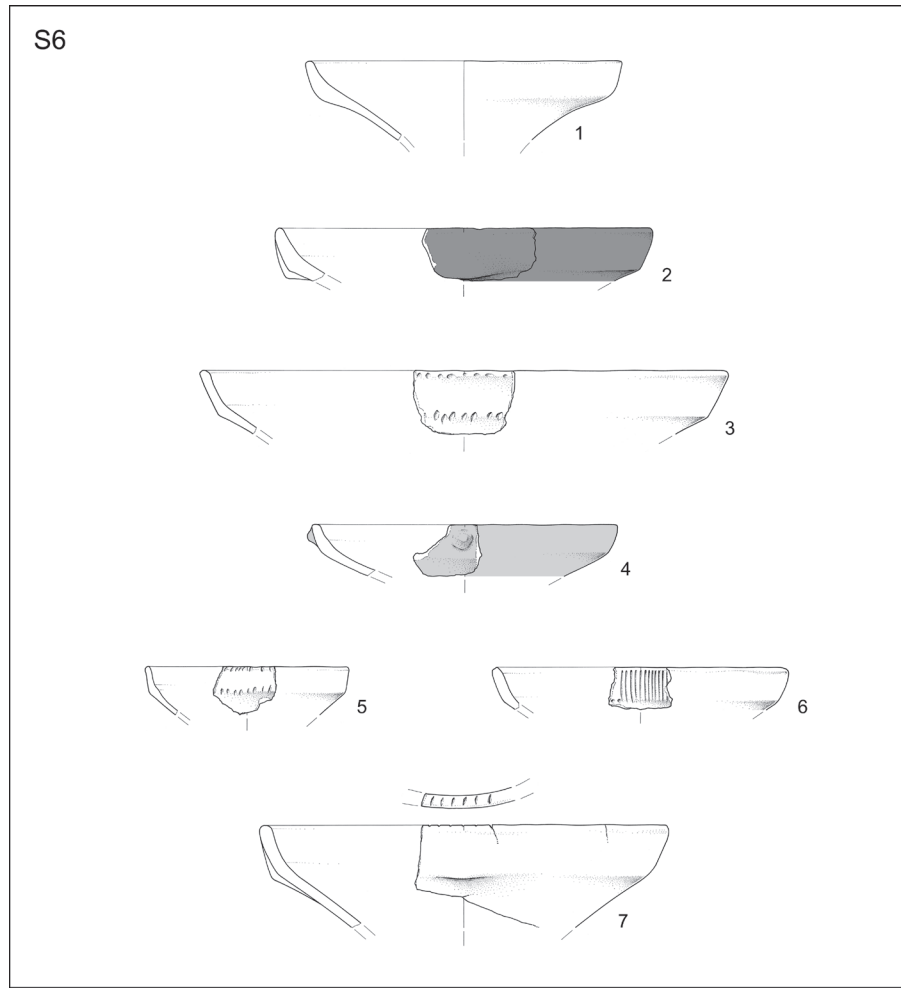
4.2.1.2.1.7 *Type S7*

Very similar are dishes with the vertically set and flat widest rim. The sharp break of the wall can be smoother with a wider (e.g. *Fig. 4.11:* S7/1; e.g. *Pls. 4.1:* 2; *4.10:* 2,4; *4.19:* 2; *4.20:* 2) or narrowed lip (e.g. *Fig. 4.11:* S7/2; e.g. *Pls. 4.12:* 8; *4.13:* 9; *4.20:* 1; *4.26:* 2,5; *4.28:* 2) or sharp with wide (e.g. *Fig. 4.11:* S7/3; e.g. *Pls. 4.7:* 5; *4.10:* 3; *4.14:* 10; *4.15:* 1; *4.18:* 7; *4.19:* 3; *4.32:* 10) or narrowed lip (e.g. *Fig. 4.11:* S7/4; e.g. *Pls. 4.10:* 3; *4.18:* 7; *4.19:* 3; *4.32:* 10). The lip can also be thickened (*Fig. 4.11:* S7/5; e.g. *Pl. 4.34:* 3,10).

Type S7 dishes can be coated red (*Fig. 4.11:* S7/1,4). A relief ornament is on the lip, sharp break (*Fig. 4.11:* S7/6), and the widest rim (*Fig. 4.11:* S7/5). There are also tongue-shaped grips on the break (*Fig. 4.11:* S7/3) and lip (*Fig. 4.11:* S7/7).

4.2.1.2.1.8 *Type S8*

The similar is true also for dishes with generally flat but slightly inverted lip. The sharp break of the wall can be developed into the wide lip (e.g. *Fig. 4.11:* S8/1; e.g. *Pl. 4.27:* 14) or sharp with wide (e.g. *Fig. 4.11:* S8/2; *Pls. 4.27:* 13; *4.31:* 8) or narrowed lip (e.g. *Fig. 4.11:* S8/3;



Sl. 4.10: Spaha. Sklede tipa S6. M = 1 : 5.
Fig. 4.10: Spaha. Type S6 dishes. Scale = 1 : 5.

(npr. *sl. 4.11:* S7/2; npr. *t. 4.12:* 8; *4.13:* 9; *4.20:* 1; *4.26:* 2,5; *4.28:* 2) ali oster s širokim (npr. *sl. 4.11:* S7/3; npr. *t. 4.7:* 5; *4.10:* 3; *4.14:* 10; *4.15:* 1; *4.18:* 7; *4.19:* 3; *4.32:* 10) oz. zoženim ustjem (npr. *sl. 4.11:* S7/4; npr. *t. 4.10:* 3; *4.18:* 7; *4.19:* 3; *4.32:* 10). Ustje je lahko tudi odebeljeno (*sl. 4.11:* S7/5; npr. *t. 4.34:* 3,10).

Sklede tipa S7 so lahko premazane z rdečim premazom (*sl. 4.11:* S7/1,4). Reliefni ornament je na ustju, kolenčastem prelomu (*sl. 4.11:* S7/6) in najširšem obodu (*sl. 4.11:* S7/5). Prisotni so jezičasti držaji na prelomu (*sl. 4.11:* S7/3) in ustju (*sl. 4.11:* S7/7).

4.2.1.2.1.8 *Tip S8*

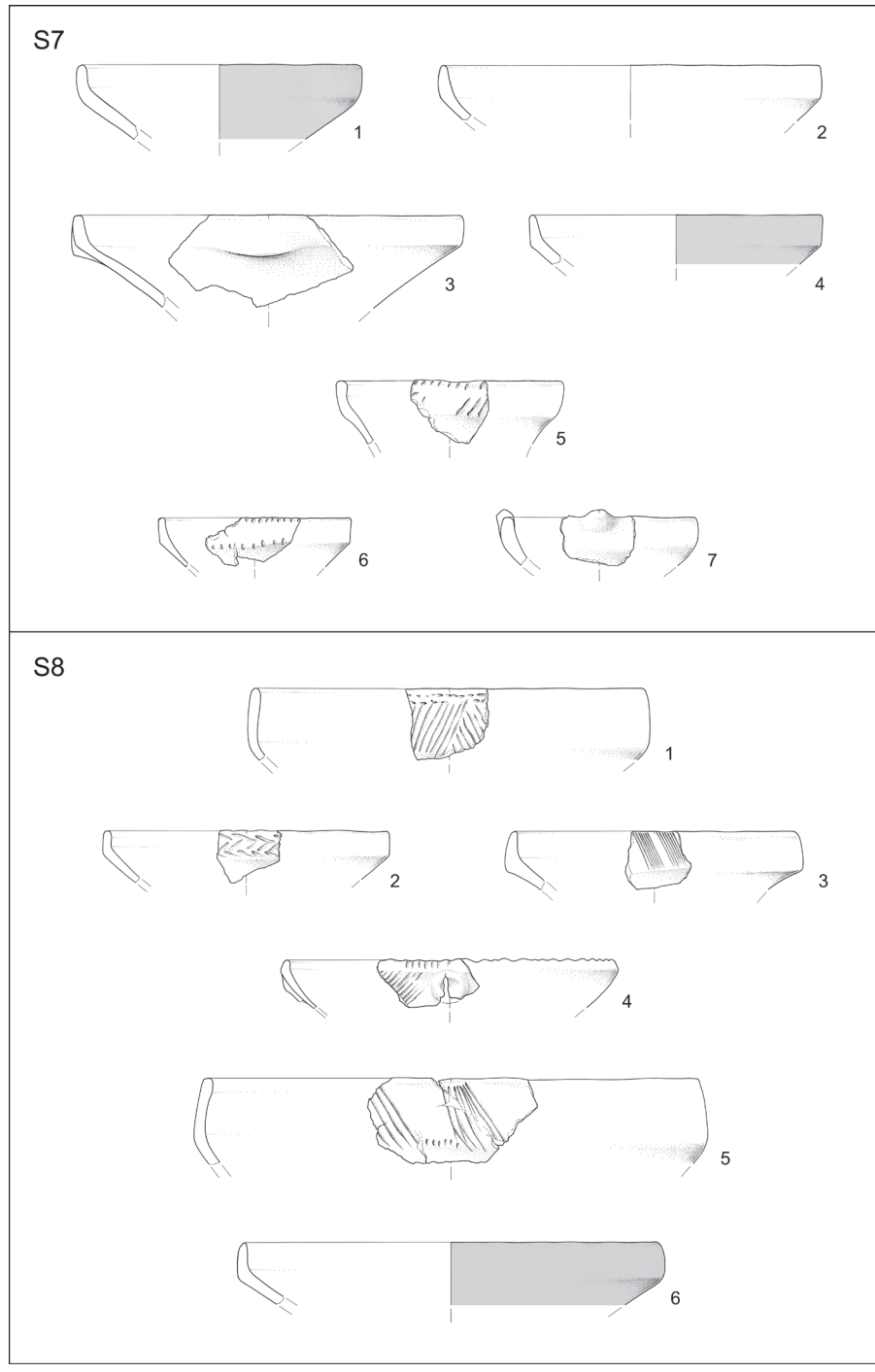
Podobno lahko rečemo tudi za sklede s sicer ravnim, a rahlo navznoter zavihanim ustjem. Kolenčast prelom ostenja je lahko bolj tekoč s širokim ustjem (npr. *sl. 4.11:* S8/1; npr. *t. 4.27:* 14) ali oster s širokim (npr. *sl. 4.11:* S8/2; *t. 4.27:* 13; *4.31:* 8) oz. z zoženim ustjem (npr. *sl. 4.11:* S8/3; *t. 4.5:* 10; *4.6:* 9; *4.9:* 3; *4.10:* 8; *4.13:* 11; *Pls. 4.5:* 10; *4.6:* 9; *4.9:* 3; *4.10:* 8; *4.13:* 11; *4.30:* 1). The lip can be set right above the sharp break (*Fig. 4.11:* S8/4; *Pl. 4.11:* 9) or is thickened (*Fig. 4.11:* S8/5; e.g. *Pl. 4.33:* 9).

Type S8 dishes are coated with a red slip (*Fig. 4.11:* S8/6). A relief ornament is on the lip, neck, and sharp break (*Fig. 4.11:* S8/1–5). On the lower part of the dish, beneath the break, there can be a round appliqué (*Fig. 4.11:* S8/4).

4.2.1.2.1.9 *Type S9*

A special type is shallow and open dishes with a distinct break of a wall and a concave outer widest rim (*Fig. 4.12:* S9/1–3; e.g. *Pls. 4.2:* 6; *4.3:* 8; *4.8:* 5; *4.33:* 7; *4.37:* 4).

Type S9 dishes are sometimes coated red (*Fig. 4.12:* S9/2). A relief ornament is on the lip, the widest rim, and sharp break (*Fig. 4.12:* S9/1). A tongue-shaped grip can be located on the lip (*Fig. 4.12:* S9/3).



Sl. 4.11: Spaha. Sklede po tipih (S7 in S8). M = 1 : 5.
Fig. 4.11: Spaha. Dishes according to type (S7 and S8). Scale = 1 : 5.

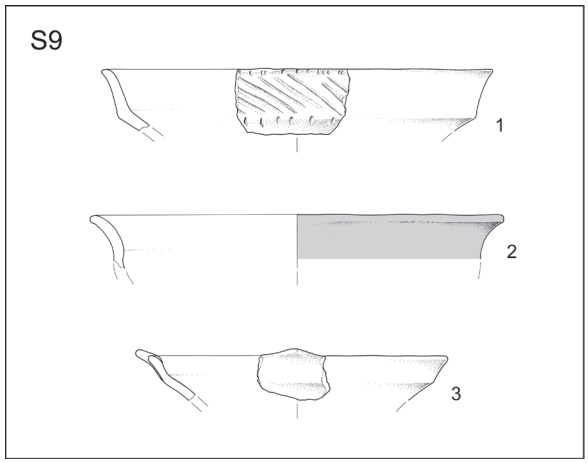
4.30: 1). Ustje je lahko postavljeno tik nad kolenčastim prelomom (*sl. 4.11:* S8/4; *t. 4.11:* 9) oz. je odebeljeno (*sl. 4.11:* S8/5; npr. *t. 4.33:* 9).

Sklede tipa S8 so včasih premazane z rdečim premazom (*sl. 4.11:* S8/6). Reliefni ornament je na ustju, vratu in kolenčastem prelomu (*sl. 4.11:* S8/1–5). Na spodnjem delu sklede pod prelomom je lahko tudi okrogla plastična aplikacija (*sl. 4.11:* S8/4).

4.2.1.2.2 Vessels/dishes on foot: forms Vn and Mn

Among pottery we also found numerous fragments of hollow feet which probably belong to dishes. Only in one example we can reliably say that this is a deep vessel (*Fig. 4.4:* Ob9/1).[10]

[10] See chapter 4.2.1.1.1.9.



Sl. 4.12: Spaha. Sklede tipa S9. M = 1 : 5.
Fig. 4.12: Spaha. Type S9 dishes. Scale = 1 : 5.

4.2.1.2.1.9 *Tip S9*

Poseben tip predstavljajo plitve in odprte sklede s poudarjenim prelomom ostenja in vbočenim zunanjim najširšim obodom (*sl. 4.12:* S9/1–3; npr. *t. 4.2:* 6; *4.3:* 8; *4.8:* 5; *4.33:* 7; *4.37:* 4).

Sklede tipa S9 so včasih premazane z rdečim premazom (*sl. 4.12:* S9/2). Reliefni ornament je na ustju, najširšem obodu in kolenčastem prelomu (*sl. 4.12:* S9/1). Na ustju je lahko tudi jezičasti držaj (*sl. 4.12:* S9/3).

4.2.1.2.2 Posode/sklede na nogi: obliki Vn in Mn

Med keramičnim gradivom je tudi veliko fragmentov votlih nog, ki v večini primerov verjetno spadajo k skledam. Le v enem primeru lahko z gotovostjo trdimo, da gre za globoko posodo (*sl. 4.4:* Ob9/1).[10]

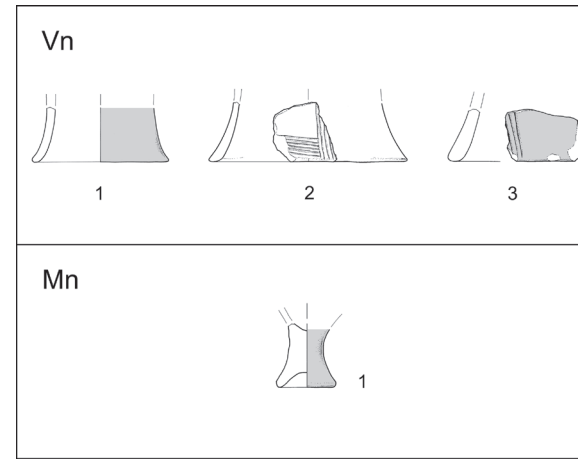
Sicer razlikujemo votle (Vn) in masivne noge (Mn).

4.2.1.2.2.1 *Oblika Vn*

Veliko več je odlomkov votlih nog, ki pa so zelo fragmentarno ohranjeni, tako da jih ne moremo tipološko podrobneje razvrstiti (*sl. 4.13:* Vn/1–3; npr. *t. 4.2:* 14; *4.3:* 2,3; *4.4:* 3,4; *4.6:* 16; *4.13:* 3; *4.21:* 5; *4.32:* 1; *4.37:* 15).

Večina votlih nog je bila premazana z rdečim premazom (*sl. 4.13:* Vn/1,3). Na nekaterih je reliefni ornament (*sl. 4.13:* Vn/2,3).

[10] Glej poglavje 4.2.1.1.1.9, v tem zborniku.



Sl. 4.13: Spaha. Noge (Vn in Mn). M = 1 : 5.
Fig. 4.13: Spaha. Feet (Vn and Mn). Scale = 1 : 5.

Generally we distinguish between hollow (Vn) and massive feet (Mn).

4.2.1.2.2.1 *Form Vn*

The majority are fragments of hollow feet which are preserved very fragmentarily and thus cannot be typologically classified in greater detail (*Fig. 4.13:* Vn/1–3; e.g. *Pls. 4.2:* 14; *4.3:* 2,3; *4.4:* 3,4; *4.6:* 16; *4.13:* 3; *4.21:* 5; *4.32:* 1; *4.37:* 15).

Most of hollow feet were coated red (*Fig. 4.13:* Vn/1,3). Some have a relief ornament (*Fig. 4.13:* Vn/2,3).

4.2.1.2.2.2 *Form Mn*

At Spaha we only once encountered an object that resembles a small massive foot (*Fig. 4.13:* Mn/1; *Pl. 4.35:* 13).

Traces of red slip are visible on the fragment.

4.2.1.2.3 Bowls: types Sk1–Sk4

Vessels with handles and grips that due to their specific shape cannot be assigned to other groups of vessels are classified as bowls. These are usually shallow vessels.

4.2.1.2.3.1 *Type Sk1*

Bowls with everted lips and a bellied lower part (*Fig. 4.14:* Sk1/1; *Pls. 4.6:* 4; *4.22:* 1). In size some resemble small dishes but are due to the massive strappy handle classified among bowls (*Fig. 4.14:* Sk1/1).

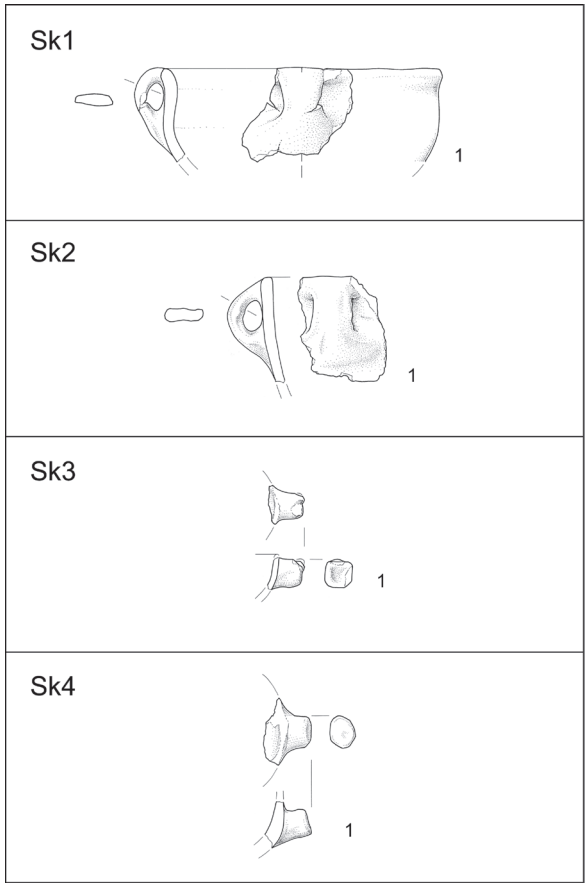
4.2.1.2.2.2 *Oblika Mn*

Na Spahi smo samo v enem primeru naleteli na predmet, ki spominja na majhno masivno nogo (*sl. 4.13:* Mn/1; *t. 4.35:* 13).

Na fragmentu je opaziti sledove rdečega premaza.

4.2.1.2.3 Skodele: tipi Sk1–Sk4

Med skodele uvrščamo posode z ročaji in držaji, ki jih zaradi specifične oblike ne moremo uvrstiti v druge skupine posod. Običajno so to plitve posode.



Sl. 4.14: Spaha. Skodele po tipih (Sk1–Sk4). M = 1 : 5.
Fig. 4.14: Spaha. Bowls according to types (Sk1–Sk4). Scale = 1 : 5.

4.2.1.2.3.1 *Tip Sk1*

Skodele z izvihanim ustjem in trebušastim spodnjim delom (*sl. 4.14:* Sk1/1; *t. 4.6:* 4; *4.22:* 1). Nekatere so po dimenziji bolj podobne manjšim skledam, a jih zaradi masivnega trakastega ročaja uvrščamo med skodele (*sl. 4.14:* Sk1/1).

4.2.1.2.3.2 *Type Sk2*

A semicircular bowl with the flat lip and highly set massive strappy handle (*Fig. 4.14:* Sk2/1; *Pl. 4.24:* 1).

4.2.1.2.3.3 *Type Sk3*

A shallow bowl with the flat lip and highly set massive cylindrical handle which ends in an animal protome (*Fig. 4.14:* Sk3/1; *Pl. 4.13:* 8).

4.2.1.2.3.4 *Type Sk4*

A shallow bowl with a sharp break, on which a massive cylindrical grip is shaped (*Fig. 4.14:* Sk4/1; *Pl. 4.3:* 6).

4.2.1.3 HANGING VESSELS

Hanging vessels were named after the fact that they were hung on a string and were hanging. Thus these vessels always have smaller, horizontally or vertically perforated ears.

4.2.1.3.1 Hanging vessels with horizontally perforated ears: types VP-h1–VP-h6

4.2.1.3.1.1 *Type VP-h1*

These are vessels with an everted or flat lip on the highly set conical neck and slightly surpassing ears (*Fig. 4.15:* VP-h1/1,2; *Pls. 4.9:* 7; *4.31:* 10; *4.33:* 2). The shape of the preserved part of these vessels is identical to deep vessels of form 11 (Ob11).[11]

Vessels of type VP-h1 can be coated red (*Fig. 4.15:* VP-h1/1) or decorated with a relief ornament at the lip (*Fig. 4.15:* VP-h1/2).

4.2.1.3.1.2 *Type VP-h2*

Similar in the upper part but smaller in size are vessels classified under type VP-h2. Horizontally perforated ears are located directly beneath the lip (*Fig. 4.15:* VP-h2/1; *Pls. 4.32:* 6; *4.35:* 3).

4.2.1.3.1.3 *Type VP-h3*

A slightly bellied vessel with two ears directly beneath the lip (*Fig. 4.15:* VP-h3/1; *Pl. 4.7:* 15).

The vessel reveals traces of red slip.

[11] See chapter 4.2.1.1.2.2.

Sl. 4.15: Spaha. Viseče posode (VP-h1–VP-h6 in VP-v1). M = 1 : 5.
Fig. 4.15: Spaha. Hanging vessels (VP-h1–VP-h6 and VP-v1). Scale = 1 : 5.

4.2.1.2.3.2 *Tip Sk2*

Polkroglasta skodela z ravnim ustjem in visoko postavljenim masivnim trakastim ročajem (*sl. 4.14:* Sk2/1; *t. 4.24:* 1).

4.2.1.2.3.3 *Tip Sk3*

Plitva skodela z ravnim ustjem in visoko postavljenim masivnim valjastim držajem, ki se zaključi z živalskim protomom (*sl. 4.14:* Sk3/1; *t. 4.13:* 8).

4.2.1.2.3.4 *Tip Sk4*

Plitva skodela s kolenčastim prelomom, na katerem je izoblikovan masiven valjasti držaj (*sl. 4.14:* Sk4/1; *t. 4.3:* 6).

4.2.1.3 VISEČE POSODE

Viseče posode so dobile ime po tem, da so bile obešene na vrvico in so visele. Zaradi tega se na posodah vedno pojavljajo manjša, horizontalno ali vertikalno prevrtana ušesca.

4.2.1.3.1 Viseče posode s horizontalno prevrtanim ušescem: tipi VP-h1–VP-h6

4.2.1.3.1.1 *Tip VP-h1*

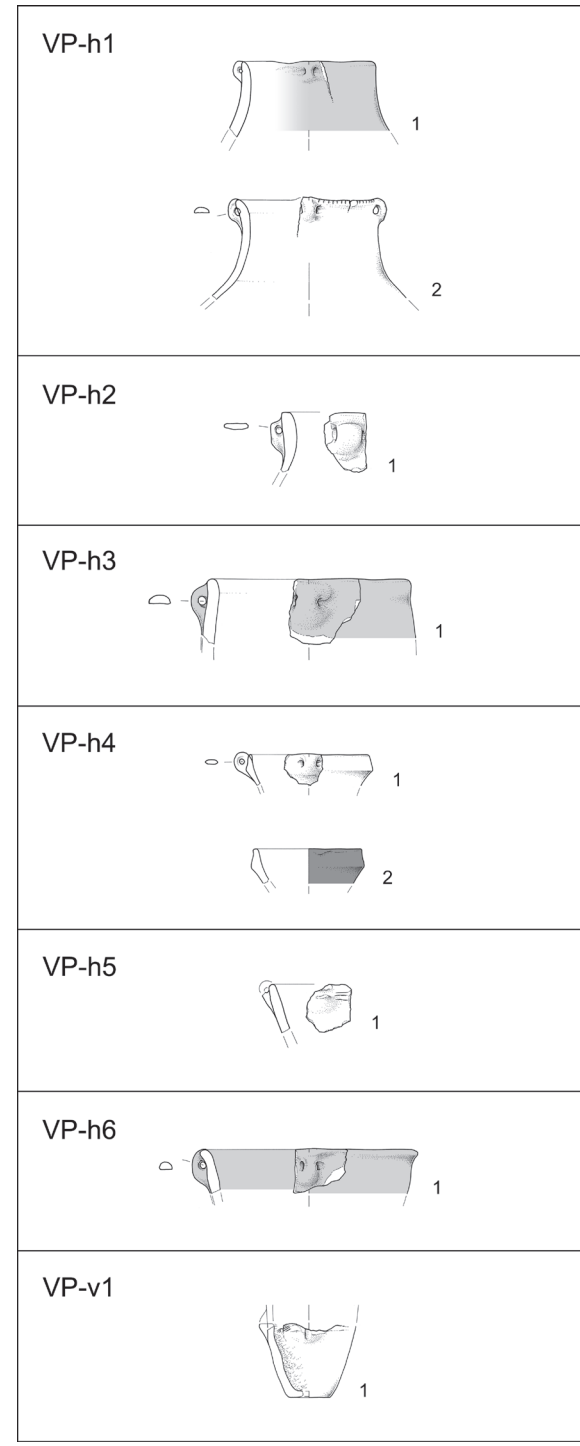
Gre za posode z izvihanim ali ravnim ustjem na visoko postavljenem stožčastem vratu in rahlo presegajočima ušescema (*sl. 4.15:* VP-h1/1,2; *t. 4.9:* 7; *4.31:* 10; *4.33:* 2). Oblika ohranjenega dela teh posod je enaka globokim posodam oblike 11.[11]

Posode tipa VP-h1 so lahko premazane z rdečo barvo (*sl. 4.15:* VP-h1/1) ali pa na ustju okrašene z reliefnim ornamentom (*sl. 4.15:* VP-h1/2).

4.2.1.3.1.2 *Tip VP-h2*

V zgornjem delu podobne posode, ki so po dimenziji manjše, uvrščamo v tip VP-h2. Horizontalno prevrtani ušesci sta tik pod ustjem (*sl. 4.15:* VP-h2/1; *t. 4.32:* 6; *4.35:* 3).

[11] Glej poglavje 4.2.1.1.2.2, v tem prispevku.



4.2.1.3.1.4 *Type VP-h4*

Small vessels with narrowed lips which are located directly above the sharp break (*Fig. 4.15:* VP-h4/1,2; *Pl. 4.3:* 13). The lip and sharp break connect both surpassing ears (*Fig. 4.15:* VP-h4/1).

A fragment with traces of black slip can be probably also classified under this type of vessels (*Fig. 4.15:* VP-h4/2; *Pl. 4.7:* 4).

4.2.1.3.1.3 *Tip VP-h3*

Rahlo trebušasta posoda z ušescema tik pod ustjem (*sl. 4.15:* VP-h3/1; *t. 4.7:* 15).

Na posodi so opazni sledovi rdečega premaza.

4.2.1.3.1.4 *Tip VP-h4*

Majhne posode z zoženim ustjem, ki je postavljeno tik nad kolenčasti prelom (*sl. 4.15:* VP-h4/1,2; *t. 4.3:* 13). Ustje in kolenčasti prelom povezujeta presegajoči ušesci (*sl. 4.15:* VP-h4/1).

K posodam tega tipa verjetno spada tudi fragment, na katerem so vidni sledovi črnega premaza (*sl. 4.15:* VP-h4/2; *t. 4.7:* 4).

4.2.1.3.1.5 *Tip VP-h5*

Konična posoda ravnih sten z majhnima presegajočima ušescema (*sl. 4.15:* VP-h5/1; *t. 4.1:* 4).

4.2.1.3.1.6 *Tip VP-h6*

Konična posoda z rahlo izvihanim ustjem in presegajočima ušescema (*sl. 4.15:* VP-h6/1; *t. 4.28:* 5).

Na posodi so sledovi rdečega premaza.

4.2.1.3.2 Viseče posode z vertikalno prevrtanim ušescem: tip VP-v1

4.2.1.3.2.1 *Tip VP-v1*

Fragment dna z ostenjem, ki ima na trebuhu ohranjen del vertikalno prevrtanega ušesca (*sl. 4.15:* VP-v1/1; *t. 4.12:* 5). Verjetno gre za del t.i. flašoidne posode.

4.2.1.4 POSODE Z IZLIVOM

V dveh primerih smo naleteli na ostanke posod z izlivom: PI. Posod te vrste ni možno rekonstruirati, ker so ohranjene zelo fragmentarno (*sl. 4.16:* PI/1; *t. 4.10:* 6; *4.30:* 12).

4.2.1.5 CEDILA

V nekaj primerih so se ohranili tudi fragmenti cedil (*sl. 4.16:* CE/1,2), kjer so luknje na fragmentih ostenj (*sl. 4.16:* CE/1; *t. 4.6:* 3; *4.19:* 20) in na fragmentih ustij z ostenji (*sl. 4.16:* CE/2; *t. 4.20:* 16; *4.37:* 9).

4.2.1.3.1.5 *Type VP-h5*

A conical vessel of straight walls with small surpassing ears (*Fig. 4.15:* VP-h5/1; *Pl. 4.1:* 4).

4.2.1.3.1.6 *Type VP-h6*

A conical vessel with a gently everted lip and two surpassing ears (*Fig. 4.15:* VP-h6/1; *Pl. 4.28:* 5).

Traces of red slip are visible on the vessel.

4.2.1.3.2 Hanging vessels with vertically perforated ear: type VP-v1

4.2.1.3.2.1 *Type VP-v1*

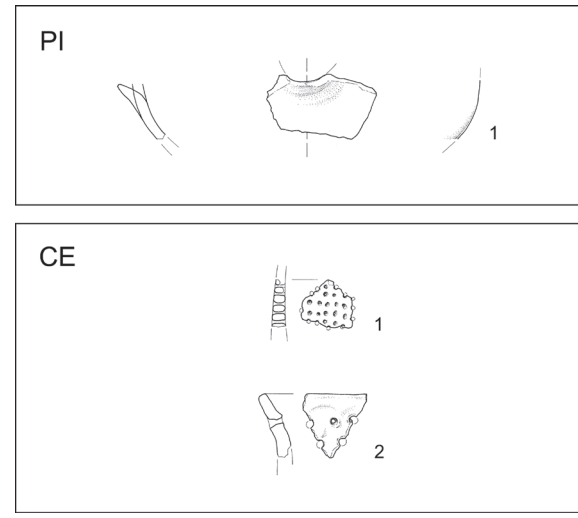
A fragment of a bottom with a wall which has on the belly a preserved part of the vertically perforated ear (*Fig. 4.15:* VP-v1/1; *Pl. 4.12:* 5). This is probably a part of the s.c. flask-like vessel.

4.2.1.4 VESSELS WITH A SPOUT

Two cases reveal the remains of vessels with a spout: PI. Vessels of this type cannot be reconstructed since they are preserved extremely fragmentarily (*Fig. 4.16:* PI/1; *Pls. 4.10:* 6; *4.30:* 12).

4.2.1.5 STRAINERS

There were also a few examples of strainer fragments (*Fig. 4.16:* CE/1,2) where we find holes on wall



Sl. 4.16: Spaha. Posode z izlivom (PI) in cedila (CE). M = 1 : 5.
Fig. 4.16: Spaha. Vessels with a spout (PI) and strainers (CE). Scale = 1 : 5.

Edina opazna razlika med fragmenti je v gostoti lukenj. Na dveh fragmentih so luknje pogostejše (npr. *sl. 4.16:* CE/1) kot na drugih dveh (npr. *sl. 4.16:* CE/2).

4.2.1.6 ZAJEMALKE

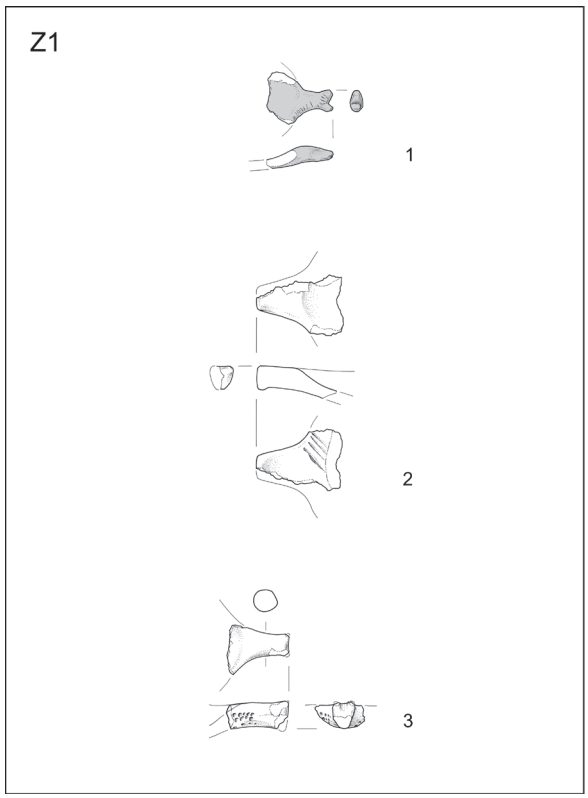
Na Spahi se v razmeroma velikem številu pojavljajo tudi zajemalke. Razlikujemo dva osnovna tipa: zajemalke s polnim držajem (tip Z1) in zajemalke s tulastim držajem (tip Z2).

4.2.1.6.1 Zajemalke: tipa Z1 in Z2

4.2.1.6.1.1 *Tip Z1*

V skupino zajemalk s polnim držajem smo uvrstili vse tiste najdbe, ki so z večjo ali manjšo verjetnostjo deli takšnih posod (*sl. 4.17*: Z1/1–3; npr. *t. 4.2:* 5; *4.5:* 2; *4.7:* 11; *4.24:* 8). So različnih velikosti, vse od majhnih do velikih. Držaj je lahko okroglega preseka (*sl. 4.17:* Z1/3) ali bolj razvlečen (*sl. 4.17:* Z1/2).

Zajemalke so včasih premazane z rdečim premazom (*sl. 4.17:* Z1/1). Na njih je opaziti reliefni ornament (*sl. 4.17:* Z1/1–3). Držaji se največkrat zaključijo z živalskim protomom (*sl. 4.17:* Z1/1–3).



Sl. 4.17: Spaha. Zajemalke tipa Z1. M = 1 : 5.
Fig. 4.17: Spaha. Ladles of type Z1. Scale = 1 : 5.

fragments (*Fig. 4.16:* CE/1; *Pls. 4.6:* 3; *4.19:* 20) and fragments of lips with walls (*Fig. 4.16:* CE/2; *Pls. 4.20:* 16; *4.37:* 9).

The only noticeable difference among the fragments is the density of the holes. On two fragments holes are denser (e.g. *Fig. 4.16:* CE/1) than on the other two (e.g. *Fig. 4.16:* CE/2).

4.2.1.6 LADLES

At Spaha a relatively high number of ladles appear. We distinguish between two basic types: ladles with a solid grip (type Z1) and ladles with a hollow grip (type Z2).

4.2.1.6.1 Ladles: types Z1 and Z2

4.2.1.6.1.1 *Type Z1*

The group of ladles with a solid grip consists of all those finds which are, more or less probably, a part of such vessels (*Fig. 4.17:* Z1/1–3; e.g. *Pls. 4.2:* 5; *4.5:* 2; *4.7:* 11; *4.24:* 8). They are of various sizes, all from small to big. The grip can be of a circular intersection (*Fig. 4.17:* Z1/3) or more stretched (*Fig. 4.17:* Z1/2).

Ladles can be coated red (*Fig. 4.17*: Z1/1) with a noticeable relief ornament on them (*Fig. 4.17:* Z1/1–3). Grips most frequently end in an animal protome (*Fig. 4.17:* Z1/1–3).

4.2.1.6.1.2 *Type Z2*

More numerous are ladles with a hollow grip (*Fig. 4.18:* Z2/1–5; e.g. *Pls. 4.4:* 19; *4.5:* 3; *4.6:* 5; *4.7:* 13; *4.14:* 8; *4.17:* 3; *4.19:* 12,21; *4.25:* 5; *4.27:* 1–4; *4.35:* 11,12; *4.36:* 10,11).

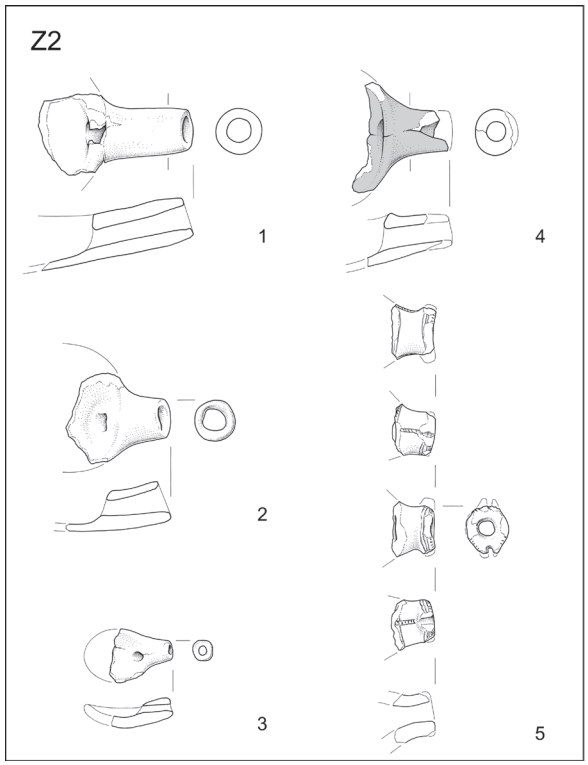
Ladles can be big and massive (*Fig. 4.18:* Z2/1), medium (*Fig. 4.18:* Z2/2), or small (*Fig. 4.18:* Z2/3), with a long massive hollow grip or with a short hollow grip.

They can be coated red (*Fig. 4.18:* Z2/4). One of the grips has a relief ornament (*Fig. 4.18:* Z2/5).

4.2.1.7 SPINDLE WHORLS

The inventory reveals also five fragments and two completely preserved spindle whorls. They are assigned to types V1–V4 (*Fig. 4.19:* V1/1–V4/1; *Pls. 4.6:* 6; *4.7:* 14; *4.12:* 7; *4.17:* 2; *4.30:* 18; *4.35:* 14).[12]

12 According to Velušček 2009c, 67–68, Fig. 3.20.



Sl. 4.18: Spaha. Zajemalke tipa Z2. M = 1 : 5.
Fig. 4.18: Spaha. Ladles of type Z2. Scale = 1 : 5.

4.2.1.6.1.2 *Tip Z2*

Številnejše so zajemalke s tulastim držajem (*sl. 4.18:* Z2/1–5; npr. *t. 4.4:* 19; *4.5:* 3; *4.6:* 5; *4.7:* 13; *4.14:* 8; *4.17:* 3; *4.19:* 12,21; *4.25:* 5; *4.27:* 1–4; *4.35:* 11,12; *4.36:* 10,11).

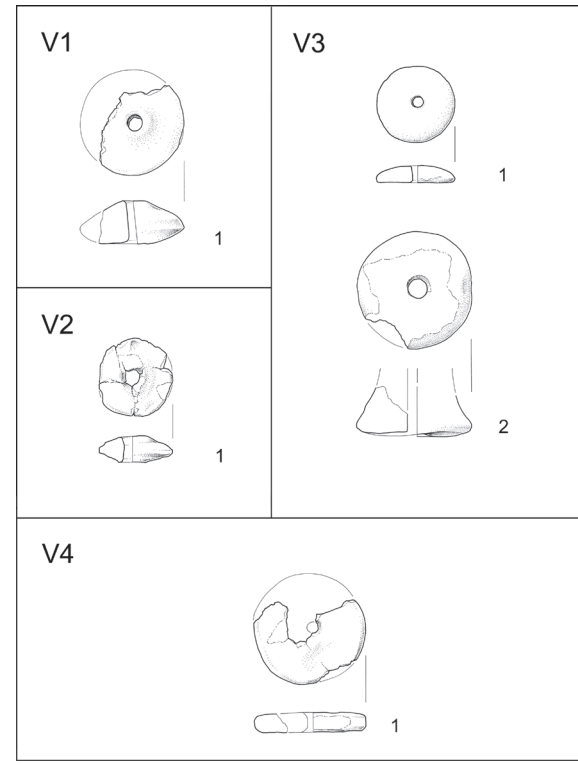
Zajemalke so lahko velike in masivne (*sl. 4.18:* Z2/1), srednje (*sl. 4.18:* Z2/2) ali majhne (*sl. 4.18:* Z2/3), z dolgim masivnim tulastim držajem ali s kratkim tulastim držajem.

Včasih so premazane z rdečim premazom (*sl. 4.18:* Z2/4). Na enem izmed držajev je reliefni ornament (*sl. 4.18:* Z2/5).

4.2.1.7 PREDILNA VRETENCA

Med inventariziranimi fragmenti je tudi pet odlomkov in dve celi predilni vretenci. Uvrščamo jih k tipom V1–V4 (*sl. 4.19:* V1/1–V4/1; *t. 4.6:* 6; *4.7:* 14; *4.12:* 7; *4.17:* 2; *4.30:* 18; *4.35:* 14).[12]

12 Po Velušček 2009c, 67–68, sl. 3.20.



Sl. 4.19: Spaha. Predilna vretenca po tipih (V1–V4). M = 1 : 5.
Fig. 4.19: Spaha. Spindle whorls according to types (V1–V4). Scale = 1 : 5.

4.2.1.7.1 Spindle whorls: types V1–V4

4.2.1.7.1.1 *Type V1*

Type V1 consists of simple biconic whorl. It appears in a low variant (*Fig. 4.19:* V1/1).

4.2.1.7.1.2 *Type V2*

Type V2 consists of biconic whorls with a strongly emphasized middle part. One of these is an almost flat spindle whorl (*Fig. 4.19:* V2/1).

4.2.1.7.1.3 *Type V3*

Type V3 consists of a whorl with distinct conicity. We distinguish between the low (*Fig. 4.19:* V3/1) and high variant, which has the shape of a cone (*Fig. 4.19:* V3/2).

4.2.1.7.1.4 *Type V4*

Type V4 consists of low flat whorls (*Fig. 4.19:* V4/1).

4.2.1.7.1 Predilna vretenca: tipi V1–V4

4.2.1.7.1.1 *Tip V1*

K tipu V1 prištevamo enostavna bikonična vretenca. Pojavlja se v nizki varianti (*sl. 4.19:* V1/1).

4.2.1.7.1.2 *Tip V2*

K tipu V2 prištevamo bikonična vretenca z močno poudarjenim sredinskim delom. Prisotno je skoraj ploščato predilno vretence (*sl. 4.19:* V2/1).

4.2.1.7.1.3 *Tip V3*

K tipu V3 prištevamo vretence s poudarjeno koničnostjo. Razlikujemo nizko (*sl. 4.19:* V3/1) in visoko varianto, ki ima obliko stožca (*sl. 4.19:* V3/2).

4.2.1.7.1.4 *Tip V4*

K tipu V4 uvrščamo nizka ploščata vretenca (*sl. 4.19:* V4/1).

4.2.1.8 POSEBNE OBLIKE

Med posebne oblike uvrščamo tiste keramične najdbe, ki ne spadajo v nobeno izmed zgoraj obravnavanih skupin. Tako ločimo pečatnike (PE) in figuralno plastiko (FP).

4.2.1.8.1 Pečatniki: tipi PE1–PE3

4.2.1.8.1.1 *Tip PE1*

Majhne stožčaste predmete z okroglo ploskvijo smo uvrstili v skupino enostavnih stožčastih pečatnikov.[13] Na Spahi se pojavlja z dvema primerkoma (npr. *sl. 4.20:* PE1/1; *t. 4.27:* 6,7). Predmeta nista ornamentirana.

4.2.1.8.1.2 *Tip PE2*

Valjast, približno 3 cm dolg in 2,4 cm debel podolgovat predmet z luknjo uvrščamo v drugo skupino pečatnikov (*sl. 4.20:* PE2/2; *t. 4.16:* 12).[14]

[13] Pri opredeljevanju najdbe za pečatnik se sklicujemo na Budja 1992, sl. 2, brez namere, da predmetu poskušamo dati drugačno kvaliteto.

[14] Pri opredeljevanju najdbe za pečatnik se sklicujemo na Budja 1992, sl. 3, brez namere, da predmetu poskušamo dati drugačno kvaliteto.

4.2.1.8 SPECIAL FORMS

Special forms are those pottery finds which cannot be attributed to any of the above mentioned groups. Here we distinguish between stamp seals (PE) and figural plastic (FP).

4.2.1.8.1 Stamp seals: types PE1–PE3

4.2.1.8.1.1 *Type PE1*

Small conical objects with a circular surface were assigned to a group of simple conical stamp seals.[13] At Spaha they appear with two examples (e.g. *Fig. 4.20:* PE1/1; *Pl. 4.27:* 6,7). Neither of the objects is ornamented.

4.2.1.8.1.2 *Type PE2*

A cylindrical, approximately 3 cm long and 2.4 cm thick oblong object with a hole is assigned to the second group of stamp seals (*Fig. 4.20:* PE2/2; *Pl. 4.16:* 12).[14]

The object is on the surface ornamented with a relief decoration.

4.2.1.8.1.3 *Type PE3*

A fragment of a cylindrical and oblong object with a hole belongs to this group of seals (*Fig. 4.20:* PE2/3; *Pl. 4.7*: 12).[15]

The object surface is smooth and is thus different from the object in *Fig. 4.20:* PE2/2.

4.2.1.8.2 Figural plastic: sorts FP1 and FP2

Figural plastic proper is rarely found at Slovenian Neo- and Eneolithic sites.[16] From the oldest period there are more handles or grips and feet of pottery vessels, the ending of which is transformed into an animal or human protome.[17] Both sorts of figural plastic are present at Spaha.

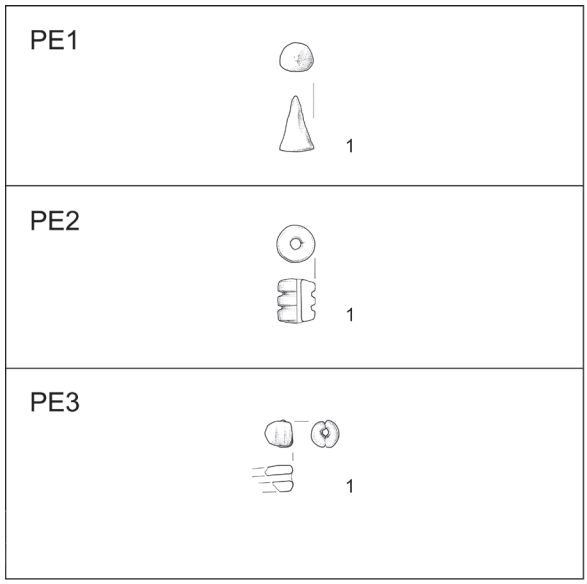
[13] While defining the find of the stamp seal we refer to Budja 1992, Fig. 2, without the intention of trying to assign a different meaning to the object.

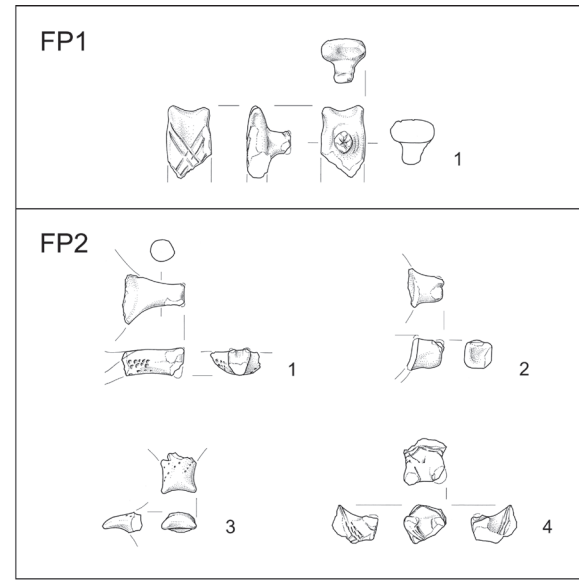
[14] While defining the find of the seal we refer to Budja 1992, Fig. 3, without the intention of trying to assign a different meaning to the object.

[15] Even though while defining the find of a seal we refer to Budja 1992, Fig. 3, the typological classification among the seals is with this particular object very questionable.

[16] E.g. Velušček 2007; Tomaž 2008, 47–66.

[17] See e.g. Korošec 1965, Pls. 1: 2,3; 2: 1,2; Velušček 2005b, finds no. 1 and 24; Guštin, Tomaž, Kavur 2005, 51, find no. 31; Tomaž 2005a, find no. 15; 2008, Figs. 39, 40.





Sl. 4.20: Spaha. Posebne oblike (PE1–PE3) in figuralna plastika (FP1 in FP2). M = 1 : 5.
Fig. 4.20: Spaha. Special forms (PE1–PE3) and figural plastic (FP1 and FP2). Scale = 1 : 5.

Predmet je na površju ornamentiran z reliefnim okrasom.

4.2.1.8.1.3 *Tip PE3*

Fragment valjastega in podolgovatega predmeta z luknjo uvrščamo v tretjo skupino pečatnikov (*sl. 4.20:* PE2/3; *t. 4.7:* 12).[15]

Površina predmeta je gladka in se tako razlikuje od predmeta na *sl. 4.20:* PE2/2.

4.2.1.8.2 Figuralna plastika: vrsti FP1 in FP2

Prave figuralne plastike je na slovenskih neo- in eneolitskih najdiščih razmeroma malo.[16] Iz najstarejšega obdobja je več ročajev oz. držajev in nog keramičnih posod, katerih zaključek je preoblikovan v živalski ali človeški protom.[17] Na Spahi sta prisotni obe vrsti figuralne plastike.

4.2.1.8.2.1 *Vrsta FP1*

Med predmeti, ki jih lahko uvrstimo v skupino prave figuralne plastike, je najizpovednejša najdba na *sl.*

4.2.1.8.2.1 *Sort FP1*

Among the objects that can be attributed to the group of figural plastic proper the most declaratory is *Fig. 4.20:* FP1/1 (*Pl. 4.12:* 10), this could be an anthropomorphic idol. This is a 4.8 cm long and 3 cm wide pottery fragment, which at the preserved part ends in two outgrowths resembling small horns (or ears). In the middle there is an approx. 1.5 cm high and similarly wide cylinder which is at the end decorated by a relief ornament. The back side is also ornamented with a relief decoration – with an incised motif of the s.c. Saint Andrew's Cross.

4.2.1.8.2.2 *Sort FP2*

Figural plastic in the shape of animal protomes appears also on the grip ends of various vessels (*Fig. 4.20:* FP2/1–4; *Pls. 4.1:* 8; *4.2:* 5,16; *4.5:* 2; *4.7:* 11; *4.13:* 8; *4.36:* 9).

They can be found on grips of ladles of type Z1 (*Fig. 4.20:* FP2/1), shallow vessels of type Sk3 (*Fig. 4.20:* FP2/2), and other vessels which cannot be assigned a form due to the fragmentation (*Fig. 4.20:* FP2/3,4).

4.2.2 HANDLES AND GRIPS

Handles (R) and grips (D) form a special category. Their classification will also follow the typology represented during the discussion of other sites: Hočevarica, Maharski prekop,[18] and Stare gmajne.[19]

[15] Čeprav se pri opredelitvi najdbe za pečatnik sklicujemo na Budja 1992, sl. 3, je pri obravnavanem predmetu tipološka klasifikacija med pečatnike zelo vprašljiva.

[16] Npr. Velušček 2007; Tomaž 2008, 47–66.

[17] Glej npr. Korošec 1965, t. 1: 2,3; 2: 1,2; Velušček 2005b, najdbi št. 1 in 24; Guštin,Tomaž, Kavur 2005, 51, najdba št. 31; Tomaž 2005a, najdba št. 15; 2008, sl. 39, 40.

[18] Velušček 2004b, 203, 206, Fig. 4.2.12.

[19] Velušček 2009c, 69, Figs. 3.24–3.26.

4.20: FP1/1 (*t. 4.12:* 10), morda gre za antropomorfno plastiko. Gre za 4,8 cm dolg in 3 cm širok fragment keramike, ki se na ohranjenem delu zaključuje v dveh rožičkom (ali ušesom) podobnih izrastkih. Na osrednjem delu se dviguje pribl. 1,5 cm visok in podobno širok valj, ki je na koncu okrašen z reliefnim ornamentom. Hrbtna stran je prav tako ornamentirana z reliefnim okrasom – z vrezanim motivom t. i. Andrejevega križa.

4.2.1.8.2.2 *Vrsta FP2*

Figuralna plastika, v obliki živalskih protom, se pojavlja tudi na koncih držajev različnih posod (*sl. 4.20:* FP2/1–4; *t. 4.1:* 8; *4.2:* 5,16; *4.5:* 2; *4.7:* 11; *4.13:* 8; *4.36:* 9).

Najdemo jih na držajih zajemalk tipa Z1 (*sl. 4.20:* FP2/1), plitvih skodelah tipa Sk3 (*sl. 4.20:* FP2/2) in drugih vrstah posod, ki pa jim zaradi fragmentarnosti ni možno določiti oblike (*sl. 4.20:* FP2/3,4).

4.2.2 ROČAJI IN DRŽAJI

Posebno kategorijo predstavljajo ročaji (R) in držaji (D). Tudi pri njihovi klasifikaciji bomo sledili tipologiji, ki je bila že predstavljena pri obravnavi drugih najdišč: Hočevarice, Maharskega prekopa[18] in Starih gmajn.[19]

4.2.2.1 ROČAJI

Ročaji so pomembna značilnost na keramičnem posodju. Omogočajo prijemanje oz. obešanje in s tem olajšajo uporabo.

Prisotnost ročajev ima učinek tudi na tipološko opredelitev, tako na primer skledi podobno posodo z ročajem imenujemo skodela, lonec z vertikalnim ročajem je vrč, lonec z vertikalnima ročajema na vratu pa je amfora.[20]

4.2.2.1.1 Ročaji: tipa R1 in R3

4.2.2.1.1.1 *Tip R1*

Najpogostejši so široki vertikalni trakasti ročaji tipa R1. Lahko povezujejo ustje s prelomom oz. trebuhom in so: presegajoči (*sl. 4.21:* R1/1,2) oz. nepresegajoči (*sl. 4.21:* R1/3) ali vrat s trebuhom (*sl. 4.21:* R1/4,5).

V enem primeru se pojavlja ožja varianta trakastega ročaja (*sl. 4.21:* R1/6).

[18] Velušček 2004b, 203, 206, sl. 4.2.12.

[19] Velušček 2009c, 69, sl. 3.24–3.26.

[20] Prim. z Dular 1982.

4.2.2.1 HANDLES

Handles are an important characteristic of pottery vessels for they enable holding or hanging and thus make usage easier.

The presence of handles also effects the typological definition; thus a dish resembling a vessel with a handle is called a bowl, a pot with a vertical handle is a jug, and a pot with two vertical handles on the neck is an amphora.[20]

4.2.2.1.1 Handles: types R1 and R3

4.2.2.1.1.1 *Type R1*

The most frequent are vertical ribbon handles of type R1, which can connect the lip with the break or belly and are: surpassing (*Fig. 4.21:* R1/1,2) or non-surpassing (*Fig. 4.21:* R1/3), or connect the neck with the belly (*Fig. 4.21:* R1/4,5).

In one example there is a narrower variant of the ribbon handle (*Fig. 4.21:* R1/6).

4.2.2.1.1.2 *Type R3*

The second group of handles consists of the s.c. ears. These are usually smaller handles with a narrow perforation. Some of them were during the discussion of pottery from Hočevarica assigned to handles with ears of type D5.[21]

Ears usually appear on hanging vessels[22] and have a horizontal (*Fig. 4.21:* R3/1) or vertical perforation (*Fig. 4.21:* R3/2).

They can be found on the lip (*Fig. 4.21:* R3/1), the neck beneath the lip (*Fig. 4.21:* R3/3), and on the belly (*Fig. 4.21:* R3/2,4), or they connect the neck with the belly (*Fig. 4.21:* R3/5).

4.2.2.2 GRIPS

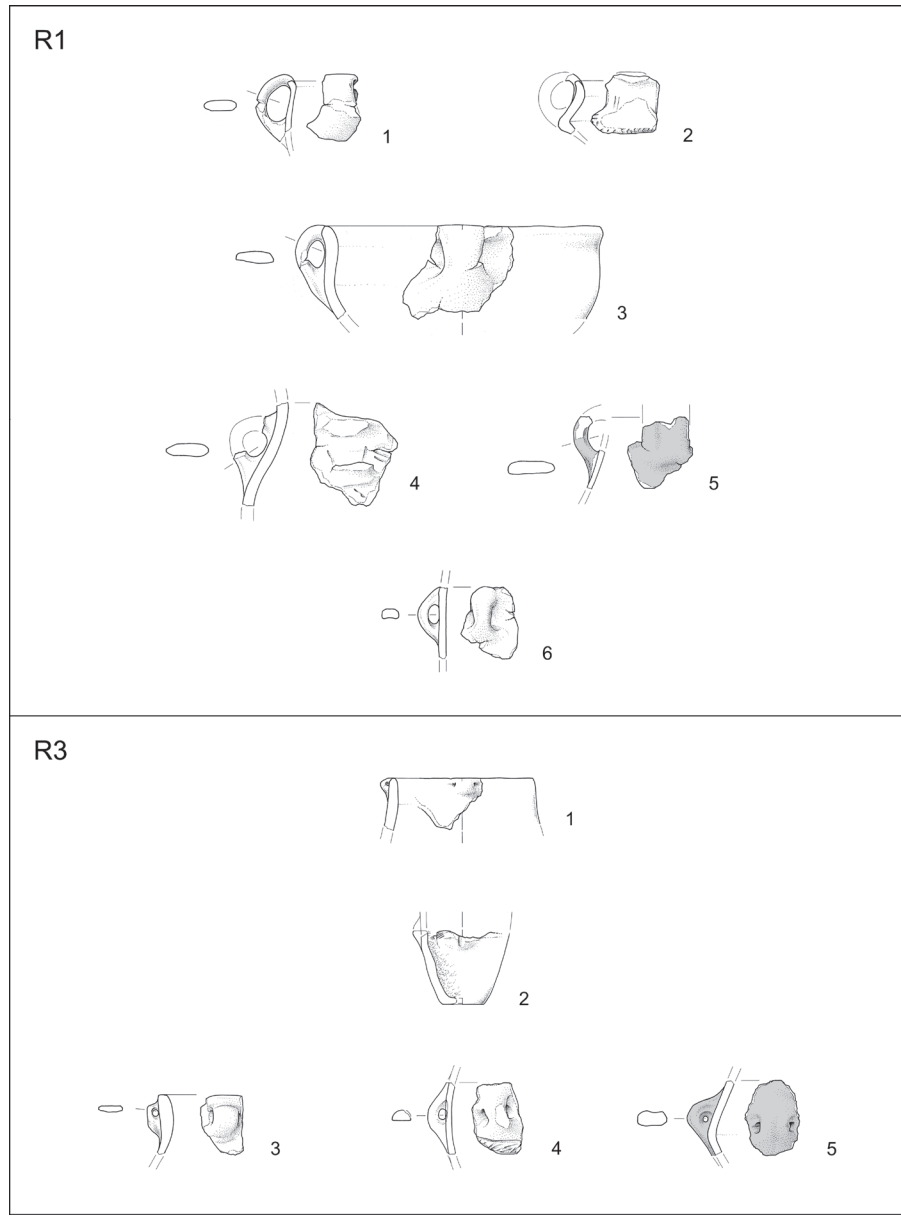
Grips (D) also form a separate category. On the pottery from Spaha they appear less frequently than handles. They are found on ladles,[23] which will not be dealt with here, and primarily on dishes (e.g. *Pls. 4.15:* 1; *4.37:* 4). In some cases vessels also have round appliqués (*Pls. 4.9:* 12; *4.37:* 5) or embossments (*Pl. 4.6:* 7), which are also discussed separately in the chapter about the ornament (see hereon). Despite everything we distinguish three types of grips: D1, D2, and D8.

20 Cf. Dular 1982.

[21] Cf. Velušček 2004b, Fig. 4.2.13.

[22] See chapter 4.2.1.3.

23 See chapter 4.2.1.6.



Sl. 4.21: Spaha. Ročaji po tipih (R1 in R3). M = 1 : 5.
Fig. 4.21: Spaha. Handles according to types (R1 and R3). Scale = 1 : 5.

4.2.2.1.1.2 *Tip R3*

Drugo skupino ročajev predstavljajo t. i. ušesca. To so običajno manjši ročaji z ozko perforacijo. Nekatere med njimi smo pri obravnavi keramike s Hočevarice uvrstili med držaje z ušesci tipa D5.[21]

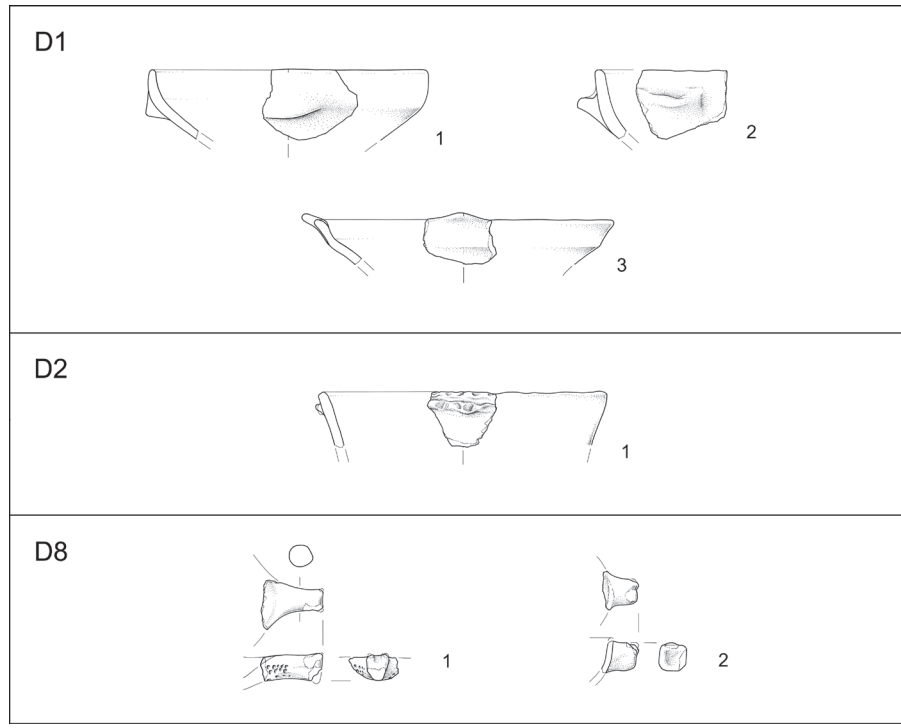
Ušesca se običajno pojavljajo na visečih posodah[22] in to s horizontalno (*sl. 4.21:* R3/1) ali vertikalno perforacijo (*sl. 4.21:* R3/2).

4.2.2.2.1 Grips: types D1, D2, and D8

4.2.2.2.1.1 *Type D1*

Type D1 consists of all tongue-shaped grips (e.g. *Pls. 4.1:* 2; *4.11:* 1; *4.15:* 1,5; *4.37:* 4), which most frequently appear on the sharp break (*Fig. 4.22:* D1/1) but can also be found on the lip (*Fig. 4.22:* D1/3). In one example, a thickening resembling the tongue-shaped grip appears on the lip (see *Pl. 4.31:* 9).

[21] Prim. z Velušček 2004b, sl. 4.2.13.
[22] Glej poglavje 4.2.1.3, v tem prispevku.



Sl. 4.22: Spaha. Držaji po tipih (D1, D2 in D8). M = 1 : 5.
Fig. 4.22: Spaha. Grips according to type (D1, D2, and D8). Scale = 1 : 5.

Najdemo jih na ustju (*sl. 4.21:* R3/1), na vratu pod ustjem (*sl. 4.21:* R3/3) in na trebuhu (*sl. 4.21:* R3/2,4), oz. povezujejo vrat s trebuhom (*sl. 4.21:* R3/5).

4.2.2.2 DRŽAJI

Posebno kategorijo predstavljajo tudi držaji (D). Na keramiki s Spahe jih je nekoliko manj od ročajev. Najdemo jih na zajemalkah,[23] ki jih v tem delu ne bomo posebej obravnavali, in predvsem na skledah (npr. *t. 4.15:* 1; *4.37:* 4). V nekaj primerih so na posodah tudi okrogle plastične aplikacije (*t. 4.9:* 12; *4.37:* 5) ali bradavice (*t. 4.6:* 7), tudi te obravnavamo posebej v poglavju o ornamentu (glej v nadaljevanju). Kljub vsemu med držaji razlikujemo več tipov: D1, D2 in D8.

4.2.2.2.1 Držaji: tipi D1, D2 in D8

4.2.2.2.1.1 *Tip D1*

K tipu D1 uvrščamo vse jezičaste držaje (npr. *t. 4.1:* 2; *4.11:* 1; *4.15:* 1,5; *4.37:* 4), ki se pojavljajo največkrat na kolenčastem prelomu (*sl. 4.22:* D1/1), najti pa jih je tudi na ustju (*sl. 4.22:* D1/3). V enem primeru se na

4.2.2.2.1.2 *Type D2*

At Spaha, grips with finger imprints of type D2 are very rare or questionable. The grip/cordon(?) with finger imprints on the fragment from *Fig. 4.22:* D2/1 (*Pl. 4.33:* 1) probably belongs to this category.

4.2.2.2.1.3 *Type D8*

The category of cylindrical grips consists of grips that can be most frequently encountered on some types of ladles (type Z1) and similar grips on vessels of other shapes, which can end in an animal protome (e.g. *Fig. 4.22:* D8/1,2).

4.2.3 ORNAMENT

Pottery from Spaha is richly ornamented. Relief ornaments, appliqués, and two colours of slip, red and black, appear.

Types of ornaments are presented according to the logic of the prevailing ornament on an individual fragment.

[23] Glej poglavje 4.2.1.6, v tem prispevku.

ustju pojavlja jezičastemu držaju podobna odebelitev (glej *t. 4.31:* 9).

4.2.2.2.1.2 *Tip D2*

Na Spahi so razčlenjeni držaji tipa D2 zelo redki oz. vprašljivi. V to kategorijo najverjetneje spada razčlenjen držaj/rebro(?), ki je na fragmentu s *sl. 4.22:* D2/1 (*t. 4.33:* 1).

4.2.2.2.1.3 *Tip D8*

V kategorijo valjastih oz. cigarastih držajev sodijo držaji, ki jih največkrat najdemo na nekaterih tipih zajemalk (tip Z1), in njim podobni držaji na posodah drugih oblik, ki se lahko končajo z živalskim protomom (npr. *sl. 4.22:* D8/1,2).

4.2.3 ORNAMENT

Keramika s Spahe je bogato ornamentirana. Pojavljajo se reliefni ornamenti, plastične aplikacije in dve vrsti premazov: rdeč in črn.

Tipe ornamentov predstavljamo po logiki prevladujočega ornamenta na posameznem fragmentu.

4.2.3.1 RELIEFNI ORNAMENT

K reliefnemu ornamentu uvrščamo okras, ki je nastal s tehnikami vrezovanja, odtiskovanja, vbadanja itn. Lahko je bilo uporabljenih tudi več omenjenih tehnik hkrati. Končni produkt je v nekem bolj ali manj načrtovanem motivu izveden poglobljen vzorec, ki je bil, kot kažejo tudi najdbe s Spahe, največkrat prekrit s t. i. belo inkrustacijo (npr. *t. 4.10:* 14; *4.11:* 3,6–8; *4.19:* 7; *4.21:* 2; *4.30:* 16).

4.2.3.1.1 Vrezovanje

Z uporabo tehnike vrezovanja dobimo vreze, t. j. reliefni črtkani okras značilnega V-preseka.

4.2.3.1.1.1 *Tip O1*

Na keramiki s Spahe se pojavlja navadni vrez (*sl. 4.23:* O1/1–7). Najdemo ga samostojno (*sl. 4.23:* O1/1,2) in v kombinaciji z drugimi ornamenti: vbodi (*sl. 4.23:* O1/3), vbodi in odtisi (*sl. 4.23:* O1/4), odtisi (*sl. 4.23:* O1/5), plastičnimi aplikacijami (*sl. 4.23:* O1/6) in krožnimi poglobitvami (*sl. 4.23:* O1/7).

4.2.3.1 RELIEF ORNAMENT

Relief ornaments are decorations made by techniques of incision, impressing, stitching etc. Several of the mentioned techniques could have been used at the same time. The end product is in some more or less planned motif made deepened pattern which was, as also confirmed by the finds from Spaha, most frequently covered by the s.c. white encrustation (e.g. *Pls. 4.10:* 14; *4.11:* 3,6–8; *4.19:* 7; *4.21:* 2; *4.30:* 16).

4.2.3.1.1 Incised ornamentation

The use of the technique of incising results in incisions, the relief lined decoration of typical V cross-section.

4.2.3.1.1.1 *Type O1*

Pottery from Spaha has plain incisions (*Fig. 4.23:* O1/1–7). It can be found independently (*Fig. 4.23:* O1/1,2) or in combination with other ornaments: stitch impressions (*Fig. 4.23:* O1/3), stitch impressions and impressions (*Fig. 4.23:* O1/4), impressions (*Fig. 4.23:* O1/5), appliqués (*Fig. 4.23:* O1/6), and circular deepening (*Fig. 4.23:* O1/7).

4.2.3.1.1.2 *Type O2*

In individual examples incisions are made by a blunter object and resemble deep grooves (*Fig. 4.23:* O2/1). They can be found in combination with other ornaments, such as: stitch impressions (*Fig. 4.23:* O2/2) and impressions (*Fig. 4.23:* O2/3).

4.2.3.1.1.3 *Type O3*

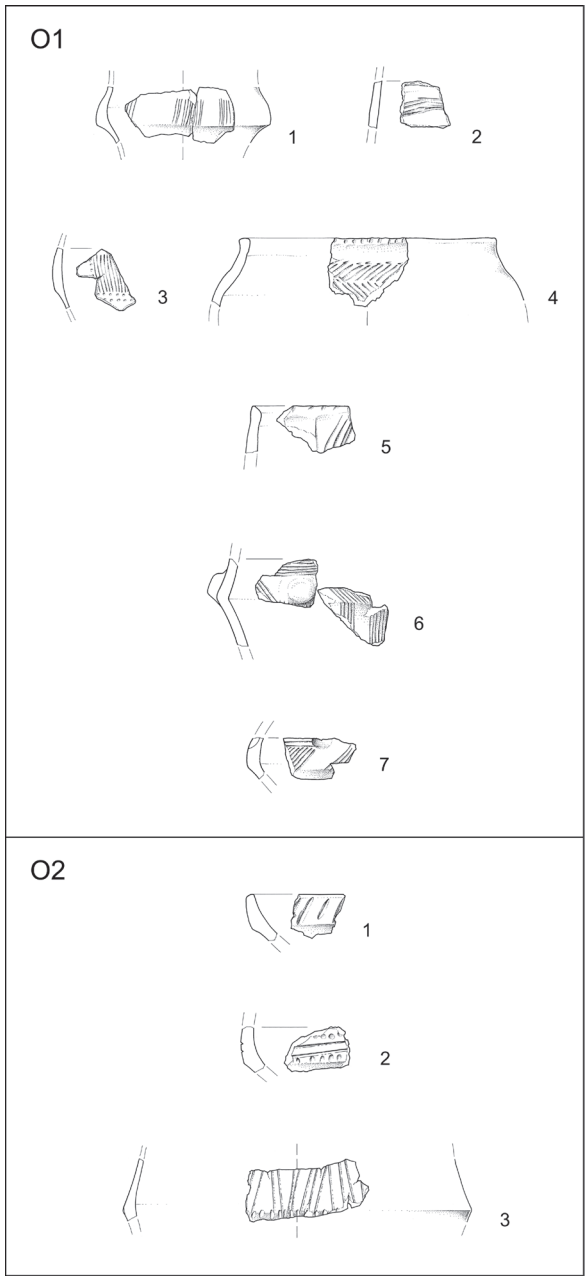
The furrowed incision is very rare. It only appears on the ribbon handle (*Fig. 4.24:* O3/1). It was not catalogued among our reviewed material but it is published by J. Dular[24] and we recapitulate it from there.

We should also point out that to furrowed incision similar decoration appears also on a pot which is coated red (*Pl. 4.18:* 8).

4.2.3.1.2 Grooved ornamentation

The technique of grooving results in grooves which resemble incisions but are slightly wider and have a characteristic U cross-section.

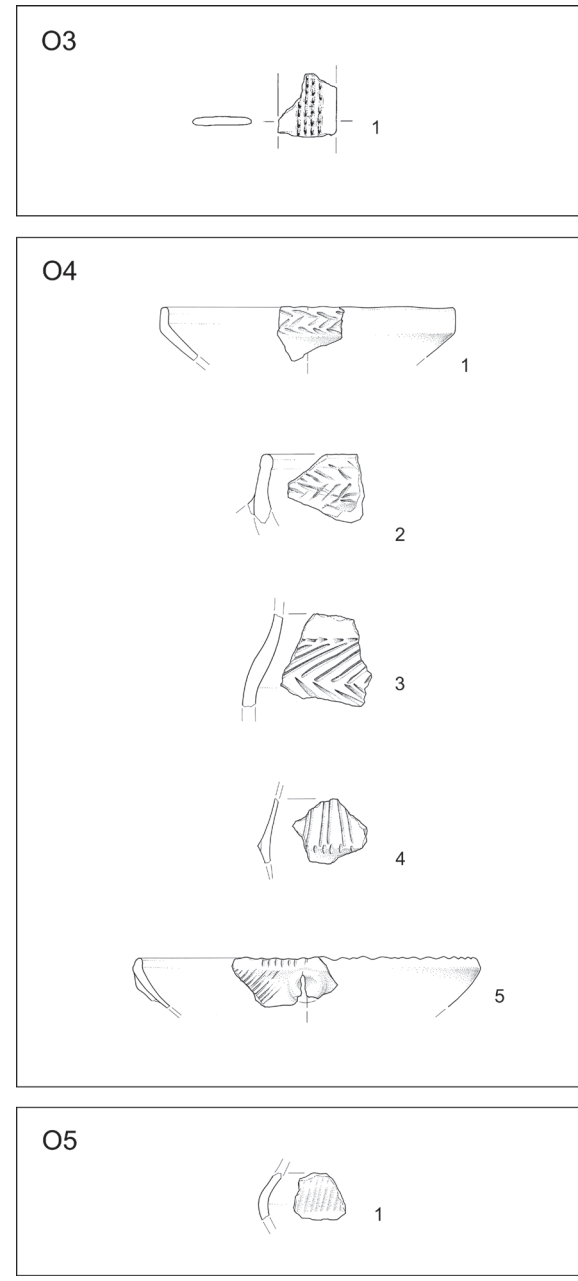
[24] 2001, Pl. 8: 7.



Sl. 4.23: Spaha. Ornament po tipih (O1 in O2). M = 1 : 5.
Fig. 4.23: Spaha. Ornament according to type (O1 and O2). Scale = 1 : 5.

4.2.3.1.1.2 *Tip O2*

V posameznih primerih so vrezi narejeni z bolj topim predmetom in spominjajo na globoke žlebove (*sl. 4.23:* O2/1). Najti jih je v kombinaciji z drugimi ornamenti, kot so: vbodi (*sl. 4.23:* O2/2) in odtisi (*sl. 4.23:* O2/3).



Sl. 4.24: Spaha. Ornament po tipih (O3–O5). M = 1 : 5.
Fig. 4.24: Spaha. Ornament according to types (O3–O5). Scale = 1 : 5.

4.2.3.1.2.1 *Type O4*

Grooves can be an independent ornament (*Fig. 4.24:* O4/1) or appear together with other decoration, such as: incisions (*Fig. 4.24:* O4/2), stitch impressions (*Fig. 4.24:* O4/3), impressions (*Fig. 4.24:* O4/4), and appliqués (*Fig. 4.24:* O4/5).

4.2.3.1.1.3 *Tip O3*

Zelo redek je brazdasti vrez. Pojavlja se samo na trakastem ročaju (*sl. 4.24:* O3/1). Med pregledanim gradivom tega ročaja nismo evidentirali, objavlja ga J. Dular[24] in od tam ga tudi povzemamo.

Opozoriti je še treba, da se brazdastemu vrezu zelo podoben okras pojavlja tudi na loncu, ki je sicer premazan z rdečim premazom (*t. 4.18:* 8).

4.2.3.1.2 Žlebljenje

Z uporabo tehnike žlebljenja dobimo žlebove, ki so podobni vrezom, a nekoliko širši in značilnega U-preseka.

4.2.3.1.2.1 *Tip O4*

Žlebovi so lahko samostojni ornament (*sl. 4.24:* O4/1) ali pa se pojavljajo skupaj z drugimi okrasi, kot npr.: z vrezi (*sl. 4.24:* O4/2), vbodi (*sl. 4.24:* O4/3), odtisi (*sl. 4.24:* O4/4) in plastičnimi aplikacijami (*sl. 4.24:* O4/5).

4.2.3.1.3 Kaneliranje

Kanelure nastanejo z uporabo tehnike kaneliranja. Značilne so široke kanelirane linije.

4.2.3.1.3.1 *Tip O5*

Na Spahi je odkrit en fragment keramike, ki je ornamentiran s tehniko kaneliranja (*sl. 4.24:* O5/1).

4.2.3.1.4 Vtiskovanje

Z uporabo tehnike vtiskovanja dobimo na posodju odtise. Glede na orodje za izvedbo okrasa na keramiki s Spahe lahko odtise ločimo na vbode (tip O10), odtise prsta (tip O11), odtise topega predmeta (tip O12) in noža oziroma podolgovatega ostrega predmeta (tip O14).

4.2.3.1.4.1 *Tip O10*

Vbodi so razmeroma pogost ornament na keramiki, še posebej v kombinaciji z drugimi prevladujočimi ornamenti, pojavljajo pa se tudi samostojno (*sl. 4.25:* O10/1), skupaj z odtisi (*sl. 4.25:* O10/2) in plastičnim okrasom (*sl. 4.25:* O10/3).

[24] 2001, t. 8: 7.

4.2.3.1.3 Fluted ornamentation

Flutes are made by the technique of fluting. Characteristic for them are wide fluted lines.

4.2.3.1.3.1 *Type O5*

At Spaha, one pottery fragment was discovered that is ornamented by the technique of fluting (*Fig. 4.24:* O5/1).

4.2.3.1.4 Impressed ornamentation

The technique of impressing results in impressions on the vessels. According to the tools used for making this pottery decoration at Spaha we can divide the impressions to stitch impressions (type O10), fingerprint impressions (type O11), blunt object impressions (type O12), and knife or sharp elongated object impressions (type O14).

4.2.3.1.4.1 *Type O10*

Stitch impressions are a relatively frequent ornament on pottery, especially combined with other prevailing ornaments, nevertheless, they also occur independently (*Fig. 4.25:* O10/1), together with impressions (*Fig. 4.25:* O10/2) and appliqués (*Fig. 4.25:* O10/3).

4.2.3.1.4.2 *Type O11*

Fingerprint impressions have been recognised on cordons and lips (e.g. *Pl. 4.33:* 1), on the pottery fragment coated red (*Pl. 4.34:* 9).

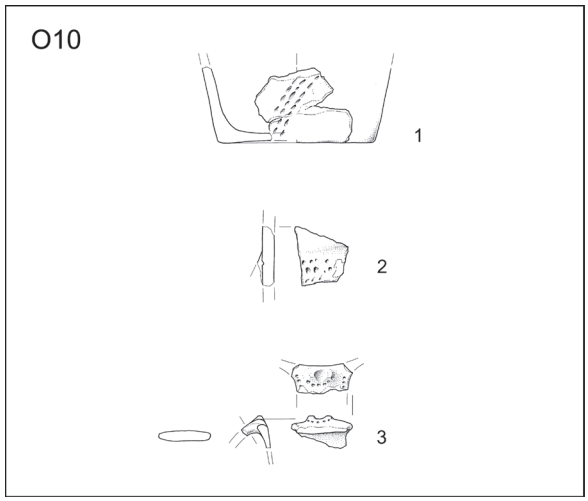
Two fragments reveal circular deepening, which could have been made by a finger (*Pls. 4.9:* 13; *4.14:* 18).

4.2.3.1.4.3 *Type O12*

Similar as for incisions and fingerprint impressions is true for blunt object impressions as they appear as a subordinate ornament in combination with other decoration but also independently (*Fig. 4.26:* O12/1).

Blunt object impressions are found also on cordons with finger imprints.[25]

[25] See chapter 4.2.3.1.5.3.



Sl. 4.25: Spaha. Ornament tipa O10. M = 1 : 5.
Fig. 4.25: Spaha. Ornament of type O10. Scale = 1 : 5.

4.2.3.1.4.2 *Tip O11*

Odtise prsta smo prepoznali na razčlenjenih rebrih in ustju (npr. *t. 4.33:* 1), na fragmentu keramike, ki je premazan z rdečim premazom (*t. 4.34:* 9).

Na dveh fragmentih je krožna poglobitev, ki je bila lahko narejena s prstom (*t. 4.9:* 13; *4.14:* 18).

4.2.3.1.4.3 *Tip O12*

Podobno kot za vreze in odtise prsta velja tudi za odtise topega predmeta, kot podrejen ornament jih najdemo v kombinaciji z drugimi okrasi, pojavljajo pa se tudi samostojno (*sl. 4.26:* O12/1).

Najdemo jih tudi na razčlenjenih rebrih.[25]

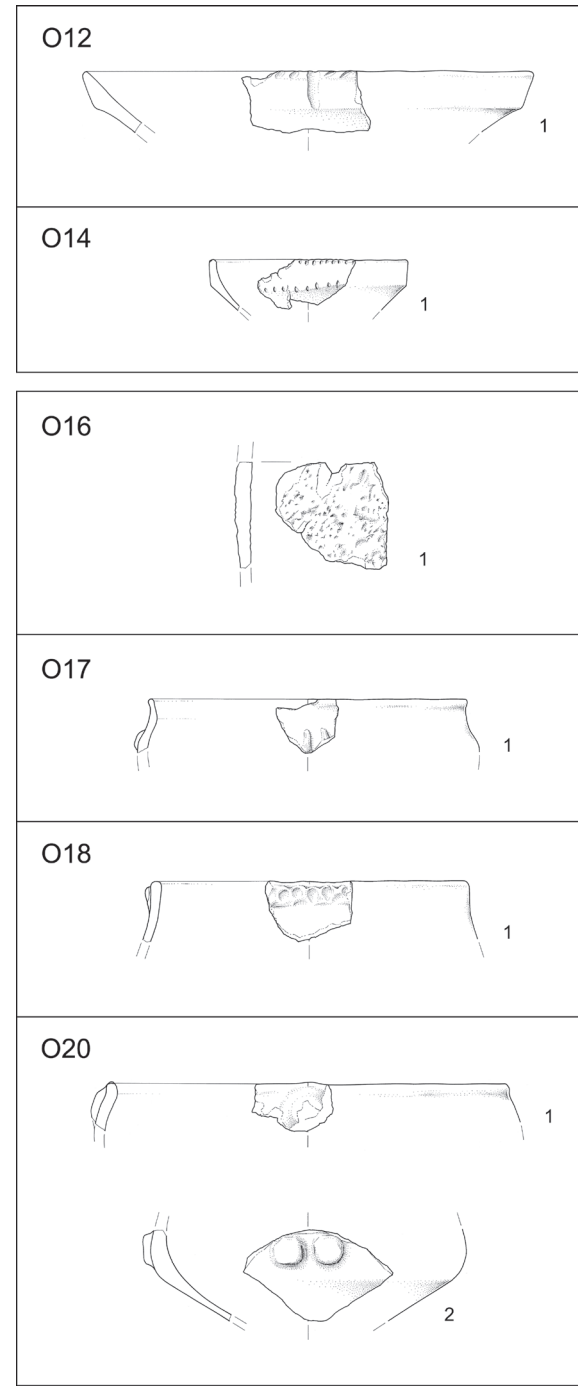
4.2.3.1.4.4 *Tip O14*

Veliko manj je odtisov noža oziroma podolgovatega ostrega predmeta. Običajno so na takšen način ornamentirana ustja ali kolenčasti prelomi na skledah (*sl. 4.26:* O14/1).

4.2.3.1.5 Plastično apliciranje

Za tehniko plastičnega apliciranja je značilen okras, ki je apliciran na steno posode. Delimo ga na več zvrsti: barbotin (tip O16), nerazčlenjeno (tip O17) in razčlenjeno rebro (tip O18), bradavice (tip O19), ploščate okrogle (tip O20) in obročkaste nalepke (tip O21).

[25] Glej poglavje 4.2.3.1.5.3, v tem prispevku.



Sl. 4.26: Spaha. Ornament po tipih (O12–O20). M = 1 : 5.
Fig. 4.26: Spaha. Ornament according to type (O12–O20). Scale = 1 : 5.

4.2.3.1.4.4 *Type O14*

Knife or elongated sharp object impressions are rare. Usually this type of ornamentation appears on lips or sharp breaks on dishes (*Fig. 4.26:* O14/1).

4.2.3.1.5.1 *Tip O16*

Barbotin je redek ornament; poznamo ga samo z nekaj fragmentov (npr. *sl. 4.26:* O16/1).

4.2.3.1.5.2 *Tip O17*

Podobno velja tudi za nerazčlenjena rebra, ki se na enem fragmentu pojavljajo v paru (*sl. 4.26:* O17/1).

4.2.3.1.5.3 *Tip O18*

Kot tudi za razčlenjena rebra, ki se pojavljajo v nekaj primerih (*sl. 4.26:* O18/1), enkrat v kombinaciji z rdečim premazom (*t. 4.33:* 4).

4.2.3.1.5.4 *Tip O19*

Bradavica je tudi zelo redka. V enem primeru se pojavlja na skledi, ki je premazana z rdečim premazom (*t. 4.6:* 7).

4.2.3.1.5.5 *Tip O20*

Okroglo plastično nalepko najdemo samo na posodi tik pod ustjem (*sl. 4.26:* O20/1) ali pa na ramenu v kombinaciji s črnim premazom in žlebovi (*t. 4.18:* 2).

V enem primeru pa se na ramenu posode pojavljata okrogli plastični nalepki v paru (*sl. 4.26:* O20/2).

4.2.3.1.5.6 *Tip O21*

Obročkasto nalepko najdemo dvakrat: na ramenu globoke posode (*t. 4.9:* 12) in ostenju sklede (*t. 4.11:* 9). Pojavlja se v kombinaciji z drugimi ornamenti.

4.2.3.1.6 Modeliranje

Pri modeliranju je za razliko od tehnike apliciranja ornament izoblikovan iz stene oziroma ročaja posode.

4.2.3.1.6.1 *Tip O22*

Izvlečen obroček je modeliran na vrhu trakastega ročaja (*t. 4.20:* 17).

4.2.3.1.5 Appliquéd ornamentation

Characteristic for this technique is the ornamentation applied to the wall of a vessel. It is divided into: barbotine (type O16), cordon without (type O17) and with finger imprints (type O18), embossment (type O19), flat-round (type O20) and ring-shaped appliqué (type O21).

4.2.3.1.5.1 *Type O16*

Barbotine is a very rare ornament; it is known only from a few fragments (e.g. *Fig. 4.26:* O16/1).

4.2.3.1.5.2 *Type O17*

The similar is true for cordons without finger imprints, which on one fragment appear in pair (*Fig. 4.26:* O17/1).

4.2.3.1.5.3 *Type O18*

Likewise for cordons with finger imprints which appear in a few cases (*Fig. 4.26:* O18/1), once in combination with red slip (*Pl. 4.33:* 4).

4.2.3.1.5.4 *Type O19*

Embossment is also very rare. Once it appears on a dish coated red (*Pl. 4.6:* 7).

4.2.3.1.5.5 *Type O20*

Flat-round appliqués are found only on vessels right beneath the lip (*Fig. 4.26:* O20/1) or on the shoulder in combination with black slip and grooves (*Pl. 4.18:* 2).

Once two flat-round appliqués in pair appear on the shoulder of a vessel (*Fig. 4.26:* O20/2).

4.2.3.1.5.6 *Type O21*

The ring-shaped appliqué is found twice: on the shoulder of a deep vessel (*Pl. 4.9:* 12) and on the wall of a dish (*Pl. 4.11:* 9). They appear in combination with other ornaments.

4.2.3.1.6 Modelled ornamentation

The technique of modelling is different from appliquéd ornamentation in that the ornament is modelled from the wall or handle of the vessel itself.

4.2.3.2 PLOSKOVNI ORNAMENT

4.2.3.2.1 Poliranje in premazovanje

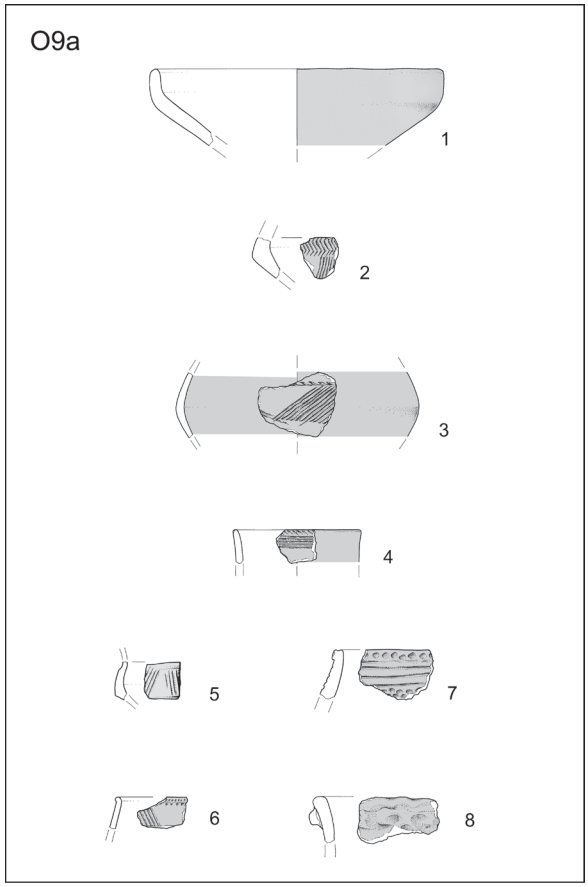
Ploskovni ornament je na keramiki s Spahe zelo pogost. Razlikujemo poliranje oziroma glajenje (tip O8) in premazovanje z rdečim (tip O9a) ter črnim premazom (tip O9b). Slednji premaz je veliko slabše ohranjen, zato vprašanje, ali gre dejansko za premaz, ostaja odprto.

4.2.3.2.1.1 *Tip O8*

Za poliranje so značilne gladke zglajene površine. Ker so bile tako izdelane posode obdelane po vsej površini, ta tehnika nima izrazito ornamentalnega značaja (tip O8).

4.2.3.2.1.2 *Tip O9a*

Na Spahi je zelo pogosto premazovanje posod z rdečim premazom, ki se ga z mokrimi rokami z lahkoto otre. Najdemo ga na globokih posodah, skledah in zajemalkah (npr. *t. 4.18:* 8; *4.23:* 7; *4.35:* 11).



Sl. 4.27: Spaha. Ornament tipa O9a. M = 1 : 5.
Fig. 4.27: Spaha. Ornament of type O9a. Scale = 1 : 5.

4.2.3.1.6.1 *Type O22*

A drawn out ringlet is modelled at the top of the ribbon handle (*Pl. 4.20:* 17).

4.2.3.2 SURFACE ORNAMENT

4.2.3.2.1 Polishing and painting

The surface ornament is very frequent on the pottery from Spaha. We distinguish between polishing or smoothing (type O8) and painting with red (type O9a) and black slip (type O9b). The latter is much more poorly preserved thus the question whether this actually is a slip remains open.

4.2.3.2.1.1 *Type O8*

Smooth surfaces are characteristic for polishing. Since vessels made in this way were worked along the entire surface this technique does not have a distinctly ornamental character (type O8).

4.2.3.2.1.2 *Type O9a*

At Spaha, slipping vessels red is very frequent. The red slip can be easily wiped off with wet hands and is found on deep vessels, dishes, and ladles (e.g. *Pls. 4.18:* 8; *4.23:* 7; *4.35:* 11).

It appears independently (*Fig. 4.27:* O9a/1) and in combination with incisions (*Fig. 4.27:* O9a/2), incisions and stitch impressions (*Fig. 4.27:* O9a/3), incisions and impressions (*Fig. 4.27:* O9a/4), grooves (*Fig. 4.27:* O9a/5), grooves and stitch impressions (*Fig. 4.27:* O9a/6), grooves and impressions (*Fig. 4.27:* O9a/7), and appliqués (*Fig. 4.27:* O9a/8 and *Pl. 4.6:* 7).

4.2.3.2.1.3 *Type O9b*

Vessels with black slip are less frequent than with the red slip. It is found on deep (e.g. *Pl. 4.9:* 4) but also shallow vessels (e.g. *Pl. 4.13:* 10) independently (*Fig. 4.28:* O9b/1) or in combination with other ornaments, such as incisions (*Fig. 4.28:* O9b/2), incisions and stitch impressions (*Fig. 4.28:* O9b/3), incisions and impressions (*Fig. 4.28:* O9b/4), grooves and appliqués (*Fig. 4.28:* O9b/5).

Sl. 4.28: Spaha. Ornament tipa O9b. M = 1 : 5.
Fig. 4.28: Spaha. Ornament of type O9b. Scale = 1 : 5.

Pojavlja se samostojno (*sl. 4.27:* O9a/1) in v kombinaciji z vrezi (*sl. 4.27:* O9a/2), vrezi in vbodi (*sl. 4.27:* O9a/3), vrezi in odtisi (*sl. 4.27:* O9a/4), žlebovi (*sl. 4.27:* O9a/5), žlebovi in vbodi (*sl. 4.27:* O9a/6), žlebovi in odtisi (*sl. 4.27:* O9a/7) in plastičnimi aplikacijami (*sl. 4.27:* O9a/8 in *t. 4.6:* 7).

4.2.3.2.1.3 *Tip O9b*

Premazovanje posod s premazom črne barve je manj pogosto kot premazovanje z rdečim premazom. Najdemo ga na globokih (npr. *t. 4.9:* 4), a tudi plitvih posodah (npr. *t. 4.13:* 10) in to lahko samostojno (*sl. 4.28:* O9b/1) ali v kombinaciji z drugim ornamentom, kot npr. z vrezi (*sl. 4.28:* O9b/2), vrezi in vbodi (*sl. 4.28:* O9b/3), vrezi in odtisi (*sl. 4.28:* O9b/4), žlebovi in plastično aplikacijo (*sl. 4.28:* O9b/5).

4.3 NAJDBE IZ GLINE

Med najdbami, ki so večidel narejene iz slabo pečene gline, se na Spahi pojavljajo uteži (*sl. 4.29:* U/1–3). Med njimi(?) je tudi ena narejena iz dobro pečene gline (*t. 4.12:* 6).

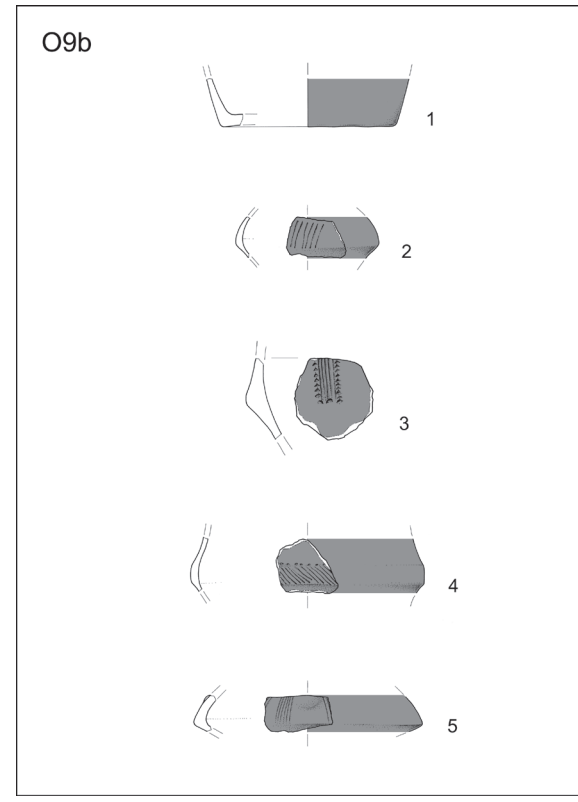
4.4 KAMNITE, KOSTNE NAJDBE IN NAJDBE IZ ROGOVJA

Kot že rečeno, na Spahi prevladujejo keramične najdbe, najti pa je tudi druge, med katerimi je največ fragmentov žrmelj, katerih surovinsko sestavo je preučil J. Turk.[26] Prav tako so na drugem mestu obdelane kamnite sekire (*t. 4.8:* 7; *4.16:* 13; *4.17:* 4; *4.31:* 1; *4.36:* 12; *4.37:* 3,16)[27] in druga orodja iz roženca.[28] Enako je tudi s kostnimi najdbami in najdbami iz rogovja.[29]

4.5 SKLEP

Na Spahi prevladujejo keramične najdbe. Ker so plasti med seboj premešane, smo najdbe razvrstili po obliki (glede na podobno oblikovanost fragmentov), po tipu (glede na tipološko primerljivost rekonstruiranih posod) in po vrsti (glede na primerljivo uporabnost), ne

[26] Glej poglavje 8, v tem zborniku.
[27] Glej poglavje 6, v tem zborniku.
[28] Glej poglavje 7, v tem zborniku.
[29] Glej poglavje 9, v tem zborniku.



4.3 CLAY FINDS

Finds which are mostly made of poorly burned clay at Spaha consists of weights (*Fig. 4.29:* U/1–3). Among them(?) is also one made of well burned clay (*Pl. 4.12:* 6).

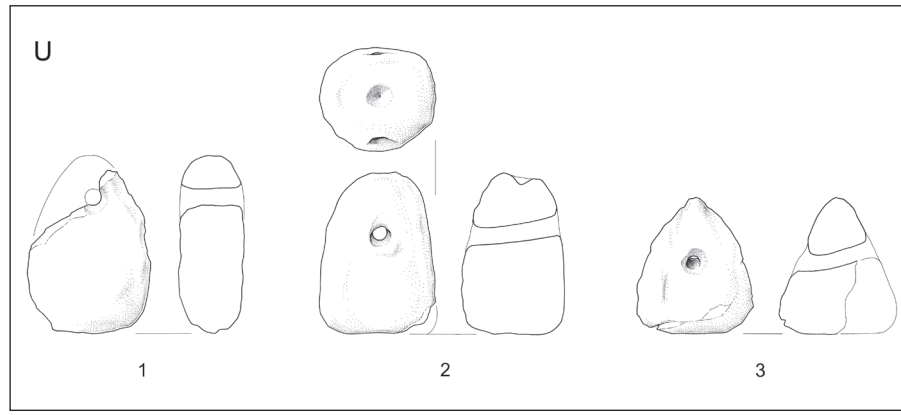
4.4 STONE, BONE AND ANTLER FINDS

As we have already mentioned, pottery finds prevail at Spaha but some other can also be found, among which the most numerous are querns fragments, the raw material of which was studied by J. Turk.[26] Stone axes (*Pls. 4.8:* 7; *4.16:* 13; *4.17:* 4; *4.31:* 1; *4.36:* 12; *4.37:* 3,16)[27] and other tools made of chert[28] are also dealt with elsewhere. Similarly, bone and antler finds are discussed elsewhere, too.[29]

4.5 CONCLUSION

Pottery finds prevail at Spaha. Since layers are heavily mixed the finds have been classified according to shape (with respect to similar shape of fragments),

[26] See chapter 8, in this monograph.
[27] See chapter 6, in this monograph.
[28] See chapter 7, in this monograph.
[29] See chapter 9, in this monograph.



Sl. 4.29: Spaha. Uteži (U). M = 1 : 5.
Fig. 4.29: Spaha. Weights (U). Scale = 1 : 5.

glede na kronološko ali kulturno pripadnost. Tako smo definirali osemnajst oblik globokih posod na podlagi ostenja oz. ustja z ostenjem. Tri oblike dna. Prepoznali smo tudi devet tipov skled in dva tipa nog, ki so verjetno deli skled na nogah. Skodele se pojavljajo v štirih tipih. Še več je visečih posod. Prepoznali smo tudi posodo z izlivom in ostanke cedil. Zajemalke se pojavljajo v dveh tipih, s polnim in tulastim držajem. Pestrejša so predilna vretenca, ki smo jih razvrstili v štiri tipe. Posebno skupino keramike predstavljajo pečatniki in figuralna plastika. V analizo smo zajeli tudi ročaje in držaje. Posebno poglavje je posvečeno ornamentu, naj na tem mestu omenimo, da je bilo veliko število posod premazanih z rdečim, a tudi s črnim premazom.

type (with respect to typological comparability of reconstructed vessels), and form (with respect to comparable use) regardless the chronological or cultural affiliation. Thus eighteen forms of deep vessels have been defined on the basis of the wall or lips with walls. Three forms of bottoms. Nine types of dishes and two types of feet, which are probably parts of dishes on feet. Bowls appear in four types. More numerous are hanging vessels. A vessel with a spout and remains of strainers have been delimited. Ladles occur in two types, with a solid and hollow grip. Spindle whorls have been divided into four types. A special group of pottery consists of stamp seals and figural plastic. The analysis encompassed also handles and grips. A special chapter deals with the ornament and let us emphasize here that a great number of vessels were coated red and some also black.

4.6 KATALOG NAJDB

Tabla 4.1

1. Frag. ustja z ostenjem; keramika; površina: temnosiva; zrnatost: groba; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3032.

2. Frag. ustja z ostenjem; držaj; keramika; površina: temnorjava; zrnatost: groba; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3036.

3. Frag. ustja z ostenjem; keramika; površina: siva; zrnatost: groba; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3033.

4. Frag. ustja z ostenjem in ušescem; keramika; površina: temnorjava; zrnatost: fina; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3056.

5. Frag. ostenja; keramika; ornament: vrezi (rovašenje); površina: temnorjava; zrnatost: fina; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3057.

6. Frag. ostenja s frag. ročaja; keramika; ornament: žlebovi; površina: siva; zrnatost: fina; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3054.

7. Frag. ostenja s frag. ročaja; keramika; površina: temnorjava; zrnatost: fina; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3049.

8. Frag. držaja; keramika; ornament: protom(?), vbodi; površina: siva; zrnatost: fina; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3047.

9. Frag. ročaja; keramika; ornament: odtisi; površina: temnosiva; zrnatost: fina; sonda I; reženj: 2; kv. C; leto pridobitve: 1980; inv. št. P 3053.

10. Frag. dna z ostenjem; keramika; površina: siva; zrnatost: groba; sonda I; reženj: 2; kv. B; leto pridobitve: 1979 ali 1980; inv. št. P 3019.

11. Frag. dna z ostenjem; keramika; površina: siva; zrnatost: fina; sonda I; reženj: 2; kv. B; leto pridobitve: 1979 ali 1980; inv. št. P 3013.

12. Frag. ročaja; keramika; površina: siva; zrnatost: fina; sonda I; reženj: 2; kv. B; leto pridobitve: 1979 ali 1980; inv. št. P 3030.

13. Frag. ostenja z ročajem; keramika; površina: rdeča; zrnatost: fina; sonda I; reženj: 1; kv. A; leto pridobitve: 1979; inv. št. P 3002.

14. Frag. ostenja; keramika; ornament: žlebovi, odtisi; površina: siva; zrnatost: groba; sonda I; reženj: 1; kv. B; leto pridobitve: 1979; inv. št. P 3001.

Tabla 4.2

1. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi; površina: črna, porozna; zrnatost: groba; sonda II; reženj: 5; kv. 4; leto pridobitve: 1981; inv. št. P 3773.

2. Frag. ostenja; keramika; ornament: vrezi, odtisi; površina: temnosiva; zrnatost: groba; sonda II; reženj: 5; kv. 4; leto pridobitve: 1981; inv. št. P 3828.

3. Frag. ostenja s frag. ročajem; keramika; ornament: rdeč premaz; površina: oranžna; zrnatost: fina; sonda II; reženj: 5; kv. 4; leto pridobitve: 1981; inv. št. P 3823.

4. Frag. ročaja; keramika; ornament: vrezi, odtisi; površina: rjava; zrnatost: groba; sonda II; reženj: 5; kv. 4; leto pridobitve: 1981; inv. št. P 3829.

5. Frag. ostenja z držajem; keramika; ornament: rdeč premaz, protom, vrezi; površina: oranžna, razpokana; zrnatost: fina; sonda II; reženj: 5; kv. 4; leto pridobitve: 1981; inv. št. P 3810.

4.6 CATALOGUE OF FINDS

Plate 4.1

1. Frag. of a lip with a wall; pottery; surface: dark grey; granularity: coarse; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3032.

2. Frag. of a lip with a wall; grip; pottery; surface: dark brown; granularity: coarse; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3036.

3. Frag. of a lip with a wall; pottery; surface: grey; granularity: coarse; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3033.

4. Frag. of a lip with a wall and an ear; pottery; surface: dark brown; granularity: fine; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3056.

5. Frag. of a wall; pottery; ornament: incisions; surface: dark brown; granularity: fine; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3057.

6. Frag. of a wall with a frag. of a grip; pottery; ornament: grooves; surface: grey; granularity: fine; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3054.

7. Frag. of a wall with a frag. of a handle; pottery; surface: dark brown; granularity: fine; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3049.

8. Frag. of a grip; pottery; ornament: protome(?), stitch impressions; surface: grey; granularity: fine; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3047.

9. Frag. of a handle; pottery; ornament: impressions; surface: dark grey; granularity: fine; trench I; slice: 2; sq. C; year of acquisition: 1980; inv. no. P 3053.

10. Frag. of a bottom with a wall; pottery; surface: grey; granularity: coarse; trench I; slice: 2; sq. B; year of acquisition: 1979 or 1980; inv. no. P 3019.

11. Frag. of a bottom with a wall; pottery; surface: grey; granularity: fine; trench I; slice: 2; sq. B; year of acquisition: 1979 or 1980; inv. no. P 3013.

12. Frag. of a handle; pottery; surface: grey; granularity: fine; trench I; slice: 2; sq. B; year of acquisition: 1979 or 1980; inv. no. P 3030.

13. Frag. of a wall with a handle; pottery; surface: red; granularity: fine; trench I; slice: 1; sq. A; year of acquisition: 1979; inv. no. P 3002.

14. Frag. of a wall; pottery; ornament: grooves, impressions; surface: grey; granularity: coarse; trench I; slice: 1; sq. B; year of acquisition: 1979; inv. no. P 3001.

Plate 4.2

1. Frag. of a lip with a wall; pottery; ornament: incisions, stitches; surface: black, porous; granularity: coarse; trench II; slice: 5; sq. 4; year of acquisition: 1981; inv. no. P 3773.

2. Frag. of a wall; pottery; ornament: incisions, impressions; surface: dark grey; granularity: coarse; trench II; slice: 5; sq. 4; year of acquisition: 1981; inv. no. P 3828.

3. Frag. of a wall with fragmented handle; pottery; ornament: red slip; surface: orange; granularity: fine; trench II; slice: 5; sq. 4; year of acquisition: 1981; inv. no. P 3823.

4. Frag. of a handle; pottery; ornament: incisions, impressions; surface: brown; granularity: coarse; trench II; slice: 5; sq. 4; year of acquisition: 1981; inv. no. P 3829.

5. Frag. of a wall with a grip; pottery; ornament: red slip, protome, incisions; surface: orange, cracked; granularity: fine; trench II; slice: 5; sq. 4; year of acquisition: 1981; inv. no. P 3810.

6. Frag. ustja z ostenjem; keramika; ornament: žlebovi, odtisi; površina: temnosiva, porozna; zrnatost: groba; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3832.

7. Frag. ustja z ostenjem; keramika; ornament: plastična nalepka (okrogla); površina: temnosiva, porozna; zrnatost: groba; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3853.

8. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: oranžna; zrnatost: fina; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3862.

9. Frag. ustja z ostenjem; keramika; površina: temnosiva; zrnatost: fina; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3866.

10. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, žlebovi, vbodi; površina: temnosiva; zrnatost: fina; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3834.

11. Frag. ustja z ostenjem; keramika; ornament: žlebovi, odtisi; površina: rdeča, porozna; zrnatost: groba; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3833.

12. Frag. dna z ostenjem; keramika; ornament: rdeč premaz, vrezi, bela inkrustacija; površina: temnorjava, razpokana; zrnatost: fina; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3879.

13. Frag. dna z ostenjem; keramika; površina: rjava; zrnatost: groba; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3882.

14. Frag. noge; keramika; ornament: rdeč premaz; površina: oranžna; zrnatost: drobna; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3865.

15. Frag. ostenja z ušescem; keramika; ornament: rdeč premaz; površina: rdeča, razpokana; zrnatost: fina; sonda II; reženj: 5; kv. 5; leto pridobitve: 1981; inv. št. P 3880.

16. Frag. držaja; keramika; ornament: protom, vrezi; površina: temnosiva; zrnatost: drobna; sonda II; reženj: 5; kv. 6; leto pridobitve: 1981; inv. št. P 3900.

Tabla 4.3

1. Frag. ostenja; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: drobna; sonda II; reženj: 4; kv. 1; leto pridobitve: 1980; inv. št. P 3538.

2. Frag. noge in dna; keramika; ornament: rdeč premaz; površina: oranžna; zrnatost: drobna; sonda II; reženj: 4; kv. 1; leto pridobitve: 1980; inv. št. P 3536.

3. Frag. noge; keramika; površina: –; zrnatost: –; sonda II; reženj: 4; kv. 1; leto pridobitve: 1980; inv. št. P 3532.

4. Frag. ustja z ostenjem in nastavkom za ročaj; keramika; ornament: vrezi, odtisi; površina: rdeča; zrnatost: groba; sonda II; reženj: 4; kv. 1; leto pridobitve: 1980; inv. št. P 3529.

5. Frag. ostenja; keramika; ornament: vrezi; površina: črna; zrnatost: groba; sonda II; reženj: 4; kv. 1; leto pridobitve: 1980; inv. št. P 3552.

6. Frag. ostenja z držajem; keramika; površina: rdeča; zrnatost: groba; sonda II; reženj: 4; kv. 1; leto pridobitve: 1980; inv. št. P 3567.

7. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: rjava; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3568.

8. Frag. ustja z ostenjem; keramika; ornament: žlebovi; površina: rjava, porozna; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3595.

9. Frag. ustja z ostenjem; keramika; površina: rdeča, porozna; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3593.

10. Frag. ustja z ostenjem; keramika; površina: temnosiva; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3681.

6. Frag. of a lip with a wall; pottery; ornament: grooves, impressions; surface: dark grey, porous; granularity: coarse; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3832.

7. Frag. of a lip with a wall; pottery; ornament: appliqué (round); surface: dark grey, porous; granularity: coarse; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3853.

8. Frag. of a lip with a wall; pottery; ornament: red slip; surface: orange; granularity: fine; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3862.

9. Frag. of a lip with a wall; pottery; surface: dark grey; granularity: fine; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3866.

10. Frag. of a lip with a wall; pottery; ornament: red slip, grooves, stitches; surface: dark grey; granularity: fine; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3834.

11. Frag. of a lip with a wall; pottery; ornament: grooves, impressions; surface: red, porous; granularity: coarse; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3833.

12. Frag. of a bottom with a wall; pottery; ornament: red slip, incisions, white encrustation; surface: dark brown, cracked; granularity: fine; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3879.

13. Frag. of a bottom with a wall; pottery; surface: brown; granularity: coarse; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3882.

14. Frag. of a foot; pottery; ornament: red slip; surface: orange; granularity: fine; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3865.

15. Frag. of a wall with an ear; pottery; ornament: red slip; surface: red, fine; granularity: fine; trench II; slice: 5; sq. 5; year of acquisition: 1981; inv. no. P 3880.

16. Frag. of a grip; pottery; ornament: protome, incisions; surface: dark grey; granularity: fine; trench II; slice: 5; sq. 6; year of acquisition: 1981; inv. no. P 3900.

Plate 4.3

1. Frag. of a wall; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench II; slice: 4; sq. 1; year of acquisition: 1980; inv. no. P 3538.

2. Frag. of a foot and a bottom; pottery; ornament: red slip; surface: orange; granularity: fine; trench II; slice: 4; sq. 1; year of acquisition: 1980; inv. no. P 3536.

3. Frag. of a foot; pottery; surface: –; granularity: –; trench II; slice: 4; sq. 1; year of acquisition: 1980; inv. no. P 3532.

4. Frag. of a lip with a wall and a handle nozzle; pottery; ornament: incisions, impressions; surface: red; granularity: coarse; trench II; slice: 4; sq. 1; year of acquisition: 1980; inv. no. P 3529.

5. Frag. of a wall; pottery; ornament: incisions; surface: black; granularity: coarse; trench II; slice: 4; sq. 1; year of acquisition: 1980; inv. no. P 3552.

6. Frag. of a wall with a grip; pottery; surface: red; granularity: coarse; trench II; slice: 4; sq. 1; year of acquisition: 1980; inv. no. P 3567.

7. Frag. of a lip with a wall; pottery; ornament: impressions; surface: brown; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3568.

8. Frag. of a lip with a wall; pottery; ornament: grooves; surface: brown, porous; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3595.

9. Frag. of a lip with a wall; pottery; surface: red, porous; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3593.

11. Frag. ustja z ostenjem; keramika; površina: rjava, porozna; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3569.

12. Frag. ustja z ostenjem; keramika; površina: –; zrnatost: –; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3589.

13. Frag. ustja z ostenjem in ušescem; keramika; površina: rjava, porozna; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3620.

14. Frag. ustja z ostenjem in frag. ročajem; keramika; ornament: vrezi; površina: temnosiva; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3590.

Tabla 4.4

1. Frag. ustja z ostenjem; keramika; ornament: žlebovi, odtisi; površina: –; zrnatost: –; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3655.

2. Frag. ostenja; keramika; ornament: vrezi, odtisi; površina: temnosiva; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3671.

3. Frag. noge in dna; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3608.

4. Frag. dna z ostenjem in noge; keramika; površina: temnosiva; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3598.

5. Frag. dna z ostenjem; keramika; ornament: vrezi; površina: siva; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3605.

6. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: črna; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3588.

7. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi; površina: rdeča; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3666.

8. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, vrezi, odtisi, vbodi; površina: oranžna; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3656.

9. Frag. ustja z ostenjem in nastavkom za ročaj; keramika; ornament: žlebovi, vrezi; površina: svetlosivorjava; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3663.

10. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi; površina: črna; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3630.

11. Frag. ustja z ostenjem; keramika; ornament: vbodi; površina: oranžna; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3677.

12. Frag. ostenja; keramika; ornament: žlebovi, vbodi; površina: rdeča, porozna; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3654.

13. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: rdeča; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3657.

14. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: temnosiva; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3675.

15. Frag. ostenja; keramika; ornament: žlebovi; površina: rjava; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3672.

16. Frag. ostenja; keramika; ornament: vrezi, odtisi, vbodi; površina: temnorjava; zrnatost: fina; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3665.

17. Frag. ročaja z ostenjem; keramika; ornament: žlebovi; površina: rdeča; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3662.

10. Frag. of a lip with a wall; pottery; surface: dark grey; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3681.

11. Frag. of a lip with a wall; pottery; surface: brown, porous; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3569.

12. Frag. of a lip with a wall; pottery; surface: –; granularity: –; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3589.

13. Frag. of a lip with a wall and an ear; pottery; surface: brown, porous; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3620.

14. Frag. of a lip with a wall and fragmented handle; pottery; ornament: incisions; surface: dark grey; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3590.

Plate 4.4

1. Frag. of a lip with a wall; pottery; ornament: grooves, impressions; surface: –; granularity: –; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3655.

2. Frag. of a wall; pottery; ornament: incisions, imprints; surface: dark grey; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3671.

3. Frag. of a foot and bottom; pottery; ornament: red slip; surface: red; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3608.

4. Frag. of a bottom with a wall and foot; pottery; surface: dark grey; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3598.

5. Frag. of a bottom with a wall; pottery; ornament: incisions; surface: grey; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3605.

6. Frag. of a lip with a wall; pottery; ornament: incisions; surface: black; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3588.

7. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions; surface: red; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3666.

8. Frag. of a lip with a wall; pottery; ornament: red slip, incisions, impressions, stitch impressions; surface: orange; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3656.

9. Frag. of a lip with a wall and handle nozzle; pottery; ornament: grooves, incisions; surface: light grey brown; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3663.

10. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions; surface: black; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3630.

11. Frag. of a lip with a wall; pottery; ornament: stitch impressions; surface: orange; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3677.

12. Frag. of a wall; pottery; ornament: grooves, stitch impressions; surface: red, porous; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3654.

13. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: red; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3657.

14. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: dark grey; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3675.

15. Frag. of a wall; pottery; ornament: grooves; surface: brown; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3672.

18. Frag. ročaja; keramika; površina: siva; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3629.

19. Frag. zajemalke s tulastim držajem; keramika; površina: svetlosivorjava; zrnatost: groba; sonda II; reženj: 4; kv. 2; leto pridobitve: 1980; inv. št. P 3559.

20. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: temnosiva; zrnatost: fina; sonda II; reženj: 4; kv. 4; leto pridobitve: 1981; inv. št. P 3697.

21. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi; površina: temnosiva; zrnatost: fina; sonda II; reženj: 4; kv. 4; leto pridobitve: 1981; inv. št. P 3720.

22. Frag. dna z ostenjem; keramika; površina: temnosiva; zrnatost: fina; sonda II; reženj: 4; kv. 4; leto pridobitve: 1981; inv. št. P 3709.

23. Frag. dna z ostenjem; keramika; površina: rdeča; zrnatost: fina; sonda II; reženj: 4; kv. 4; leto pridobitve: 1981; inv. št. P 3708.

24. Frag. ostenja; keramika; ornament: žlebovi, odtisi; površina: siva; zrnatost: fina; sonda II; reženj: 4; kv. 5; leto pridobitve: 1981; inv. št. P 3741.

Tabla 4.5

1. Frag. ostenja; keramika; ornament: črn premaz(?), vrezi, odtisi; površina: siva; zrnatost: fina; sonda II; reženj: 4; kv. 6; leto pridobitve: 1981; inv. št. P 3747.

2. Frag. zajemalke(?) z držajem; keramika; ornament: protom, žlebovi; površina: črna; zrnatost: groba; sonda II; reženj: 4; kv. 6; leto pridobitve: 1981; inv. št. P 3743.

3. Frag. zajemalke s tulastim držajem; keramika; površina: rdeča; zrnatost: fina; sonda II; reženj: 4; kv. 6; leto pridobitve: 1981; inv. št. P 3742.

4. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: fina; sonda II; reženj: 3; kv. 1–3; leto pridobitve: 1980; inv. št. P 3216.

5. Frag. ustja in frag. ročajem; keramika; površina: rjava, porozna; zrnatost: groba; sonda II; reženj: 3; kv. 1–3; leto pridobitve: 1980; inv. št. P 3230.

6. Frag. ostenja; keramika; ornament: žlebovi; površina: temnosiva; zrnatost: fina; sonda II; reženj: 3; kv. 1–3; leto pridobitve: 1980; inv. št. P 3236.

7. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi; površina: črna; zrnatost: groba; sonda II; reženj: 3; kv. 1–3; leto pridobitve: 1980; inv. št. P 3216.

8. Frag. ustja z ostenjem; keramika; površina: črna; zrnatost: groba; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3252.

9. Frag. ustja z ostenjem; keramika; površina: siva, porozna; zrnatost: fina; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3246.

10. Frag. ustja z ostenjem; keramika; površina: –; zrnatost: –; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3284.

11. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi, odtisi; površina: siva; zrnatost: fina; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3261.

12. Frag. ostenja; keramika; ornament: vrezi; površina: siva; zrnatost: fina; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3299.

13. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: fina; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3288.

16. Frag. of a wall; pottery; ornament: incisions, impressions, stitch impressions; surface: dark brown; granularity: fine; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3665.

17. Frag. of a handle with a wall; pottery; ornament: grooves; surface: red; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3662.

18. Frag. of a handle; pottery; surface: grey; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3629.

19. Frag. of a ladle with a hollow grip; pottery; surface: light grey brown; granularity: coarse; trench II; slice: 4; sq. 2; year of acquisition: 1980; inv. no. P 3559.

20. Frag. of a lip with a wall; pottery; ornament: red slip; surface: dark grey; granularity: fine; trench II; slice: 4; sq. 4; year of acquisition: 1981; inv. no. P 3697.

21. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions; surface: dark grey; granularity: fine; trench II; slice: 4; sq. 4; year of acquisition: 1981; inv. no. P 3720.

22. Frag. of a bottom with a wall; pottery; surface: dark grey; granularity: fine; trench II; slice: 4; sq. 4; year of acquisition: 1981; inv. no. P 3709.

23. Frag. of a bottom with a wall; pottery; surface: red; granularity: fine; trench II; slice: 4; sq. 4; year of acquisition: 1981; inv. no. P 3708.

24. Frag. of a wall; pottery; ornament: grooves, impressions; surface: grey; granularity: fine; trench II; slice: 4; sq. 5; year of acquisition: 1981; inv. no. P 3741.

Plate 4.5

1. Frag. of a wall; pottery; ornament: black slip(?), incisions, impressions; surface: grey; granularity: fine; trench II; slice: 4; sq. 6; year of acquisition: 1981; inv. no. P 3747.

2. Frag. of a ladle(?) with a grip; pottery; ornament: protome, grooves; surface: black; granularity: coarse; trench II; slice: 4; sq. 6; year of acquisition: 1981; inv. no. P 3743.

3. Frag. of a ladle with hollow grip; pottery; surface: red; granularity: fine; trench II; slice: 4; sq. 6; year of acquisition: 1981; inv. no. P 3742.

4. Frag. of a lip with a wall; pottery; ornament: red slip; surface: red; granularity: fine; trench II; slice: 3; sq. 1–3; year of acquisition: 1980; inv. no. P 3216.

5. Frag. of a lip and fragmented handle; pottery; surface: brown, porous; granularity: coarse; trench II; slice: 3; sq. 1–3; year of acquisition: 1980; inv. no. P 3230.

6. Frag. of a wall; pottery; ornament: grooves; surface: dark grey; granularity: fine; trench II; slice: 3; sq. 1–3; year of acquisition: 1980; inv. no. P 3236.

7. Frag. of a wall with fragmented handle; pottery; ornament: incisions; surface: black; granularity: coarse; trench II; slice: 3; sq. 1–3; year of acquisition: 1980; inv. no. P 3216.

8. Frag. of a lip with a wall; pottery; surface: black; granularity: coarse; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3252.

9. Frag. of a lip with a wall; pottery; surface: grey, porous; granularity: fine; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3246.

10. Frag. of a lip with a wall; pottery; surface: –; granularity: –; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3284.

11. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions, impressions; surface: grey; granularity: fine; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3261.

12. Frag. of a wall; pottery; ornament: incisions; surface: grey; granularity: fine; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3299.

Tabla 4.6

1. Frag. ustja z ostenjem; keramika; površina: rjava, porozna; zrnatost: groba; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3259.

2. Frag. ostenja; keramika; ornament: vrezi; površina: rdeča; zrnatost: groba; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3282.

3. Frag. ostenja (cedila); keramika; površina: temnosiva; zrnatost: fina; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3935.

4. Frag. ustja z ostenjem in frag. ročajem; keramika; površina: siva; zrnatost: fina; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3273.

5. Frag. zajemalke s tulastim držajem; keramika; površina: svetlosivorjava/rumena; zrnatost: groba; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3919.

6. Frag. vretenca; keramika; površina: temnorjava; zrnatost: groba; sonda II; reženj: 3; kv. 2; leto pridobitve: 1980; inv. št. P 3918.

7. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, plastična nalepka (bradavica); površina: temnorjava, razpokana; zrnatost: fina; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3411.

8. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, vrezi, odtisi; površina: svetlosivorjava; zrnatost: fina; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3414.

9. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: oranžna; zrnatost: fina; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3376.

10. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: temnorjava; zrnatost: fina; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3314.

11. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: temnorjava; zrnatost: groba; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3327.

12. Frag. ročaja z ostenjem; keramika; površina: –; zrnatost: –; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3361.

13. Frag. ostenja; keramika; ornament: črn premaz(?), vrezi; površina: temnorjava; zrnatost: fina; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3405.

14. Frag. dna z ostenjem; keramika; ornament: črn premaz; površina: črna, porozna; zrnatost: fina; sonda II; kv. reženj: 3; 4; leto pridobitve: 1981; inv. št. P 3345.

15. Frag. dna z ostenjem; keramika; ornament: črn premaz(?); površina: temnosiva; zrnatost: fina; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3352.

16. Frag. noge; keramika; ornament: rdeč premaz; površina: oranžna; zrnatost: fina; sonda II; reženj: 3; kv. 4; leto pridobitve: 1981; inv. št. P 3336.

Tabla 4.7

1. Frag. ustja z ostenjem; keramika; ornament: črn premaz(?), odtisi; površina: temnosiva; zrnatost: fina; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3501.

2. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, žlebovi, odtisi; površina: rdeča, razpokana; zrnatost: groba; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3501.

3. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: –; zrnatost: –; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3442.

4. Frag. ostenja z ročajem; keramika; ornament: črn premaz(?); površina: temnosiva; zrnatost: fina; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3448.

13. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3288.

Plate 4.6

1. Frag. of a lip with a wall; pottery; surface: brown, porous; granularity: coarse; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3259.

2. Frag. of a wall; pottery; ornament: incisions; surface: red; granularity: coarse; trench II; slice: 3; sq. 2; year of acquisitio: 1980; inv. no. P 3282.

3. Frag. of a wall (of a strainer); pottery; surface: dark grey; granularity: fine; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3935.

4. Frag. of a lip with a wall and fragmented handle; pottery; surface: grey; granularity: fine; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3273.

5. Frag. of a ladle with a hollow grip; pottery; surface: light grey brown/yellow; granularity: coarse; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3919.

6. Frag. of a spindle whorl; pottery; surface: dark brown; granularity: coarse; trench II; slice: 3; sq. 2; year of acquisition: 1980; inv. no. P 3918.

7. Frag. of a lip with a wall; pottery; ornament: red slip, appliqué (embossment); surface: dark brown, cracked; granularity: fine; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3411.

8. Frag. of a lip with a wall; pottery; ornament: red slip, incisions, impressions; surface: light grey brown; granularity: fine; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3414.

9. Frag. of a lip with a wall; pottery; ornament: incisions; surface: orange; granularity: fine; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3376.

10. Frag. of a lip with a wall; pottery; ornament: red slip; surface: dark brown; granularity: fine; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3314.

11. Frag. of a lip with a wall; pottery; ornament: incisions; surface: dark brown; granularity: coarse; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3327.

12. Frag. of a handle with a wall; pottery; surface: –; granularity: –; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3361.

13. Frag. of a wall; pottery; ornament: black slip(?), incisions; surface: dark brown; granularity: fine; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3405.

14. Frag. of a bottom with a wall; pottery; ornament: black slip; surface: black, porous; granularity: fine; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3345.

15. Frag. of a bottom with a wall; pottery; ornament: black slip(?); surface: dark grey; granularity: fine; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3352.

16. Frag. of a foot; pottery; ornament: red slip; surface: orange; granularity: fine; trench II; slice: 3; sq. 4; year of acquisition: 1981; inv. no. P 3336.

Plate 4.7

1. Frag. of a lip with a wall; pottery; ornament: black slip(?), impressions; surface: dark grey; granularity: fine; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3501.

2. Frag. of a lip with a wall; pottery; ornament: red slip, grooves, impressions; surface: red, cracked; granularity: coarse; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3501.

5. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: temnorjava; zrnatost: groba; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3486.

6. Frag. ustja s frag. ročajem; keramika; površina: –; zrnatost: –; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3471.

7. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: groba; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3446.

8. Frag. ostenja z ročajem; keramika; ornament: rdeč premaz, žlebovi; površina: rdeča, razpokana; zrnatost: groba; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3472.

9. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi; površina: svetlosivorjava; zrnatost: fina; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3485.

10. Frag. ostenja s frag. ročaja; keramika; ornament: žlebovi; površina: rjava; zrnatost: groba; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3481.

11. Frag. zajemalke(?) z držajem; keramika; ornament: protom, odtisi; površina: temnorjava; zrnatost: fina; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3494.

12. Frag. valja (pečatnik(?)); keramika; površina: siva; zrnatost: fina; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3944.

13. Frag. zajemalke s tulastim držajem; keramika; ornament: vrezi(?); površina: rjava; zrnatost: groba; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3943.

14. Frag. vretenca; keramika; površina: –; zrnatost: –; sonda II; reženj: 3; kv. 5; leto pridobitve: 1981; inv. št. P 3445.

15. Frag. ustja z ostenjem in ušescem; keramika; ornament: rdeč premaz; površina: rdeča, razpokana; zrnatost: fina; sonda II; reženj: 3; kv. 6; leto pridobitve: 1981; inv. št. P 3515.

Tabla 4.8

1. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: rjava; zrnatost: groba; sonda II; reženj: 2; kv. 2; leto pridobitve: 1980; inv. št. P 3065.

2. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: temnorjava, porozna, razpokana; zrnatost: fina; sonda II; reženj: 2; kv. 5; leto pridobitve: 1981; inv. št. P 3117.

3. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi; površina: rjava; zrnatost: fina; sonda II; reženj: 2; kv. 5; leto pridobitve: 1981; inv. št. P 3157.

4. Frag. ostenja s frag. ročajem; keramika; ornament: plitvi žlebovi, vbodi; površina: temnosiva; zrnatost: fina; sonda II; reženj: 2; kv. 5; leto pridobitve: 1981; inv. št. P 3158.

5. Frag. ustja z ostenjem; keramika; površina: črna; zrnatost: fina; sonda II; reženj: 2; kv. 6; leto pridobitve: 1981; inv. št. P 3179.

6. Frag. kladivaste sekire; kamen (analiza: SP2); površina: svetlosiva; sonda II; reženj: 2; kv. 6; leto pridobitve: 1981; inv. št. P 196.

7. Frag. sekire; kamen (analiza: SP8); površina: krem; sonda II; reženj: 4(?), zgornja polovica, z = 77 cm; kv. –;leto pridobitve: 1980; inv. št. P 3957.

Tabla 4.9

1. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: groba; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4340.

2. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi; površina: temnorjava; zrnatost: groba; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4377a.

3. Frag. of a lip with a wall; pottery; ornament: impressions; surface: –; granularity: –; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3442.

4. Frag. of a wall with a handle; pottery; ornament: black slip(?); surface: dark grey; granularity: fine; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3448.

5. Frag. of a lip with a wall; pottery; ornament: impressions; surface: dark brown; granularity: coarse; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3486.

6. Frag. of a lip with a fragmented handle; pottery; surface: –; granularity: –; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3471.

7. Frag. of a lip with a wall; pottery; surface: brown; granularity: coarse; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3446.

8. Frag. of a wall with a handle; pottery; ornament: red slip, grooves; surface: red, cracked; granularity: coarse; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3472.

9. Frag. of a wall; pottery; ornament: red slip, incisions; surface: light grey brown; granularity: fine; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3485.

10. Frag. of a wall with a fragmented handle; pottery; ornament: grooves; surface: brown; granularity: coarse; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3481.

11. Frag. of a ladle(?) with a grip; pottery; ornament: protome, impressions; surface: dark brown; granularity: fine; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3494.

12. Frag. of a cylinder (stamp seal(?)); pottery; surface: grey; granularity: fine; trench II; slice: 3; sq. 5 year of acquisition: 1981; inv. no. P 3944.

13. Frag. of a ladle with a hollow grip; pottery; ornament: incisions(?); surface: brown; granularity: coarse; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3943.

14. Frag. of a spindle whorl; pottery; surface: –; granularity: –; trench II; slice: 3; sq. 5; year of acquisition: 1981; inv. no. P 3445.

15. Frag. of a lip with a wall and an ear: pottery; ornament: red slip; surface: red, cracked; granularity: fine; trench II; slice: 3; sq. 6; year of acquisition: 1981; inv. no. P 3515.

Plate 4.8

1. Frag. of a lip with a wall; pottery; ornament: impressions; surface: brown; granularity: coarse; trench II; slice: 2; sq. 2; year of acquisition: 1980; inv. no. P 3065.

2. Frag. of a lip with a wall; pottery; ornament: impressions; surface: dark brown, porous, cracked; granularity: fine; trench II; slice: 2; sq. 5; year of acquisition: 1981; inv. no. P 3117.

3. Frag. of a wall with a fragmented handle; pottery; ornament: incisions; surface: brown; granularity: fine; trench II; slice: 2; sq. 5; year of acquisition: 1981; inv. no. P 3157.

4. Frag. of a wall with a fragmented handle; pottery; ornament: shallow grooves, incisions; surface: dark grey; granularity: fine; trench II; slice: 2; sq. 5; year of acquisition: 1981; inv. no. P 3158.

5. Frag. of a lip with a wall; pottery; surface: black; granularity: fine; trench II; slice: 2; sq. 6; year of acquisition: 1981; inv. no. P 3179.

6. Frag. of a hammer axe; stone (analysis: SP2); surface: light grey; trench II; slice: 2; sq. 6; year of acquisition: 1981; inv. no. P 196.

7. Frag. of an axe; stone (analysis: SP8); surface: cream-coloured; trench II; slice: 4(?), upper half, z = 77 cm; sq. –; year of acquisition: 1980; inv. no. P 3957.

3. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4326.

4. Frag. ustja z ostenjem in frag. ročajem; keramika; ornament: črn premaz(?), vrezi, vbodi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4355.

5. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4349.

6. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4378a,b.

7. Frag. ustja z ostenjem in ušescem; keramika; ornament: odtisi; površina: rdeča; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4365.

8. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi; površina: oranžna; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4364a.

9. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4364.

10. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: temnosiva, porozna; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4374.

11. Frag. ostenja; keramika; ornament: odtisi; površina: siva; zrnatost: groba; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4373.

12. Frag. ostenja; keramika; ornament: vrezi, plastična nalepka (obročkasta); površina: temnorjava; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4376.

13. Frag. ostenja; keramika; ornament: vrezi, krožne poglobitve; površina: siva; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4363a.

14. Frag. ročaja in ostenja; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4361.

15. Frag. noge; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: fina; sonda III; reženj: 5; kv. 6; leto pridobitve: 1982; inv. št. P 4347.

Tabla 4.10

1. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: oranžna; zrnatost: fina; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4394.

2. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rjava, razpokana; zrnatost: groba; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4399a.

3. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: temnorjava, razpokana; zrnatost: groba; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4383.

4. Frag. ustja z ostenjem; keramika; površina: siva; zrnatost: groba; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4389.

5. Frag. ustja z ostenjem; keramika; površina: temnosiva; zrnatost: groba; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4401.

6. Frag. ustja (izliv) z ostenjem; keramika; površina: temnorjava; zrnatost: groba; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4402.

7. Frag. ostenja; keramika; ornament: vrezi, bela inkrustacija; površina: siva; zrnatost: fina; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4413.

Plate 4.9

1. Frag. of a lip with a wall; pottery; surface: brown; granularity: coarse; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4340.

2. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions; surface: dark brown; granularity: coarse; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4377a.

3. Frag. of a lip with a wall; pottery; ornament: incisions; surface: light grey brown; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4326.

4. Frag. of a lip with a wall and a fragmented handle; pottery; ornament: black slip(?), incisions, stitch impressions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4355.

5. Frag. of a lip with a wall; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4349.

6. Frag. of a lip with a wall; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4378a,b.

7. Frag. of a lip with a wall and an ear; pottery; ornament: impressions; surface: red; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4365.

8. Frag. of a wall; pottery; ornament: red slip, incisions; surface: orange; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4364a.

9. Frag. of a wall; pottery; ornament: red slip, incisions; surface: light grey brown; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4364.

10. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: dark grey, porous; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4374.

11. Frag. of a wall; pottery; ornament: impressions; surface: grey; granularity: coarse; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4373.

12. Frag. of a wall; pottery; ornament: incisions, appliqué (ring-shaped); surface: dark brown; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4376.

13. Frag. of a wall; pottery; ornament: incisions, circular deepenings; surface: grey; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4363a.

14. Frag. of a handle and wall; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4361.

15. Frag. of a foot; pottery; ornament: red slip; surface: red; granularity: fine; trench III; slice: 5; sq. 6; year of acquisition: 1982; inv. no. P 4347.

Plate 4.10

1. Frag. of a lip with a wall; pottery; ornament: red slip; surface: orange; granularity: fine; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4394.

2. Frag. of a lip with a wall; pottery; ornament: red slip; surface: brown, cracked; granularity: coarse; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4399a.

3. Frag. of a lip with a wall; pottery; ornament: red slip; surface: dark brown, cracked; granularity: coarse; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4383.

4. Frag. of a lip with a wall; pottery; surface: grey; granularity: coarse; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4389.

8. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: siva; zrnatost: fina; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4392.

9. Frag. ostenja; keramika; ornament: vrezi, vbodi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4400.

10. Frag. dna z ostenjem; keramika; površina: temnosiva; zrnatost: fina; sonda III; reženj: 5; kv. 7; leto pridobitve: 1982; inv. št. P 4406.

11. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: groba; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4211.

12. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: temnorjava; zrnatost: drobna; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4229.

13. Frag. ustja z ostenjem; keramika; ornament: vrezi, odtisi, vbodi; površina: siva, porozna; zrnatost: drobna; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4249.

14. Frag. ustja z ostenjem; keramika; ornament: vrezi, bela inkrustacija; površina: temnorjava; zrnatost: groba; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4226.

Tabla 4.11

1. Frag. ustja z ostenjem in jezičastim držajem; keramika; ornament: vrezi; površina: siva; zrnatost: drobna; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4236.

2. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: rjava; zrnatost: groba; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4244.

3. Frag. ostenja; keramika; ornament: vrezi, vbodi, bela inkrustacija; površina: temnosiva; zrnatost: drobna; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4248.

4. Frag. ostenja; keramika; ornament: vrezi, odtisi; površina: temnosiva; zrnatost: groba; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4231.

5. Frag. ustja z ostenjem; keramika; ornament: žlebovi, odtisi; površina: temnorjava; zrnatost: groba; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4233.

6. Frag. ustja z ostenjem; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: drobna; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4247.

7. Frag. ostenja; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: drobna; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4227.

8. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: drobna; sonda III; reženj: 4; kv. 6; leto pridobitve: 1982; inv. št. P 4250.

9. Frag. ustja z ostenjem; keramika; ornament: žlebovi (plitvi), odtisi, plastična nalepka (obročkasta); površina: siva, zlizana; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4319.

10. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4273.

11. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: rjava, porozna; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4316.

12. Frag. ustja z ostenjem; keramika; ornament: žlebovi (plitvi); površina: siva, zlizana; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4320.

13. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rumena, razpokana; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4265.

5. Frag. of a lip with a wall; pottery; surface: dark grey; granularity: coarse; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4401.

6. Frag. of a lip (spout) with a wall; pottery; surface: dark brown; granularity: coarse; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4402.

7. Frag. of a wall; pottery; ornament: incisions, white encrustation; surface: grey; granularity: fine; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4413.

8. Frag. of a lip with a wall; pottery; ornament: red slip; surface: grey; granularity: fine; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4392.

9. Frag. of a wall; pottery; ornament: incisions, stitch impressions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4400.

10. Frag. of a bottom with a wall; pottery; surface: dark grey; granularity: fine; trench III; slice: 5; sq. 7; year of acquisition: 1982; inv. no. P 4406.

11. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: coarse; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4211.

12. Frag. of a lip with a wall; pottery; ornament: incisions; surface: dark brown; granularity: fine; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4229.

13. Frag. of a lip with a wall; pottery; ornament: incisions, impressions, stitch impressions; surface: grey, porous; granularity: fine; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4249.

14. Frag. of a lip with a wall; pottery; ornament: incisions, white encrustation; surface: dark brown; granularity: coarse; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4226.

Plate 4.11

1. Frag. of a lip with a wall and a grip with flanges; pottery; ornament: incisions; surface: grey; granularity: fine; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4236.

2. Frag. of a lip with a wall; pottery; ornament: incisions; surface: brown; granularity: coarse; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4244.

3. Frag. of a wall; pottery; ornament: incisions, stitch impressions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4248.

4. Frag. of a wall; pottery; ornament: incisions, impressions; surface: dark grey; granularity: coarse; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4231.

5. Frag. of a lip with a wall; pottery; ornament: grooves, impressions; surface: dark brown; granularity: coarse; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4233.

6. Frag. of a lip with a wall; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4247.

7. Frag. of a wall; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4227.

8. Frag. of a wall with a fragmented handle; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 4; sq. 6; year of acquisition: 1982; inv. no. P 4250.

9. Frag. of a lip with a wall; pottery; ornament: grooves (shallow), impressions, appliqué (ring-shaped); surface: grey, damaged; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4319.

10. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4273.

14. Frag. ostenja; keramika; ornament: vrezi; površina: temnorjava; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4315.

15. Frag. ostenja; keramika; ornament: vrezi; površina: oranžna; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4323.

16. Frag. ostenja s frag. nastavkom za ročaj(?); keramika; ornament: vbodi, odtisi; površina: siva; zrnatost: groba; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4321.

Tabla 4.12

1. Frag. ostenja s frag. ročajem; keramika; površina: rjava; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4295.

2. Frag. ostenja s frag. ročajem; keramika; površina: siva; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4294.

3. Frag. noge; keramika; površina: oranžna; zrnatost: groba; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4285.

4. Frag. dna z ostenjem; keramika; površina: temnosiva; zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4292.

5. Frag. dna z ostenjem in frag. ušescem; keramika; površina: rjava, v notranjosti posode ostanki bele snovi (apna(?)); zrnatost: drobna; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4264.

6. Frag. uteži(?); keramika; površina: oranžna; zrnatost: groba; sonda III; reženj: 4; kv. 7; leto pridobitve: 1982; inv. št. P 4263.

7. Frag. vretenca; keramika; površina: rjava; zrnatost: groba; sonda III; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4004.

8. Frag. ustja z ostenjem; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda III; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 4019.

9. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda III; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 4017.

10. Frag. držaj/idola; keramika; ornament: vrezi; površina: temnosiva; zrnatost: fina; sonda III; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 4008.

11. Frag. ostenja/noge; keramika; ornament: rdeč premaz, vrezi, bela inkrustacija; površina: temnorjava; zrnatost: fina; sonda III; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 4018.

12. Frag. držaja; keramika; površina: temnorjava; zrnatost: groba; sonda III; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 4021.

13. Frag. ustja z ostenjem in držajem; keramika; površina: rjava; zrnatost: groba; sonda III; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 4020.

Tabla 4.13

1. Frag. dna s frag. ostenja in noge; keramika; površina: siva; zrnatost: fina; sonda III; reženj: 3; kv. 4; leto pridobitve: 1982; inv. št. P 4022.

2. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: fina; sonda III; reženj: 3; kv. 5; leto pridobitve: 1982; inv. št. P 4028.

3. Frag. noge/vratu; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda III; reženj: 3; kv. 5; leto pridobitve: 1982; inv. št. P 4055a.

4. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: fina; sonda III; reženj: 3; kv. 5; leto pridobitve: 1982; inv. št. P 4032.

11. Frag. of a lip with a wall; pottery; ornament: incisions; surface: brown, porous; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4316.

12. Frag. of a lip with a wall; pottery; ornament: grooves (shallow); surface: grey, damaged; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4320.

13. Frag. of a lip with a wall; pottery; ornament: red slip; surface: yellow, cracked; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4265.

14. Frag. of a wall; pottery; ornament: incisions; surface: dark brown; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4315.

15. Frag. of a wall; pottery; ornament: incisions; surface: orange; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4323.

16. Frag. of a wall with a fragmented handle(?) nozzle; pottery; ornament: incisions, impressions; surface: grey; granularity: coarse; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4321.

Plate 4.12

1. Frag. of a wall with a fragmented handle; pottery; surface: brown; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4295.

2. Frag. of a wall with a fragmented handle; pottery; surface: grey; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4294.

3. Frag. of a leg; pottery; surface: orange; granularity: coarse; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4285.

4. Frag. of a bottom with a wall; pottery; surface: dark grey; granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4292.

5. Frag. of a bottom with a wall and a fragmented ear; pottery; surface: brown, the vessel interior shows remains of a white substance (lime(?)); granularity: fine; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4264.

6. Frag. of a weight(?); pottery; surface: orange; granularity: coarse; trench III; slice: 4; sq. 7; year of acquisition: 1982; inv. no. P 4263.

7. Frag. of a spindle whorl; pottery; surface: brown; granularity: coarse; trench III; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4004.

8. Frag. of a lip with a wall; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 4019.

9. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 4017.

10. Frag. of a handle/idol; pottery; ornament: incisions; surface: dark grey; granularity: fine; trench III; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 4008.

11. Frag. of a wall/foot; pottery; ornament: red slip, incisions, white encrustation; surface: dark brown; granularity: fine; trench III; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 4018.

12. Frag. of a grip; pottery; surface: dark brown; granularity: coarse; trench III; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 4021.

13. Frag. of a lip with a wall and a grip; pottery; surface: brown; granularity: coarse; trench III; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 4020.

5. Frag. ostenja; keramika; ornament: odtisi; površina: temnosiva; zrnatost: fina; sonda III; reženj: 3; kv. 5; leto pridobitve: 1982; inv. št. P 4054a.

6. Frag. dna s frag. ostenja in noge; keramika; površina: temnosiva; zrnatost: groba; sonda III; reženj: 3; kv. 5; leto pridobitve: 1982; inv. št. P 4040.

7. Frag. ročaja in ustje; keramika; površina: siva; zrnatost: fina; sonda III; reženj: 3; kv. 5; leto pridobitve: 1982; inv. št. P 4048.

8. Frag. držaja z ostenjem; keramika; ornament: protom(?); površina: temnorjava; zrnatost: fina; sonda III; reženj: 3; kv. 5; leto pridobitve: 1982; inv. št. P 4033.

9. Frag. ustja z ostenjem; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4093a–d.

10. Frag. ustja z ostenjem in frag. držajem; keramika; ornament: črn premaz(?); površina: siva; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4065.

11. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4096a.

Tabla 4.14

1. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4083.

2. Frag. ostenja; keramika; ornament: vrezi, bela inkrustacija; površina: temnorjava; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4100.

3. Frag. ostenja; keramika; ornament: vbodi, bela inkrustacija; površina: temnorjava; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4105.

4. Frag. ustja z ostenjem; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4101.

5. Frag. ustja z ostenjem/idola; keramika; ornament: vrezi; površina: temnosiva; zrnatost: groba; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4062.

6. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: siva; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4064.

7. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi, bela inkrustacija; površina: temnorjava; zrnatost: fina; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4102.

8. Frag. zajemalke s tulastim držajem; keramika; površina: temnosiva; zrnatost: groba; sonda III; reženj: 3; kv. 6; leto pridobitve: 1982; inv. št. P 4063.

9. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, vrezi, odtisi; površina: rdeča; zrnatost: groba; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4188.

10. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4184.

11. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4183.

12. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, vrezi, odtisi; površina: oranžna; zrnatost: groba; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4172.

13. Frag. ustja z ostenjem; keramika; površina: –; zrnatost: –; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4182a–c.

14. Frag. ustja z ostenjem; keramika; ornament: razčlenjeno rebro; površina: temnosiva; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4189.

Plate 4.13

1. Frag. of a bottom with fragments of a wall and foot; pottery; surface: grey; granularity: fine; trench III; slice: 3; sq. 4; year of acquisition: 1982; inv. no. P 4022.

2. Frag. of a lip with a wall; pottery; ornament: red slip; surface: red; granularity: fine; trench III; slice: 3; sq. 5; year of acquisition: 1982; inv. no. P 4028.

3. Frag. of a foot/neck; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 3; sq. 5; year of acquisition: 1982; inv. no. P 4055a.

4. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: fine; trench III; slice: 3; sq. 5; year of acquisition: 1982; inv. no. P 4032.

5. Frag. of a wall; pottery; ornament: impressions; surface: dark grey; granularity: fine; trench III; slice: 3; sq. 5; year of acquisition: 1982; inv. no. P 4054a.

6. Frag. of a bottom with fragments of a wall and foot; pottery; surface: dark grey; granularity: coarse; trench III; slice: 3; sq. 5; year of acquisition: 1982; inv. no. P 4040.

7. Frag. of a handle and lip; pottery; surface: grey; granularity: fine; trench III; slice: 3; sq. 5; year of acquisition: 1982; inv. no. P 4048.

8. Frag. of a grip with a wall; pottery; ornament: protome(?); surface: dark brown; granularity: fine; trench III; slice: 3; sq. 5; year of acquisition: 1982; inv. no. P 4033.

9. Frag. of a lip with a wall; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4093a–d.

10. Frag. of a lip with a wall and fragmented grip; pottery; ornament: black slip(?); surface: grey; granularity: fine; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4065.

11. Frag. of a lip with a wall; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench III; slice 3; sq. 6; year of acquisition: 1982; inv. no. P 4096a.

Plate 4.14

1. Frag. of a lip with a wall; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4083.

2. Frag. of a wall; pottery; ornament: incisions, white encrustation; surface: dark brown; granularity: fine; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4100.

3. Frag. of a wall; pottery; ornament: stitch impressions, white encrustation; surface: dark brown; granularity: fine; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4105.

4. Frag. of a lip with a wall; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4101.

5. Frag. of a lip with a wall/idol; pottery; ornament: incisions; surface: dark grey; granularity: coarse; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4062.

6. Frag. of a lip with a wall; pottery; ornament: red slip; surface: grey; granularity: fine; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4064.

7. Frag. of a wall with fragmented handle; pottery; ornament: incisions, white encrustation; surface: dark brown; granularity: fine; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4102.

8. Frag. of a ladle with a hollow handle; pottery; surface: dark grey; granularity: coarse; trench III; slice: 3; sq. 6; year of acquisition: 1982; inv. no. P 4063.

9. Frag. of a lip with a wall; pottery; ornament: red slip, incisions, impressions; surface: red; granularity: coarse; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4188.

15. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, vrezi, odtisi; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4176.

16. Frag. ostenja s frag. ročajem; keramika; ornament: rdeč premaz, vrezi; površina: siva; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4191.

17. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi; površina: rdeča; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4194.

18. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi, krožna poglobitev; površina: svetlosivorjava; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4170.

19. Frag. ostenja s frag. ročajem; keramika; ornament: rdeč premaz; površina: rdeča, razpokana; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4158.

20. Frag. ročaja; keramika; ornament: rdeč premaz; površina: rdeča, razpokana; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4166.

21. Vretence; keramika; površina: oranžna; zrnatost: fina; sonda III; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 4116.

Tabla 4.15

1. Frag. ustja z ostenjem in jezičastim držajem; keramika; površina: oranžna; zrnatost: groba; sonda III; reženj: 3; kv. 1–7; leto pridobitve: 1982; inv. št. S. N.

2. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: rjava; zrnatost: fina; sonda III; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 3965.

3. Frag. ustja z ostenjem; keramika; površina: rdeča; zrnatost: fina; sonda III; reženj: 2; kv. 2; leto pridobitve: 1982; inv. št. P 3971.

4. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: groba; sonda III; reženj: 2; kv. 2; leto pridobitve: 1982; inv. št. P 3968.

5. Frag. ostenja z držajem; keramika; površina: rdeča; zrnatost: groba; sonda III; reženj: 2; kv. 2; leto pridobitve: 1982; inv. št. P 3978.

6. Prstan; ornament: vrezi; kovina (baker ali bron); površina: zelena; sonda III; reženj: 1; kv. 1; leto pridobitve: 1982; inv. št. P 3964.

Tabla 4.16

1. Frag. ustja z ostenjem; keramika; ornament: žlebovi, odtisi; površina: temnosiva; zrnatost: groba; sonda IV; reženj: 4; kv. 1; leto pridobitve: 1982; inv. št. P 4475, P 4475a.

2. Frag. ustja z ostenjem; keramika; površina: siva; zrnatost: groba; sonda IV; reženj: 4; kv. 1; leto pridobitve: 1982; inv. št. P 4480.

3. Frag. ostenja; keramika; ornament: žlebovi; površina: siva; zrnatost: groba; sonda IV; reženj: 4; kv. 1; leto pridobitve: 1982; inv. št. P 4469.

4. Frag. dna; keramika; površina: siva; zrnatost: groba; sonda IV; reženj: 4; kv. 1; leto pridobitve: 1982; inv. št. P 4481.

5. Frag. dna; keramika; ornament: rdeč premaz; površina: rdeča, razpokana; zrnatost: groba; sonda IV; reženj: 4; kv. 1; leto pridobitve: 1982; inv. št. P 4476.

6. Frag. ostenja s frag. držaja; keramika; površina: temnorjava; zrnatost: fina; sonda IV; reženj: 4; kv. 1; leto pridobitve: 1982; inv. št. P 4474.

7. Frag. ročaja; keramika; ornament: rdeč premaz; površina: rdeča, razpokana; zrnatost: fina; sonda IV; reženj: 4; kv. 1; leto pridobitve: 1982; inv. št. P 4468.

10. Frag. of a lip with a wall; pottery; ornament: incisions; surface: light grey brown; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4184.

11. Frag. of a lip with a wall; pottery; ornament: incisions; surface: light grey brown; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4183.

12. Frag. of a lip with a wall; pottery; ornament: red slip, incisions, impressions; surface: orange; granularity: coarse; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4172.

13. Frag. of a lip with a wall; pottery; surface: –; granularity: –; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4182a–c.

14. Frag. of a lip with a wall; pottery; ornament: cordon with finger imprints; surface: dark grey; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4189.

15. Frag. of a lip with a wall; pottery; ornament: red slip, incisions, impressions; surface: light grey brown; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4176.

16. Frag. of a wall with a fragmented handle; pottery; ornament: red slip, incisions; surface: grey; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4191.

17. Frag. of a wall; pottery; ornament: red slip, incisions; surface: red; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4194.

18. Frag. of a wall; pottery; ornament: red slip, incisions, circular deepening; surface: light grey brown; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4170.

19. Frag. of a wall with a fragmented handle; pottery; ornament: red slip; surface: red, cracked; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4158.

20. Frag. of a handle; pottery; ornament: red slip; surface: red, cracked; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4166.

21. Spindle whorl; pottery; surface: orange; granularity: fine; trench III; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 4116.

Plate 4.15

1. Frag. of a lip with a wall and a grip with flanges; pottery; surface: orange; granularity: coarse; trench III; slice: 3; sq. 1–7; year of acquisition: 1982; inv. no. S. N.

2. Frag. of a lip with a wall; pottery; ornament: incisions; surface: brown; granularity: fine; trench III; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 3965.

3. Frag. of a lip with a wall; pottery; surface: red; granularity: fine; trench III; slice: 2; sq. 2; year of acquisition: 1982; inv. no. P 3971.

4. Frag. of a lip with a wall; pottery; surface: brown; granularity: coarse; trench III; slice: 2; sq. 2; year of acquisition: 1982; inv. no. P 3968.

5. Frag. of a wall with a grip; pottery; surface: red; granularity: coarse; trench III; slice: 2; sq. 2; year of acquisition: 1982; inv. no. P 3978.

6. Ring; ornament: incisions; metal (copper or bronze); surface: green; trench III; slice: 1; sq. 1; year of acquisition: 1982; inv. no. P 3964.

Plate 4.16

1. Frag. of a lip with a wall; pottery; ornament: grooves, impressions; surface: dark grey; granularity: coarse; trench IV; slice: 4; sq. 1; year of acquisition: 1982; inv. nos. P 4475, P 4475a.

2. Frag. of a lip with a wall; pottery; surface: grey; granularity: coarse; trench IV; slice: 4; sq. 1; year of acquisition: 1982; inv. no. P 4480.

8. Frag. ročaja; keramika; ornament: vrezi, vbodi; površina: rjava; zrnatost: fina; sonda IV; reženj: 4; kv. 1; leto pridobitve: 1982; inv. št. P 4470.

9. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: groba; sonda IV; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4443.

10. Frag. ostenja; keramika; ornament: vrezi (motiv mreže), bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda IV; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4448.

11. Frag. ostenja s frag. ušescem; keramika; ornament: vrezi (rovašenje); površina: temnosiva; zrnatost: groba; sonda IV; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4447.

12. Valjasti obesek (pečatnik(?)); keramika; ornament: žlebovi; površina: temnosiva; zrnatost: fina; sonda IV; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4442.

13. Frag. kladivaste sekire; kamen (analiza: SP6); površina: belosiva; zrnatost: groba; sonda IV; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4440.

Tabla 4.17

1. Frag. ustja z ostenjem; keramika; površina: siva; zrnatost: groba; sonda IV; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4458.

2. Frag. vretenca; keramika; ornament: vbodi; površina: rjava; zrnatost: fina; sonda IV; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4461.

3. Frag. zajemalke s tulastim držajem; keramika; površina: rjava; zrnatost: groba; sonda IV; reženj: 3; kv. 6 (napačen podatek (op. avtorja)); leto pridobitve: 1982; inv. št. P 4462.

4. Frag. kladivaste sekire; kamen (analiza: SP1); površina: belosiva; zrnatost: groba; sonda IV; reženj: 3; kv. 1–3 (pravilno je najbrž kv. 1 (op. avtorja)); leto pridobitve: 1982; inv. št. P 4439.

5. Žebelj; kovina (železo); površina: rjava; sonda IV; reženj: 2; kv. 2; leto pridobitve: 1982; inv. št. P 4436.

6. Žebelj; kovina (železo); površina: rjava; sonda IV; reženj: 1; kv. 1; leto pridobitve: 1982; inv. št. P 4423.

Tabla 4.18

1. Frag. ustja z ostenjem; keramika; ornament: razčlenjeno rebro; površina: siva; zrnatost: fina; sonda VI; reženj: 4; kv. 2; leto pridobitve: 1982; inv. št. P 5286.

2. Frag. ostenja; keramika; ornament: črn premaz(?), plastična nalepka (okrogla), žlebovi; površina: temnosiva, glajena; zrnatost: fina; sonda VI; reženj: 4; kv. 2; leto pridobitve: 1982; inv. št. P 5285.

3. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: –; zrnatost: –; sonda VI; reženj: 4; kv. 2; leto pridobitve: 1982; inv. št. P 5281.

4. Frag. ostenja; keramika; ornament: žlebovi; površina: siva, glajena; zrnatost: fina; sonda VI; reženj: 4; kv. 2; leto pridobitve: 1982; inv. št. P 5278.

5. Frag. ostenja; keramika; ornament: rdeč premaz(?), žlebovi; površina: temnosiva, glajena; zrnatost: fina; sonda VI; reženj: 4; kv. 2; leto pridobitve: 1982; inv. št. P 5283.

6. Frag. ustja z ostenjem in frag. ročajem; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: fina; sonda VI; reženj: 4; kv. 2; leto pridobitve: 1982; inv. št. P 5280.

7. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI; reženj: 4; kv. 3; leto pridobitve: 1982; inv. št. P 5288.

8. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, vbodi (spominja na brazdasti vrez); površina: rjava, razpokana;

3. Frag. of a wall; pottery; ornament: grooves; surface: grey; granularity: coarse; trench IV; slice: 4; sq. 1; year of acquisition: 1982; inv. no. P 4469.

4. Frag. of a bottom; pottery; surface: grey; granularity: coarse; trench IV; slice: 4; sq. 1; year of acquisition: 1982; inv. no. P 4481.

5. Frag. of a bottom; pottery; ornament: red slip; surface: red, cracked; granularity: coarse; trench IV; slice: 4; sq. 1; year of acquisition: 1982; inv. no. P 4476.

6. Frag. of a wall with a grip fragment; pottery; surface: dark brown; granularity: fine; trench IV; slice: 4; sq. 1; year of acquisition: 1982; inv. no. P 4474.

7. Frag. of a handle; pottery; ornament: red slip; surface: red, cracked; granularity: fine; trench IV; slice: 4; sq. 1; year of acquisition: 1982; inv. no. P 4468.

8. Frag. of a handle; pottery; ornament: incisions, stitch impressions; surface: brown; granularity: fine; trench IV; slice: 4; sq. 1; year of acquisition: 1982; inv. no. P 4470.

9. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: coarse; trench IV; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4443.

10. Frag. of a wall; pottery; ornament: incisions (grid motif), white encrustation; surface: dark grey; granularity: fine; trench IV; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4448.

11. Frag. of a wall with a fragmented ear; pottery; ornament: incisions; surface: dark grey; granularity: coarse; trench IV; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4447.

12. Cylindrical pendant (stamp seal(?)); pottery; ornament: grooves; surface: dark grey; granularity: fine; trench IV; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4442.

13. Frag. of a hammer axe; stone (analysis: SP6); surface: white grey; granularity: coarse; trench IV; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4440.

Plate 4.17

1. Frag. of a lip with a wall; pottery; surface: grey; granularity: coarse; trench IV; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4458.

2. Frag. of a spindle whorl; pottery; ornament: stitch impressions; surface: brown; granularity: fine; trench IV; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4461.

3. Frag. of a ladle with a hollow grip; pottery; surface: brown; granularity: coarse; trench IV; slice: 3; sq. 6 (wrong data (author's comment)); year of acquisition: 1982; inv. no. P 4462.

4. Frag. of a hammer axe; stone (analysis: SP1); surface: white grey; granularity: coarse; trench IV; slice: 3; sq. 1–3 (sq. 1 is probably right (author's comment)); year of acquisition: 1982; inv. no. P 4439.

5. Nail; metal (iron); surface: brown; trench IV; slice: 2; sq. 2; year of acquisition: 1982; inv. no. P 4436.

6. Nail; metal (iron); surface: brown; trench IV; slice: 1; sq. 1; year of acquisition: 1982; inv. no. P 4423.

Plate 4.18

1. Frag. of a lip with a wall; pottery; ornament: cordon with finger imprints; surface: grey; granularity: fine; trench VI; slice: 4; sq. 2; year of acquisition: 1982; inv. no. P 5286.

2. Frag. of a wall; pottery; ornament: black slip(?), appliqué (round), grooves; surface: dark grey, polished; granularity: fine; trench VI; slice: 4; sq. 2; year of acquisition: 1982; inv. no. P 5285.

3. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: –; granularity: –; trench VI; slice: 4; sq. 2; year of acquisition: 1982; inv. no. P 5281.

zrnatost: groba; sonda VI; reženj: 4; kv. 3; leto pridobitve: 1982; inv. št. P 5292.

9. Frag. ostenja; keramika; ornament: žlebovi; površina: temnosiva; zrnatost: groba; sonda VI; reženj: 4; kv. 3; leto pridobitve: 1982; inv. št. P 5294.

10. Frag. ostenja; keramika; ornament: žlebovi; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 4; kv. 3; leto pridobitve: 1982; inv. št. P 5287.

11. Frag. dna z ostenjem; keramika; ornament: rdeč premaz(?); površina: svetlosivorjava; zrnatost: fina; sonda VI; reženj: 4; kv. 3; leto pridobitve: 1982; inv. št. P 5289.

12. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi, bela inkrustacija; površina: siva; zrnatost: fina; sonda VI; reženj: 4; kv. 3; leto pridobitve: 1982; inv. št. P 5290.

Tabla 4.19

1. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4840.

2. Frag. ustja z držajem in ostenjem; keramika; površina: temnosiva; zrnatost: groba; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4930.

3. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: groba; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4847.

4. Frag. ostenja; keramika; ornament: žlebovi (zlizani); površina: siva; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4905.

5. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4920.

6. Frag. noge; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4873.

7. Frag. noge; keramika; ornament: vrezi, bela inkrustacija; površina: ornažna; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4917.

8. Frag. ustja z ostenjem; keramika; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4851.

9. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4866.

10. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4921.

11. Frag. ostenja; keramika; površina: siva; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4900.

12. Frag. zajemalke s tulastim držajem; keramika; površina: rdeča; zrnatost: fina; sonda VI; reženj: 3; kv. 1; leto pridobitve: 1982; inv. št. P 4839.

13. Frag. ustja z ostenjem; keramika; površina: rdeča; zrnatost: groba; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4989.

14. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rjava, razpokana; zrnatost: fina; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4952.

15. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: siva; zrnatost: groba; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 5041.

16. Frag. ustja z ostenjem in frag. ročajem; keramika; površina: siva; zrnatost: fina; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4954.

4. Frag. of a wall; pottery; ornament: grooves; surface: grey, polished; granularity: fine; trench VI; slice: 4; sq. 2; year of acquisition: 1982; inv. no. P 5278.

5. Frag. of a wall; pottery; ornament: red slip(?), grooves; surface: dark grey, polished; granularity: fine; trench VI; slice: 4; sq. 2; year of acquisition: 1982; inv. no. P 5283.

6. Frag. of a lip with a wall and a fragmented handle; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench VI; slice: 4; sq. 2; year of acquisition: 1982; inv. no. P 5280.

7. Frag. of a lip with a wall; pottery; surface: brown; granularity: fine; trench VI; slice: 4; sq. 3; year of acquisition: 1982; inv. no. P 5288.

8. Frag. of a lip with a wall; pottery; ornament: red slip, stitch impressions (resembles the furrowed incision); surface: brown, cracked; granularity: coarse; trench VI; slice: 4; sq. 3; year of acquisition: 1982; inv. no. P 5292.

9. Frag. of a wall; pottery; ornament: grooves; surface: dark grey; granularity: coarse; trench VI; slice: 4; sq. 3; year of acquisition: 1982; inv. no. P 5294.

10. Frag. of a wall; pottery; ornament: grooves; surface: dark grey; granularity: fine; trench VI; slice: 4; sq. 3; year of acquisition: 1982; inv. no. P 5287.

11. Frag. of a bottom with a wall; pottery; ornament: red slip(?); surface: light grey brown; granularity: fine; trench VI; slice: 4; sq. 3; year of acquisition: 1982; inv. no. P 5289.

12. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions, white encrustation; surface: grey; granularity: fine; trench VI; slice: 4; sq. 3; year of acquisition: 1982; inv. no. P 5290.

Plate 4.19

1. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4840.

2. Frag. of a lip with a grip and wall; pottery; surface: dark grey; granularity: coarse; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4930.

3. Frag. of a lip with a wall; pottery; ornament: red slip; surface: red; granularity: coarse; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4847.

4. Frag. of a wall; pottery; ornament: grooves (damaged); surface: grey; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4905.

5. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4920.

6. Frag. of a leg; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4873.

7. Frag. of a leg; pottery; ornament: incisions, white encrustation; surface: orange; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4917.

8. Frag. of a lip with a wall; pottery; surface: dark grey; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4851.

9. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4866.

10. Frag. of a wall; pottery; ornament: red slip, incisions, white encrustation; surface: dark grey; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4921.

11. Frag. of a wall; pottery; surface: grey; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4900.

17. Frag. dna z ostenjem in nogo; keramika; ornament: rdeč premaz; površina: siva; zrnatost: groba; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 5002.

18. Frag. dna z ostenjem; keramika; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4995.

19. Frag. dna z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4997 (deli od iste posode še P 4994).

20. Frag. ostenja (cedila); keramika; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4945.

21. Frag. zajemalke s tulastim držajem; keramika; površina: siva; zrnatost: fina; sonda VI; reženj: 3; kv. 2; leto pridobitve: 1982; inv. št. P 4946.

Tabla 4.20

1. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 5052a.

2. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 5052b.

3. Frag. ustja z ostenjem in frag. ročajem; keramika; ornament: vrezi, odtisi; površina: siva; zrnatost: fina; sonda VI; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 5054.

4. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda VI; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 5079.

5. Frag. ostenja; keramika; ornament: žlebovi, odtisi; površina: rjava; zrnatost: groba; sonda VI; reženj: 3; kv. 3; leto pridobitve: 1982; inv. št. P 5078.

6. Frag. ustja z ostenjem; keramika; površina: –; zrnatost: –; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4577.

7. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4552.

8. Frag. ustja z ostenjem; keramika; ornament: plastični rebri; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4586.

9. Frag. ostenja; keramika; ornament: žlebovi; površina: temnosiva; zrnatost: groba; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4598.

10. Frag. ostenja; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4585 (deli od iste posode še P 4599).

11. Frag. dna; keramika; ornament: rdeč premaz; površina: rjavordeča, razpokana; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4565 (deli od iste posode še P 4570, P 4573).

12. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4562.

13. Frag. ostenja; keramika; ornament: kanelure (široki žlebovi); površina: temnosiva; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4584.

14. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4599 (deli od iste posode še P 4585).

15. Frag. ostenja/noge; keramika; ornament: črn premaz(?), vrezi, vbodi; površina: –; zrnatost: –; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4597.

16. Frag. ustja z ostenjem (cedila); keramika; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4548.

12. Frag. of a ladle with a hollow grip; pottery; surface: red; granularity: fine; trench VI; slice: 3; sq. 1; year of acquisition: 1982; inv. no. P 4839.

13. Frag. of a lip with a wall; pottery; surface: red; granularity: coarse; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4989.

14. Frag. of a lip with a wall; pottery; ornament: red slip; surface: brown, cracked; granularity: fine; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4952.

15. Frag. of a lip with a wall; pottery; ornament: impressions; surface: grey; granularity: coarse; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 5041.

16. Frag. of a lip with a wall and a fragmented handle; pottery; surface: grey; granularity: fine; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4954.

17. Frag. of a bottom with a wall and foot; pottery; ornament: red slip; surface: grey; granularity: coarse; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 5002.

18. Frag. of a bottom with a wall; pottery; surface: dark grey; granularity: fine; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4995.

19. Frag. of a bottom with a wall; pottery; surface: brown; granularity: fine; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4997 (parts of the same vessel also P 4994).

20. Frag. of a wall (strainer); pottery; surface: dark grey; granularity: fine; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4945.

21. Frag. of a ladle with a hollow grip; pottery; surface: grey; granularity: fine; trench VI; slice: 3; sq. 2; year of acquisition: 1982; inv. no. P 4946.

Plate 4.20

1. Frag. of a lip with a wall; pottery; surface: brown; granularity: fine; trench VI; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 5052a.

2. Frag. of a lip with a wall; pottery; surface: brown; granularity: fine; trench VI; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 5052b.

3. Frag. of a lip with a wall and fragmented handle; pottery; ornament: incisions, impressions; surface: grey; granularity: fine; trench VI; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 5054.

4. Frag. of a lip with a wall; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench VI; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 5079.

5. Frag. of a wall; pottery; ornament: grooves, impressions; surface: brown; granularity: coarse; trench VI; slice: 3; sq. 3; year of acquisition: 1982; inv. no. P 5078.

6. Frag. of a lip with a wall; pottery; surface: –; granularity: –; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4577.

7. Frag. of a lip with a wall; pottery; surface: brown; granularity: fine; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4552.

8. Frag. of a lip with a wall; pottery; ornament: appliqués; surface: dark grey; granularity: fine; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4586.

9. Frag. of a wall; pottery; ornament: grooves; surface: dark grey; granularity: coarse; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4598.

10. Frag. of a wall; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4585 (parts of the same vessel also P 4599).

11. Frag. of a bottom; pottery; ornament: red slip; surface: brown red, cracked; granularity: fine; trench VI; slice: 2; sq. 1;

17. Frag. ustja z ostenjem in frag. ročajem; keramika; ornament: vbodi, izvlečen plastični obroček; površina: rjava; zrnatost: fina; sonda VI; reženj: 2; kv. 1; leto pridobitve: 1982; inv. št. P 4590.

Tabla 4.21

1. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: temnosiva, recentna poškodba; zrnatost: fina; sonda VI; reženj: 2; kv. 2; leto pridobitve: 1982; inv. št. P 4613.

2. Frag. ostenja; keramika; ornament: vrezi, bela inkrustacija; površina: temnosiva; zrnatost: fina; sonda VI; reženj: 2; kv. 2; leto pridobitve: 1982; inv. št. P 4620 (deli od iste posode še P 4618).

3. Frag. ostenja; keramika; ornament: vrezi; površina: temnorjava; zrnatost: fina; sonda VI; reženj: 2; kv. 2; leto pridobitve: 1982; inv. št. P 4619.

4. Frag. ostenja; keramika; ornament: žlebovi; površina: siva; zrnatost: groba; sonda VI; reženj: 1 (pobrano s površja); kv. 1; leto pridobitve: 1983; inv. št. P 5347.

5. Frag. noge; keramika; ornament: rdeč premaz, vrezi; površina: svetlosivorjava; zrnatost: fina; sonda VI; reženj: 1; kv. 1; leto pridobitve: 1982; inv. št. P 4487.

6. Frag. ustja z ostenjem in frag. držajem; keramika; površina: rdeča; zrnatost: fina; sonda VI; reženj: 1; kv. 2; leto pridobitve: 1982; inv. št. P 4496.

7. Frag. ustja z ostenjem; keramika; površina: ornažna; zrnatost: groba; sonda VI; reženj: 1; kv. 2; leto pridobitve: 1982; inv. št. P 4498.

8. Frag. noge; keramika; površina: rjava; zrnatost: fina; sonda VI; reženj: 1; kv. 2; leto pridobitve: 1982; inv. št. P 4500.

Tabla 4.22

1. Frag. ustja z ostenjem in frag. ročajem; keramika; površina: rdeča; zrnatost: groba; sonda VI/1; reženj: 3; kv. 4; leto pridobitve: 1983; inv. št. P 5362.

2. Frag. ostenja; keramika; ornament: vrezi; površina: temnosiva; zrnatost: fina; sonda VI/1; reženj: 3; kv. 4; leto pridobitve: 1983; inv. št. P 5363.

3. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi, vbodi; površina: rdeča; zrnatost: fina; sonda VI/1; reženj: 3; kv. 4; leto pridobitve: 1983; inv. št. P 5364a.

4. Frag. ustja z ostenjem; keramika; površina: svetlosivorjava; zrnatost: fina; sonda VI/1; reženj: 3; kv. 5; leto pridobitve: 1983; inv. št. P 5368.

5. Frag. ostenja; keramika; ornament: žlebovi, vbodi; površina: temnosiva; zrnatost: fina; sonda VI/1; reženj: 3; kv. 5; leto pridobitve: 1983; inv. št. P 5378.

6. Frag. ostenja z ročajem; keramika; površina: oranžna; zrnatost: fina; sonda VI/1; reženj: 3; kv. 5; leto pridobitve: 1983; inv. št. P 5384.

7. Frag. ustja z ostenjem; keramika; površina: oranžna; zrnatost: fina; sonda VI/1; reženj: 3; kv. 7; leto pridobitve: 1982; inv. št. P 5090.

Tabla 4.23

1. Frag. dna z ostenjem; keramika; površina: rjava; zrnatost: groba; sonda VI/2; reženj: 5; kv. 9; leto pridobitve: 1983; inv. št. P 5877.

2. Frag. ostenja; keramika; ornament: rdeč premaz; površina: temnosiva; zrnatost: fina; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5918.

year of acquisition: 1982; inv. no. P 4565 (parts of the same vessel also P 4570, P 4573).

12. Frag. of a lip with a wall; pottery; surface: brown; granularity: fine; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4562.

13. Frag. of a wall; pottery; ornament: channels (wide grooves); surface: dark grey; granularity: fine; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4584.

14. Frag. of a wall with fragmented handle; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4599 (parts of the same vessel also P 4585).

15. Frag. of a wall/foot; pottery; ornament: black slip(?), incisions, stitch impressions; surface: –; granularity: –; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4597.

16. Frag. of a lip with a wall (of a strainer); pottery; surface: dark grey; granularity: fine; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4548.

17. Frag. of a lip with a wall and fragmented handle; pottery; ornament: incisions, pulled-out appliqué ringlet; surface: brown; granularity: fine; trench VI; slice: 2; sq. 1; year of acquisition: 1982; inv. no. P 4590.

Plate 4.21

1. Frag. of a lip with a wall; pottery; ornament: impressions; surface: dark grey, recent injury; granularity: fine; trench VI; slice: 2; sq. 2; year of acquisition: 1982; inv. no. P 4613.

2. Frag. of a wall; pottery; ornament: incisions, white encrustation; surface: dark grey; granularity: fine; trench VI; slice: 2; sq. 2; year of acquisition: 1982; inv. no. P 4620 (parts of the same vessel also P 4618).

3. Frag. of a wall; pottery; ornament: incisions; surface: dark brown; granularity: fine; trench VI; slice: 2; sq. 2; year of acquisition: 1982; inv. no. P 4619.

4. Frag. of a wall; pottery; ornament: grooves; surface: grey; granularity: coarse; trench VI; slice: 1 (gathered on the surface); sq. 1; year of acquisition: 1983; inv. no. P 5347.

5. Frag. of a foot; pottery; ornament: red slip, incisions; surface: light grey brown; granularity: fine; trench VI; slice: 1; sq. 1; year of acquisition: 1982; inv. no. P 4487.

6. Frag. of a lip with a wall and fragmented grip; pottery; surface: red; granularity: fine; trench VI; slice: 1; sq. 2; year of acquisition: 1982; inv. no. P 4496.

7. Frag. of a lip with a wall; pottery; surface: orange; granularity: coarse; trench VI; slice: 1; sq. 2; year of acquisition: 1982; inv. no. P 4498.

8. Frag. of a foot; pottery; surface: brown; granularity: fine; trench VI; slice: 1; sq. 2; year of acquisition: 1982; inv. no. P 4500.

Plate 4.22

1. Frag. of a lip with a wall and fragmented handle; pottery; surface: red; granularity: coarse; trench VI/1; slice: 3; sq. 4; year of acquisition: 1983; inv. no. P 5362.

2. Frag. of a wall; pottery; ornament: incisions; surface: dark grey; granularity: fine; trench VI/1; slice: 3; sq. 4; year of acquisition: 1983; inv. no. P 5363.

3. Frag. of a wall; pottery; ornament: red slip, incisions, stitch impressions; surface: red; granularity: fine; trench VI/1; slice: 3; sq. 4; year of acquisition: 1983; inv. no. P 5364a.

4. Frag. of a lip with a wall; pottery; surface: light grey brown; granularity: fine; trench VI/1; slice: 3; sq. 5; year of acquisition: 1983; inv. no. P 5368.

3. Frag. ustja z ostenjem in frag. ročajem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5889.

4. Frag. ustja z ostenjem in frag. ročajem; keramika; površina: siva; zrnatost: fina; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5911.

5. Frag. ostenja; keramika; ornament: vrezi; površina: siva; zrnatost: fina; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5930.

6. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: fina; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5886.

7. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: fina; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5923.

8. Frag. ostenja z ročajem; keramika; ornament: vrezi; površina: temnorjava; zrnatost: fina; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5917.

9. Frag. noge; keramika; površina: siva; zrnatost: fina; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5898.

10. Frag. noge; keramika; površina: temnosiva; zrnatost: groba; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5890.

11. Frag. ostenja s frag. ročajem; keramika; ornament: rdeč premaz, žlebovi; površina: svetlosivorjava; zrnatost: groba; sonda VI/2; reženj: 5; kv. 10; leto pridobitve: 1983; inv. št. P 5903.

Tabla 4.24

1. Frag. ustja z ostenjem in ročajem; keramika; površina: rdeča; zrnatost: groba; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5868.

2. Frag. ostenja; keramika; ornament: barbotin; površina: temnorjava; zrnatost: groba; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5876.

3. Frag. ostenja; keramika; ornament: odtisi; površina: rdeča; zrnatost: groba; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5870.

4. Frag. ostenja; keramika; ornament: vrezi; površina: temnosiva; zrnatost: fina; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5875.

5. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi, vbodi, bela inkrustacija; površina: siva; zrnatost: fina; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5872.

6. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi; površina: temnosiva; zrnatost: fina; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5873.

7. Frag. ostenja s frag. ročajem; keramika; ornament: rdeč premaz; površina: rjava; zrnatost: groba; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5864.

8. Frag. ustja z ostenjem in frag. držajem (skleda/zajemalka); keramika; površina: temnosiva; zrnatost: groba; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5862.

9. Frag. uteži; slabo pečena glina; površina: rdeča; zrnatost: fina; sonda VI/2; reženj: 4; kv. 10; leto pridobitve: 1983; inv. št. P 5589.

10. Frag. ustja z ostenjem; keramika; ornament: vrezi, odtisi; površina: rjava; zrnatost: groba; sonda VI/2; reženj: 4; kv. 9–10; leto pridobitve: 1983; inv. št. P 5871.

11. Frag. noge; keramika; površina: svetlosivorjava; zrnatost: groba; sonda VI/2; reženj: 4; kv. 9–10; leto pridobitve: 1983; inv. št. P 5835.

12. Frag. ostenja; keramika; ornament: vrezi; površina: siva; zrnatost: fina; sonda VI/2; reženj: 4; kv. 9–10; leto pridobitve: 1983; inv. št. P 5858.

5. Frag. of a wall; pottery; ornament: grooves, incisions; surface: dark grey; granularity: fine; trench VI/1; slice: 3; sq. 5; year of acquisition: 1983; inv. no. P 5378.

6. Frag. of a wall with a handle; pottery; surface: orange; granularity: fine; trench VI/1; slice: 3; sq. 5; year of acquisition: 1983; inv. no. P 5384.

7. Frag. of a lip with a wall; pottery; surface: orange; granularity: fine; trench VI/1; slice: 3; sq. 7; year of acquisition: 1982; inv. no. P 5090.

Plate 4.23

1. Frag. of a bottom with a wall; pottery; surface: brown; granularity: coarse; trench VI/2; slice: 5; sq. 9; year of acquisition: 1983; inv. no. P 5877.

2. Frag. of a wall; pottery; ornament: red slip; surface: dark grey; granularity: fine; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5918.

3. Frag. of a lip with a wall and fragmented handle; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5889.

4. Frag. of a lip with a wall and fragmented handle; pottery; surface: grey; granularity: fine; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5911.

5. Frag. of a wall; pottery; ornament: incisions; surface: grey; granularity: fine; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5930.

6. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: fine; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5886.

7. Frag. of a lip with a wall; pottery; ornament: red slip; surface: red; granularity: fine; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5923.

8. Frag. of a wall with a handle; pottery; ornament: incisions; surface: dark brown; granularity: fine; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5917.

9. Frag. of a foot; pottery; surface: grey; granularity: fine; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5898.

10. Frag. of a foot; pottery; surface: dark grey; granularity: coarse; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5890.

11. Frag. of a wall with a fragmented handle; pottery; ornament: red slip, grooves; surface: light grey brown; granularity: coarse; trench VI/2; slice: 5; sq. 10; year of acquisition: 1983; inv. no. P 5903.

Plate 4.24

1. Frag. of a lip with a wall and handle; pottery; surface: red; granularity: coarse; trench VI/2; slice: 4; sq. 10; year of acquisition: 1983; inv. no. P 5868.

2. Frag. of a wall; pottery; ornament: barbotine; surface: dark brown; granularity: coarse; trench VI/2; slice: 4; sq. 10; year of acquisition: 1983; inv. no. P 5876.

3. Frag. of a wall; pottery; ornament: impressions; surface: red; granularity: coarse; trench VI/2; slice 4; sq. 10; year of acquisition: 1983; inv. no. P 5870.

4. Frag. of a wall; pottery; ornament: incisions; surface: dark grey; granularity: fine; trench VI/2; slice: 4; sq. 10; year of acquisition: 1983; inv. no. P 5875.

5. Frag. of a wall with a fragmented handle; pottery; ornament: incisions, stitch impressions, white encrustation; surface:

Tabla 4.25

1. Utež; slabo pečena glina; površina: svetlosivorjava; zrnatost: fina; sonda VI/2; reženj: 3; kv. 9; leto pridobitve: 1983; inv. št. P 5460.

2. Frag. uteži; slabo pečena glina; površina: svetlosivorjava; zrnatost: fina; sonda VI/2; reženj: 3; kv. 9; leto pridobitve: 1983; inv. št. P 5461.

3. Frag. uteži; slabo pečena glina; površina: oranžna; zrnatost: fina; sonda VI/2; reženj: 3; kv. 9; leto pridobitve: 1983; inv. št. P 5470.

4. Frag. uteži; slabo pečena glina; površina: svetlosivorjava; zrnatost: fina; sonda VI/2; reženj: 3; kv. 9; leto pridobitve: 1983; inv. št. P 5471.

5. Frag. zajemalke s tulastim držajem(?); keramika; ornament: vrezi, žlebovi; površina: temnosiva; zrnatost: fina; sonda VI/2; reženj: 2; kv. 10; leto pridobitve: 1983; inv. št. P 5351.

6. Frag. ostenja; keramika; ornament: vrzi, vbodi; površina: –; zrnatost: –; sonda VI/2 ali VI/1; reženj: 2 ali 3; kv. 10 ali 4; leto pridobitve: 1983; inv. št. P 5358.

Tabla 4.26

1. Frag. uteži; slabo pečena glina; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: 5; kv. 11; leto pridobitve: 1984; inv. št. P 5981 (deli od iste uteži še P 5980).

2. Frag. ustja z ostenjem in držajem; keramika; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 6626.

3. Frag. ustja z ostenjem in frag. ročajem; keramika; ornament: vrezi (kratki); površina: siva; zrnatost: fina; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 6639.

4. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rdeča, razpokana; zrnatost: fina; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 6635.

5. Frag. ustja z ostenjem in držajem; keramika; ornament: vrezi, žlebovi; površina: oranžna; zrnatost: fina; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 6625.

6. Frag. ustja z ostenjem; keramika; ornament: žlebovi, odtisi; površina: temnorjava; zrnatost: groba; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 6636 (deli od iste posode še P 5081 iz sonde 6, reženj 3, kv. 4).

7. Frag. ustja z ostenjem; keramika; ornament: žlebovi; površina: siva; zrnatost: fina; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 6634.

8. Frag. ustja z ostenjem/noge(?); keramika; površina: siva; zrnatost: groba; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 6637.

9. Frag. dna z ostenjem; keramika; ornament: vbodi; površina: oranžna; zrnatost: groba; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 6640.

Tabla 4.27

1. Frag. zajemalke s tulastim držajem; keramika; površina: rdeča; zrnatost: groba; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 5973.

2. Frag. zajemalke s tulastim držajem; keramika; površina: rjava; zrnatost: fina; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 5979.

3. Frag. zajemalke s tulastim držajem; keramika; površina: rdeča; zrnatost: groba; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 5983.

grey; granularity: fine; trench VI/2; slice: 4; sq. 10; year of acquisition: 1983; inv. no. P 5872.

6. Frag. of a wall with a fragmented handle; pottery; ornament: incisions; surface: dark grey; granualrity: fine; trench VI/2; slice: 4; sq. 10; year of acquisition: 1983; inv. no. P 5873.

7. Frag. of a wall with a fragmented handle; pottery; ornament: red slip; surface: brown; granularity: coarse; trench VI/2; slice: 4; sq. 10; year of acquisition: 1983; inv. no. P 5864.

8. Frag. of a lip with a wall and fragmented grip (dish/ladle); pottery; surface: dark grey; granularity: coarse; trench VI/2; slice: 4; sq. 10; year of acquisition: 1983; inv. no. P 5862.

9. Frag. of a weight; poorly burned clay; surface: red; granularity: fine; trench VI/2; slice: 4; sq. 10; year of acquisition: 1983; inv. no. P 5589.

10. Frag. of a lip with a wall; pottery; ornament: incisions, impressions; surface: brown; granularity: coarse; trench VI/2; slice: 4; sq. 9–10; year of acquisition: 1983; inv. no. P 5871.

11. Frag. of a foot; pottery; surface: light grey brown; granularity: coarse; trench VI/2; slice: 4; sq. 9–10; year of acquisition: 1983; inv. no. P 5835.

12. Frag. of a wall; pottery; ornament: incisions; surface: grey; granularity: fine; trench VI/2; slice: 4; sq. 9–10; year of acquisition: 1983; inv. no. P 5858.

Plate 4.25

1. Weight; poorly burned clay; surface: light grey brown; granularity: fine; trench VI/2; slice: 3; sq. 9; year of acquisition: 1983; inv. no. P 5460.

2. Frag. of a weight; poorly burned clay; surface: light grey brown; granularity: fine; trench VI/2; slice: 3; sq. 9; year of acquisition: 1983; inv. no. P 5461.

3. Frag. of a weight; poorly burned clay; surface: orange; granularity: fine; trench VI/2; slice: 3; sq. 9; year of acquisition: 1983; inv. no. P 5470.

4. Frag. of a weight; poorly burned clay; surface: light grey brown; granularity: fine; trench VI/2; slice: 3; sq. 9; year of acquisition: 1983; inv. no. P 5471.

5. Frag. of a ladle with a hollow grip(?); pottery; ornament: incisions, grooves; surface: dark grey; granularity: fine; trench VI/2; slice: 2; sq. 10; year of acquisition: 1983; inv. no. P 5351.

6. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: –; granularity: –; trench VI/2 or VI/1; slice: 2 or 3; sq. 10 or 4; year of acquisition: 1983; inv. no. P 5358.

Plate 4.26

1. Frag. of a weight; poorly burned clay; surface: light grey brown; granularity: fine; trench VI/3; slice 5; sq. 11; year of acquisition: 1984; inv. no. P 5981 (parts of this weight also P 5980).

2. Frag. of a lip with a wall and a grip; pottery; surface: light grey brown; granularity: fine; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 6626.

3. Frag. of a lip with a wall and fragmented handle; pottery; ornament: incisions (short); surface: grey; granularity: fine; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 6639.

4. Frag. of a lip with a wall; pottery; ornament: red slip; surface: red, cracked; granularity: fine; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 6635.

5. Frag. of a lip with a wall and a grip; pottery; ornament: incisions, grooves; surface: orange; granularity: fine; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 6625.

6. Frag. of a lip with a wall; pottery; ornament: grooves, impressions; surface: dark brown; granularity: coarse; trench VI/3;

4. Frag. zajemalke s tulastim držajem; keramika; površina: siva; zrnatost: fina; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 5977.

5. Frag. zajemalke (s tulastim držajem(?)); keramika; površina: –; zrnatost: –; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 5982.

6. Stožec (pečatnik(?)); keramika; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: 4; kv. 11; leto pridobitve: 1984; inv. št. P 5976.

7. Frag. ustja z ostenjem; keramika; ornament: žlebovi; površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: 4 – zaplata hišnega ometa; kv. 12; leto pridobitve: 1984; inv. št. P 5954.

8. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI/3; reženj: 4 – zaplata hišnega ometa; kv. 12; leto pridobitve: 1984; inv. št. P 5955.

9. Frag. ustja z ostenjem; keramika; ornament: žlebovi; površina: rjava; zrnatost: groba; sonda VI/3; reženj: 4 – zaplata hišnega ometa; kv. 12; leto pridobitve: 1984; inv. št. P 5956.

10. Frag. ustja z ostenjem; keramika; ornament: vbodi, bela inkrustacija; površina: temnosiva, glajena; zrnatost: fina; sonda VI/3; reženj: 4 – zaplata hišnega ometa; kv. 12; leto pridobitve: 1984; inv. št. P 5950.

11. Stožec (pečatnik(?)); keramika; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: 4; kv. 12; leto pridobitve: 1984; inv. št. P 5984.

12. Frag. ustja z ostenjem in frag. držajem; keramika; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6075.

13. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: groba; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6102.

14. Frag. ustja z ostenjem; keramika; vrezi, vbodi; površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6171.

Tabla 4.28

1. Frag. ustja z ostenjem; keramika; ornament: vbodi; površina: oranžna; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6082.

2. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: groba; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6095.

3. Frag. ustja z ostenjem in držajem; keramika; ornament: vrezi; površina: temnosiva, glajena; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6159.

4. Frag. ostenja; keramika; površina: temnorjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6096.

5. Frag. ustja z ostenjem in ušescem; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. S. N.

6. Frag. ustja s frag. ročajem; keramika; površina: –; zrnatost: –; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6099.

7. Frag. ustja z ostenjem; keramika; površina: –; zrnatost: –; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6101.

8. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rdeča, razpokana; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6083.

9. Frag. ustja z ostenjem; keramika; površina: siva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6089.

10. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6084.

slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 6636 (parts of the same vessel also P 5081 from trench 6, slice 3, sq. 4).

7. Frag. of a lip with a wall; pottery; ornament: grooves; surface: grey; granularity: fine; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 6634.

8. Frag. of a lip with a wall/foot(?); pottery; surface: grey; granularity: coarse; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 6637.

9. Frag. of a bottom with a wall; pottery; ornament: stitch impressions; surface: orange; granularity: coarse; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 6640.

Plate 4.27

1. Frag. of a ladle with a hollow grip; pottery; surface: red; granularity: coarse; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 5973.

2. Frag. of a ladle with a hollow grip; pottery; surface: brown; granularity: fine; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 5979.

3. Frag. of a ladle with a hollow grip; pottery; surface: red; granularity: coarse; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 5983.

4. Frag. of a ladle with a hollow grip; pottery; surface: grey; granularity: fine; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 5977.

5. Frag. of a ladle (with a hollow grip(?)); pottery; surface: –; granularity: –; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 5982.

6. Cone (stamp seal(?)); pottery; surface: light grey brown; granularity: fine; trench VI/3; slice: 4; sq. 11; year of acquisition: 1984; inv. no. P 5976.

7. Frag. of a lip with a wall; pottery; ornament: grooves; surface: dark grey; granularity: fine; trench VI/3; slice: 4 – a patch of house plaster; sq. 12; year of acquisition: 1984; inv. no. P 5954.

8. Frag. of a lip with a wall; pottery; surface: brown; granularity: fine; trench VI/3; slice: 4 – a patch of house plaster; sq. 12; year of acquisition: 1984; inv. no. P 5955.

9. Frag. of a lip with a wall; pottery; ornament: grooves; surface: brown; granularity: coarse; trench VI/3; slice: 4 – a patch of house plaster; sq. 12; year of acquisition: 1984; inv. no. P 5956.

10. Frag. of a lip with a wall; pottery; ornament: incisions, white encrustation; surface: dark grey, polished; granularity: fine; trench VI/3; slice: 4 – a patch of house plaster; sq. 12; year of acquisition: 1984; inv. no. P 5950.

11. Cone (stamp seal(?)); pottery; surface: light grey brown; granularity: fine; trench VI/3; slice: 4; sq. 12; year of acquisition: 1984; inv. no. P 5984.

12. Frag. of a lip with a wall and fragmented grip; pottery; surface: light grey brown; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6075.

13. Frag. of a lip with a wall; pottery; surface: brown; granularity: coarse; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6102.

14. Frag. of a lip with a wall; pottery; incisions, stitch impressions; surface: dark grey; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6171.

Plate 4.28

1. Frag. of a lip with a wall; pottery; ornament: incisions; surface: orange; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6082.

11. Frag. ostenja; keramika; ornament: vrezi; površina: rjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6466.

12. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi; površina: siva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6169.

13. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6156.

Tabla 4.29

1. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6482.

2. Frag. ostenja; keramika; ornament: žlebovi, odtisi; površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6157.

3. Frag. ostenja z nastavkom za ročaj; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6164.

4. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi, vbodi, bela inkrustacija; površina: rdeča; zrnatost: groba; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6152.

5. Frag. noge(?); keramika; ornament: rdeč premaz, vrezi, bela inkrustacija; površina: oranžna; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6160.

6. Frag. dna z ostenjem in nogo; keramika; površina: temnorjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6112.

7. Frag. dna z ostenjem in nogo; keramika; površina: rjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6474.

8. Frag. dna z ostenjem; keramika; površina: temnosiva; zrnatost: groba; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6103.

9. Frag. dna z ostenjem; keramika; ornament: rdeč premaz; površina: rjava, razpokana; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6111.

10. Frag. dna z ostenjem; keramika; površina: –; zrnatost: –; sonda VI/3; kv. 112; reženj: 3; leto pridobitve: 1983; inv. št. P 6124.

11. Frag. ostenja; keramika; ornament: žlebovi, vbodi; površina: siva; zrnatost: fina (sljuda); sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6464.

12. Frag. ostenja z nastavkom za ročaj; keramika; ornament: rdeč premaz, vrezi, bela inkrustacija; površina: oranžna; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6162.

13. Frag. ostenja; keramika; ornament: vrezi; površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6449.

14. Frag. ostenja; keramika; ornament: vrezi; površina: temnosiva; zrnatost: groba; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6457.

15. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: siva, glajena; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6441.

16. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: rjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6446.

17. Frag. ostenja; keramika; ornament: žlebovi, vbodi; površina: rjava; zrnatost: groba; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6155.

2. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: coarse; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6095.

3. Frag. of a lip with a wall and grip; pottery; ornament: incisions; surface: dark brown, polished; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6159.

4. Frag. of a wall; pottery; surface: dark brown; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6096.

5. Frag. of a lip with a wall and ear; pottery; ornament: red slip; surface: red; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. S. N.

6. Frag. of a lip with a fragmented handle; pottery; surface: –; granularity: –; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6099.

7. Frag. of a lip with a wall; pottery; surface: –; granularity: –; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6101.

8. Frag. of a lip with a wall; pottery; ornament: red slip; surface: red, cracked; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6083.

9. Frag. of a lip with a wall; pottery; surface: grey; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6089.

10. Frag. of a lip with a wall; pottery; surface: brown; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6084.

11. Frag. of a wall; pottery; ornament: incisions; surface: brown; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6466.

12. Frag. of a wall with a fragmented handle; pottery; ornament: incisions; surface: grey; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6169.

13. Frag. of a wall with a fragmented handle; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6156.

Plate 4.29

1. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6482.

2. Frag. of a wall; pottery; ornament: grooves, impressions; surface: dark grey; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6157.

3. Frag. of a wall with a handle nozzle; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6164.

4. Frag. of a wall; pottery; ornament: red slip, incisions, stitch impressions, white encrustation; surface: red; granularity: coarse; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6152.

5. Frag. of a foot(?); pottery; ornament: red slip, incisions, white encrustation; surface: orange; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6160.

6. Frag. of a bottom with a wall and foot; pottery; surface: dark brown; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6112.

7. Frag. of a bottom with a wall and foot; pottery; surface: brown; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6474.

8. Frag. of a bottom with a wall; pottery; surface: dark grey; granularity: coarse; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6103.

18. Frag. ostenja z ročajem; keramika; ornament: rdeč premaz; površina: temnorjava, razpokana; zrnatost: groba; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6150.

19. Frag. ročaja; keramika; ornament: rdeč premaz; površina: svtlosivorjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 11; leto pridobitve: 1983; inv. št. P 6454.

Tabla 4.30

1. Frag. ustja z ostenjem; keramika; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6527.

2. Frag. ustja z ostenjem; keramika; površina: oranžna; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6494.

3. Frag. ustja z ostenjem; keramika; površina: rdeča; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6503.

4. Frag. ustja z ostenjem; keramika; površina: temnosiva; zrnatost: groba; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6521.

5. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: groba; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6514.

6. Frag. ustja z ostenjem; keramika; površina: rjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6507.

7. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6526a.

8. Frag. ustja z ostenjem; keramika; ornament: vrezi; površina: siva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6492.

9. Frag. ostenja z ročajem; keramika; površina: rjava; zrnatost: groba; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6594.

10. Frag. ostenja; keramika; ornament: odtisi; površina: rdeča; zrnatost: groba; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6491.

11. Frag. ostenja; keramika; ornament: vbodi; površina: siva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6613.

12. Frag. ostenja z izlivom; keramika; površina: oranžna; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6487.

13. Frag. ostenja s frag. ročajem; keramika; površina: oranžna; zrnatost: groba; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6595.

14. Frag. ostenja z nastavkom za ročaj; keramika; površina: rdeča; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6206.

15. Frag. ostenja; keramika; ornament: vrezi; površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6611.

16. Frag. ostenja s frag. dnom in nogo; keramika; ornament: vrezi, bela inkrustacija; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6490.

17. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6202.

18. Frag. vretenca; keramika; površina: temnorjava; zrnatost: groba; sonda VI/3; reženj: 3; kv. 12; leto pridobitve: 1983; inv. št. P 6486.

9. Frag. of a bottom with a wall; pottery; ornament: red slip; surface: brown, cracked; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6111.

10. Frag. of a bottom with a wall; pottery; surface: –; granularity: –; trench VI/3; slice: 3; sq. 112; year of acquisition: 1983; inv. no. P 6124.

11. Frag. of a wall; pottery; ornament: grooves, stitch impressions; surface: grey; granularity: fine (mica); trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6464.

12. Frag. of a wall with a handle nozzle; pottery; ornament: red slip, incisions, white encrustation; surface: orange; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6162.

13. Frag. of a wall; pottery; ornament: incisions; surface: dark grey; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6449.

14. Frag. of a wall; pottery; ornament: incisions; surface: dark grey; granularity: coarse; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6457.

15. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: grey, polished; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6441.

16. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: brown; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6446.

17. Frag. of a wall; pottery; ornament: grooves, incisions; surface: brown; granularity: coarse; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6155.

18. Frag. of a wall with a handle; pottery; ornament: red slip; surface: dark brown, cracked; granularity: coarse; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6150.

19. Frag. of a handle; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench VI/3; slice: 3; sq. 11; year of acquisition: 1983; inv. no. P 6454.

Plate 4.30

1. Frag. of a lip with a wall; pottery; surface: light grey brown; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6527.

2. Frag. of a lip with a wall; pottery; surface: orange; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6494.

3. Frag. of a lip with a wall; pottery; surface: red; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6503.

4. Frag. of a lip with a wall; pottery; surface: dark grey; granularity: coarse; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6521.

5. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: coarse; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6514.

6. Frag. of a lip with a wall; pottery; surface: brown; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6507.

7. Frag. of a lip with a wall; pottery; ornament: red slip; surface: red; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6526a.

8. Frag. of a lip with a wall; pottery; ornament: incisions; surface: grey; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6492.

9. Frag. of a wall with a handle; pottery; surface: brown; granularity: coarse; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6594.

Tabla 4.31

1. Frag. kladivaste sekire; kamen (analiza: SP7); površina: svetlorjava; zrnatost: fina; sonda VI/3; reženj: 2; kv. 11; leto pridobitve: 1983 ali 1984; inv. št. P 177.

2. Frag. ostenja; keramika; ornament: rdeč premaz(?), vrezi, vbodi; površina: rjava, glajena; zrnatost: fina; sonda VI/3; reženj: 2; kv. 12; leto pridobitve: 1983; inv. št. P 6069.

3. Frag. ostenja; keramika; ornament: črn premaz(?), vrezi, vbodi; površina: siva; zrnatost: fina; sonda VI/3; reženj: 2; kv. 12; leto pridobitve: 1983; inv. št. P 6062a.

4. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6831.

5. Frag. ustja z ostenjem/noge(?); keramika; ornament: rdeč premaz, žlebovi; površina: oranžna; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6774.

6. Frag. ustja z ostenjem; keramika; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6835.

7. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: temnorjava, razpokana; zrnatost: groba; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6834.

8. Frag. ustja z ostenjem; keramika; ornament: žlebovi; površina: temnorjava; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6896.

9. Frag. ustja z jezičasto odebelitvijo in ostenjem; keramika; površina: temnorjava; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6837.

10. Frag. ustja z ostenjem in ušescem; keramika; površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6817.

11. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi, vbodi; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6778.

12. Frag. ostenja s frag. ročajem; keramika; ornament: vrezi, vbodi; površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6772.

13. Frag. ostenja; keramika; ornament: črn premaz(?), vrezi, vbodi, bela inkrustacija; površina: siva; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6794.

14. Frag. ostenja; keramika; ornament: vrezi, odtisi; površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6852.

Tabla 4.32

1. Frag. noge/ustja z ostenjem(?); keramika; ornament: vrezi, bela inkrustacija; površina: rjava; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6756.

2. Frag. noge; keramika; ornament: vrezi, vbodi; površina: temnosiva; zrnatost: groba; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6752.

3. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi; površina: svetlosivorjava; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6773.

4. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: črna; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6779.

5. Frag. ostenja; keramika; ornament: rdeč premaz, žlebovi, odtisi; površina: svetlosivorjava; zrnatost: groba; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6853.

6. Frag. ustja z ostenjem in frag. ročajem; keramika; površina: temnorjava; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6894.

10. Frag. of a wall; pottery; ornament: impressions; surface: red; granularity: coarse; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6491.

11. Frag. of a wall; pottery; ornament: stitch impressions; surface: grey; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6613.

12. Frag. of a wall with a spout; pottery; surface: orange; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6487.

13. Frag. of a wall with a fragmented handle; pottery; surface: orange; granularity: coarse; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6595.

14. Frag. of a wall with a handle nozzle; pottery; surface: red; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6206.

15. Frag. of a wall; pottery; ornament: incisions; surface: dark grey; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6611.

16. Frag. of a wall with a fragmented bottom and foot; pottery; ornament: incisions, white encrustation; surface: light grey brown; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6490.

17. Frag. of a wall; pottery; ornament: red slip, incisions; surface: light grey brown; granularity: fine; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6202.

18. Frag. of a spindle whorl; pottery; surface: dark brown; granularity: coarse; trench VI/3; slice: 3; sq. 12; year of acquisition: 1983; inv. no. P 6486.

Plate 4.31

1. Frag. of a hammer axe; stone (analysis: SP7); surface: light brown; granularity: fine; trench VI/3; slice: 2; sq. 11; year of acquisition: 1983 or 1984; inv. no. P 177.

2. Frag. of a wall; pottery; ornament: red slip(?), incisions, stitch impressions; surface: brown, polished; granularity: fine; trench VI/3; slice: 2; sq. 12; year of acquisition: 1983; inv. no. P 6069.

3. Frag. of a wall; pottery; ornament: black slip(?), incisions, stitch impressions; surface: grey; granularity: fine; trench VI/3; slice: 2; sq. 12; year of acquisition: 1983; inv. no. P 6062a.

4. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6831.

5. Frag. of a lip with a wall/foot(?); pottery; ornament: red slip, grooves; surface: orange; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6774.

6. Frag. of a lip with a wall; pottery; surface: light grey green; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6835.

7. Frag. of a lip with a wall; pottery; ornament: red slip; surface: dark brown, cracked; granularity: coarse; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6834.

8. Frag. of a lip with a wall; pottery; ornament: grooves; surface: dark brown; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6896.

9. Frag. of a lip with a tongue-shaped thickening and wall; pottery; surface: dark brown; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6837.

10. Frag. of a lip with a wall and ear; pottery; surface: dark grey; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6817.

11. Frag. of a wall; pottery; ornament: red slip, incisions, stitch impressions; surface: light grey brown; granularity: fine;

7. Frag. ostenja s frag. ročajem; keramika; ornament: rdeč premaz, vrezi; površina: rdeča; zrnatost: groba; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6856.

8. Frag. ostenja; keramika; ornament: vrezi (valovnica); površina: temnosiva; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 11; leto pridobitve: 1984; inv. št. P 6886.

9. Frag. ustja z ostenjem; keramika; površina: siva; zrnatost: fina; sonda VI/3; reženj: severni profil; kv. 12; leto pridobitve: 1984; inv. št. P 6785.

10. Frag. ustja z ostenjem; keramika; površina: siva; zrnatost: groba; sonda VI/3; reženj: severni profil; kv. 12; leto pridobitve: 1984; inv. št. P 6788.

11. Frag. zajemalke s tulastim držajem(?); keramika; ornament: rdeč premaz; površina: rjava, razpokana; zrnatost: fina; sonda VI/3 in VI/4; reženj: 3; kv. 11, 12, 15; leto pridobitve: 1984; inv. št. P 5969.

12. Frag. zajemalke s tulastim držajem; keramika; površina: siva; zrnatost: groba; sonda VI/3 in VI/4; reženj: 3; kv. 11, 12, 15; leto pridobitve: 1984; inv. št. P 5972.

Tabla 4.33

1. Frag. ustja z ostenjem; keramika; ornament: razčlenjeno rebro (držaj(?)), odtisi; površina: temnorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 14; leto pridobitve: 1984; inv. št. P 4669.

2. Frag. ustja z ostenjem in ušescem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 14; leto pridobitve: 1984; inv. št. P 4679.

3. Frag. ostenja; keramika; ornament: vrezi, vbodi; površina: temnosiva; zrnatost: fina; sonda VI/4; reženj: 2; kv. 14; leto pridobitve: 1984; inv. št. P 4675.

4. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz, razčlenjeno rebro (držaj(?)), odtisi; površina: svetlosivorjava, razpokana; zrnatost: fina; sonda VI/4; reženj: 2; kv. 14; leto pridobitve: 1984; inv. št. P 4676.

5. Frag. ustja z ostenjem; keramika; ornament: žlebovi (široki); površina: oranžna; zrnatost: fina; sonda VI/4; reženj: 2; kv. 14; leto pridobitve: 1984; inv. št. P 4680.

6. Frag. ustja z ostenjem; keramika; površina: temnosiva; zrnatost: fina; sonda VI/4; reženj: 2; kv. 16; leto pridobitve: 1984; inv. št. P 4686.

7. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: temnorjava, razpokana; zrnatost: groba; sonda VI/4; reženj: 2; kv. 16; leto pridobitve: 1984; inv. št. P 4684.

8. Frag. ustja z ostenjem; keramika; ornament: žlebovi, vbodi; površina: svetlosivorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 16; leto pridobitve: 1984; inv. št. P 4683.

9. Frag. ustja z ostenjem; keramika; površina: temnosiva; zrnatost: fina; sonda VI/4; reženj: 2; kv. 16; leto pridobitve: 1984; inv. št. P 4681.

10. Frag. ostenja; keramika; ornament: žlebovi, vbodi; površina: temnorjava; zrnatost: groba; sonda VI/4; reženj: 2; kv. 16; leto pridobitve: 1984; inv. št. P 4699.

11. Frag. ostenja s frag. držajem; keramika; ornament: vrezi; površina: temnosiva; zrnatost: groba; sonda VI/4; reženj: 2; kv. 16; leto pridobitve: 1984; inv. št. P 4698.

12. Frag. ostenja; keramika; ornament: razčlenjeno rebro; površina: rdeča; zrnatost: groba; sonda VI/4; reženj: 2; kv. 16; leto pridobitve: 1984; inv. št. P 4697.

13. Frag. ostenja z ročajem; keramika; površina: temnorjava; zrnatost: groba; sonda VI/4; reženj: 2; kv. 16; leto pridobitve: 1984; inv. št. P 4689.

trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6778.

12. Frag. of a wall with a fragmented handle; pottery; ornament: incisions, stitch impressions; surface: dark grey; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6772.

13. Frag. of a wall; pottery; ornament: black slip(?), incisions, stitch impressions, white encrustation; surface: grey; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6794.

14. Frag. of a wall; pottery; ornament: incisions, impressions; surface: dark grey; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6852.

Plate 4.32

1. Frag. of a foot/lip with a wall(?); pottery; ornament: incisions, white encrustation; surface: brown; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6756.

2. Frag. of a foot; pottery; ornament: incisions, stitch impressions; surface: dark grey; granularity: coarse; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6752.

3. Frag. of a wall; pottery; ornament: red slip, incisions; surface: light grey brown; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6773.

4. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: black; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6779.

5. Frag. of a wall; pottery; ornament: red slip, grooves, impressions; surface: light grey brown; granularity: coarse; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6853.

6. Frag. of a lip with a wall and a fragmented handle; pottery; surface: dark brown; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6894.

7. Frag. of a wall with a fragmented handle; pottery; ornament: red slip, incisions; surface: red; granularity: coarse; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6856.

8. Frag. of a wall; pottery; ornament: incisions (wavy line); surface: dark grey; granularity: fine; trench VI/3; slice: northern profile; sq. 11; year of acquisition: 1984; inv. no. P 6886.

9. Frag. of a lip with a wall; pottery; surface: grey; granularity: fine; trench VI/3; slice: northern profile; sq. 12; year of acquisition: 1984; inv. no. P 6785.

10. Frag. of a lip with a wall; pottery; surface: grey; granularity: coarse; trench VI/3; slice: northern profile; sq. 12; year of acquisition: 1984; inv. no. P 6788.

11. Frag. of a ladle with a hollow grip(?); pottery; ornament: red slip; surface: brown, cracked; granularity: fine; trench VI/3 and VI/4; slice: 3; sq. 11, 12, 15; year of acquisition: 1984; inv. no. P 5969.

12. Frag. of a ladle with a hollow grip; pottery; surface: grey; granularity: coarse; trench VI/3 and VI/4; slice: 3; sq. 11, 12, 15; year of acquisition: 1984; inv. no. P 5972.

Plate 4.33

1. Frag. of a lip with a wall; pottery; ornament: cordon with finger imprints (grip(?)), impressions; surface: dark brown; granularity: fine; trench VI/4; slice: 2; sq. 14; year of acquisition: 1984; inv. no. P 4669.

Tabla 4.34

1. Frag. ustja z ostenjem in frag. ročajem; keramika; ornament: vrezi; površina: siva; zrnatost: groba; sonda VI/4; reženj: 2; kv. 17; leto pridobitve: 1984; inv. št. P 4704.

2. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: groba; sonda VI/4; reženj: 2; kv. 17; leto pridobitve: 1984; inv. št. P 4702.

3. Frag. ustja z ostenjem; keramika; površina: temnorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 17; leto pridobitve: 1984; inv. št. P 4705.

4. Frag. ustja z ostenjem in držajem; keramika; površina: svetlosivorjava; zrnatost: groba; sonda VI/4; reženj: 2; kv. 17; leto pridobitve: 1984; inv. št. P 4706.

5. Frag. ostenja; keramika; ornament: vrezi; površina: temnorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 17; leto pridobitve: 1984; inv. št. P 4725.

6. Frag. ostenja; keramika; ornament: barbotin; površina: rdeča; zrnatost: fina; sonda VI/4; reženj: 2; kv. 17; leto pridobitve: 1984; inv. št. P 4724.

7. Frag. dna z ostenjem in nogo; keramika; ornament: rdeč premaz; površina: temnorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 19; leto pridobitve: 1984; inv. št. P 4726.

8. Frag. ustja z ostenjem in držajem; keramika; površina: temnorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 20; leto pridobitve: 1984; inv. št. P 4734.

9. Frag. ostenja; keramika; ornament: rdeč premaz, razčlenjeno rebro; površina: rdeča, razpokana; zrnatost: groba; sonda VI/4; reženj: 2; kv. 20; leto pridobitve: 1984; inv. št. P 4744.

10. Frag. ustja z ostenjem; keramika; ornament: vrezi, odtisi; površina: –; zrnatost: –; sonda VI/4; reženj: 2; kv. 21; leto pridobitve: 1984; inv. št. S. N.

11. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: siva; zrnatost: fina; sonda VI/4; reženj: 2; kv. 21; leto pridobitve: 1984; inv. št. P 4752.

Tabla 4.35

1. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4794.

2. Frag. ustja z ostenjem; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: fina; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4833.

3. Frag. ustja z ostenjem in ušescem; keramika; površina: siva; zrnatost: groba; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4795.

4. Frag. ostenja; keramika; ornament: vrezi; površina: temnorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4829.

5. Frag. ostenja; keramika; ornament: vrezi; površina: rdeča; zrnatost: fina; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4826.

6. Frag. ostenja; keramika; ornament: črn premaz(?), vrezi; površina: siva; zrnatost: fina; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4827.

7. Frag. dna z ostenjem; keramika; površina: temnosiva; zrnatost: groba; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4797.

8. Frag. dna z ostenjem; keramika; ornament: vrezi, vbodi; površina: siva; zrnatost: fina; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4801.

9. Frag. noge; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4807 (deli od iste posode še P 4804).

2. Frag. of a lip with a wall and ear; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench VI/4; slice: 2; sq. 14; year of acquisition: 1984; inv. no. P 4679.

3. Frag. of a wall; pottery; ornament: incisions, stitch impressions; surface: dark grey; granularity: fine; trench VI/4; slice: 2; sq. 14; year of acquisition: 1984; inv. no. P 4675.

4. Frag. of a lip with a wall; pottery; ornament: red slip, cordon with finger imprints (grip(?)), impressions; surface: light grey brown, cracked; granularity: fine; trench VI/4; slice: 2; sq. 14; year of acquisition: 1984; inv. no. P 4676.

5. Frag. of a lip with a wall; pottery; ornament: grooves (wide); surface: orange; granularity: fine; trench VI/4; slice: 2; sq. 14; year of acquisition: 1984; inv. no. P 4680.

6. Frag. of a lip with a wall; pottery; surface: dark grey; granularity: fine; trench VI/4; slice: 2; sq. 16; year of acquisition: 1984; inv. no. P 4686.

7. Frag. of a lip with a wall; pottery; ornament: red slip; surface: dark brown, cracked; granularity: coarse; trench VI/4; slice: 2; sq. 16; year of acquisition: 1984; inv. no. P 4684.

8. Frag. of a lip with a wall; pottery; ornament: grooves, incisions; surface: light grey brown; granularity: fine; trench VI/4; slice: 2; sq. 16; year of acquisition: 1984; inv. no. P 4683.

9. Frag. of a lip with a wall; pottery; surface: dark grey; granularity: fine; trench VI/4; slice: 2; sq. 16; year of acquisition: 1984; inv. no. P 4681.

10. Frag. of a wall; pottery; ornament: grooves, incisions; surface: dark brown; granularity: coarse; trench VI/4; slice: 2; sq. 16; year of acquisition: 1984; inv. no. P 4699.

11. Frag. of a wall with a fragmented grip; pottery; ornament: incisions; surface: dark grey; granularity: coarse; trench VI/4; slice: 2; sq. 16; year of acquisition: 1984; inv. no. P 4698.

12. Frag. of a wall; pottery; ornament: cordon with finger imprints; surface: red; granularity: coarse; trench VI/4; slice: 2; sq. 16; year of acquisition: 1984; inv. no. P 4697.

13. Frag. of a wall with a handle; pottery; surface: dark brown; granularity: coarse; trench VI/4; slice: 2; sq. 16; year of acquisition: 1984; inv. no. P 4689.

Plate 4.34

1. Frag. of a lip with a wall and a fragmented handle; pottery; ornament: incisions; surface: grey; granularity: coarse; trench VI/4; slice: 2; sq. 17; year of acquisition: 1984; inv. no. P 4704.

2. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: coarse; trench VI/4; slice: 2; sq. 17; year of acquisition: 1984; inv. no. P 4702.

3. Frag. of a lip with a wall; pottery; surface: dark brown; granularity: fine; trench VI/4; slice: 2; sq. 17; year of acquisition: 1984; inv. no. P 4705.

4. Frag. of a lip with a wall and grip; pottery; surface: light grey brown; granularity: coarse; trench VI/4; slice: 2; sq. 17; year of acquisition: 1984; inv. no. P 4706.

5. Frag. of a wall; pottery; ornament: incisions; surface: dark brown; granularity: fine; trench VI/4; slice: 2; sq. 17; year of acquisition: 1984; inv. no. P 4725.

6. Frag. of a wall; pottery; ornament: barbotine; surface: red; granularity: fine; trench VI/4; slice: 2; sq. 17; year of acquisition: 1984; inv. no. P 4724.

7. Frag. of a bottom with a wall and foot; pottery; ornament: red slip; surface: dark brown; granularity: fine; trench VI/4; slice: 2; sq. 19; year of acquisition: 1984; inv. no. P 4726.

8. Frag. of a lip with a wall and grip; pottery; surface: dark brown; granularity: fine; trench VI/4; slice: 2; sq. 20; year of acquisition: 1984; inv. no. P 4734.

10. Frag. zajemalke s tulastim držajem; keramika; površina: –; zrnatost: –; sonda VI/4; reženj: 2; kv. 22; leto pridobitve: 1984; inv. št. P 4811.

11. Frag. zajemalke s tulastim držajem; keramika; ornament: rdeč premaz; površina: svetlosivorjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 16, 19, 21, 22; leto pridobitve: 1984; inv. št. P 5965.

12. Frag. zajemalke s tulastim držajem; keramika; ornament: rdeč premaz; površina: temnosiva; zrnatost: fina; sonda VI/4; reženj: 2; kv. 16, 19, 21, 22; leto pridobitve: 1984; inv. št. P 5968.

13. Noga z dnom(?); keramika; ornament: rdeč premaz; površina: temnorjava, razpokana; zrnatost: fina; sonda VI/4; reženj: 2; kv. 16, 19, 21, 22; leto pridobitve: 1984; inv. št. P 5967.

14. Vretence; keramika; površina: rjava; zrnatost: fina; sonda VI/4; reženj: 2; kv. 16, 19, 21, 22; leto pridobitve: 1984; inv. št. P 5966.

Tabla 4.36

1. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: svetlosivorjava; zrnatost: groba; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7102.

2. Frag. ustja z ostenjem; keramika; ornament: vrezi, odtisi; površina: –; zrnatost: –; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. S. N.

3. Frag. ustja z ostenjem; keramika; ornament: vrezi, odtisi, vbodi; površina: rjava; zrnatost: groba; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7103.

4. Frag. ostenja; keramika; ornament: vrezi; površina: rjava; zrnatost: fina; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7144.

5. Frag. ostenja; keramika; ornament: žlebovi, vbodi; površina: siva; zrnatost: fina; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7150.

6. Frag. ostenja; keramika; površina: siva; zrnatost: fina; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7117.

7. Frag. dna z ostenjem; keramika; površina: temnosiva; zrnatost: fina; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7116a.

8. Frag. dna z ostenjem; keramika; površina: rjava; zrnatost: groba; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7118.

9. Frag. držaja; keramika; ornament: protom; površina: oranžna; zrnatost: fina; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7095.

10. Frag. zajemalke s tulastim držajem; keramika; površina: rjava; zrnatost: fina; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7094.

11. Frag. zajemalke s tulastim držajem; keramika; površina: rjava; zrnatost: groba; sonda VII; reženj: 5; kv. 3; leto pridobitve: 1984; inv. št. P 7093.

12. Ploščata sekira; kamen (analiza: SP5); površina: zelenorjava; sonda VII; reženj: 5; x = 3 m; y = 9 m; z = 0,75 m; kv. 3; leto pridobitve: 1984; inv. št. S. N.

13. Frag. ostenja; keramika; ornament: rdeč premaz; površina: rjava; zrnatost: fina; sonda VII; reženj: 4; kv. 2; leto pridobitve: 1984; inv. št. P 7085a.

Tabla 4.37

1. Frag. ustja z ostenjem; keramika; ornament: odtisi; površina: temnosiva; zrnatost: fina; sonda VII; reženj: 4; kv. 3; leto pridobitve: 1984; inv. št. P 7090.

9. Frag. of a wall; pottery; ornament: red slip, cordon with finger imprints; surface: red, cracked; granularity: coarse; trench VI/4; slice: 2; sq. 20; year of acquisition: 1984; inv. no. P 4744.

10. Frag. of a lip with a wall; pottery; ornament: incisions, impressions; surface: –; granularity: –; trench VI/4; slice: 2; sq. 21; year of acquisition: 1984; inv. no. S. N.

11. Frag. of a lip with a wall; pottery; ornament: red slip; surface: grey; granularity: fine; trench VI/4; slice: 2; sq. 21; year of acquisition: 1984; inv. no. P 4752.

Plate 4.35

1. Frag. of a lip with a wall; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4794.

2. Frag. of a lip with a wall; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4833.

3. Frag. of a lip with a wall and ear; pottery; surface: grey; granularity: coarse; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4795.

4. Frag. of a wall; pottery; ornament: incisions; surface: dark brown; granularity: fine; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4829.

5. Frag. of a wall; pottery; ornament: incisions; surface: red; granularity: fine; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4826.

6. Frag. of a wall; pottery; ornament: black slip(?), incisions; surface: grey; granularity: fine; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4827.

7. Frag. of a bottom with a wall; pottery; surface: dark grey; granularity: coarse; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4797.

8. Frag. of a bottom with a wall; pottery; ornament: incisions, stitch impressions; surface: grey; granularity: fine; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4801.

9. Frag. of a foot; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4807 (parts of the same vessel also P 4804).

10. Frag. of a ladle with a hollow grip; pottery; surface: –; granularity: –; trench VI/4; slice: 2; sq. 22; year of acquisition: 1984; inv. no. P 4811.

11. Frag. of a ladle with a hollow grip; pottery; ornament: red slip; surface: light grey brown; granularity: fine; trench VI/4; slice: 2; sq. 16, 19, 21, 22; year of acquisition: 1984; inv. no. P 5965.

12. Frag. of a ladle with a hollow grip; pottery; ornament: red slip; surface: dark grey; granularity: fine; trench VI/4; slice: 2; sq. 16, 19, 21, 22; year of acquisition: 1984; inv. no. P 5968.

13. Foot with a bottom(?); pottery; ornament: red slip; surface: dark brown, cracked; granularity: fine; trench VI/4; slice: 2; sq. 16, 19, 21, 22; year of acquisition: 1984; inv. no. P 5967.

14. Spindle whorl; pottery; surface: brown; granularity: fine; trench VI/4; slice: 2; sq. 16, 19, 21, 22; year of acquisition: 1984; inv. no. P 5966.

Plate 4.36

1. Frag. of a lip with a wall; pottery; ornament: impressions; surface: light grey brown; granularity: coarse; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7102.

2. Frag. of a lip with a wall; pottery; ornament: incisions, impressions; surface: –; granularity: –; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. S. N.

2. Frag. ostenja; keramika; ornament: rdeč premaz, vrezi, vbodi; površina: svetlosivorjava; zrnatost: fina; sonda VII; reženj: 4; kv. 3; leto pridobitve: 1984; inv. št. P 7091.

3. Frag. ploščate sekire; kamen (analiza: SP3); površina: svetlorjava (bež); sonda VII; reženj: 4; x = 3 m; y = 9 m; z = 0,6 m; kv. 3; leto pridobitve: 1984; inv. št. P 6932.

4. Frag. ustja z jezičastim držajem in ostenjem; keramika; površina: temnorjava; zrnatost: groba; sonda VII; reženj: 3; kv. 2; leto pridobitve: 1983; inv. št. P 7012.

5. Frag. ostenja; keramika; ornament: okrogli plastični nalepki; površina: rjava; zrnatost: groba; sonda VII; reženj: 3; kv. 2; leto pridobitve: 1983; inv. št. P 7004.

6. Frag. dna z ostenjem; keramika; ornament: vrezi; površina: temnosiva; zrnatost: fina (sljuda); sonda VII; reženj: 3; kv. 2; leto pridobitve: 1983; inv. št. P 7016.

7. Frag. ročaja; keramika; ornament: vrezi, odtisi; površina: rjava; zrnatost: groba; sonda VII; reženj: 3; kv. 2; leto pridobitve: 1983; inv. št. P 7002.

8. Frag. dna; keramika; površina: svetlosivorjava; zrnatost: groba; sonda VII; reženj: 3; kv. 3; leto pridobitve: 1983; inv. št. P 7045.

9. Frag. ustja z ostenjem (cedila); keramika; površina: siva; zrnatost: fina; sonda VII; reženj: 3; kv. 3; leto pridobitve: 1983; inv. št. P 7033.

10. Frag. ostenja z ustjem in dnom; keramika; površina: siva; zrnatost: groba; sonda VII; reženj: južni profil; kv. 3; leto pridobitve: 1984; inv. št. P 7153.

11. Frag. ustja z ostenjem; keramika; ornament: rdeč premaz; površina: rdeča; zrnatost: fina; sonda VII; reženj: južni profil; kv. 3; leto pridobitve: 1984; inv. št. P 7157.

12. Frag. ostenja; keramika; ornament: žlebovi; površina: temnosiva; zrnatost: fina; sonda VII; reženj: južni profil; kv. 3; leto pridobitve: 1984; inv. št. P 7168.

13. Frag. ostenja; keramika; ornament: rdeč premaz, odtisi; površina: svetlosivorjava; zrnatost: fina; sonda VII; reženj: južni profil; kv. 3; leto pridobitve: 1984; inv. št. P 7172.

14. Frag. dna z ostenjem; keramika; površina: rjava; zrnatost: groba; sonda VII; reženj: južni profil; kv. 3; leto pridobitve: 1984; inv. št. P 7162.

15. Frag. noge; keramika; ornament: rdeč premaz; površina: oranžna; zrnatost: fina; sonda VII; reženj: južni profil; kv. 3; leto pridobitve: 1984; inv. št. P 7154.

16. Ploščata sekira; kamen (analiza: SP4); površina: svetlorjava (bež); sonda VII; reženj: 3 ali 4, južni profil; z = 0,5–0,8 m; kv. 9 (verjetno je pravilno kv. 3 (op. avtorja)); leto pridobitve: 1984; inv. št. S. N.

3. Frag. of a lip with a wall; pottery; ornament: incisions, impressions, stitch impressions; surface: brown; granularity: coarse; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7103.

4. Frag. of a wall; pottery; ornament: incisions; surface: brown; granularity: fine; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7144.

5. Frag. of a wall; pottery; ornament: grooves, stitch impressions; surface: grey; granularity: fine; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7150.

6. Frag. of a wall; pottery; surface: grey; granularity: fine; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7117.

7. Frag. of a bottom with a wall; pottery; surface: dark grey; granularity: fine; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7116a.

8. Frag. of a bottom with a wall; pottery; surface: brown; granularity: coarse; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7118.

9. Frag. of a grip; pottery; ornament: protome; surface: orange; granularity: fine; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7095.

10. Frag. of a ladle with a hollow grip; pottery; surface: brown; granularity: fine; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7094.

11. Frag. of a ladle with a hollow grip; pottery; surface: brown; granularity: coarse; trench VII; slice: 5; sq. 3; year of acquisition: 1984; inv. no. P 7093.

12. Axe blades; stone (analysis: SP5); surface: green brown; trench VII; slice: 5; x = 3 m; y = 9 m; z = 0.75 m; sq. 3; year of acquisition: 1984; inv. no. S. N.

13. Frag. of a wall; pottery; ornament: red slip; surface: brown; granularity: fine; trench VII; slice: 4; sq. 2; year of acquisition: 1984; inv. no. P 7085a.

Plate 4.37

1. Frag. of a lip with a wall; pottery; ornament: impressions; surface: dark grey; granularity: fine; trench VII; slice: 4; sq. 3; year of acquisition: 1984; inv. no. P 7090.

2. Frag. of a wall; pottery; ornament: red slip, incisions, stitch impressions; surface: light grey brown; granularity: fine; trench VII; slice: 4; sq. 3; year of acquisition: 1984; inv. no. P 7091.

3. Frag. of an axe blades; stone (analysis: SP3); surface: light brown (beige); trench VII; slice: 4; x = 3 m; y = 9 m; z = 0.6 m; sq. 3; year of acquisition: 1984; inv. no. P 6932.

4. Frag. of a lip with a tongue-shape grip and wall; pottery; surface: dark brown; granularity: coarse; trench VII; slice: 3; sq. 2; year of acquisition: 1983; inv. no. P 7012.

5. Frag. of a wall; pottery; ornament: two round appliqués; surface: brown; granularity: coarse; trench VII; slice: 3; sq. 2; year of acquisition: 1983; inv. no. P 7004.

6. Frag. of a bottom with a wall; pottery; ornament: incisions; surface: dark grey; granularity: fine (mica); trench VII; slice: 3; sq. 2; year of acquisition: 1983; inv. no. P 7016.

7. Frag. of a handle; pottery; ornament: incisions, impressions; surface: brown; granularity: coarse; trench VII; slice: 3; sq. 2; year of acquisition: 1983; inv. no. P 7002.

8. Frag. of a bottom; pottery; surface: light grey brown; granularity: coarse; trench VII; slice: 3; sq. 3; year of acquisition: 1983; inv. no. P 7045.

9. Frag. of a lip with a wall (a strainer); pottery; surface: grey; granularity: fine; trench VII; slice: 3; sq. 3; year of acquisition: 1983; inv. no. P 7033.

10. Frag. of a wall with a lip and bottom; pottery; surface: grey; granularity: coarse; trench VII; slice: southern profile; sq. 3; year of acquisition: 1984; inv. no. P 7153.

11. Frag. of a lip with a wall; pottery; ornament: red slip; surface: red; granularity: fine; trench VII; slice: southern profile; sq. 3; year of acquisition: 1984; inv. no. P 7157.

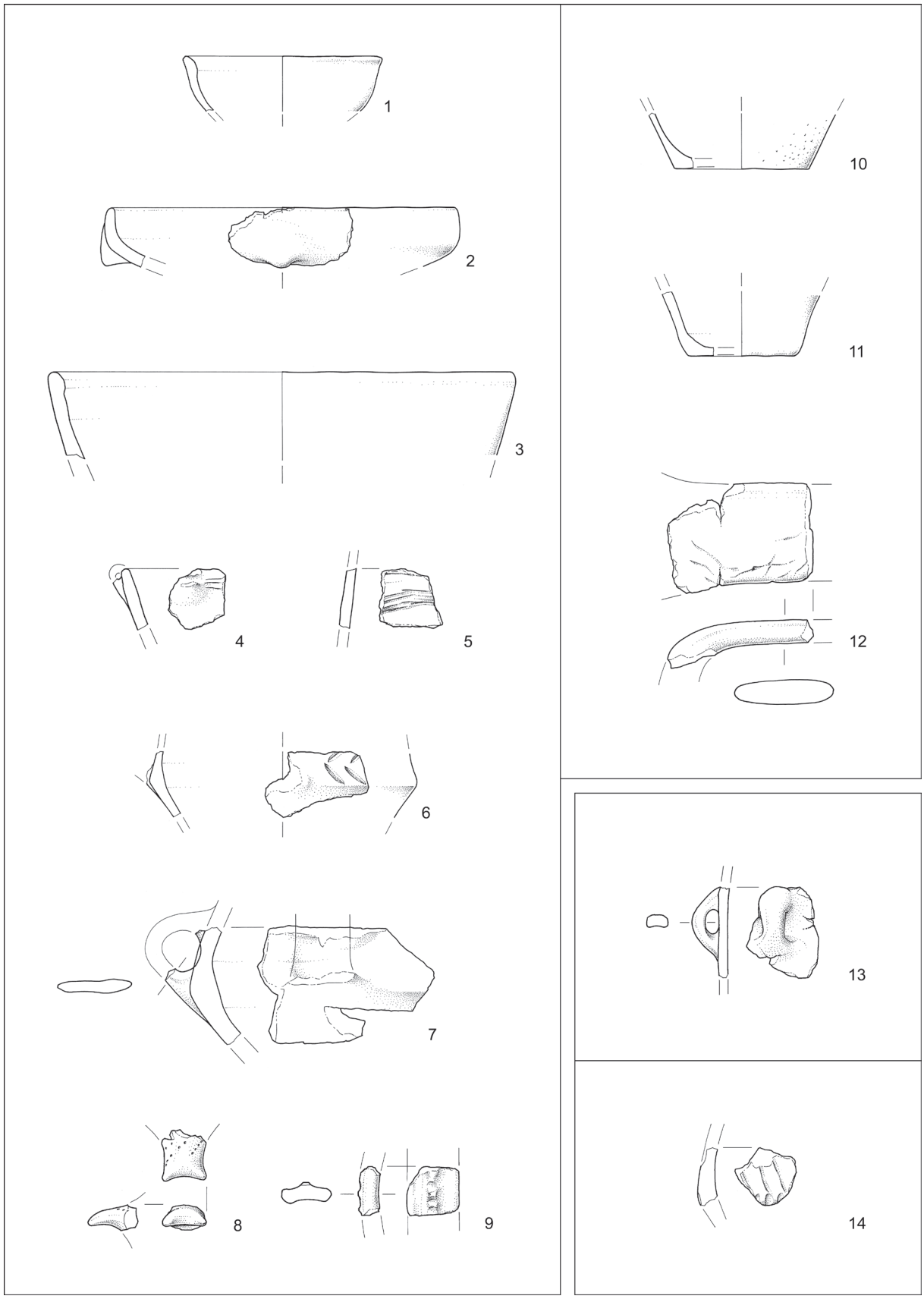
12. Frag. of a wall; pottery; ornament: grooves; surface: dark grey; granularity: fine; trench VII; slice: southern profile; sq. 3; year of acquisition: 1984; inv. no. P 7168.

13. Frag. of a wall; pottery; ornament: red slip, impressions; surface: light grey brown; granularity: fine; trench VII; slice: southern profile; sq. 3; year of acquisition: 1984; inv. no. P 7172.

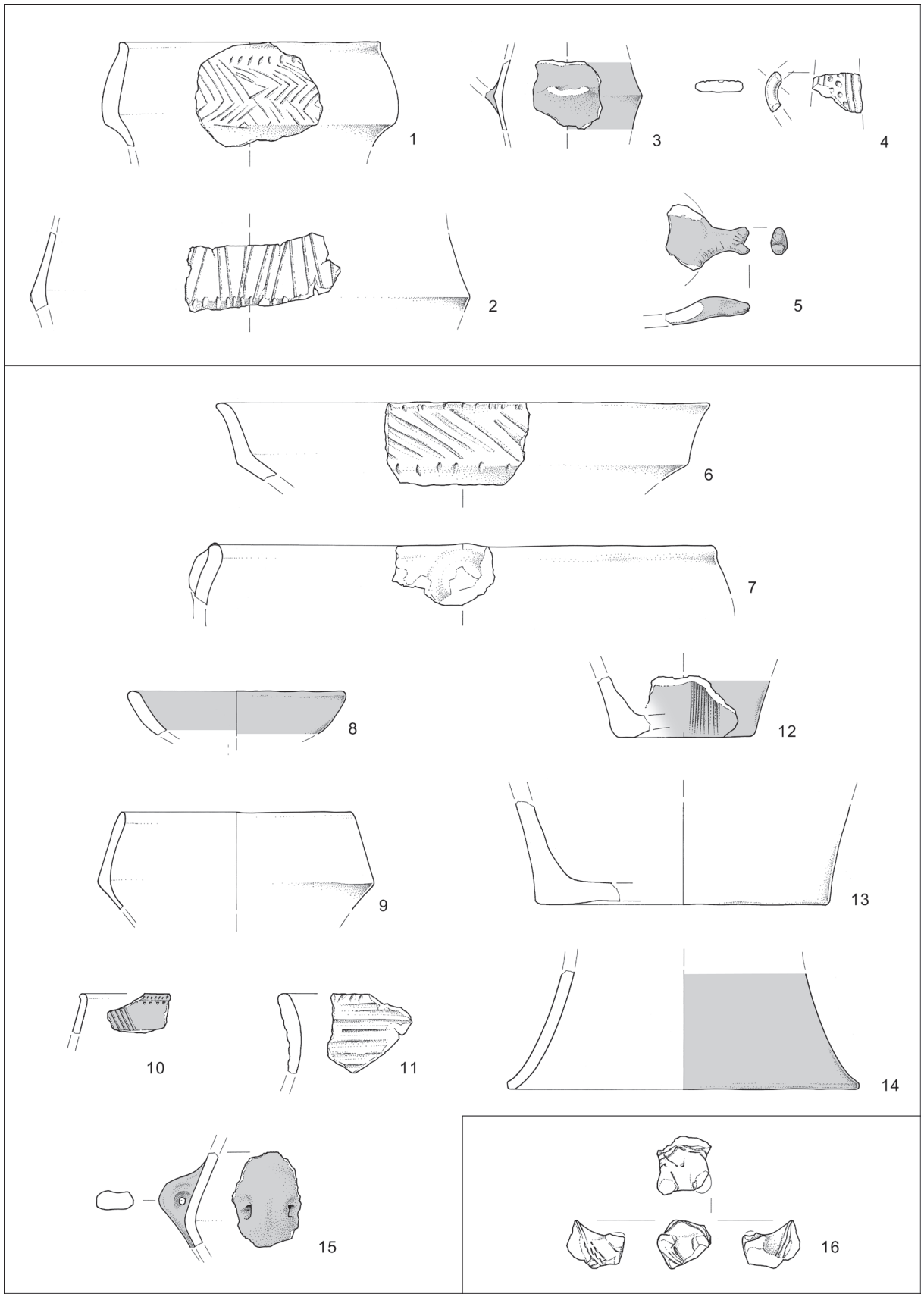
14. Frag. of a bottom with a wall; pottery; surface: brown; granularity: coarse; trench VII; slice: southern profile; sq. 3; year of acquisition: 1984; inv. no. P 7162.

15. Frag. of a foot; pottery; ornament: red slip; surface: orange; granularity: fine; trench VII; slice: southern profile; sq. 3; year of acquisition: 1984; inv. no. P 7154.

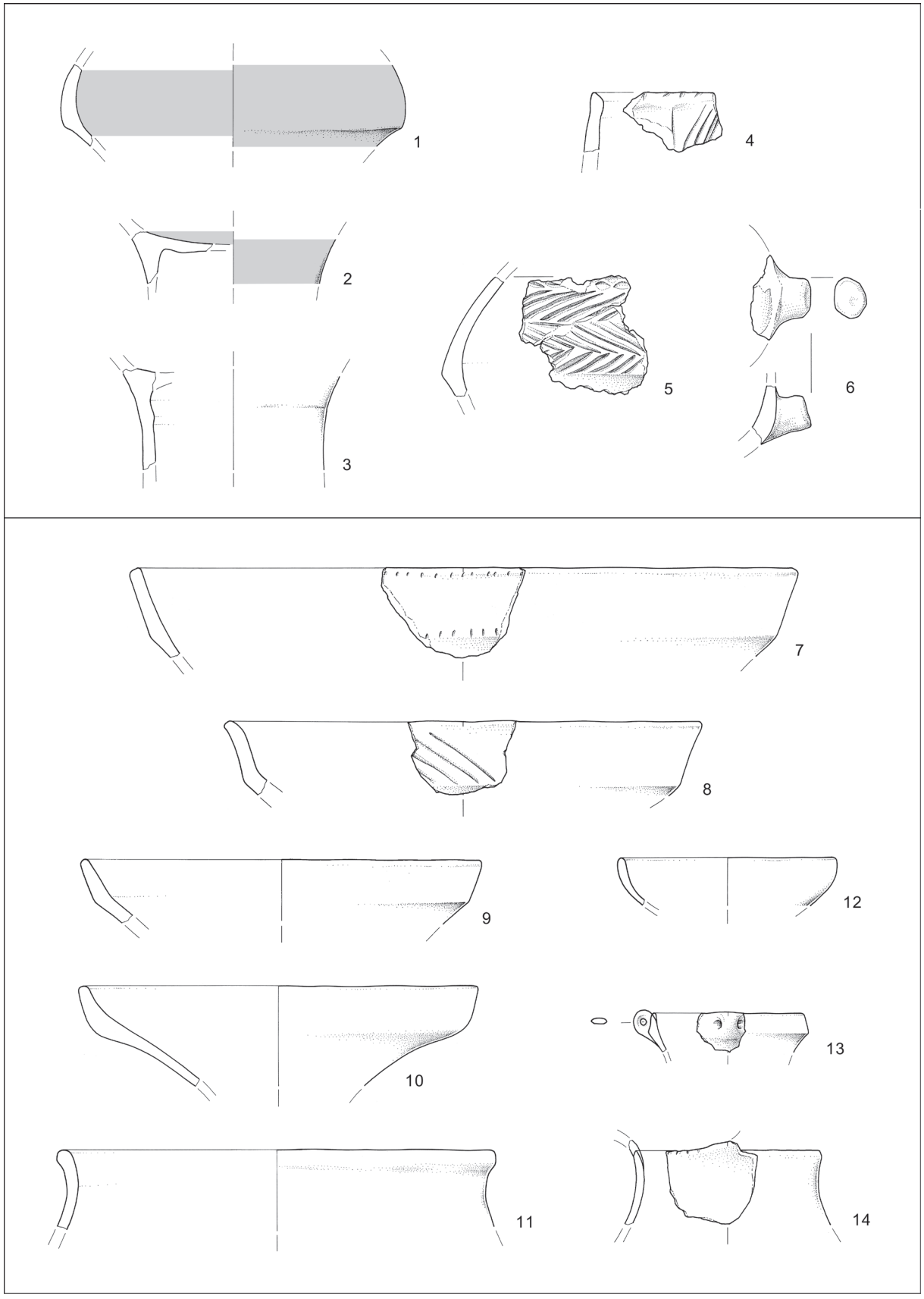
16. Axe blades; stone (analysis: SP4); surface: light brown (beige); trench VII; slice: 3 or 4, southern profile; z = 0.5–0.8 m; sq. 9 (sq. 3 is probably correct (author's comment)); year of acquisition: 1984; inv. no. S. N.



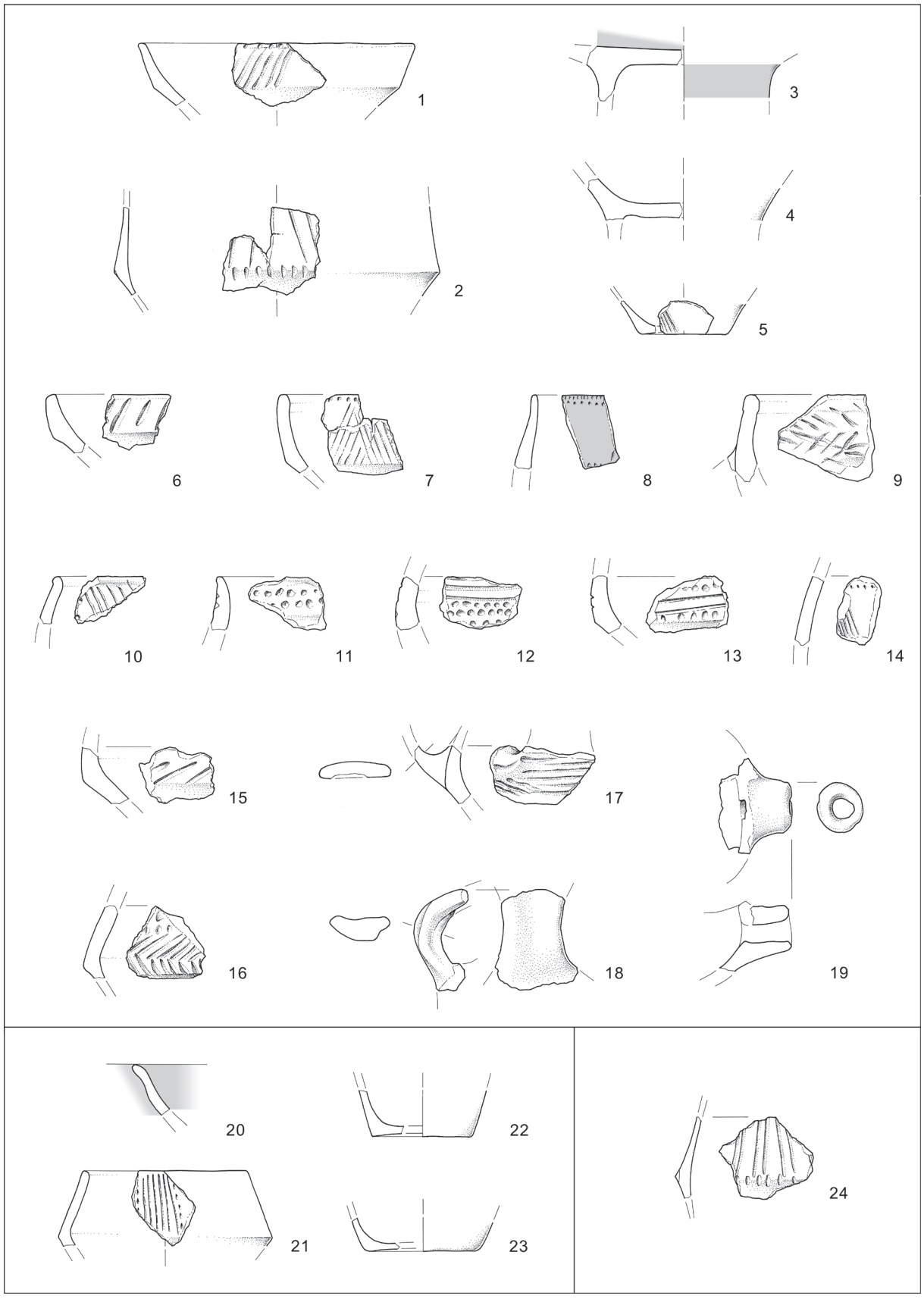
T. 4.1: Keramika. M = 1 : 3.
Pl. 4.1: Pottery. Scale = 1 : 3.



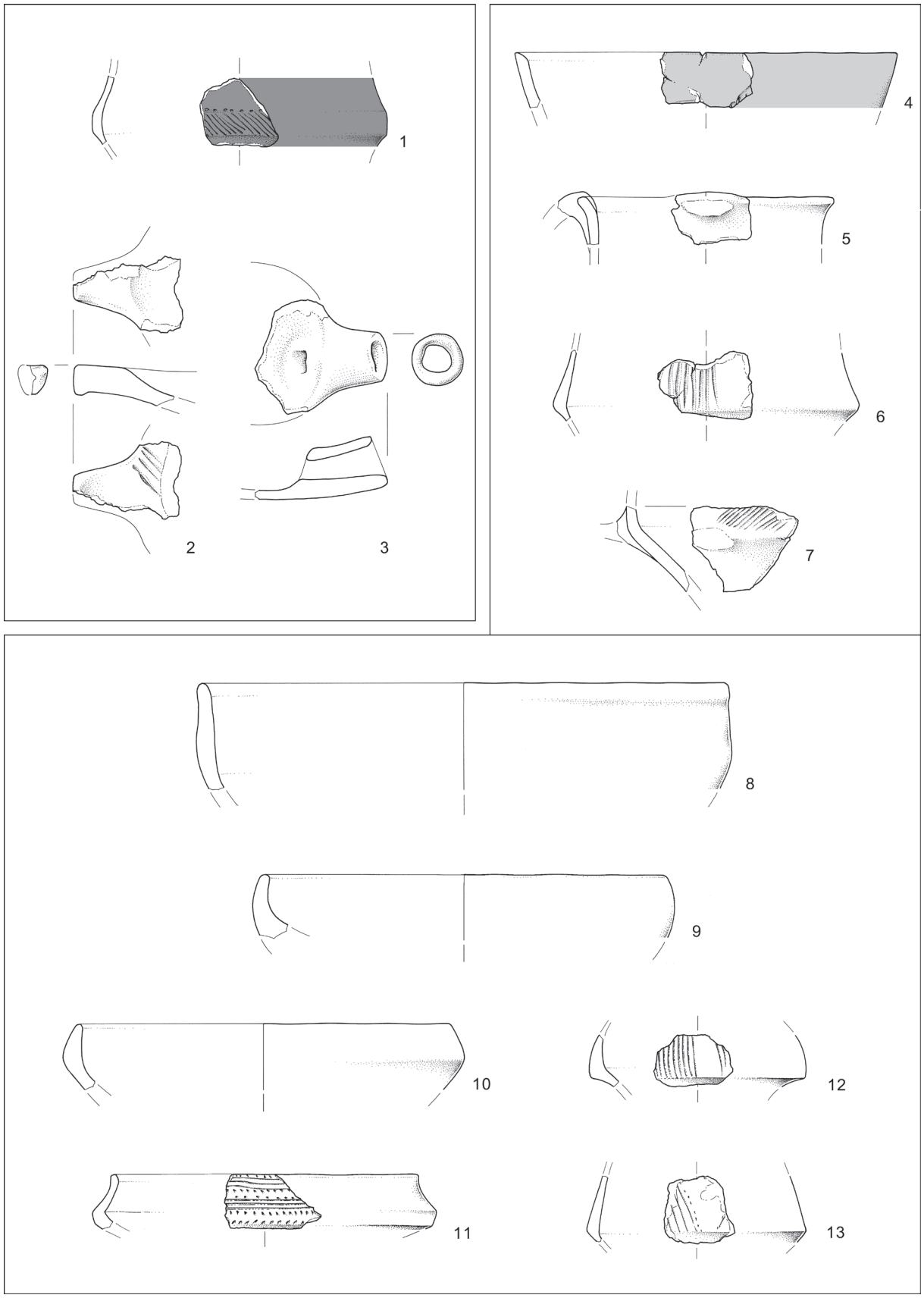
T. 4.2: Keramika. M = 1 : 3.
Pl. 4.2: Pottery. Scale = 1 : 3.



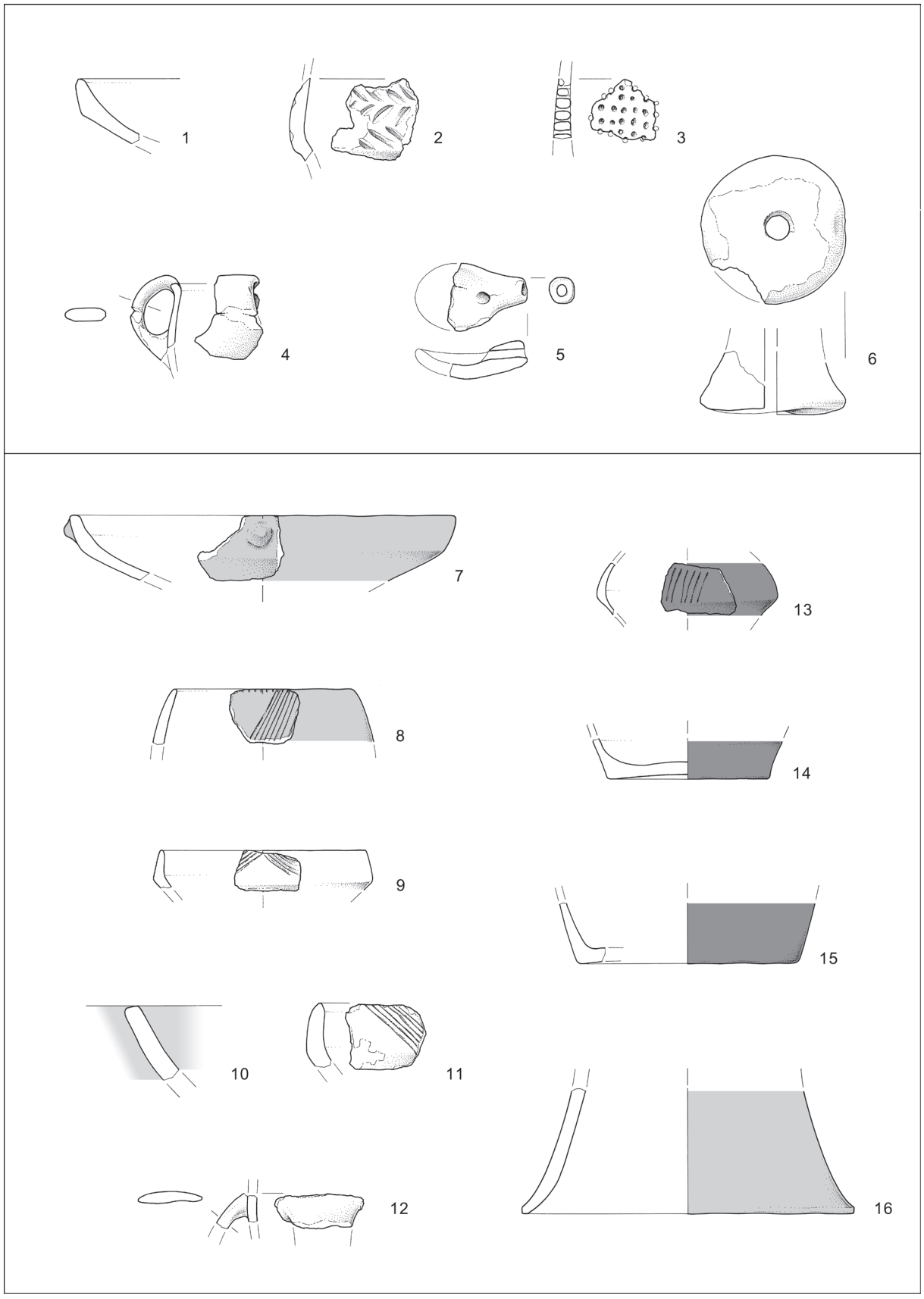
T. 4.3: Keramika. M = 1 : 3.
Pl. 4.3: Pottery. Scale = 1 : 3.



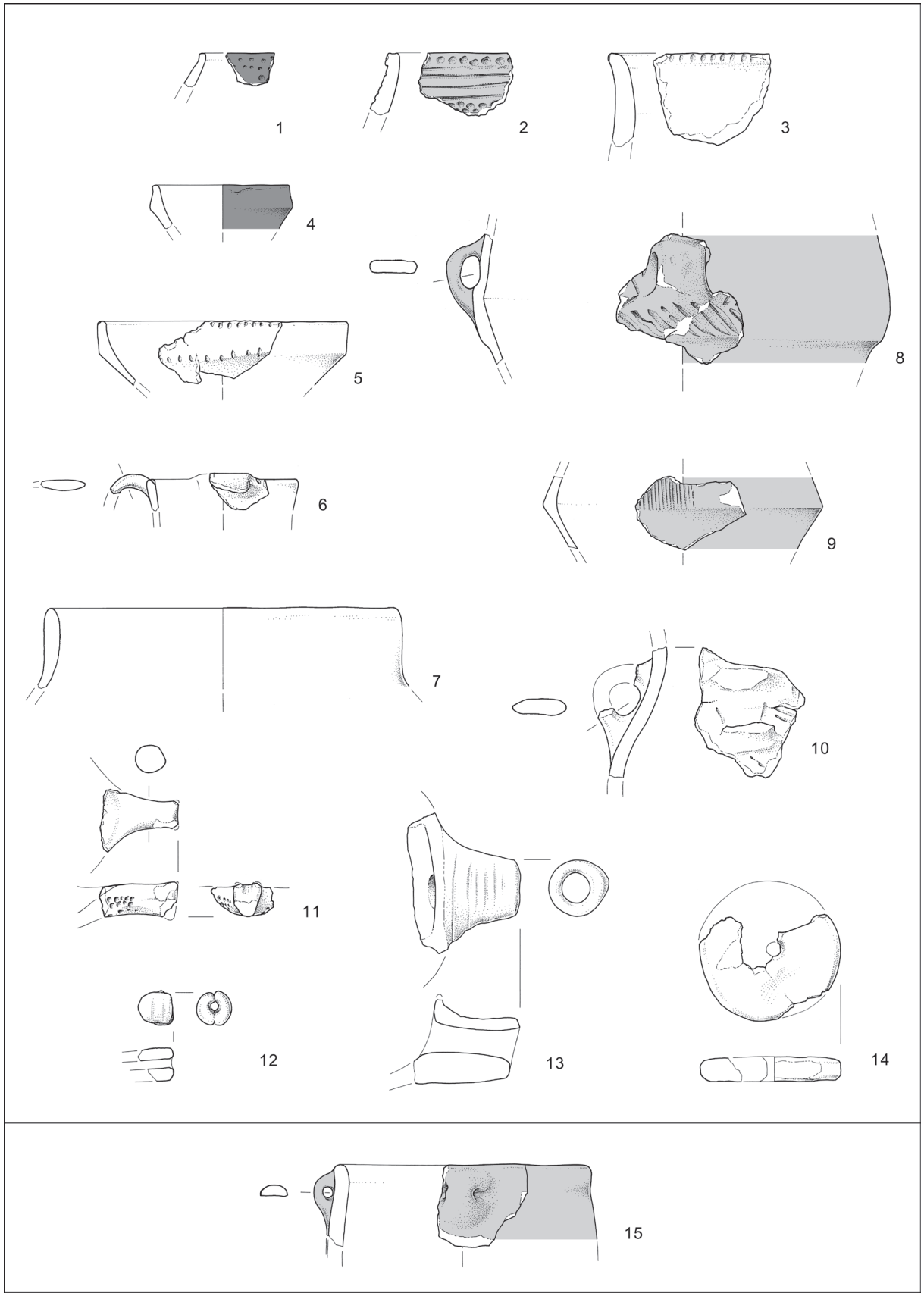
T. 4.4: Keramika. M = 1 : 3.
Pl. 4.4: Pottery. Scale = 1 : 3.



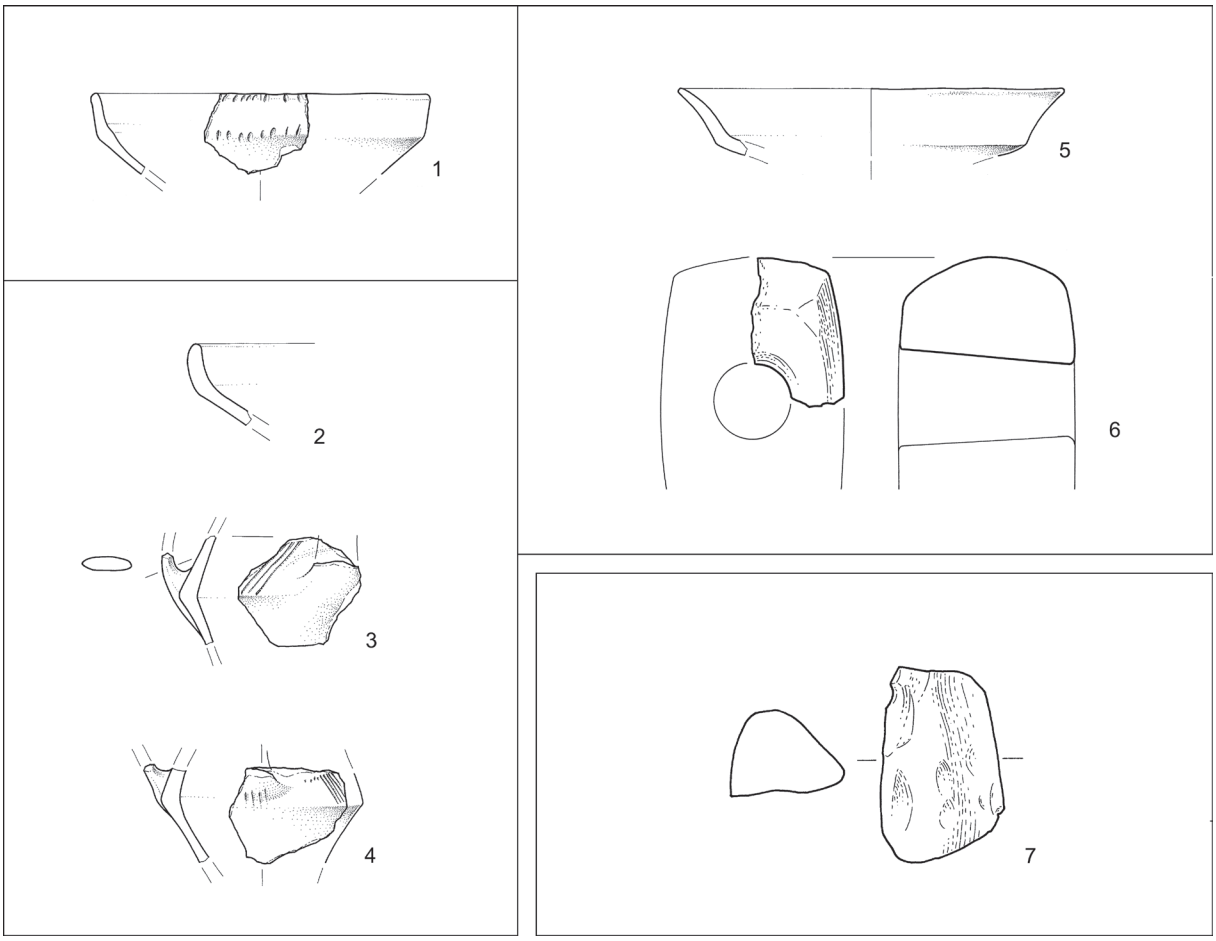
T. 4.5: Keramika. M = 1 : 3.
Pl. 4.5: Pottery. Scale = 1 : 3.



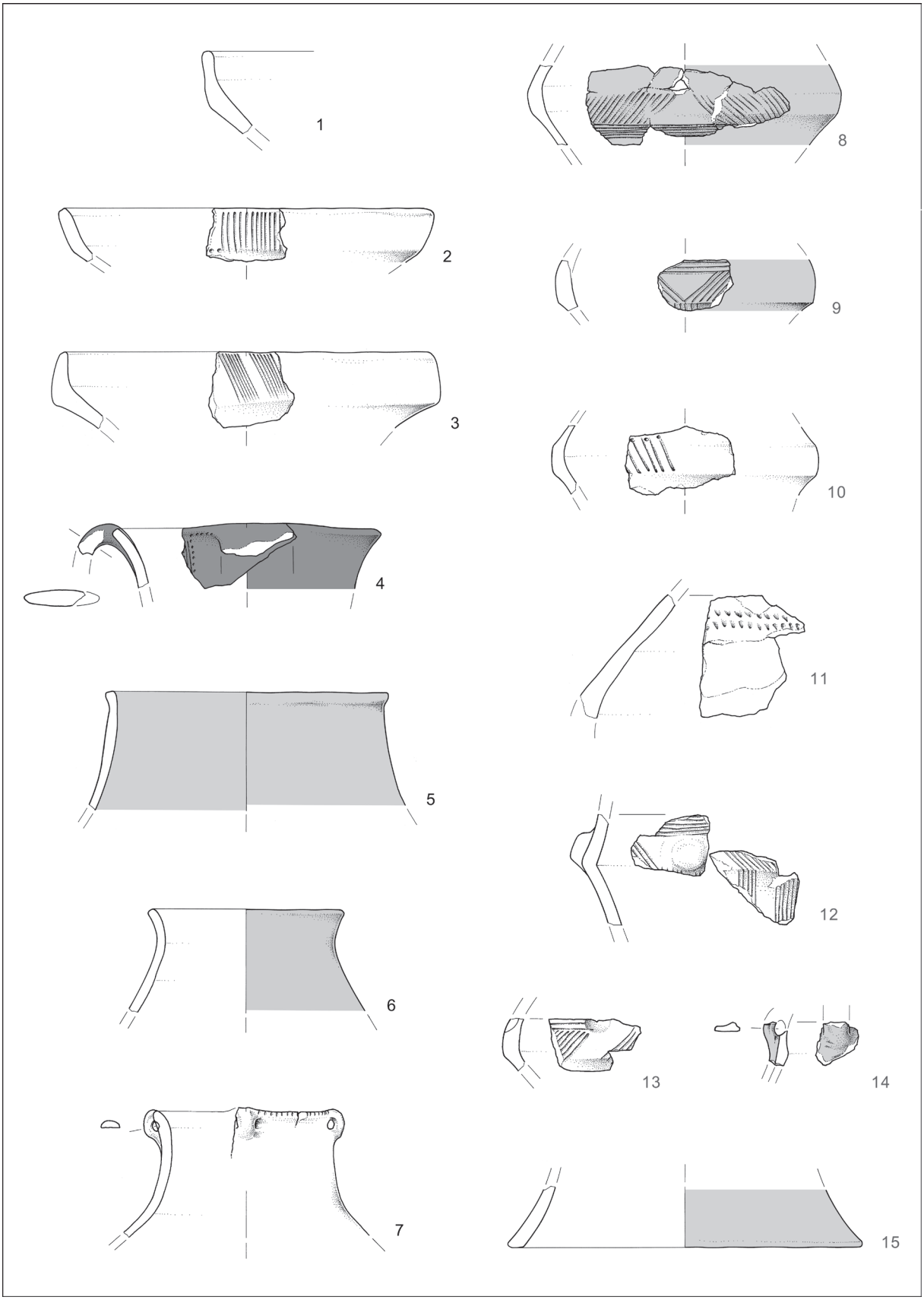
T. 4.6: Keramika. M = 1 : 3.
Pl. 4.6: Pottery. Scale = 1 : 3.



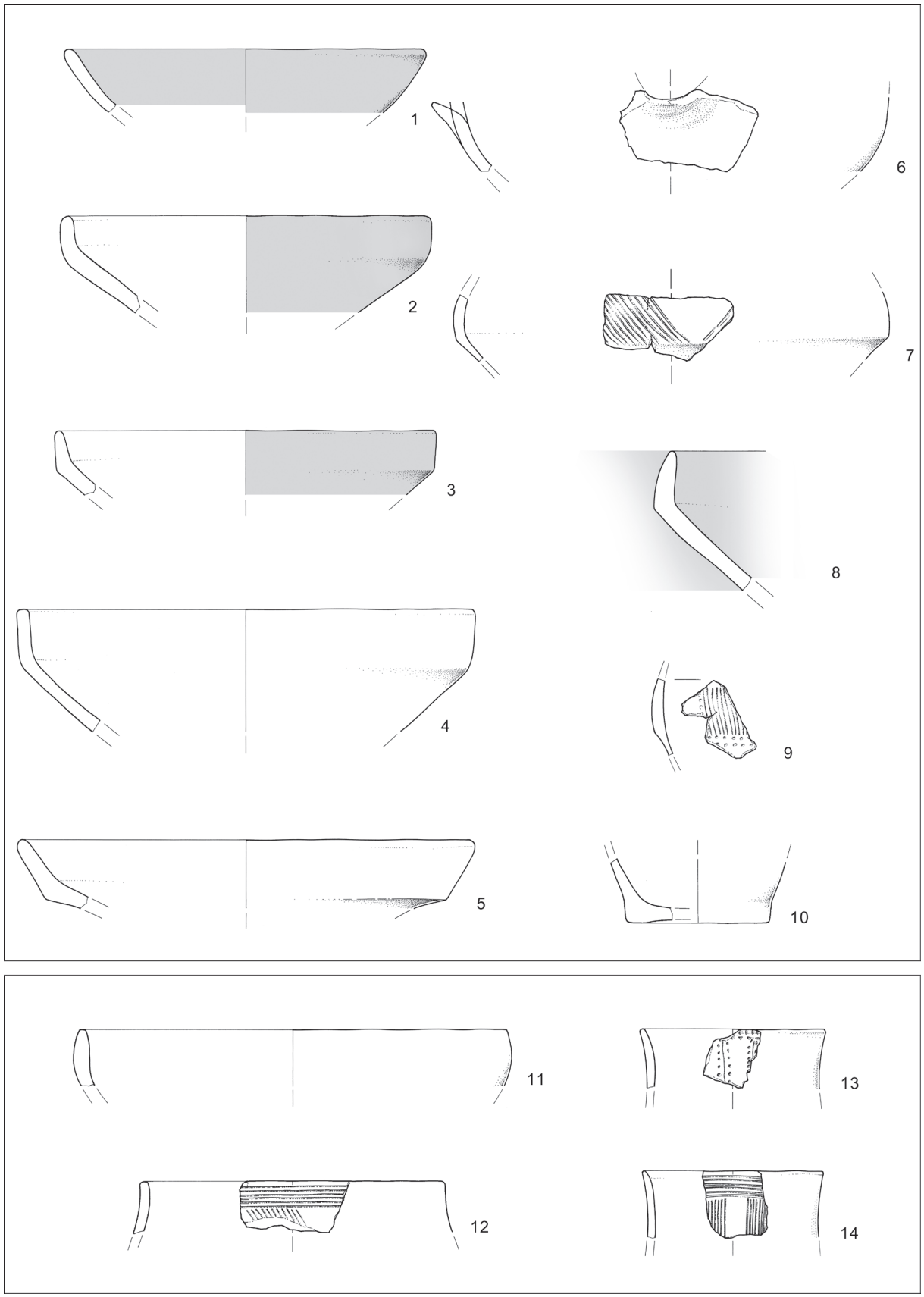
T. 4.7: Keramika. M = 1 : 3.
Pl. 4.7: Pottery. Scale = 1 : 3.



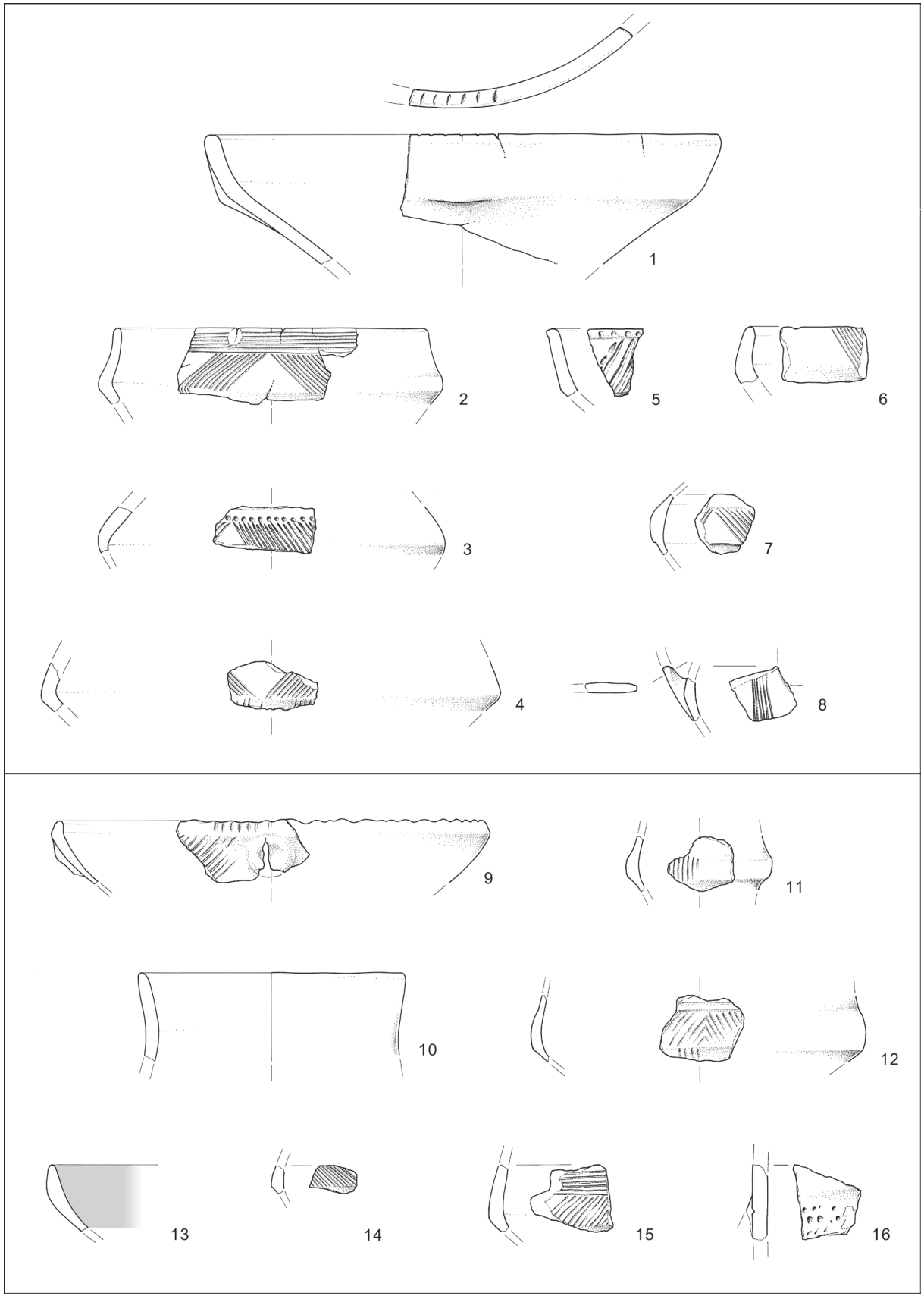
T. 4.8: Keramika (1–5). M = 1 : 3. Kamen (6, 7). M = 1 : 2.
Pl. 4.8: Pottery (1–5). Scale = 1 : 3. Stone (6, 7). Scale = 1 : 2.



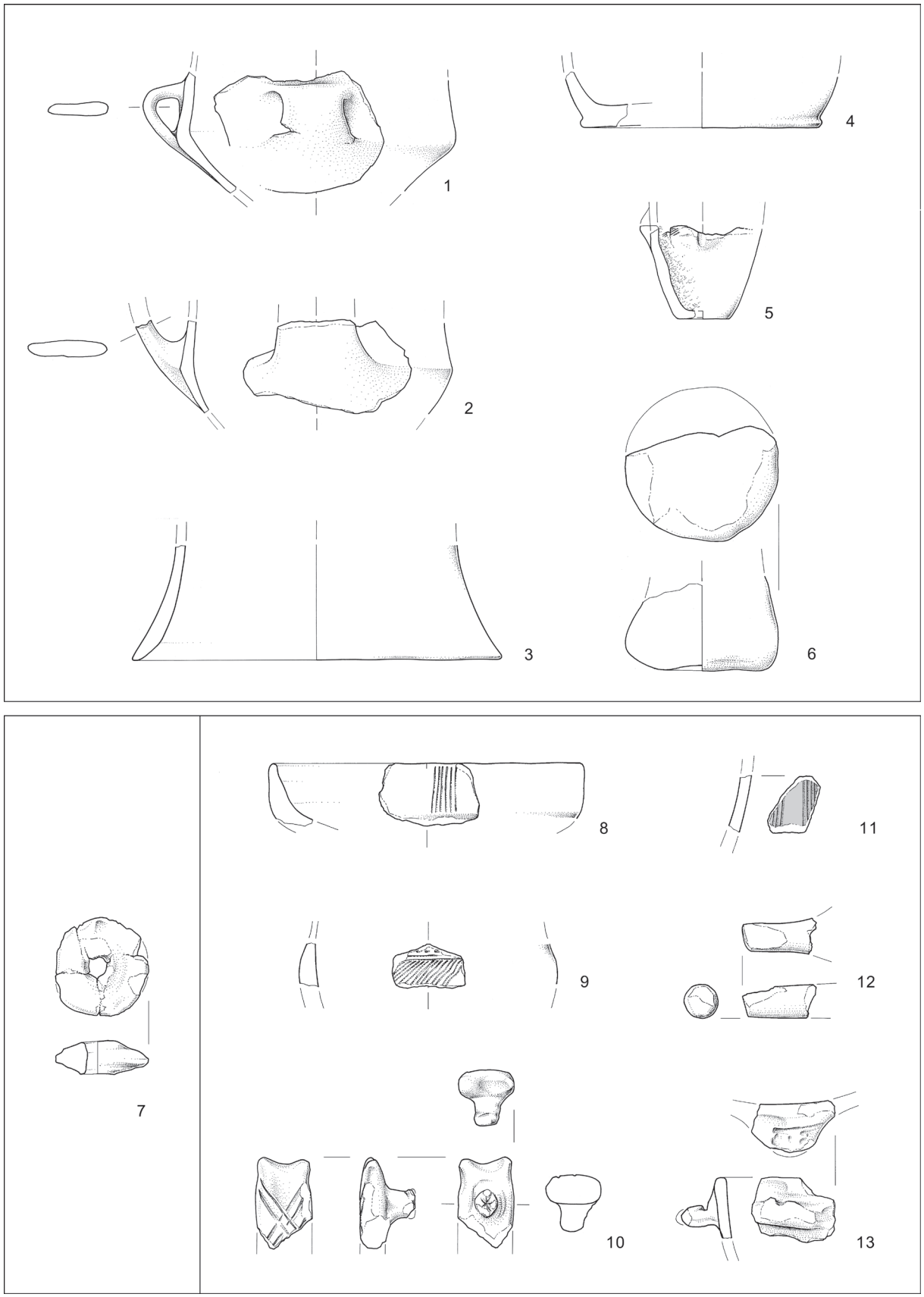
T. 4.9: Keramika. M = 1 : 3.
Pl. 4.9: Pottery. Scale = 1 : 3.



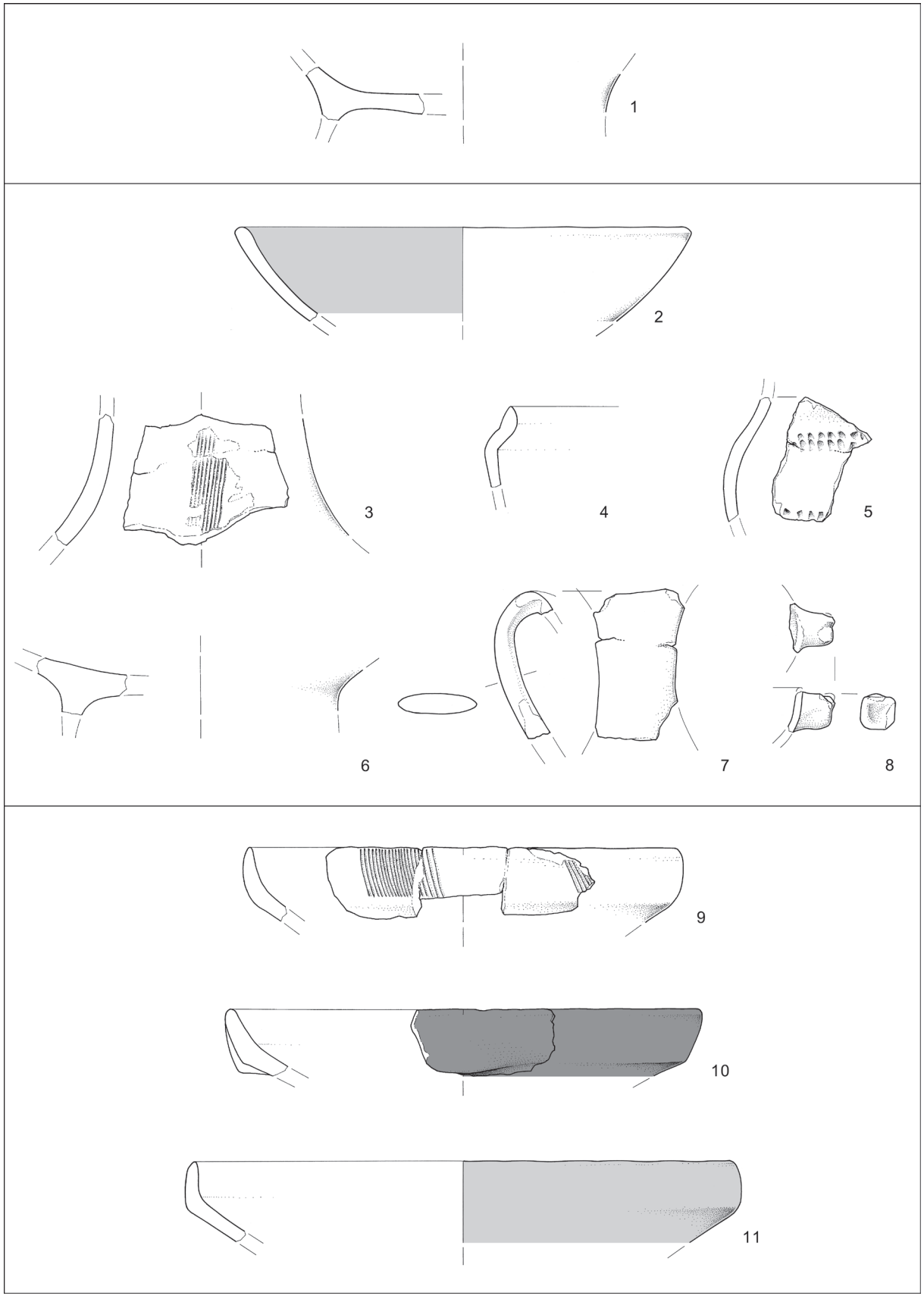
T. 4.10: Keramika. M = 1 : 3.
Pl. 4.10: Pottery. Scale = 1 : 3.



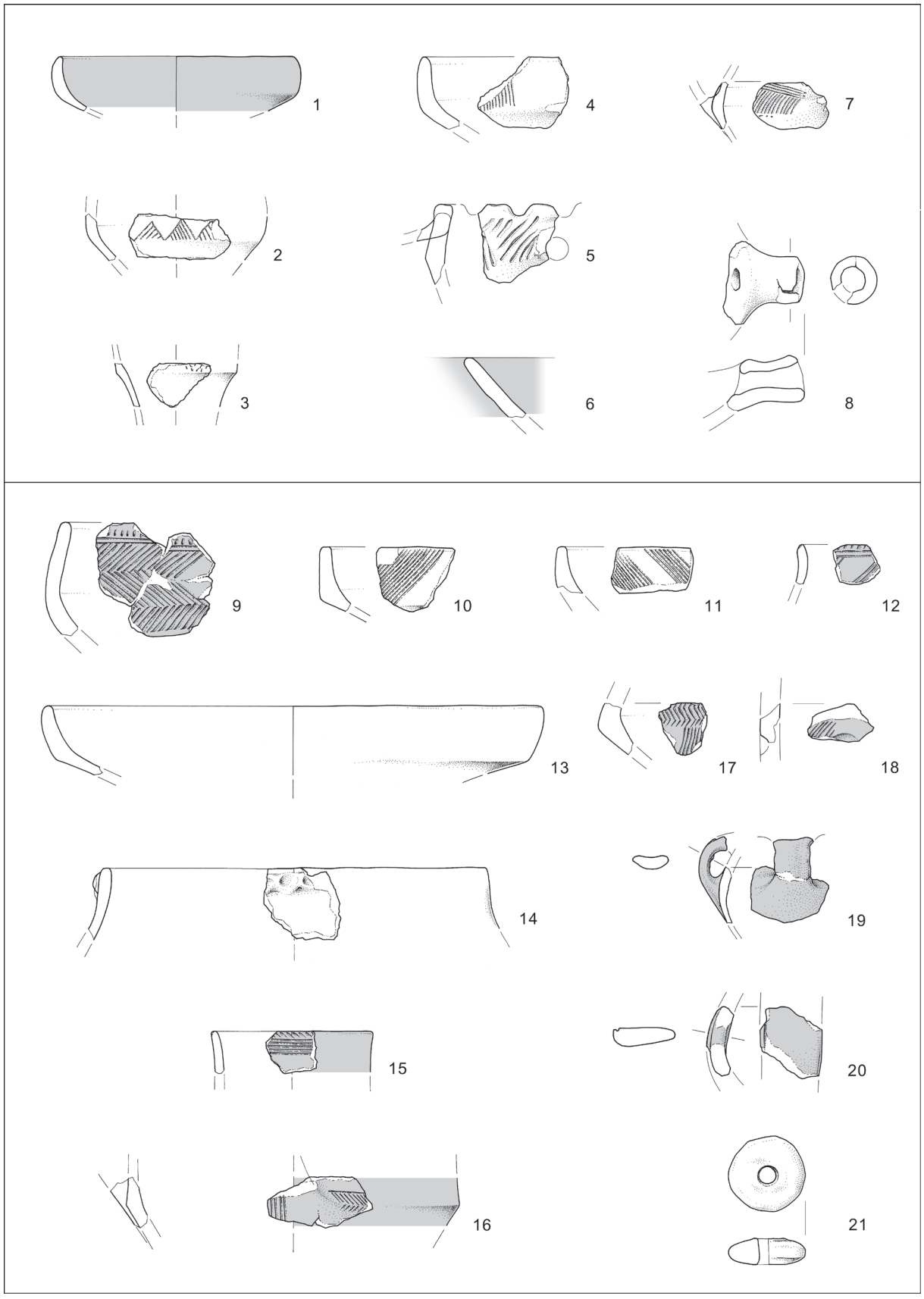
T. 4.11: Keramika. M = 1 : 3.
Pl. 4.11: Pottery. Scale = 1 : 3.



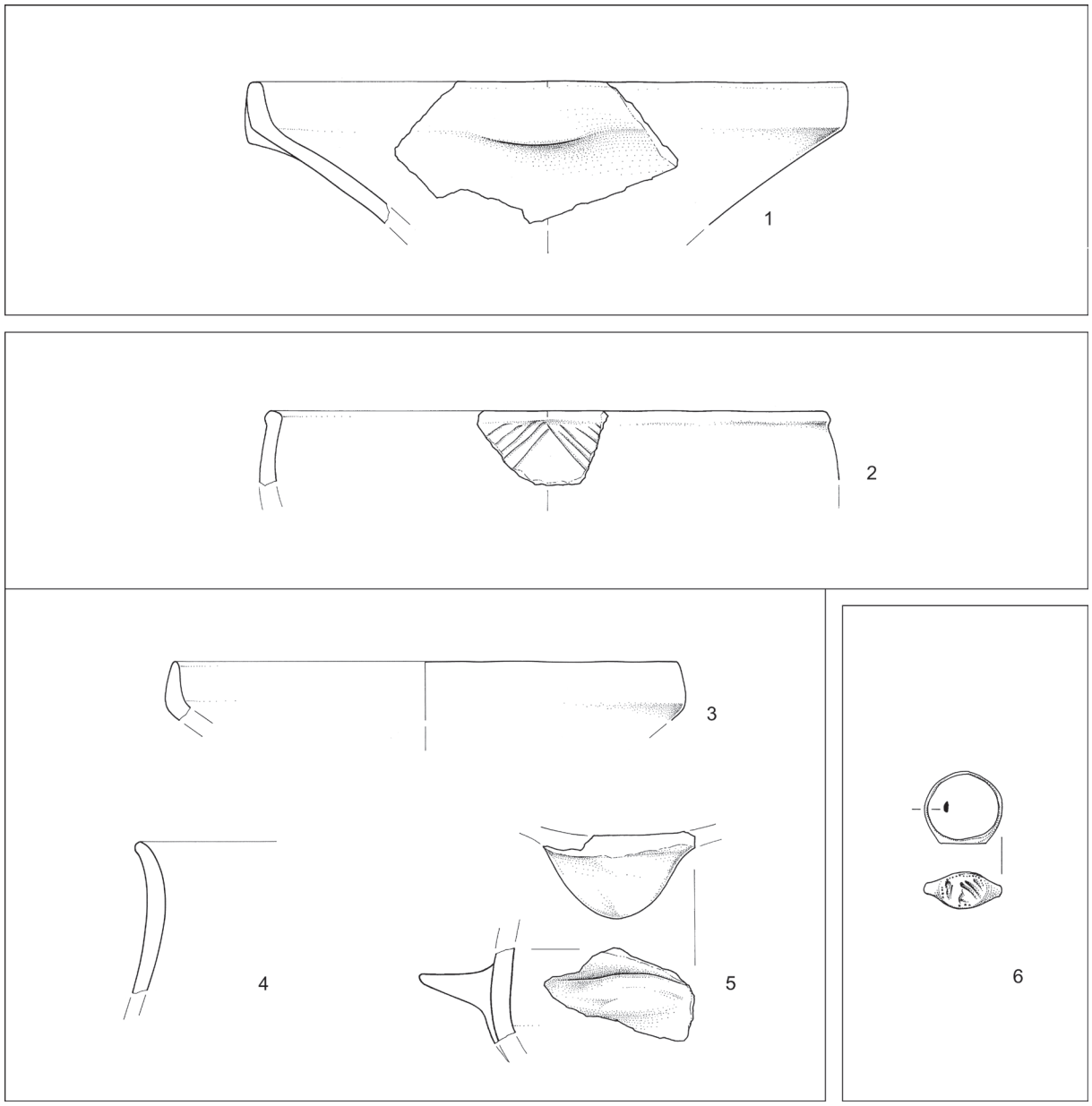
T. 4.12: Keramika. M = 1 : 3.
Pl. 4.12: Pottery. Scale = 1 : 3.



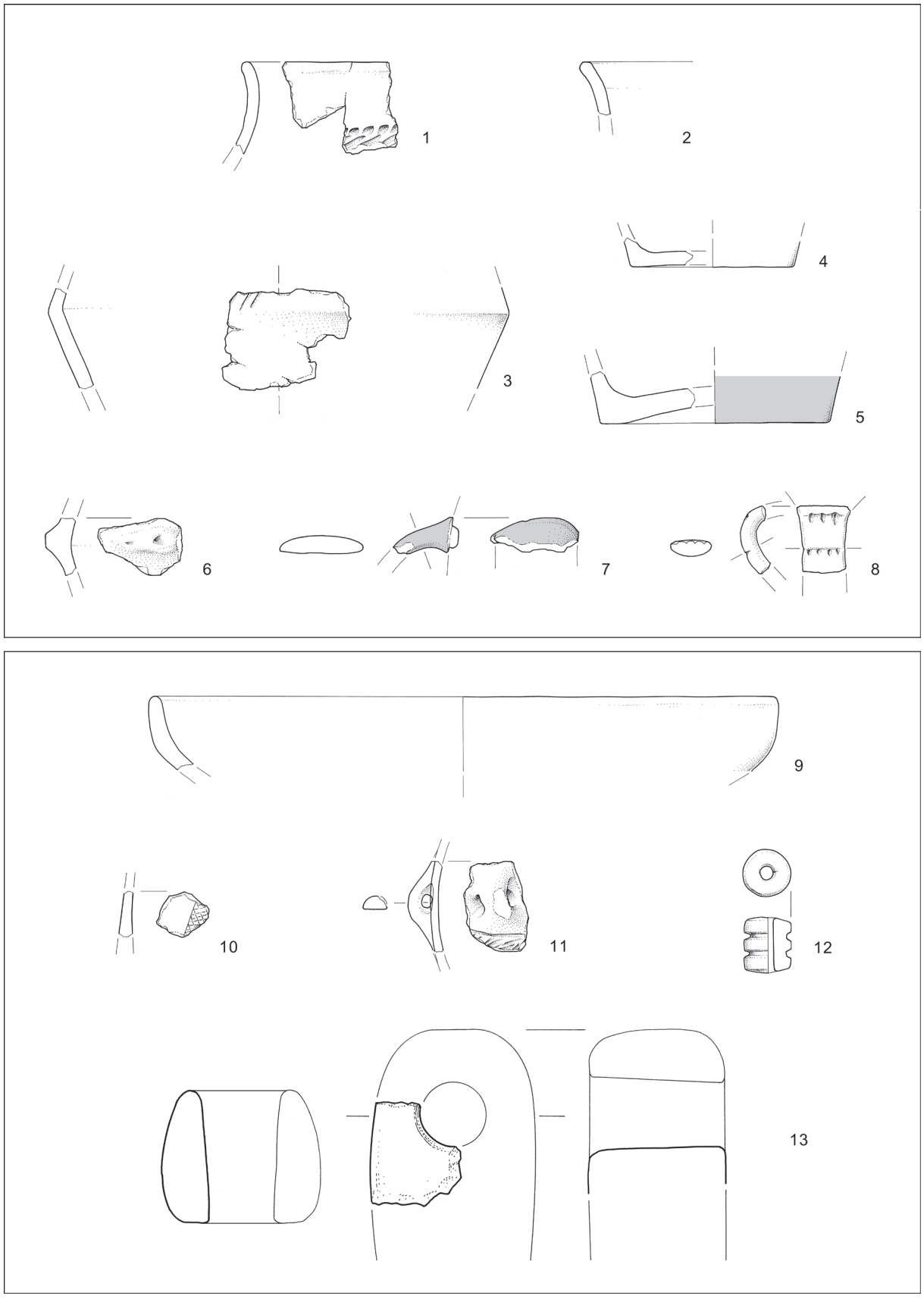
T. 4.13: Keramika. M = 1 : 3.
Pl. 4.13: Pottery. Scale = 1 : 3.



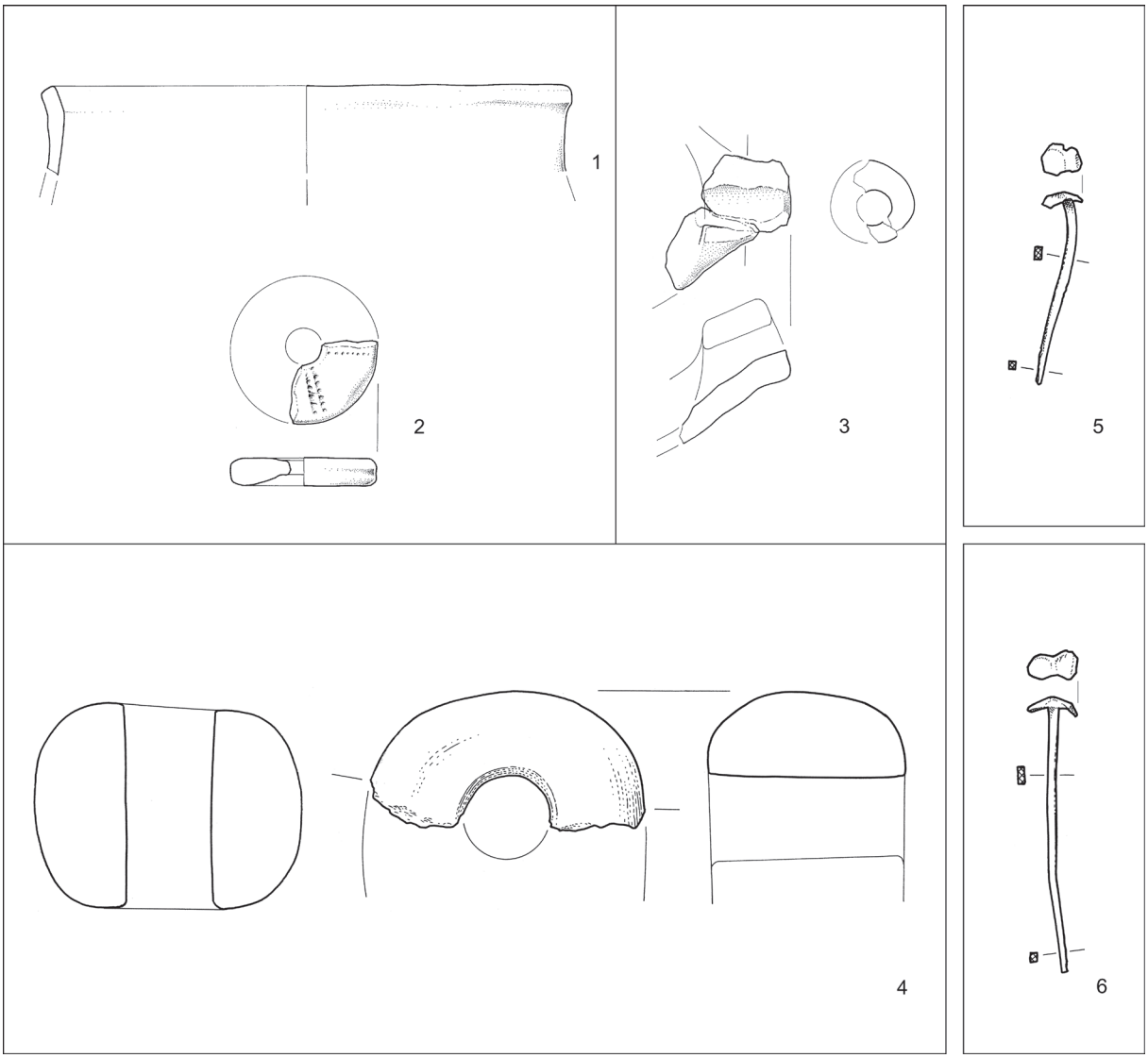
T. 4.14: Keramika. M = 1 : 3.
Pl. 4.14: Pottery. Scale = 1 : 3.



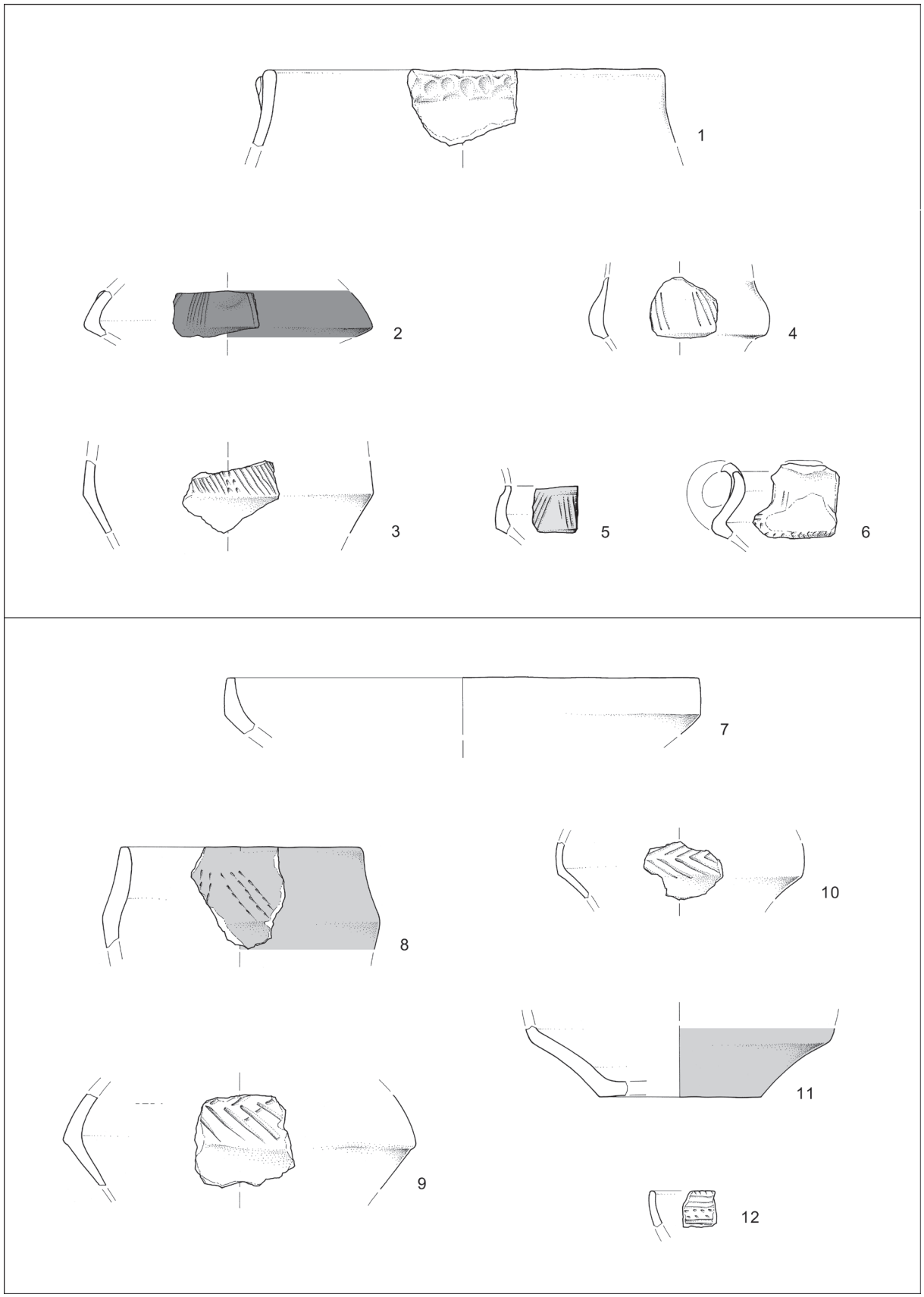
T. 4.15: Keramika (1–5). M = 1 : 3. Kovina (6). M = 1 : 2.
Pl. 4.15: Pottery (1–5). Scale = 1 : 3. Metal (6). Scale = 1 : 2.



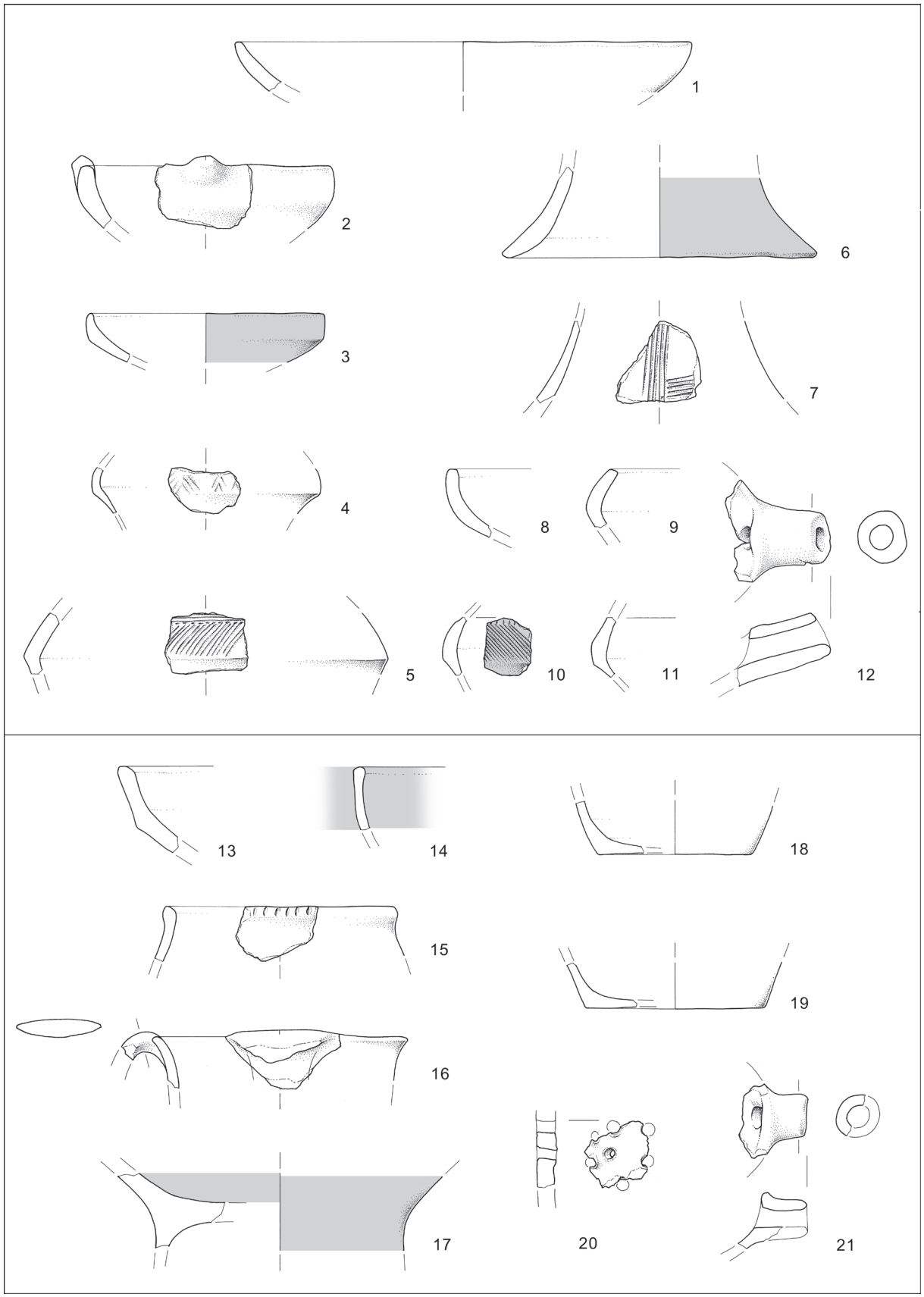
T. 4.16: Keramika (1–12). M = 1 : 3. Kamen (13). M = 1 : 2.
Pl. 4.16: Pottery (1–12). Scale = 1 : 3. Stone (13). Scale = 1 : 2.



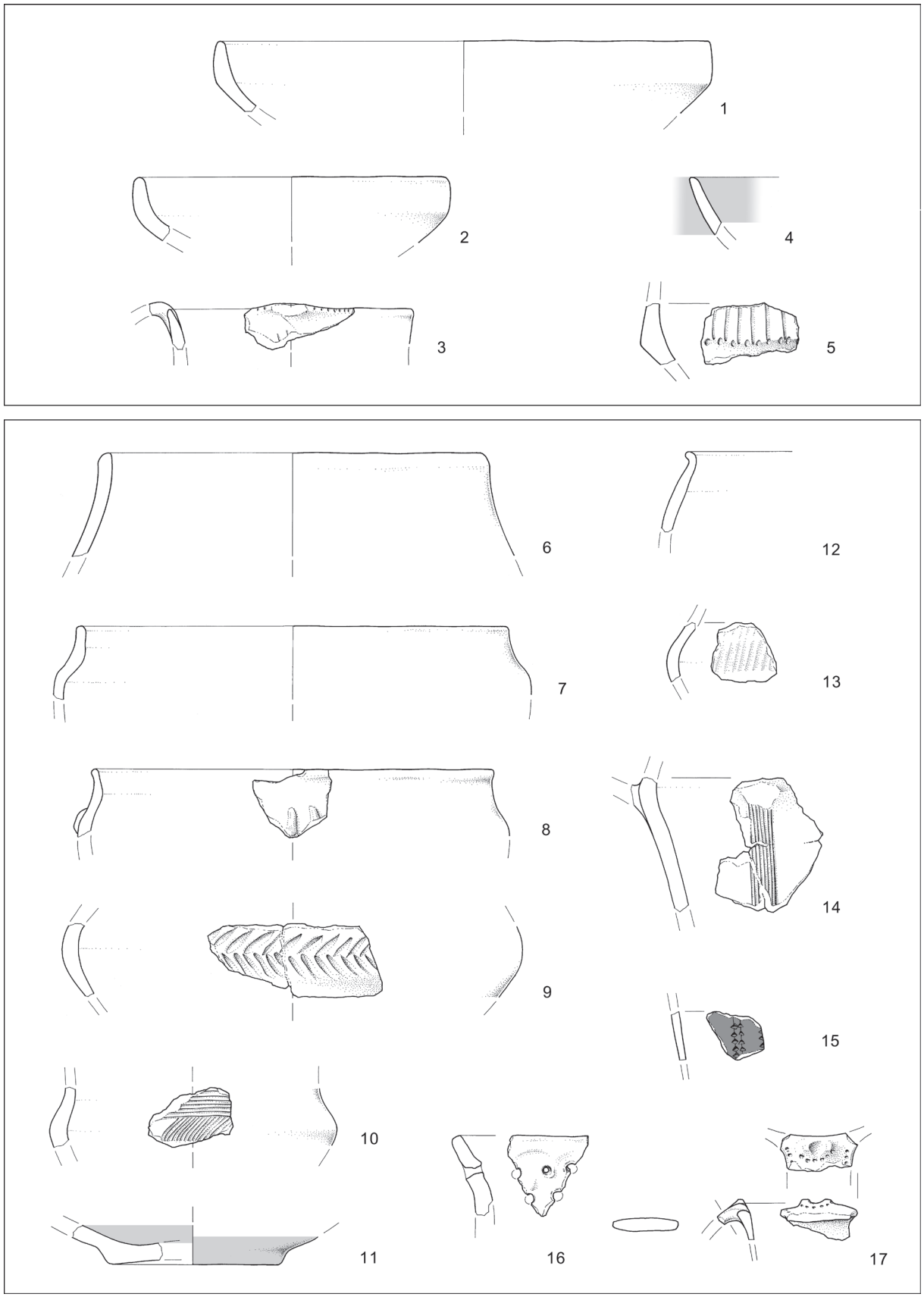
T. 4.17: Keramika (1–3). M = 1 : 3. Kamen (4), kovina (5, 6). M = 1 : 2.
Pl. 4.17: Pottery (1–3). Scale = 1 : 3. Stone (4), metal (5, 6). Scale = 1 : 2.



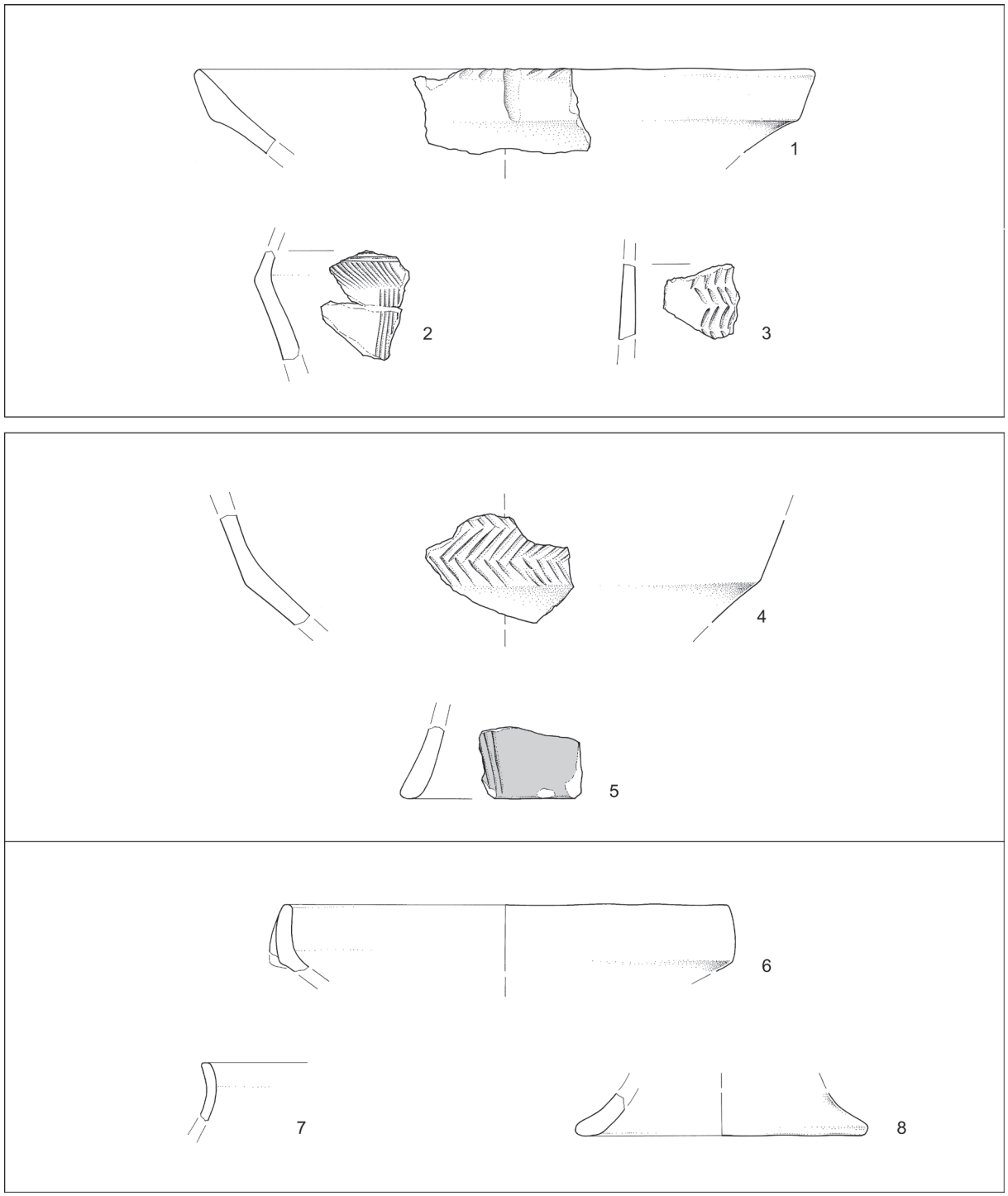
T. 4.18: Keramika. M = 1 : 3.
Pl. 4.18: Pottery. Scale = 1 : 3.



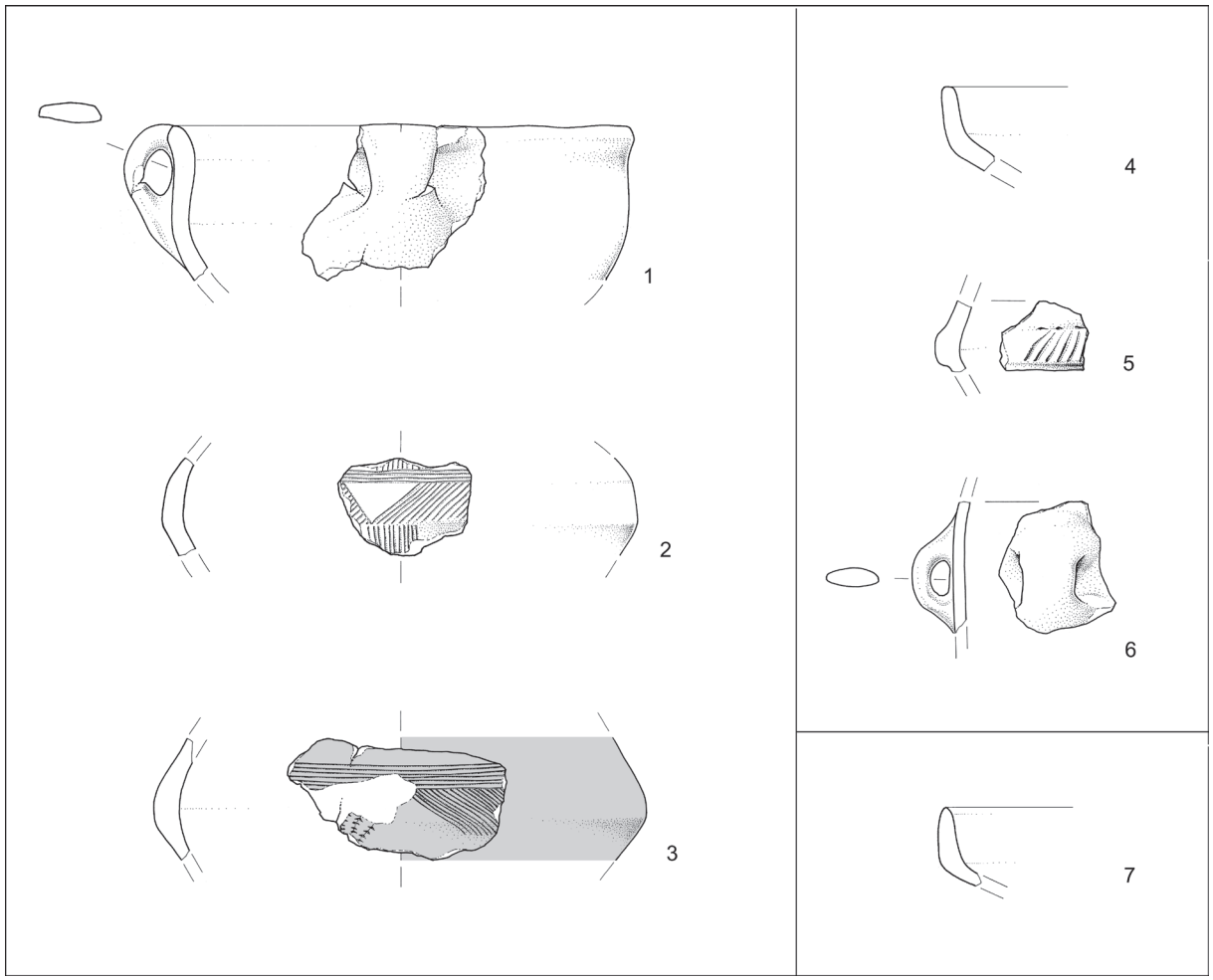
T. 4.19: Keramika. M = 1 : 3.
Pl. 4.19: Pottery. Scale = 1 : 3.



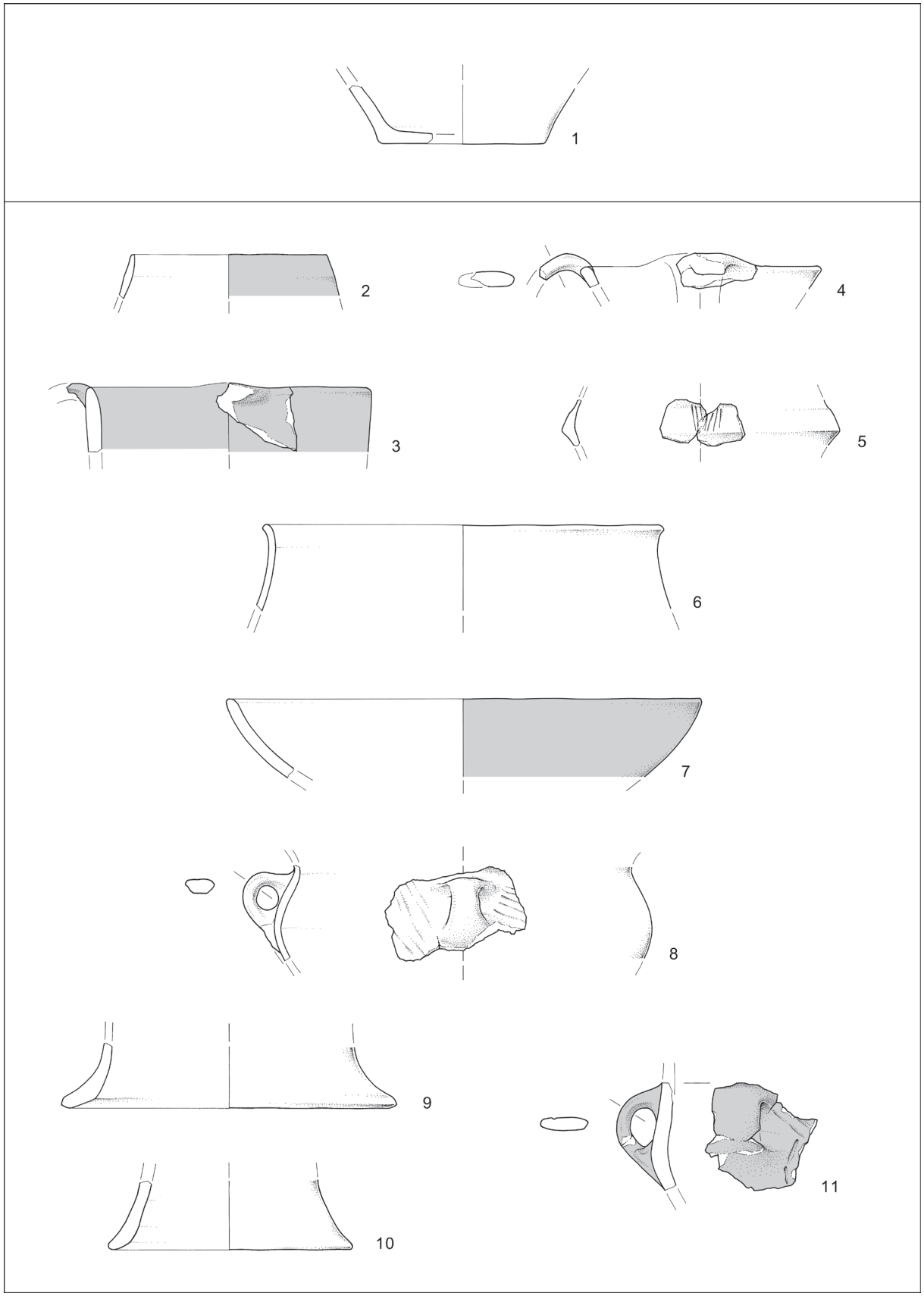
T. 4.20: Keramika. M = 1 : 3.
Pl. 4.20: Pottery. Scale = 1 : 3.



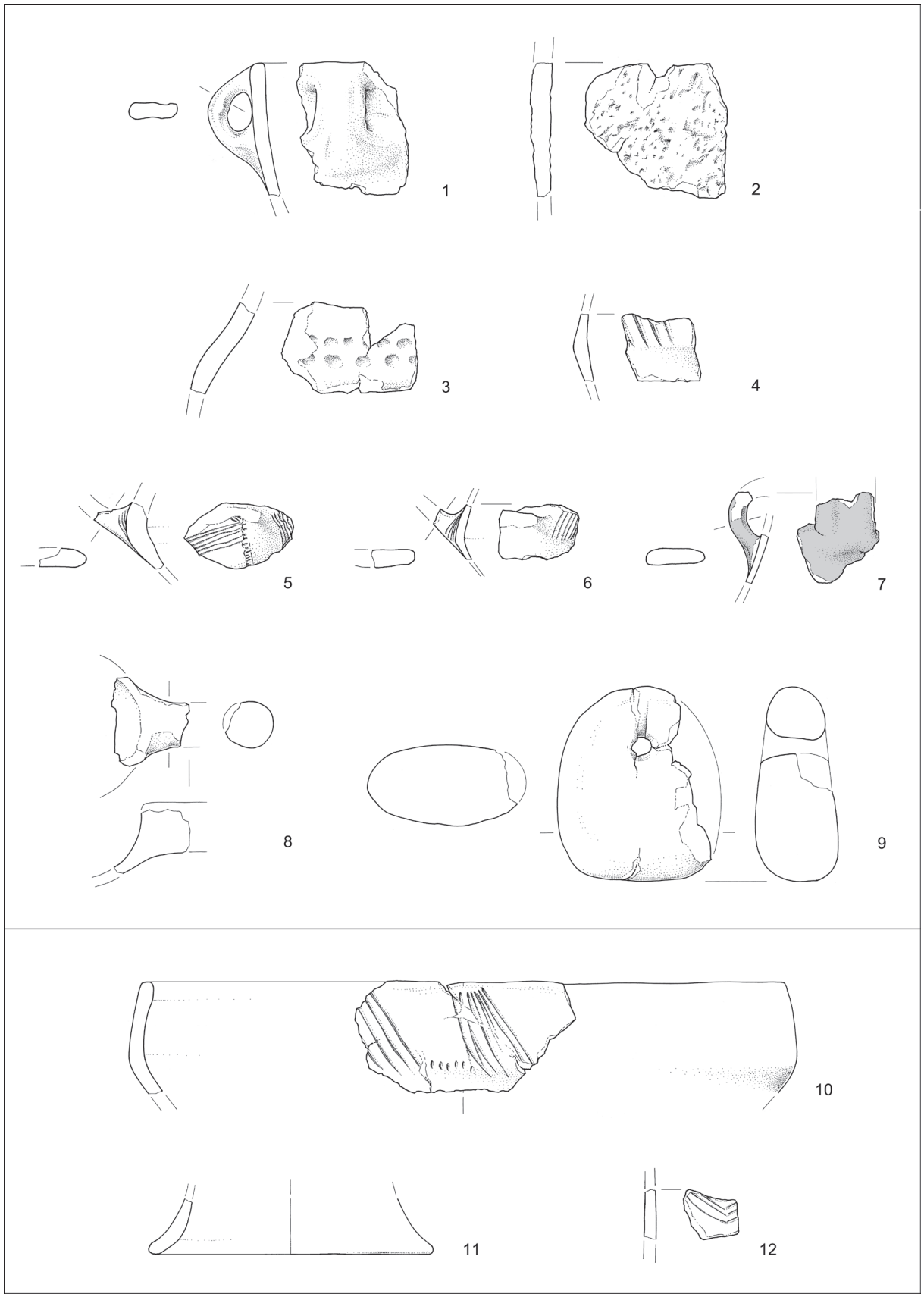
T. 4.21: Keramika. M = 1 : 3.
Pl. 4.21: Pottery. Scale = 1 : 3.



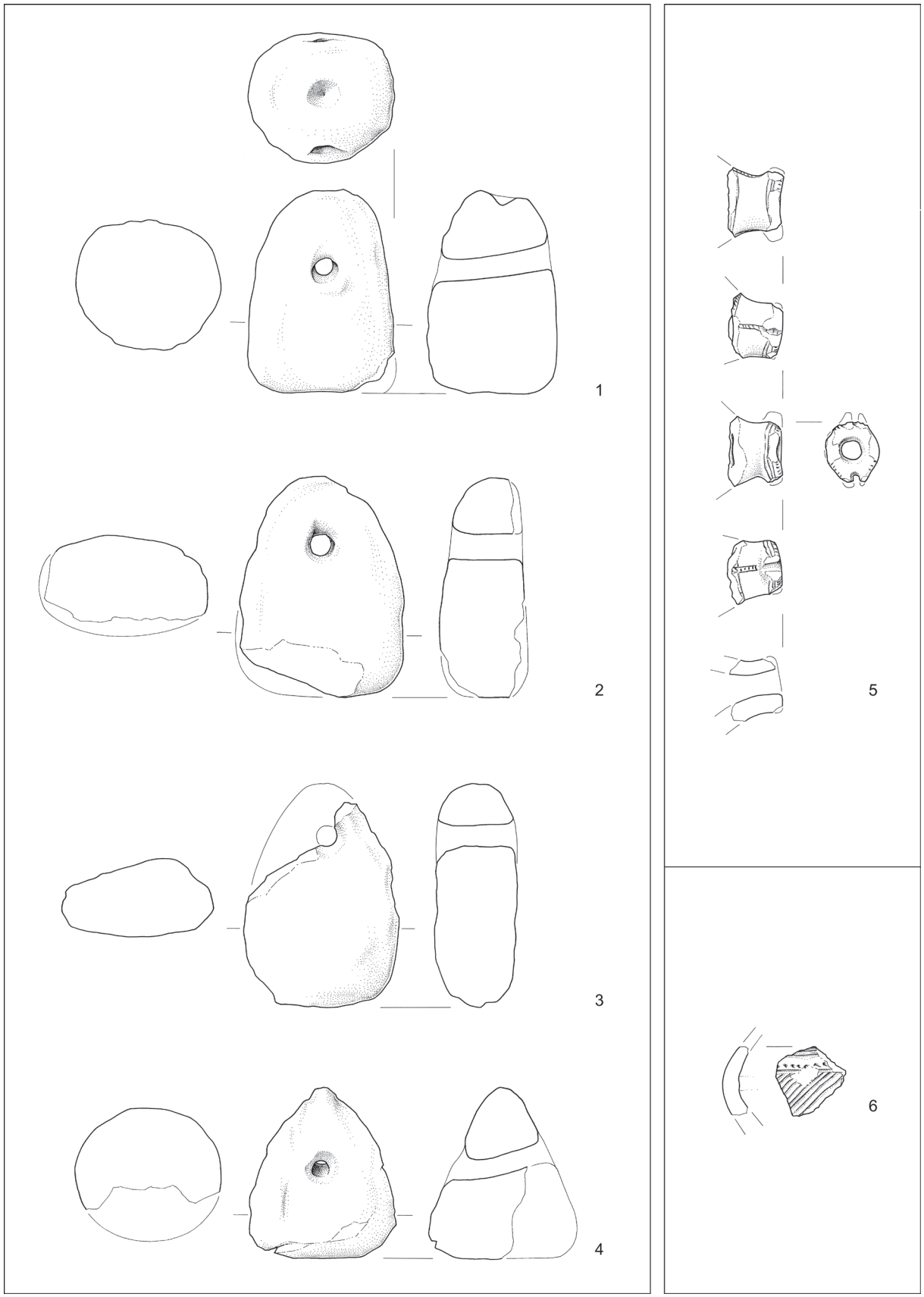
T. 4.22: Keramika. M = 1 : 3.
Pl. 4.22: Pottery. Scale = 1 : 3.



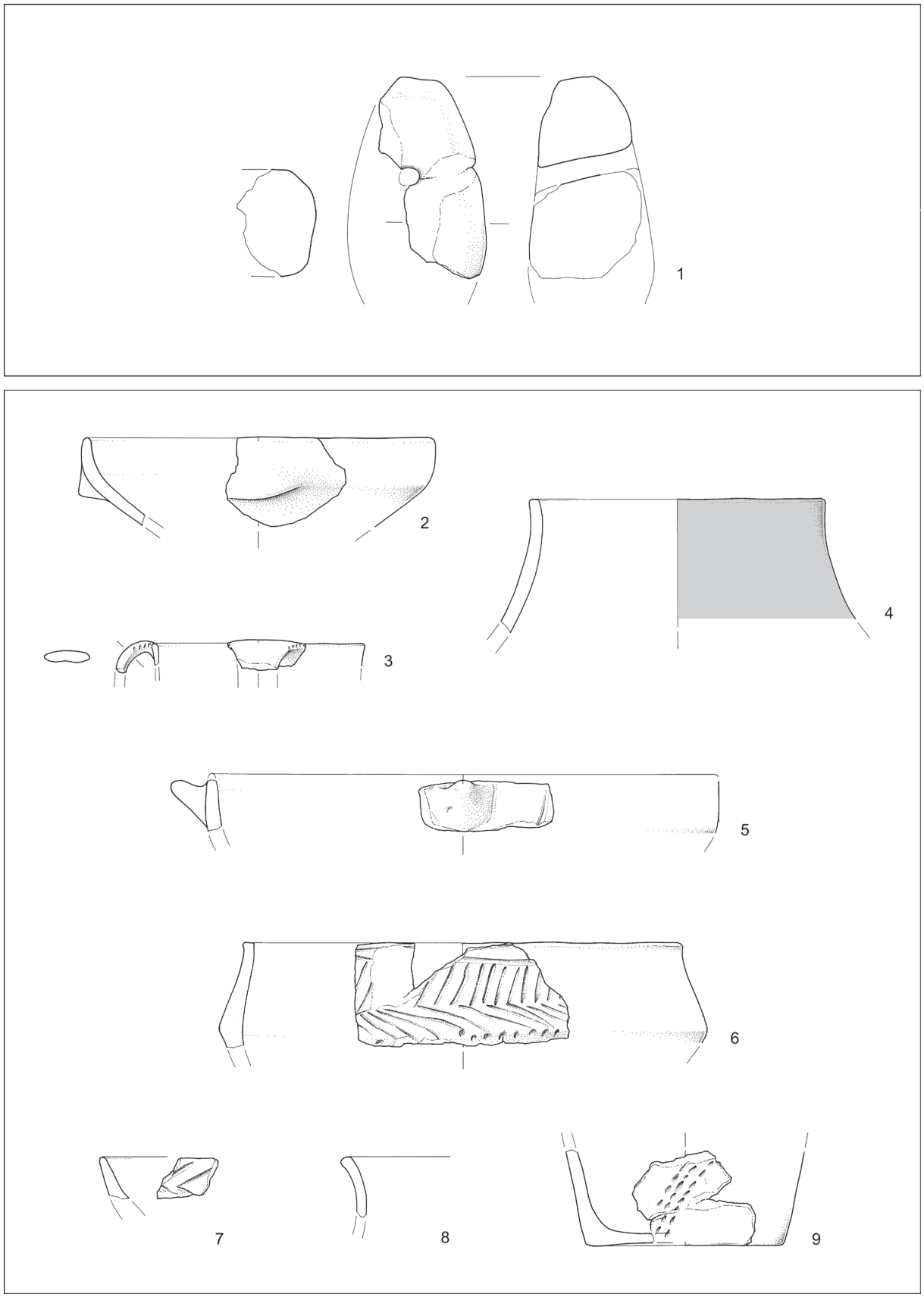
T. 4.23: Keramika. M = 1 : 3.
Pl. 4.23: Pottery. Scale = 1 : 3.



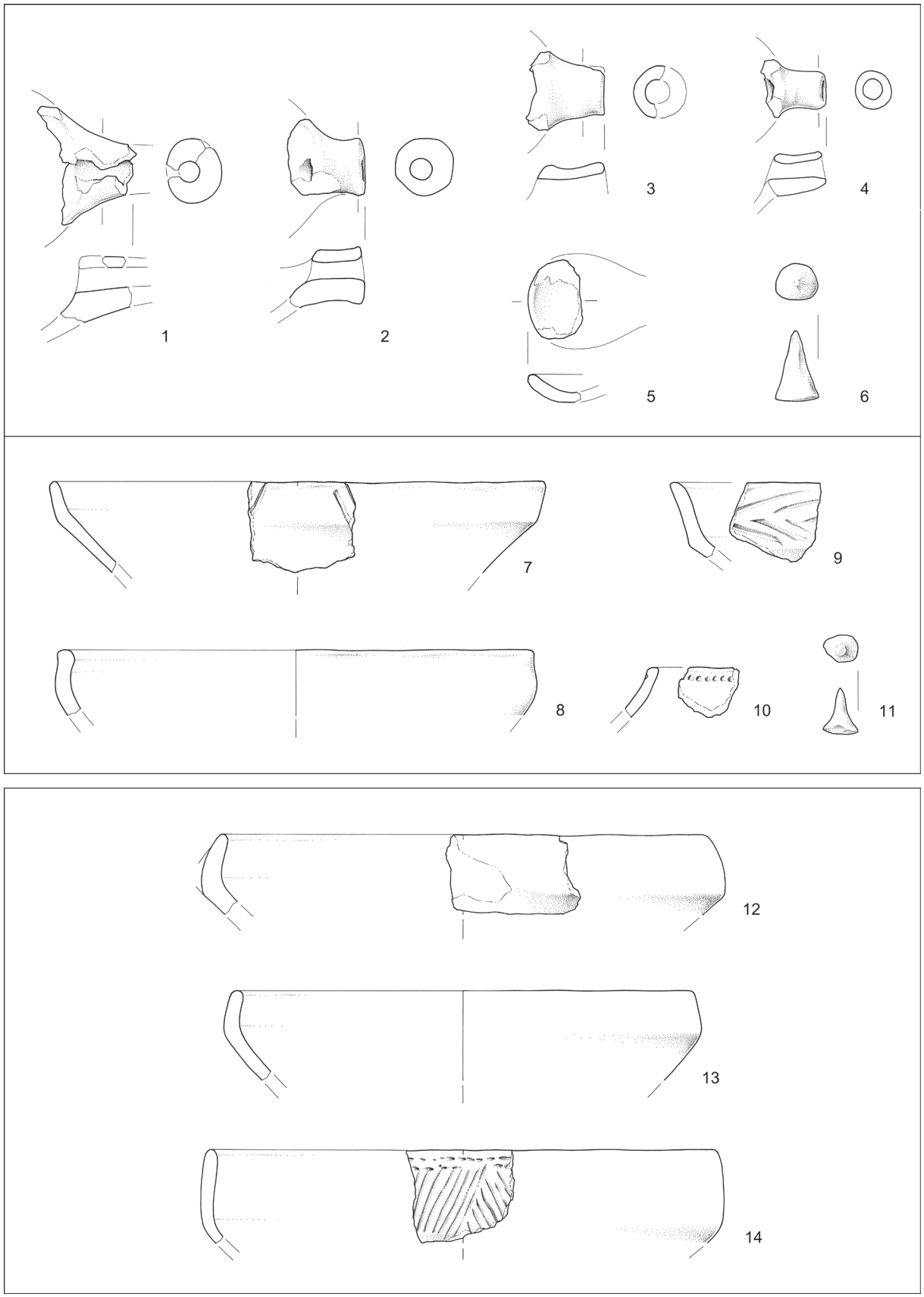
T. 4.24: Keramika (1–8, 10–12), glina (9). M = 1 : 3.
Pl. 4.24: Pottery (1–8, 10–12), clay (9). Scale = 1 : 3.



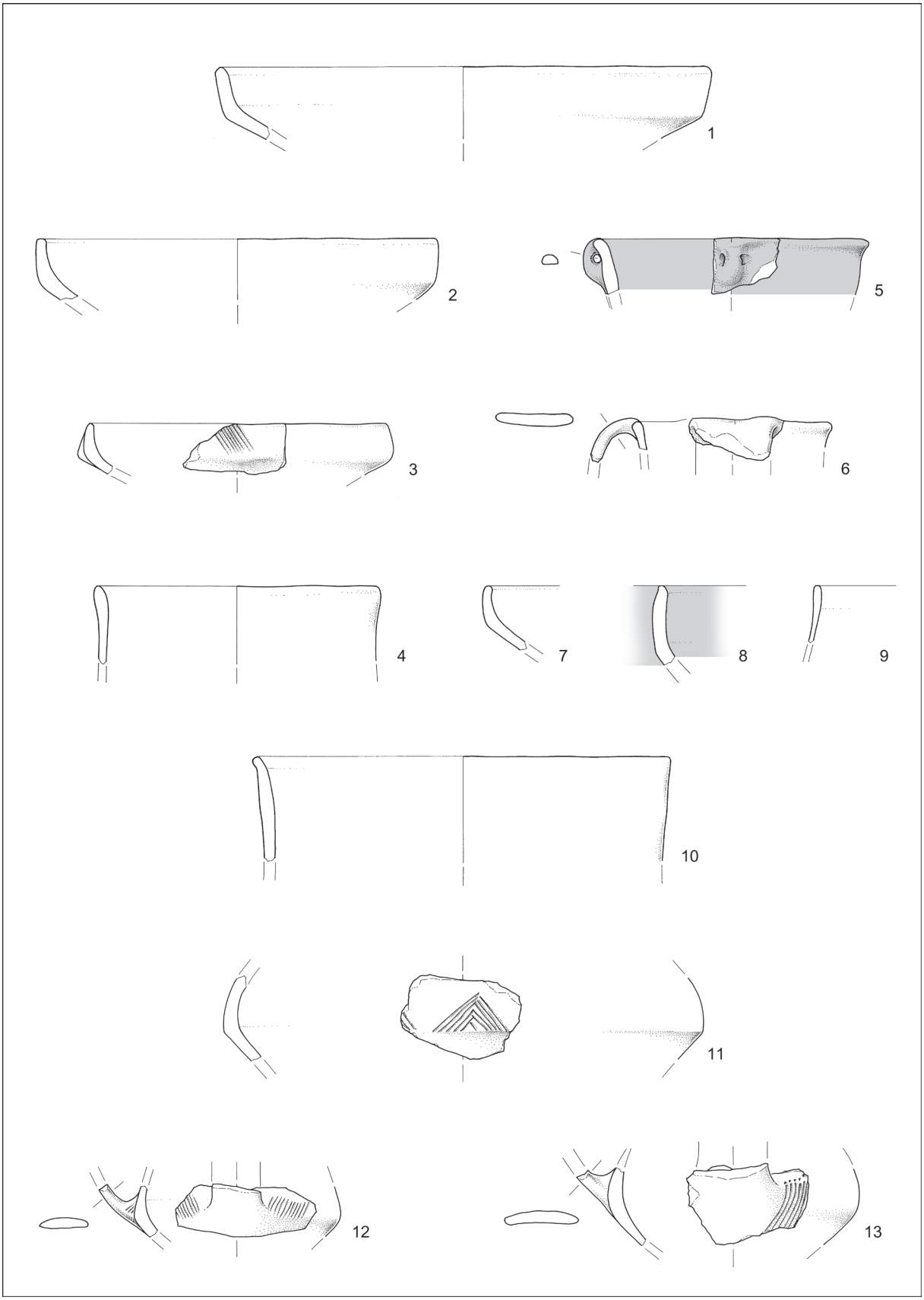
T. 4.25: Glina (1–4), keramika (5, 6). M = 1 : 3.
Pl. 4.25: Clay (1–4), pottery (5, 6). Scale = 1 : 3.



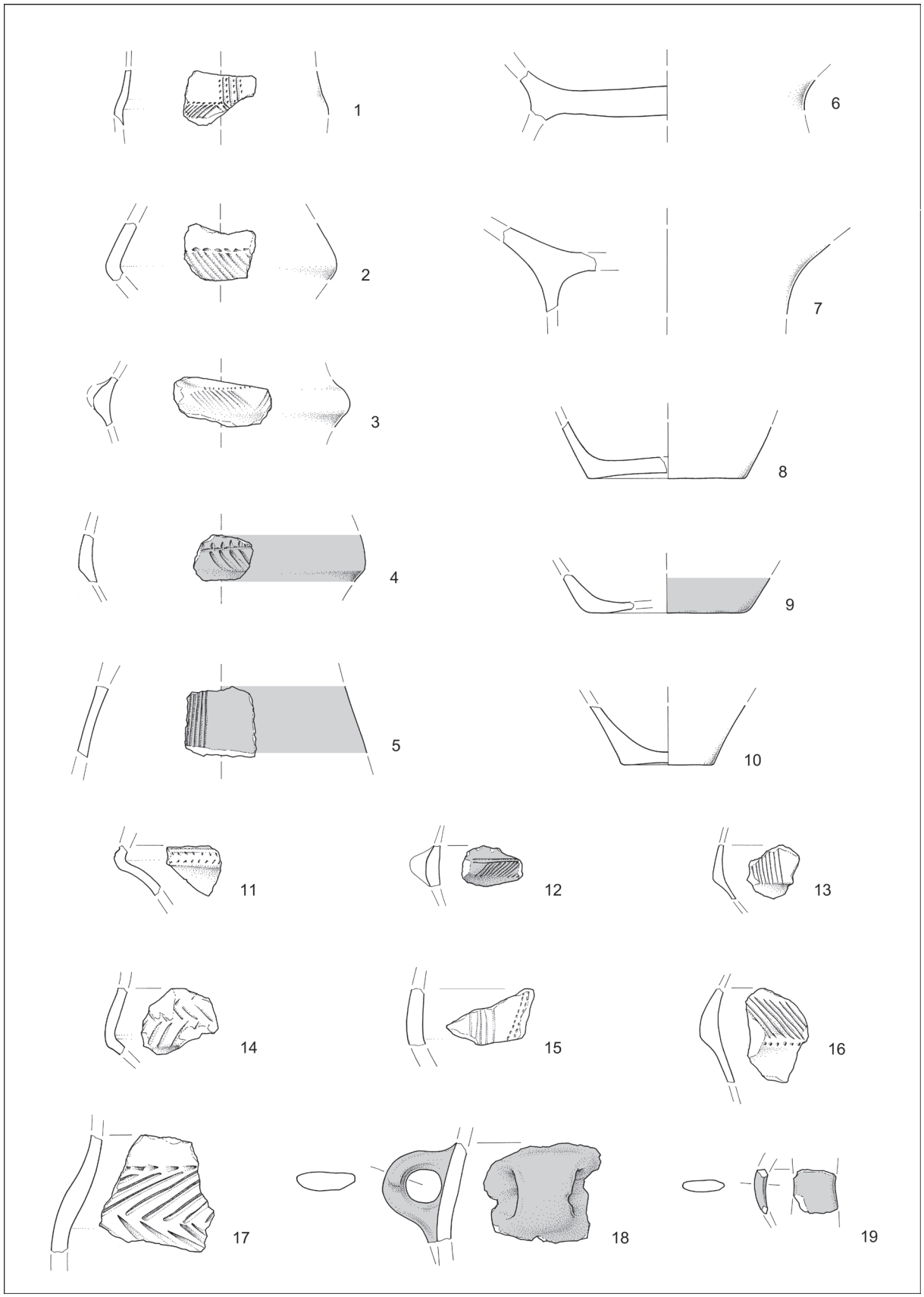
T. 4.26: Glina (1), keramika (2–9). M = 1 : 3.
Pl. 4.26: Clay (1), pottery (2–9). Scale = 1 : 3.



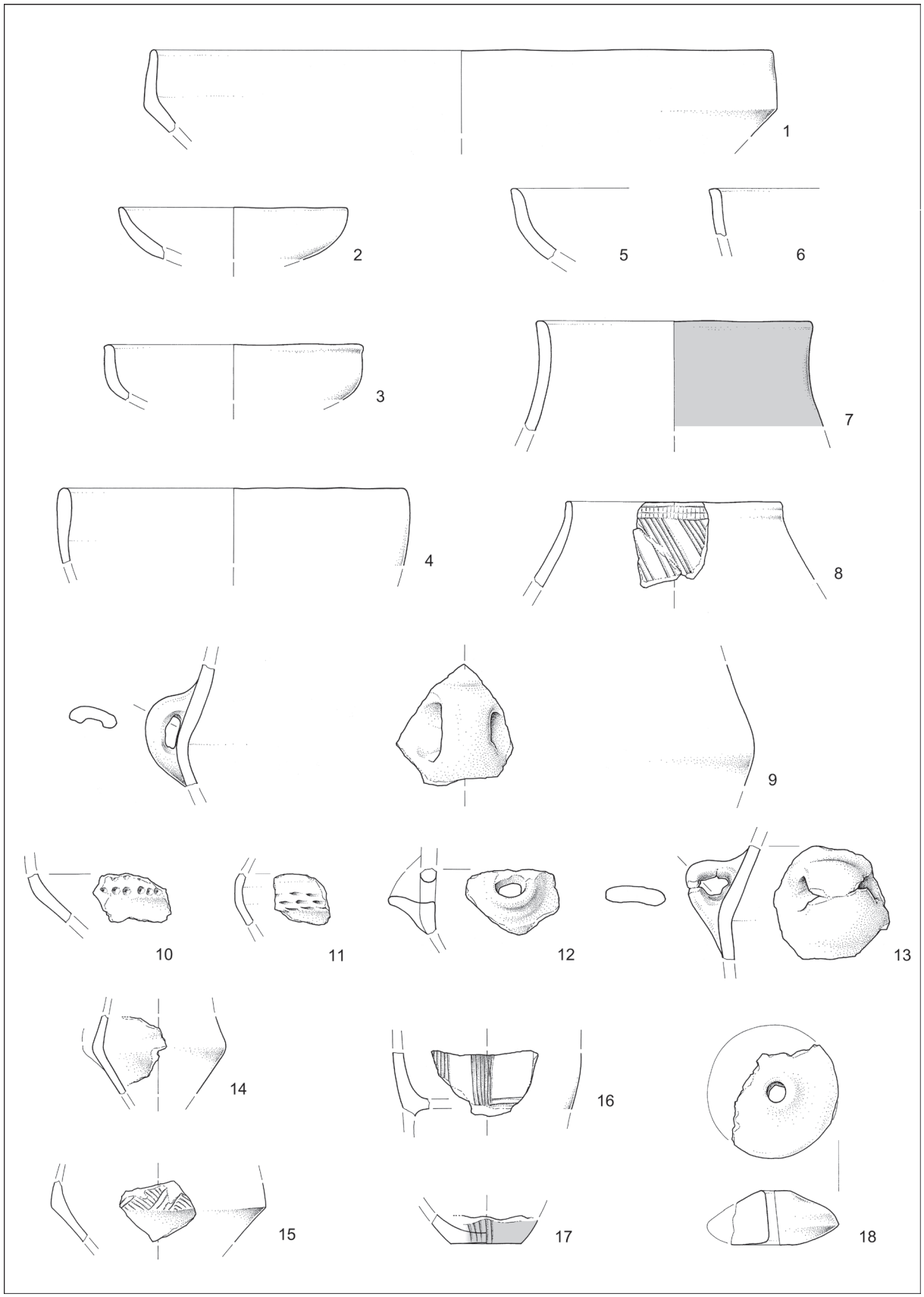
T. 4.27: Keramika. M = 1 : 3.
Pl. 4.27: Pottery. Scale = 1 : 3.



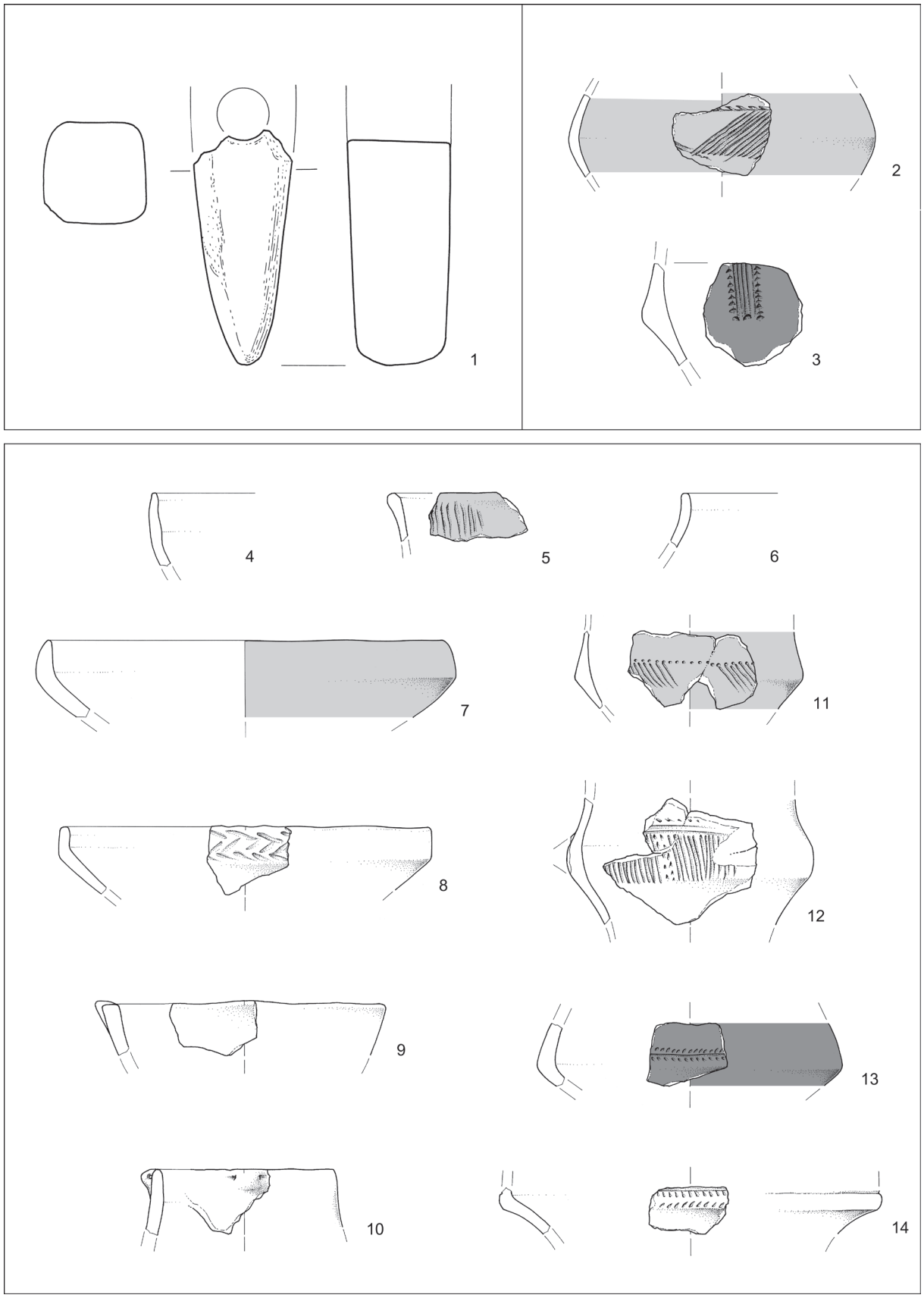
T. 4.28: Keramika. M = 1 : 3.
Pl. 4.28: Pottery. Scale = 1 : 3.



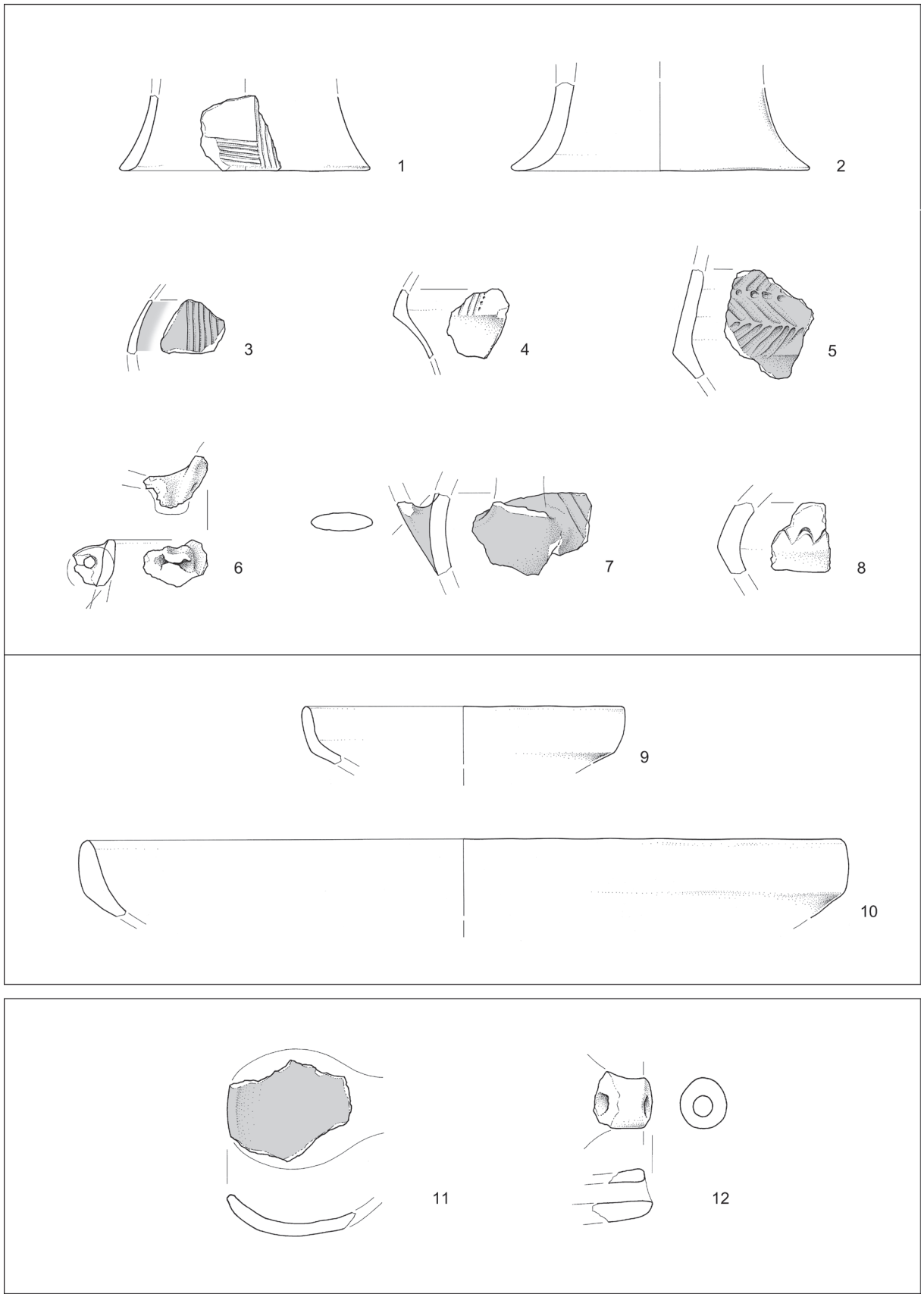
T. 4.29: Keramika. M = 1 : 3.
Pl. 4.29: Pottery. Scale = 1 : 3.



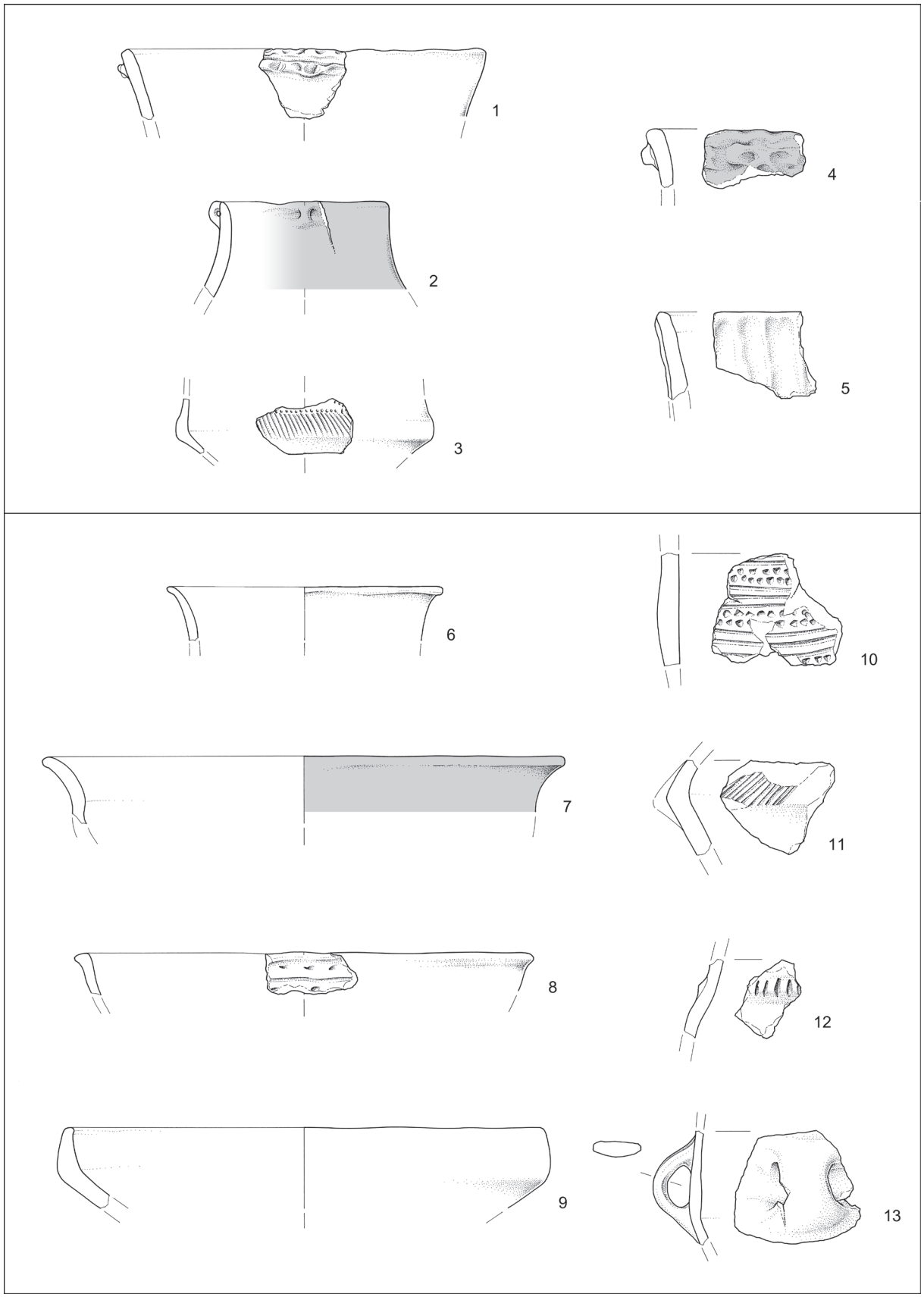
T. 4.30: Keramika. M = 1 : 3.
Pl. 4.30: Pottery. Scale = 1 : 3.



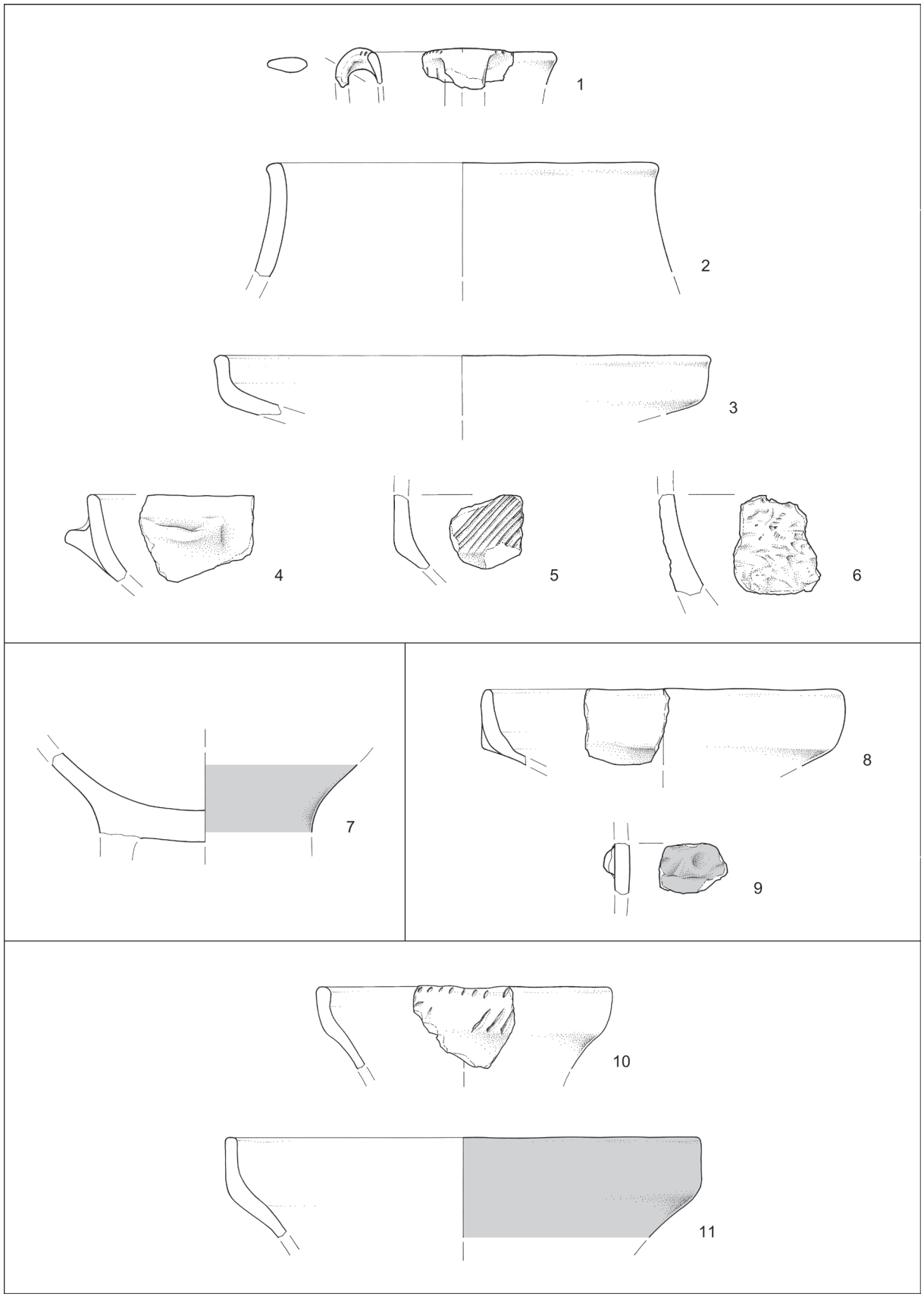
T. 4.31: Kamen (1). M = 1 : 2. Keramika (2–14). M = 1 : 3.
Pl. 4.31: Stone (1). Scale = 1 : 2. Pottery (2–14). Scale = 1 : 3.



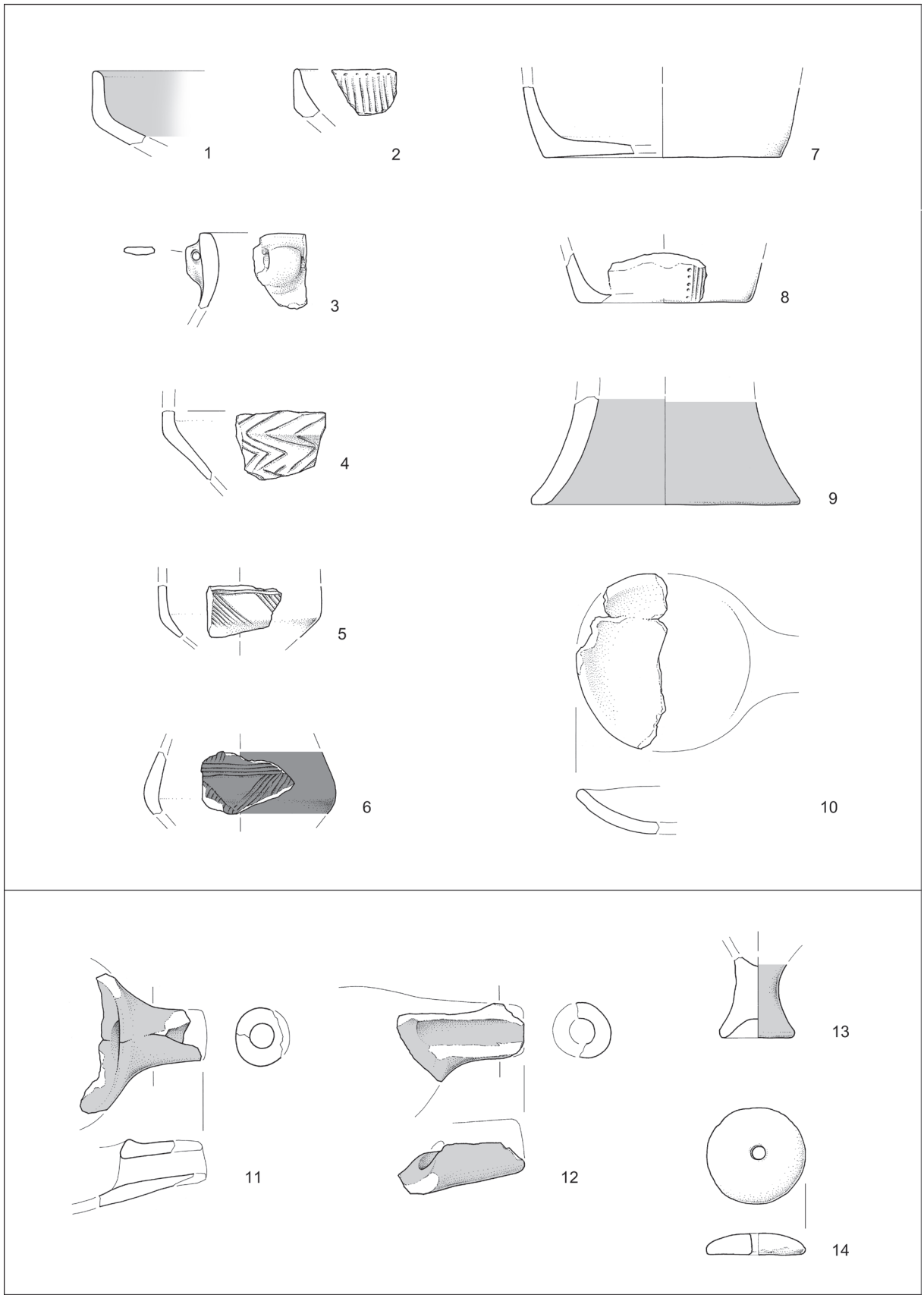
T. 4.32: Keramika. M = 1 : 3.
Pl. 4.32: Pottery. Scale = 1 : 3.



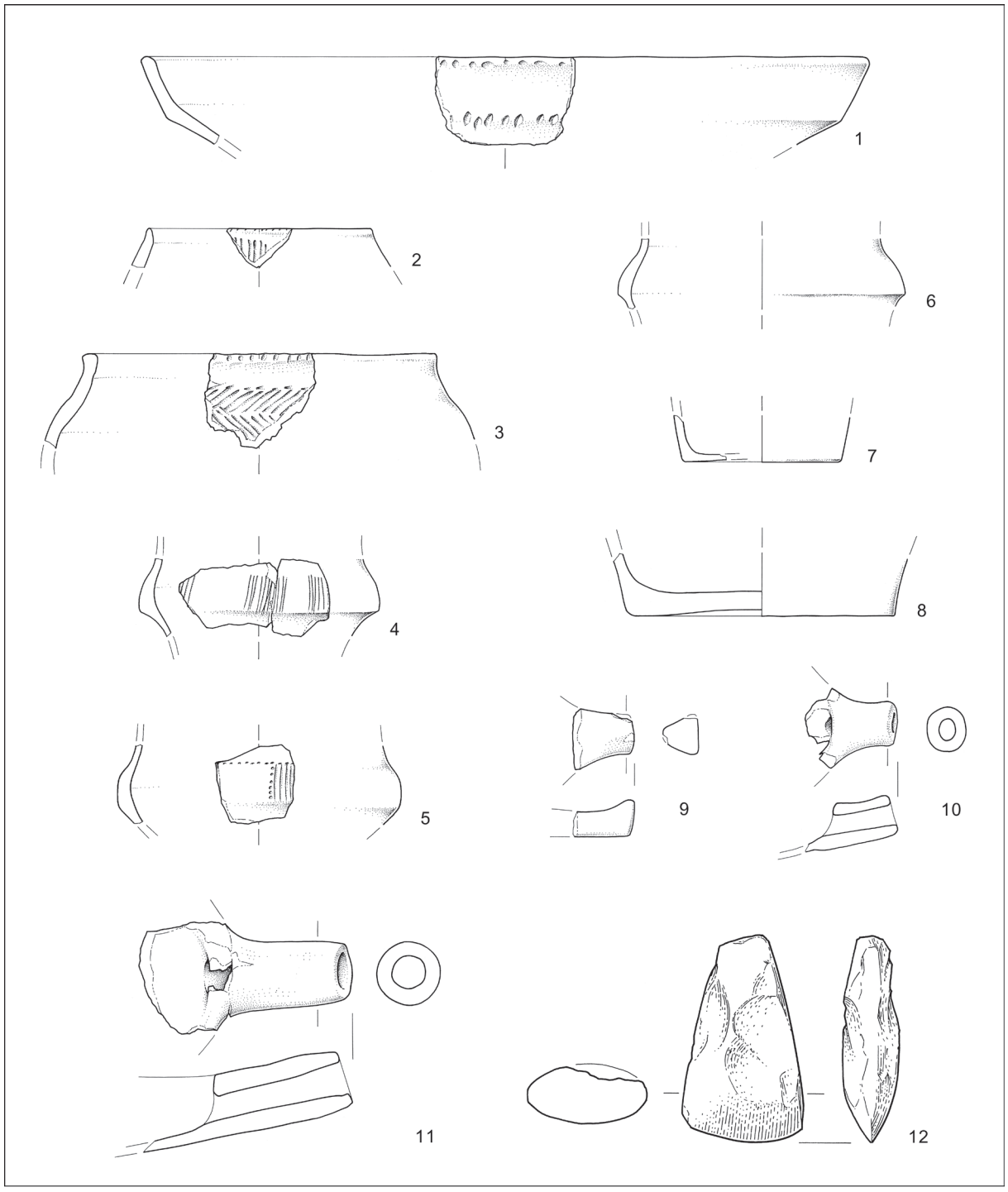
T. 4.33: Keramika. M = 1 : 3.
Pl. 4.33: Pottery. Scale = 1 : 3.

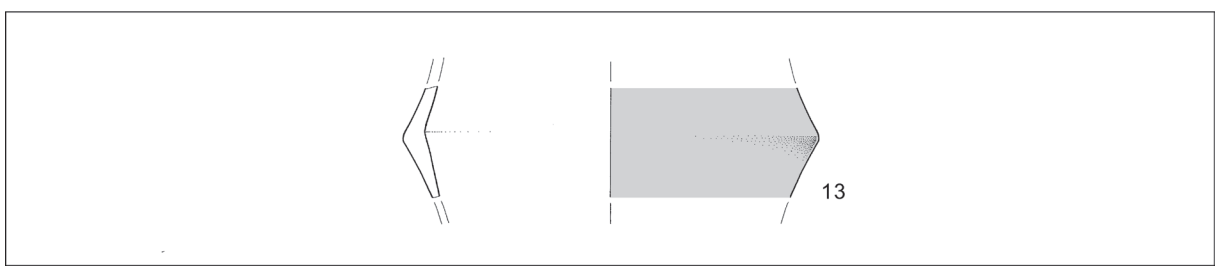


T. 4.34: Keramika. M = 1 : 3.
Pl. 4.34: Pottery. Scale = 1 : 3.

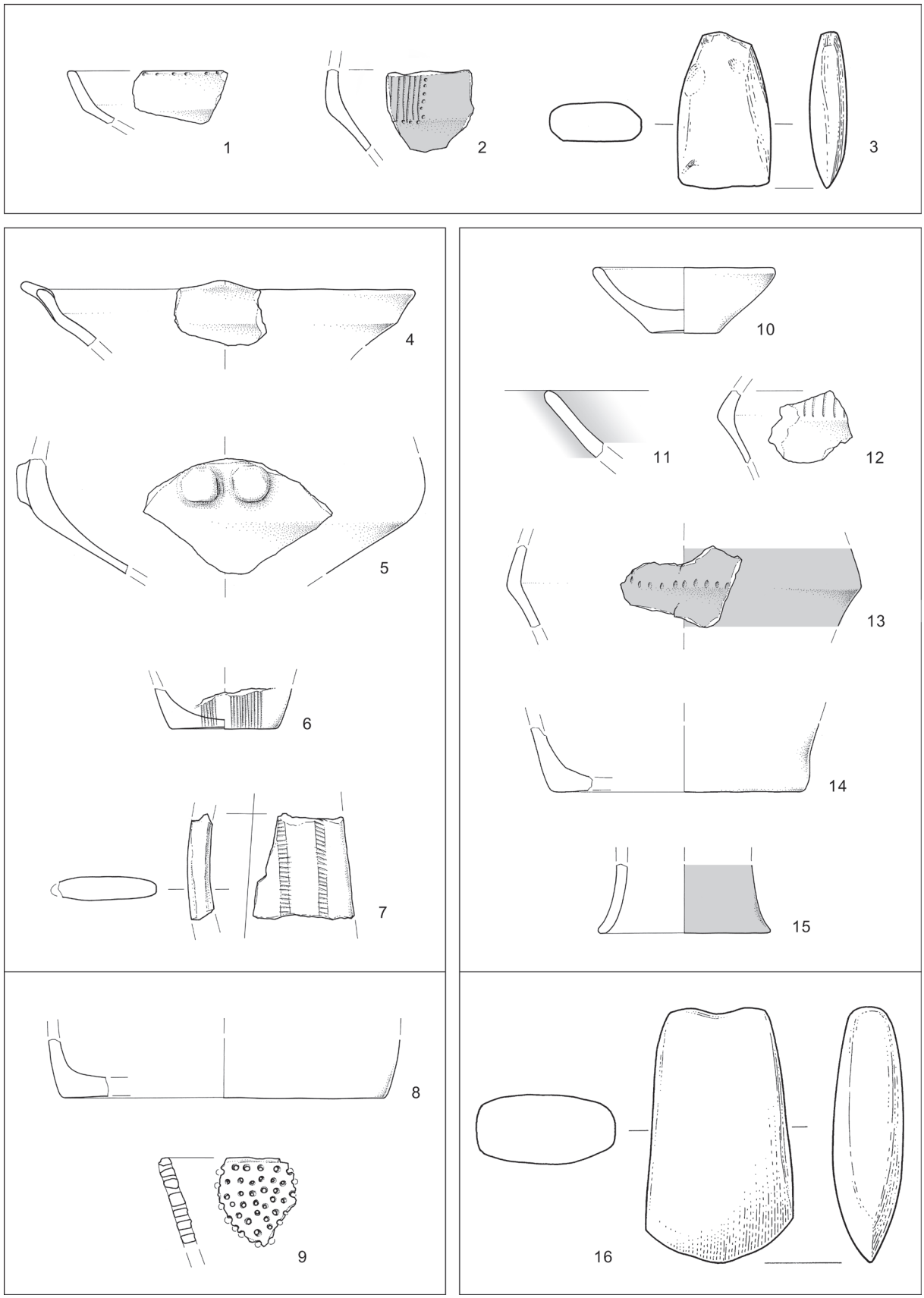


T. 4.35: Keramika. M = 1 : 3.
Pl. 4.35: Pottery. Scale = 1 : 3.





T. 4.36: Keramika (1–11, 13). M = 1 : 3. Kamen (12). M = 1 : 2.
Pl. 4.36: Pottery (1–11, 13). Scale = 1 : 3. Stone (12). Scale = 1 : 2.



T. 4.37: Keramika (1, 2, 4–15). M = 1 : 3. Kamen (3, 16). M = 1 : 2.
Pl. 4.37: Pottery (1, 2, 4–15). Scale = 1 : 3. Stone (3, 16). Scale = 1 : 2.

5. SPAHA IN KRONOLOGIJA OSREDNJE- IN JUŽNOSLOVENSKEGA NEOLITIKA TER ZGODNEJŠEGA ENEOLITIKA

5. SPAHA AND CHRONOLOGY OF CENTRAL AND SOUTH SLOVENIAN NEOLITHIC AND EARLY ENEOLITHIC

Anton VELUŠČEK

Izvleček

V prispevku opozarjamo na nekatere kronološke probleme neo- in eneolitskih raziskav v Sloveniji. Podajamo kronologijo poselitve na Spahi ter na novo postavljamo relativno- in absolutnokronološko shemo neolitika in eneolitika na preučevanem območju.

Ugotavljamo, da je bila Spaha poseljena v obdobju savske skupine (4712–4547 (oz. 4726–4504) pr. Kr.), ki jo vzporejamo s poznolengyelskim obdobjem (Lengyel III) na zahodu Madžarske. Nato so sledile poselitve v času lasinjske kulture (4366–4080 pr. Kr.), horizonta keramike z brazdastim vrezom (3775–3519 pr. Kr.) in kulture žarnih grobišč. V 16. stoletju pa je bila na njej postavljena lesena stražnica s kamnitim temeljem.

Ključne besede: metodološki problemi, primerjalna tipološka analiza, absolutno datiranje, savska skupina, lasinjska kultura, horizont keramike z brazdastim vrezom, kultura žarnih grobišč, stražnica iz 16. stoletja.

Abstract

This article draws attention to certain chronological problems of Neo- and Eneolithic research in Slovenia. We introduce the settlement chronology of Spaha and reset the relative and absolute chronological scheme of the Neolithic and Eneolithic at the studied area.

We discovered that Spaha was inhabited in the period of the Sava group (4712–4547 (or 4726–4504) BC), which we parallel with the Late Lengyel period (Lengyel III) in the west of Hungary. Settlements in the time of the Lasinja culture (4366–4080 BC), horizon of pottery with furrowed incisions (3775–3519 BC), and the Urnfield culture followed. In the 16th century, probably a wooden watchtower with a stone foundation was built here.

Keywords: methodological problems, comparative typological analysis, absolute dating, Sava group, Lasinja culture, horizon of pottery with furrowed incisions, Urnfield culture, 16th century watchtower.

5.1 UVOD

Raziskovanje prazgodovinskih višinskih naselij ima na območju osrednje in južne Slovenije razmeroma dolgo tradicijo. Začetki segajo v drugo polovico 19. stoletja, a je zaradi veliko bolj odmevnih najdb iz grobov ostalo nekako v senci zanimanja vse do osemdesetih let 20. stoletja. Šlo je namreč za živahno obdobje, ki je sledilo raziskovanju naselbine v Stični. Takrat se je v okviru Inštituta za arheologijo ZRC SAZU, Narodnega muzeja iz Ljubljane in Zavoda za varstvo naravne in kulturne

5.1 INTRODUCTION

The research of prehistoric hilltop settlements has a relatively long tradition in central and southern Slovenia. Its beginnings reach back to the second half of the 19th century when various grave finds drew much attention, nevertheless, it remained at the margins of general interest until the 80s of the 20th century. Namely, this was the lively period that followed the research of the settlement in Stična. At that time the Institute of Archaeology of SRC SASA, National museum of Slovenia

dediščine iz Novega mesta porodila misel, da je za boljše razumevanje dogajanja v prazgodovini na tem območju nujno treba evidentirati in vsaj v omejenem obsegu raziskati celotno poselitveno sliko, tj. naselja in njim pripadajoče nekropole. Projekt "Utrjena prazgodovinska naselja na Dolenjskem", kot so ga poimenovali, se je osredotočil samo na en segment poselitve, tj. utrjena naselja in njim pripadajoče nekropole, a je bil kasneje znatno dopolnjen z zaščitnimi raziskavami na trasi avtoceste.[1]

Temu dogajanju ob bok je torej treba postaviti tudi izkopavanja na prostranem, z gozdovi pokritem in pod socialistično Jugoslavijo v veliki meri vojaško zaprtem območju[2] med osrednjeslovensko regijo na severu in reko Kolpo na jugu. V letih od 1979 do 1984 so potekale arheološke raziskave na Spahi in med letoma 1982 in 1983 tudi na Kostelu.

Za prazgodovinsko poselitev Kostela, ki je dočakala objavo leta 1996, se ugotavlja, da je bila najbolj intenzivna v obdobju kulture žarnih grobišč, izpričane pa so tudi najdbe, ki kažejo na veliko starejšo (neo-) eneolitsko naselbino.[3]

Skoraj nepoznani pa so do danes ostali rezultati arheoloških raziskav na Spahi. Že v enem izmed prvih poročil o izkopavanjih je navedeno, da gre za ostanke eneolitskega naselja, katerega je vsaj delno prekrila arhitektura iz 16. stoletja.[4]

Kronološko natančneje, a kljub temu le mimogrede, se o prazgodovinski poselitvi na Spahi piše v prispevku "Neolitska in eneolitska višinska naselja v osrednji Sloveniji".[5] Avtor članka J. Dular je naselbino postavil ob bok Gradcu pri Mirni in Straži nad Gorenjimi Radenci, torej v obdobje časovnih horizontov Gradec I do III, kar po najnovejši kronološki shemi ustreza času od savske skupine pa vse do horizonta keramike z brazdastim vrezom.[6]

V primeru, da sledimo širši kulturno historični interpretaciji, se razmeroma jasna kronološka opredelitev nekoliko zaplete. V zadnjih desetletjih se za ravnokar omenjeni časovni razpon uporablja različno terminologijo. Velikokrat je problem nedoslednost. Avtorji pišejo o obdobju od srednjega[7] oz. mlajšega (ali

[1] Glej D. Breščak et al. (ur.), *Arheološka najdišča Dolenjske*, Ljubljana 1990; Dular et al. 1991, 65–66; 1995, 89–167; Dular 1999a, 129–153; 1999b, 65–71; 2001, 89–106; D. Prešeren (ur.), *Zemlja pod vašimi nogami,* Ljubljana 2003; Dular, Tecco - Hvala 2007, 13–21, 119–122; Pavlin, Dular 2007, 65–120; Križ 2009a, 43–45.

[2] Ferenc 2005.

[3] Velušček 1996, 65–67.

[4] Glej Hirschbäck - Merhar 1982, 139; Simonič 1939, 78–80.

[5] Dular 2001, 94, t. 8; glej še Dular 1999a, sl. 5: 11.

[6] Prim. Dular 2001, 95–96; Velušček 2004d, 290–295; Velušček, Čufar 2008, 31–48; Guštin 2005b, 7–22.

[7] Npr. Budja 1991, 199, sl. 6; Guštin, Bekić 2002, 63.

from Ljubljana, and Institute for Protection of Natural and Cultural Heritage from Novo mesto agreed that, for a better understanding of the happenings in the Prehistory of this area, it is essential to record and, at least to some extent, research the complete settlement picture, e.g. the settlements and their necropolises. The project "Prehistoric hill forts in the Dolenjska region", as it was called, focused solely on one settlement segment, e.g. the fortified settlements and their necropolises but was later significantly supplemented through rescue excavations for the highway alignment.[1]

This is therefore also the time of excavations at the vast, wooded and, under the government of socialist Yugoslavia, to a great extent militarily closed area[2] between the central Slovenian region in the north and the river Kolpa in the south. From 1979 to 1984 the archaeological excavations were carried out at Spaha and between 1982 and 1983 also at Kostel.

The prehistoric settlement of Kostel, which was published in 1996, is discovered to have been settled most intensively in the period of the Urnfield culture and some finds also attest to a much older, (Neo-)Eneolithic settlement.[3]

The research at Spaha, on the other hand, remained almost unknown until the present day. One of the first excavation reports reveals that these are the remains of an Eneolithic settlement which was at least partly covered by the 16th century architecture.[4]

Chronologically more precisely but still briefly the prehistoric settlement of Spaha is discussed in the article "Neolithische und äneolithische Höhensiedlungen in Zentralslowenien".[5] The author of this article, J. Dular, placed the settlement contemporary to Gradec near Mirna and Straža above Gorenji Radenci, therefore to the time of horizons Gradec I to III, which according to the newest chronological scheme corresponds with the time from the Sava group period to the horizon of pottery with furrowed incisions.[6]

If we follow a wider cultural and historical interpretation, this relatively clear chronological definition gets somewhat more complicated. In the recent decades, various terminologies have been used for the above mentioned time frame. Inconsistency is often the problem.

[1] See D. Breščak et al. (Ed.), *Arheološka najdišča Dolenjske*, Ljubljana 1990; Dular et al. 1991, 65–66; 1995, 89–167; Dular 1999a, 129–153; 1999b, 65–71; 2001, 89–106; D. Prešeren (Ed.), *Zemlja pod vašimi nogami,* Ljubljana 2003; Dular, Tecco - Hvala 2007, 13–21, 119–122; Pavlin, Dular 2007, 65–120; Križ 2009a, 43–45.

[2] Ferenc 2005.

[3] Velušček 1996, 65–67.

[4] See Hirschbäck - Merhar 1982, 139; Simonič 1939, 78–80.

[5] Dular 2001, 94, Pl. 8; see also Dular 1999a, Fig. 5: 11.

[6] Cf. Dular 2001, 95–96; Velušček 2004d, 290–295; Velušček, Čufar 2008, 31–48; Guštin 2005b, 7–22.

poznega) neolitika[8] pa vse do srednjega eneolitika.[9] Pričujoče delo je torej priložnost, da naselbino na Spahi natančneje kronološko ovrednotimo in hkrati "na novo" postavimo neolitsko in (zgodnejšo) eneolitsko relativno- in absolutnokronološko shemo za osrednje- in južnoslovenski prostor.

5.2 METODOLOŠKI PROBLEMI

Tako kot je narava vseh stvari je tudi kronologija, še posebno kronologija arheoloških kultur, zelo živ organizem, ki se stalno dopolnjuje oz. z novimi predlogi korenito spreminja. Podobno lahko z gotovostjo trdimo, da se dogaja tudi s kronološkimi shemami za prostor celinske Slovenije. Ob tem se ne zdi potrebno ponavljati celotne zgodovine neolitskih in eneolitskih raziskav v Sloveniji. Predvsem zato, ker v literaturi obstaja kopica dobrih pregledov, ki to tematiko obravnavajo.[10] Opozarjamo pa na štiri dela, ki se v tem pogledu zdijo ključna.

Najprej gre za prispevek M. Budje[11] "Tri desetletja razvoja teorij o poznem neolitu in eneolitu severozahodne Jugoslavije". V njem so podrobno prikazani temeljni problemi neo- in eneolitskih študij na območju nekdanje severozahodne Jugoslavije. Avtor nazorno opozori na različne, velikokrat tudi nasprotujoče si interpretacije istih kulturnih pojavov. Bistveno pa je, da v zaključku poda novo kronološko shemo za neolitsko in eneolitsko obdobje jugovzhodnoalpskega prostora, ki se sklada s srednjeevropskimi kronološkimi shemami.

Po Budji[12] so najstarejša neo-eneolitska najdišča na Slovenskem četrti horizont v Ajdovski jami, spodnja plast v Andrencih in kolišče ob Resnikovem prekopu, ki jih bolj v kronološkem kot kulturnem smislu označi za lengyelska.

Sledijo najdbe iz Bevk, s kolišča ob Resnikovem prekopu,[13] z Brezja pri Zrečah in ostalih slovenskogoriških in obdravskih najdišč, s Ptujskega gradu,[14] z Rifnika in iz Ajdovske jame (tretji in drugi horizont). Starejši del tega horizonta kronološko povezuje z epilengyelskim obdobjem, s keramiko z nekaterih hrvaških lasinjskih najdišč, najdišč skupine Balaton I, najdišč skupin Kanzianiberg-Strappelkogel, Oberpullendorf in Bisamberg ter bavarskih najdišč skupin Münchshöfen in Wallerfing. V naslednjem horizontu se poleg keramike, ki je značilna za prejšnji horizont, pojavi keramika ornamentirana z brazdastim vrezom tipa Višnjica in Kevderc-Hrnje-

[8] Npr. Budja 1983, 81; Guštin 2005b, 16, sl. 4.

[9] Budja 1983, 81; Dular 2001, 96; Velušček 2001, 7.

[10] Glej Leben 1979, 29–40; Budja 1994a, 75–78; Velušček 1999a, 59–79.

[11] 1983, 73–83.

[12] 1983, 81.

[13] Slučajno pobrane najdbe in najdbe, ki jih je odkril S. Jesse in objavil Z. Harej (1975).

[14] Najdbe iz t. i. kulturne plasti in nekaterih kurišč.

Authors write about the period from the Middle[7] or Late Neolithic[8] to the Middle Eneolithic.[9] The work before you is thus an opportunity to assess the settlement at Spaha chronologically more precisely and at the same time set "anew" the Neolithic and (earlier) Eneolithic relative and absolute chronological scheme for central and southern Slovenia.

5.2 METHODOLOGICAL PROBLEMS

As is the nature of all things, the chronology, especially chronology of archaeological cultures, is a living organism which is constantly supplemented and which is, through new suggestions, thoroughly changing. Similar holds true also for the chronological schemes for the area of continental Slovenia. It does not seem necessary here to revise the entire history of the Neolithic and Eneolithic research in Slovenia, especially since scientific writings contain an abundance of perfectly good overviews discussing this subject.[10] Nevertheless, we draw attention to four works which in this respect seem crucial.

The first one is the article by M. Budja[11] "Drei Jahrzehnte der Entwicklung der Theorien über das Spätneolithikum und das Äneolithikum des nordwestlichen Jugoslawien". This article discusses in detail the basic problems of Neo- and Eneolithic studies in the area of, once, north-western Yugoslavia. The author clearly points out the various, often contradictory to one another, interpretations of the same cultural phenomena. The essential part is that in the conclusion he presents a new chronological scheme for the Neolithic and Eneolithic period of the south-eastern Alpine region coherent with Central-European chronological schemes.

According to Budja,[12] the oldest Neo-Eneolithic sites in Slovenia are horizon 4 in Ajdovska jama, the lower layer of Andrenci, and the pile-dwelling Resnikov prekop, which he, more chronologically than culturally, delimits as Lengyel.

Finds from Bevke, the pile-dwelling Resnikov prekop,[13] from Brezje near Zreče, and other sites from Slovenske gorice and the Drava region follow, then from Ptujski grad,[14] Rifnik, and from Ajdovska jama (horizons 3 and 2). The older part of this horizon Budja chronologically connects to the Epi-Lengyel period,

[7] E.g. Budja 1991, 199, Fig. 6; Guštin, Bekić 2002, 63.

[8] E.g. Budja 1983, 81; Guštin 2005b, 16, Fig. 4.

[9] Budja 1983, 81; Dular 2001, 96; Velušček 2001, 7.

[10] See Leben 1979, 29–40; Budja 1994a, 75–78; Velušček 1999a, 59–79.

[11] 1983, 73–83.

[12] 1983, 81.

[13] Chance finds and finds discovered by S. Jesse and published by Z. Harej (1975).

[14] Finds from the s.c. cultural layer and some fireplaces.

vac kulture Retz-Gajary. Najdišča z najdbami iz tega horizonta so Kevderc, Drulovka, Andrenci, Predjama, Bezgečeva jama, Jermanova jama, Ajdovska jama in Levakova jama. Horizont kronološko primerja z delom lasinjskih najdišč in skupino Balaton II/III. Sledi horizont najdb tipa Boleráz badenske kulture na Drulovki, Ptujskem gradu, Jermanovi jami, Ajdovski jami in na kolišču ob Maharskem prekopu.

Budja kronološko shemo umešča v časovni in kulturni okvir med poznim neolitom (Lengyel II) in srednjim eneolitom (boleraška stopnja badenske kulture).

Še pomembnejša sta dva prispevka H. Parzingerja, v katerih je predstavil na tipološki analizi temelječo kronologijo kolišč Ljubljanskega barja in osrednjeslovenskega prostora ter njeno vpetost v širši evropski prostor.[15]

V prvem prispevku[16] obravnava kolišča z Ljubljanskega barja. Razvrstil jih je v sedem kulturnih horizontov: Ljubljansko barje (= LB) I do VII, in jih povezal z drugimi slovenskimi najdišči ter nato vpel v srednjeevropske kronološke sheme.

Najstarejše najdbe (LB I) izvirajo z Resnikovega prekopa, ki jih povezuje s četrtim horizontom iz Ajdovske jame in koncem lengyelske kulture, tj. s kulturami Tiszapolgár, Zengövárkony-Lengyel III in MSK (= moravska slikana keramika) IIb.

Na Resnikovem prekopu naj bi bile odkrite tudi najdbe (LB II), ki jih primerja z najdbami iz tretjega in drugega horizonta Ajdovske jame in jih povezuje z zgodnjo Lasinjo, Epi-Lengyelom, Balatonom I, Bodrogkeresztúrom in Ludanicami.

Na Resnikovem prekopu naj bi se pojavljale tudi mlajše najdbe (LB III), ki jih povezuje z novo skupino kolišč, kot so Maharski prekop, Blatna Brezovica in Notranje Gorice. Zanje najde paralele v okviru boleraške stopnje badenske kulture.

Na Maharskem prekopu, Blatni Brezovici in v Notranjih Goricah je po njegovo najti tudi najdbe iz obdobja klasične badenske kulure, kar predstavlja horizont LB IV.

Mlajši horizonti LB V–VII pa zajemajo najdbe iz 3. in zgodnjega 2. tisočletja pr. Kr., ki niso predmet te obravnave in jih zato na tem mestu podrobneje ne razčlenjujemo.

Parzinger sledi kronološki shemi iz leta 1984 tudi v letu 1993. V obsežni tematiki, kjer obravnava kronologijo in kulturno zgodovino mlajše kamene, bakrene in zgodnje bronaste dobe na ozemlju med Karpati in gorovjem Tavrus v Mali Aziji, je na straneh od 15 do 17 tudi krajše podpoglavje o kronologiji osrednjeslovenskega ozemlja.[17]

Najstarejše najdbe prepozna v četrtem oz. tretjem[18] horizontu Ajdovske jame in na Resnikovem prekopu

[15] Parzinger 1984; 1993.

[16] Parzinger 1984, 13–75.

[17] Parzinger 1993, 15–17.

[18] Kar velja za najdbe iz desnega hodnika (glej Horvat 1986).

with pottery from some Croatian Lasinja sites, sites of the group Balaton I, sites of groups Kanzianiberg-Strappelkogel, Oberpullendorf, and Bisamberg, and Bavarian sites of the groups Münchshöfen and Wallerfing. The next horizon reveals, besides the pottery characteristic for the previous horizon, also the pottery ornamented with furrowed incisions of the type Višnjica and Kevderc-Hrnjevac of the culture Retz-Gajary. Sites revealing finds of this horizon are Kevderc, Drulovka, Andrenci, Predjama, Bezgečeva jama, Jermanova jama, Ajdovska jama, and Levakova jama. Budja chronologically compares this horizon with a part of Lasinja sites and group Balaton II/III. The horizon of finds of the type Boleráz of the Baden culture at Drulovka, Ptujski grad, Jermanova jama, Ajdovska jama, and the pile-dwelling Maharski prekop follow.

Budja places the chronological scheme into the time and cultural frame between the Late Neolithic (Lengyel II) and Middle Eneolithic (Boleráz phase of the Baden culture).

Even more important are two articles by H. Parzinger, where he introduces on the typological analysis based chronology of the Ljubljansko barje pile-dwellings and central Slovenia and its integration into the wider European space.[15]

The first article[16] discusses pile-dwellings from the Ljubljansko barje and divides them into seven cultural horizons: the Ljubljansko barje (= LB) I to VII, which are connected to other Slovenian sites and then integrated into the Central-European chronological schemes.

The oldest finds (LB I) come from Resnikov prekop, which he connects to the fourth horizon from Ajdovska jama and the end of the Lengyel culture, that is the cultures Tiszapolgár, Zengövárkony-Lengyel III, and MPP (= Moravian painted pottery) IIb.

At Resnikov prekop supposedly finds were discovered (LB II), which he compares to the finds of the third and second horizon of Ajdovska jama and connects them to the Early Lasinja, Epi-Lengyel, Balaton I, Bodrogkeresztúr, and Ludanice.

At Resnikov prekop younger finds (LB III) supposedly also appear and these he connects to a new group of pile-dwellings, such as Maharski prekop, Blatna Brezovica, and Notranje Gorice. For these he finds parallels within the Boleráz phase of the Baden culture.

At Maharski prekop, Blatna Brezovica, and Notranje Gorice Parzinger believes that also finds from the period of classical Baden culture can be found, which represents horizon LB IV.

Younger horizons LB V–VII contain finds from the 3rd and early 2nd millennium BC, which are not the subject of this article and will thus not be here discussed in detail.

[15] Parzinger 1984; 1993.

[16] Parzinger 1984, 13–75.

ter v Moverni vasi (najgloblje plasti) in na Gradcu pri Mirni (spodnja plast), na dveh do leta 1984 tozadevno nepoznanih najdiščih.

Sprememba je v tem, da so po novem najstarejše najdbe uvrščene v horizonta 6 in 7 in ne v horizont 8 – ustreza kulturi Tiszapolgár in Lengyelu III –, kar po kronološki shemi za Madžarsko in nekdanjo Jugoslavijo predstavlja poznoneolitski horizont.

Nadaljevanje poselitve predstavljajo ista najdišča, ki so obravnavana v prispevku o kronologiji kolišč Ljubljanskega barja, s to razliko, da tezo še dodatno utemeljuje s pomočjo vertikalnostratigrafsko dokumentiranih najdb iz Moverne vasi in z Gradca pri Mirni. Skratka, horizonta 9a in 9b ustrezata Balaton I, zgodnji Lasinji in retzgajaryski kulturi. Na Madžarskem pozna bakrena doba ("Spätkupferzeit"), v nekdanji Jugoslaviji pa srednji eneolitik ("Mitteläneolithikum") naj bi se začela z boleraško stopnjo badenske kulture.

Zadnji izmed pomembnejših prispevkov, ki ga v tem sklopu izpostavljamo, pravzaprav ne prinaša nič bistveno novega, je pa dober kritičen pregled stanja raziskav, ki ga je v magistrski študiji na keramičnem gradivu z Resnikovega prekopa in Moverne vasi pripravila A. Tomaž.[19] Pri datiranju najstarejših najdb se Tomaž sklicuje na Budjo, ki je najstarejše plasti z osrednjeslovenskih najdišč (Moverna vas, Sevnica) mimogrede uvrstil v srednji neolitik ter na podlagi treh majhnih fragmentov s kaneliranim barbotinom in impresso ornamentom iz Sevnice celo predvidel neko starejšeneolitsko fazo,[20] obstoja katere pa kasnejše raziskave na tem območju niso potrdile.[21] Tako je Tomaž našla – brez navedb(!) – primerjave za najstarejše najdbe iz Moverne vasi in najdbe z Resnikovega prekopa v srednjeneolitskih kontekstih sopotske in lengyelske kulture, za mlajše najdbe iz Moverne vasi pa v kontekstih lasinjske kulture, kulture Boleráz-Baden in vučedolske kulture.[22]

Poleg ravnokar omenjenih prispevkov pa je treba omeniti tudi krajši odlomek o alpsko-lengyelski kulturi, ki jo je na osnovi maloštevilnih najdb iz četrtega horizonta Ajdovske jame definiral S. Dimitrijević[23] in naj bi predstavljala edino neolitsko (protolasinjsko) manifestacijo na širšem območju osrednje Slovenije.

Nedavno je alpsko-lengyelsko kulturo nadomestila savska skupina[24] lengyelske kulture.[25] Poleg najdb iz četrtega horizonta Ajdovske jame so vanjo vključena tudi nekatera najdišča t. i. alpskega faciesa lengyelske oz.

[19] 1999, 98–103, 149–152.

[20] Glej Budja 1991, 199, sl. 7: 1–3.

[21] Glej Horvat 2009, 25, sl. 2.

[22] Tomaž 1999, 103, 149.

[23] 1979c, 347–349.

[24] Imena ne smemo zamenjevati z eneolitsko savsko skupino ("Sava group") ob Črnem morju (glej Garašanin 1982, 143–145).

[25] Npr. Guštin 2005b, 7–22.

Parzinger follows the chronological scheme from 1984 also in 1993. Within the vast theme, where he deals with the chronology and cultural history of the Late Stone, Copper, and Early Bronze Ages in the area between the Carpathian and the Taurus Mountains in Anatolia, pages 15 to 17 also feature a short subchapter about the chronology of the central-Slovenian territory.[17]

He recognizes the oldest finds in the fourth or third[18] horizon of Ajdovska jama and at Resnikov prekop and in Moverna vas (the deepest layers) and at Gradec near Mirna (the lower layer), on two, until 1984, in this respect unknown sites.

The change is the fact that following this new interpretation the oldest finds are assigned to horizons 6 and 7, and not to horizon 8 – which corresponds to the Tiszapolgár culture and Lengyel III –, which according to the chronological scheme for Hungary and former Yugoslavia represents the Late Neolithic horizon.

The continuation of the settlement is represented by the same sites that are discussed in the article about the chronology of the pile-dwellings of the Ljubljansko barje, the only difference being that this thesis is additionally substantiated with the help of vertical stratigraphically documented finds from Moverna vas and Gradec near Mirna. Therefore, horizons 9a and 9b correspond with Balaton I, the Early Lasinja culture, and the Retz-Gajary culture. In Hungary the Late Copper Age ("Spätkupferzeit") and in former Yugoslavia the Middle Eneolithic ("Mitteläneolithikum") supposedly began with the Boleráz phase of the Baden culture.

The last one among the more significant articles presented in this part does not actually bring anything new, yet it is a good critical overview of the research condition, which had been prepared by A. Tomaž in her master`s degree thesis about the pottery from Resnikov prekop and Moverna vas.[19] For the dating of the oldest finds Tomaž refers to Budja, who assigned the oldest layers of the central-Slovenian sites (Moverna vas, Sevnica) to the Middle Neolithic and on the basis of three small fragments with channelled barbotine and impresso ornament from Sevnica even supposed an older Neolithic phase,[20] the existence of which the later research of this area did not confirm.[21] Thus Tomaž found – without references(!) – comparisons for the oldest finds from Moverna vas and finds from Resnikov prekop in the Middle Neolithic contexts of the Sopot and Lengyel cultures, and for the younger finds from Moverna vas in

[17] Parzinger 1993, 15–17.

[18] Relevant for the finds from the right corridor (see Horvat 1986).

[19] 1999, 98–103, 149–152.

[20] See Budja 1991, 199, Fig. 7: 1–3.

[21] See Horvat 2009, 25, Fig. 2.

lasinjske kulture.[26] Šlo pa naj bi za srednje-[27] oz. mlajšeneolitsko[28] kulturno skupino, sočasno II. lengyelski stopnji, ki naj bi se razprostirala od Save pri Brežicah in ob Kolpi vse do Ljubljanskega barja na severozahodu[29] oz. ob Savi od Brežic do Kranja.[30]

Menimo,[31] da je njena razprostranjenost širša in sicer na območju Bele krajine, v okolici Karlovca in na Kočevskem na jugozahodu ter do Štajerske oz. vzhodne Koroške v Avstriji[32] na severovzhodu. Savsko skupino je mogoče primerjati tudi z zgodnjeeneolitsko stopnjo Lengyel III v zahodni Panoniji[33] in njej sočasnimi kulturami oz. skupinami, kot so npr. Seče[34] na severu Hrvaške, Wolfsbach[35] v Avstriji in Brodzany-Nitra[36] na jugozahodu Slovaške.[37] Uvrstitev savske skupine v (mlajši) neolitik pa predvsem zaradi formalnih razlogov[38] vseeno velja obdržati, saj gre za termin, ki se je v slovenski literaturi hitro uveljavil.[39] Kakorkoli že, definicija savske skupine je pomembna, ker ločuje tisto, kar je dejansko drugačno. Najdbe z Resnikovega prekopa so z definiranjem skupine npr. dokončno izločene iz lasinjske kulture, kar še nedavno ni bilo pravilo.[40]

Lasinjsko kulturo je definiral Dimitrijević. Menil je, da gre za "badenizirani lengyelski pojav", s čimer je poudaril dve osnovni komponenti, iz katerih naj bi lasinjska kultura nastala: bapsko-lengyelsko in badensko.[41] Manj kot dvajset let kasneje je napisal izčrpno sintezo, kjer zagovarja delitev kulture na štiri stopnje: I, II-A, II-B in III. Zanimivo je predvsem to, da se je delitev z nekaterimi bolj estetskimi popravki in pomisleki glede izvora obdržala vse do danes.[42]

[26] Npr. del najdb z Drulovke in Resnikov prekop (glej Dimitrijević 1979b, 137–138; Guštin 2005b, sl. 1).

[27] Guštin, Bekić 2002, 62; prim. z Guštin, Tomaž, Kavur 2006, 386.

[28] Guštin 2005b, 16, sl. 4.

[29] Guštin, Bekić 2002, 62, 63.

[30] Guštin 2005b, 7–22, sl. 1.

[31] Velušček 2006b, 44.

[32] Npr. Rabenstein v Labotski dolini (Tiefengraber 2004, 185–253; Carneiro 2004, 255–272).

[33] Glej Horváth, Kalicz 2006, 63–65; Velušček 2006b, 28–42.

[34] Marković 1994, 89–91.

[35] Ruttkay 1995, 110–118.

[36] Beran 1999, 16–17.

[37] Nenavadno zvezo dobimo pri M. Guštinu in G. Tiefengraberju, ki stopnji MOG IIb in Lengyel III kronološko ločujeta, slednjo pa nato enačita z zgodnjo lasinjsko kulturo (Lasinja I) (glej Guštin, Tiefengraber 2001, 108).

[38] Prim. s Turk, Svetličič 2005, 73; Horváth, Kalicz 2006, 53, 54.

[39] Glej npr. Guštin 2005a.

[40] Glej npr. Dimitrijević 1979b; Marković 1994; Samonig 2003.

[41] 1961, 56.

[42] Glej npr. Šavel 1992, 57–85; Marković 1994, 92–96; Žižek 2006a, 130, 131; Minichreiter, Marković 2009, 21–44.

contexts of the Lasinja culture, culture Boleráz-Baden, and Vučedol culture.[22]

Additionally we would also like to mention a shorter contribution about the Alpine-Lengyel culture, which was on the basis of scarce finds from the fourth horizon of Ajdovska jama defined by S. Dimitrijević[23] and is supposed to represent the only Neolithic (proto-Lasinja) manifestation on the wider area of central Slovenia.

Not long ago, the Alpine-Lengyel culture was replaced by the Sava group[24] of the Lengyel culture.[25] In addition to the finds from the fourth horizon of Ajdovska jama it includes some sites of the s.c. Alpine facies of the Lengyel or Lasinja culture.[26] This is to be a Middle[27] or Late Neolithic[28] cultural group, contemporary with Lengyel stage II, which was to spread from the Sava at Brežice and along the Kolpa all the way to the Ljubljansko barje in the northwest,[29] and along the Sava, from Brežice to Kranj.[30]

We believe[31] that its spread is wider, namely to the area of Bela krajina, the surroundings of Karlovac and the Kočevje region in the southwest to the Styrian region or eastern Carinthian region in Austria[32] in the northeast. The Sava group can be compared to the Early Eneolithic stage Lengyel III in western Pannonia[33] and its contemporary cultures or groups such as e.g. Seče[34] in the north of Croatia, Wolfsbach[35] in Austria, and Brodzany-Nitra[36] in the southwest of Slovakia.[37] The placement of the Sava group into the (Late) Neolithic is nevertheless prudent to retain mostly for the formal reasons,[38] this being a technical term that was quickly

[22] Tomaž 1999, 103, 149.

[23] 1979c, 347–349.

[24] The name is not to be mistaken with the Eneolithic Sava group along the Black Sea (see Garašanin 1982, 143–145).

[25] E.g. Guštin 2005b, 7–22.

[26] E.g. a part of finds from Drulovka and Resnikov prekop (see Dimitrijević 1979b, 137–138; Guštin 2005b, Fig. 1).

[27] Guštin, Bekić 2002, 62; cf. Guštin, Tomaž, Kavur 2006, 386.

[28] Guštin 2005b, 16, Fig. 4.

[29] Guštin, Bekić 2002, 62, 63.

[30] Guštin 2005b, 7–22, Fig. 1.

[31] Velušček 2006b, 44.

[32] E.g. Rabenstein in the Lavamünd valley (Tiefengraber 2004, 185–253; Carneiro 2004, 255–272).

[33] See Horváth, Kalicz 2006, 63–65; Velušček 2006b, 28–42.

[34] Marković 1994, 89–91.

[35] Ruttkay 1995, 110–118.

[36] Beran 1999, 16–17.

[37] An unusual connection is found in M. Guštin and G. Tiefengraber, which chronologically divide phases MOG IIb and Lengyel III, and then equal the latter with the Early Lasinja culture (Lasinja I) (see Guštin, Tiefengraber 2001, 108).

[38] Cf. Turk, Svetličič 2005, 73; Horváth, Kalicz 2006, 53, 54.

Z današnjega gledišča se zdi vztrajanje pri starem neupravičeno. Na zelo problematično Dimitrijevićevo interpretacijo stratigrafskih podatkov iz Ajdovske jame, ključnega najdišča pri utemeljevanju kronologije lasinjske kulture,[43] je že pred desetletjema opozoril Budja.[44] V tem prispevku naj navedemo primer "lasinjskega"[45] kolišča Resnikov prekop na Ljubljanskem barju in problematiko, ki nastane z uvrstitvijo kolišča v to kulturo.

Na Resnikovem prekopu je najobsežnejše raziskave vodil J. Korošec.[46] Na podlagi najdb je kolišče uvrstil v t. i. alpski facies lengyelske kulture.[47] Gre za poimenovanje, ki ga je Dimitrijević zavrgel in namesto tega predlagal ime lasinjska kultura.[48] Tako tudi smatra Resnikov prekop za eno ključnih najdišč pri definiranju II-A stopnje lasinjske kulture. Podobno kot Korošec,[49] tudi Dimitrijević daje v isti koš keramiko, ki sodi v horizont grobov v Ajdovski jami[50] in keramiko z Resnikovega prekopa.[51]

Pustimo ob strani interpretacije, ki izhajajo iz tipološke analize, za katere Tomaž upravičeno meni, da so pogostokrat predmet zavedne ali nezavedne manipulacije.[52] Da povezava med horizontom grobov in Resnikovim prekopom ne drži, je zelo jasno pokazala stratigrafija Gradca pri Mirni, iz katere je razvidno, da je horizont grobov v Ajdovski jami mlajši od kolišča Resnikov prekop.[53] Še več, faze, ki ustreza grobovom v Ajdovski jami in je prisotna na Gradcu pri Mirni, Ljubljansko barje oz. Resnikov prekop ne pozna.[54]

Podobno kažejo tudi naravoslovne metode datiranja. Na Resnikovem prekopu so bile opravljene dendrokronološke raziskave, ki niso dale želenih rezultatov, tj. absolutne datacije kolišča, zato pa smo pridobili radiokarbonsko datirani vzorec vertikalnega kola, ki je bil predhodno dendrokronološko protokoliran. Radiokarbonski datum 5718 ± 23 BP[55] lahko kaže na isto obdobje kot datum z zelo veliko standardno napako 5824 ± 150 BP iz sedemdesetih let.[56] Pomembno je tudi, da smo na podlagi dendrokronoloških in arheoloških

[43] Glej Dimitrijević 1979b, 145, 146.

[44] Budja 1990a, 124, 125.

[45] Dimitrijević 1979b, 149.

[46] Glej Bregant 1964; Korošec 1964.

[47] Korošec 1964, 40.

[48] Dimitrijević 1961, 55.

[49] Korošec celo meni, da je kolišče Resnikov prekop nekoliko mlajše, "kvečjemu kakšno desetletje ali pa še manj" od najdb iz Ajdovske jame (Korošec 1964, 38, 40, 41).

[50] Prim. Dimitrijević 1979b, t. 19: 3–5 in Horvat 1986, 77–87; Horvat 1989, 25.

[51] Dimitrijević 1979b, t. 19: 1,2,6–8.

[52] Tomaž 1999, 103.

[53] Dular et al. 1991, 84–90.

[54] Dular et al. 1991, 89; glej še Velušček 2006b, 28, 29.

[55] Čufar, Korenčič 2006, 124, tab. 2.

[56] Dimitrijević 1979b, 179.

asserted in the Slovenian scientific writing.[39] Be this as it may, the definition of the Sava group is important because it separates that which is in fact different. The finds from Resnikov prekop are due to definition of the group, for example, conclusively excluded from the Lasinja culture, which has not been the rule even recently.[40]

The Lasinja culture was defined by Dimitrijević. He believed that this is a "Badenised Lengyel phenomenon", through which he emphasized two basic components that were to create the Lasinja culture: Bapska-Lengyel and Baden.[41] Less than twenty years later he wrote a comprehensive synthesis where he advocates the division of the culture into four stages: I, II-A, II-B, and III. It is interesting that this division, with some aesthetic corrections and hesitations about the provenance, persists until this day.[42]

Today, insisting on the old seems unjustified. Budja emphasized the Dimitrijević's problematic interpretation of stratigraphic data from Ajdovska jama, the key site for the explanation of the Lasinja culture chronology,[43] already two decades ago.[44] In this article we would like to state the example of the "Lasinja"[45] pile-dwelling Resnikov prekop at the Ljubljansko barje and problems ensuing from the classification of this pile-dwelling into this culture.

The most extensive research at Resnikov prekop was led by J. Korošec.[46] On the basis of the finds he assigned the pile-dwelling to the s.c. Alpine facies of the Lengyel culture.[47] This is the denomination which had been discarded by Dimitrijević and who instead proposed the name Lasinja culture.[48] Thus he considers Resnikov prekop as one of the key sites for the definition of II-A stage of the Lasinja culture. Similarly as Korošec,[49] Dimitrijević also makes no distinction between the pottery from the horizon of graves in Ajdovska jama[50] and pottery from Resnikov prekop.[51]

Let us set aside the interpretations derived from the typological analysis, for which Tomaž justifiably believes are often the subject of intentional or unintentional ma-

[39] See e.g. Guštin 2005a.

[40] See e.g. Dimitrijević 1979b; Marković 1994; Samonig 2003.

[41] 1961, 56.

[42] See e.g. Šavel 1992, 57–85; Marković 1994, 92–96; Žižek 2006a, 130, 131; Minichreiter, Marković 2009, 21–44.

[43] See Dimitrijević 1979b, 145, 146.

[44] Budja 1990a, 124, 125.

[45] Dimitrijević 1979b, 149.

[46] See Bregant 1964; Korošec 1964.

[47] Korošec 1964, 40.

[48] Dimitrijević 1961, 55.

[49] Korošec even believes that the pile-dwelling Resnikov prekop is somewhat younger, "a decade or less at best", from the finds from Ajdovska jama (Korošec 1964, 38, 40, 41).

[50] Cf. Dimitrijević 1979b, Pl. 19: 3–5 and Horvat 1986, 77–87; Horvat 1989, 25.

[51] Dimitrijević 1979b, Pl. 19: 1,2,6–8.

raziskav ugotovili, da je bilo kolišče obljudeno zelo malo časa. Predvidevamo, da manj kot desetletje.[57]

Številnejši so radiokarbonski datumi iz Ajdovske jame, ki so pokazali na časovni razpon grobov[58] od 5625 ± 130 BP do 5340 ± 120 BP[59],[60] oz. 5120 ± 130 BP,[61] kar se je naknadno izkazalo, da je preširok. Po zadnjih objavljenih podatkih[62] so grobovi datirani v radiokarbonski čas med 5485 ± 50 BP in 5340 ± 36 BP. Z modeliranjem so določili celo koledarski čas 4340–4290 pr. Kr. (1-sigma), kot *terminus post quem,* ko naj bi se pokopavanje v jami sploh začelo. Kakor koli že, ritual polaganja umrlih je trajal malo časa, "total span is equivalent to 5–120 yr (95.4% probability) with the highest probability associated with 10–20 yr." Ugotovitev se ujema tudi s homogenostjo keramike.[63] Torej je razvidno, da Resnikov prekop in horizont grobov časovno in kulturno ne gresta skupaj. Naj ponovimo, tipološko gledano spadajo najdbe z Resnikovega prekopa v savsko skupino,[64] medtem ko so najdbe iz okolice skeletnih ostankov v Ajdovski jami lasinjske.[65]

Ugotovitev je zelo pomembna, saj jasno ovrže Dimitrijevićevo definicijo in delitev lasinjske kulture.[66] V tem trenutku se zdi, da je rešitev iz zagate iskati v ohranjanju imena, ker je uveljavljeno.[67] Na podlagi tega kot značilno lasinjsko keramiko opredeljujemo najdbe iz horizonta grobov v Ajdovski jami,[68] drugega poselitvenega horizonta na Gradcu pri Mirni,[69] sedme poselitvene faze v Moverni vasi[70] in z Bukovnice.[71] Pri interpretaciji pa se ne moremo več naslanjati na Dimitrijevića in iz njegove delitve izvajati sklepov. Vedno bolj je treba upoštevati rezultate naravoslovnih datacijskih metod in le-te kritično preverjati z drugimi nabori

[57] Glej Čufar, Korenčič 2006, 124; Toškan, Dirjec 2006, 148; Velušček 2006b, 24, 26.

[58] V novejših prispevkih, kjer so omenjene tudi najdbe iz grobov v Ajdovski jami, se le-te uvršča v pozni neolitik oz. v alpsko lengyelsko kulturo (glej Horvat 2005, 153; Bonsall et al. 2007, 730).

[59] Horvat 1989, 27.

[60] Radiokarbonska datacija vzorca iz drugega horizonta desnega hodnika, kar ustreza horizontu grobov, kaže na starost od 5726 ± 130 BP do 5430 ± 120 BP (po Horvat 1989, 25).

[61] Bonsall et al. 2007, 730.

[62] Bonsall et al. 2007, 734.

[63] Glej Velušček 2006b, 37.

[64] Npr. Guštin 2005b, sl. 1; Velušček 2006b, 43, 44.

[65] Npr. Težak - Gregl 2007, 38.

[66] Opuščanje Dimitrijevićeve delitve nima namere zanikati notranjega razvoja kulture, ki naj bi bil razviden iz delitve kulture na več stopenj, saj je lasinjska kultura, npr. na Hrvaškem, glede na radiokarbonske datume lahko trajala do 400 let (glej Balen 2008a, 23 in *tab. 5.7:* 4, v tem prispevku).

[67] Glej Tomaž 2006; Balen 2008a, 17–35; Potrebica, Balen 2007, 116–117; Minichreiter, Marković 2009, 21–44 itd.

[68] Horvat 1989, t. 1–9.

[69] Dular et al. 1991, 89, t. 25: 10–14.

[70] Budja 1992, sl. 4: faza 7.

[71] Šavel 1992, t. 7–12.

nipulation.[52] That the connection between the horizon of graves and Resnikov prekop is false was clearly shown by the stratigraphy of Gradec near Mirna, which reveals that the horizon of graves in Ajdovska jama is younger than the pile-dwelling Resnikov prekop.[53] Moreover, the phase corresponding to the graves in Ajdovska jama and which is present at Gradec near Mirna is unknown to the Ljubljansko barje or Resnikov prekop.[54]

Absolute dating methods show similarly. Dendrochronological research was done at Resnikov prekop which did not yield the desired results, e.g. the absolute dating of the pile-dwelling, but we did get the radiocarbon dated sample of the vertical pile which had been previously dendrochronologically protocolised. The radiocarbon date 5718 ± 23 BP[55] can point to the same period as the date with a very big standard error 5824 ± 150 BP from the seventies.[56] It is also important that, on the basis of dendrochronological and archaeological research, we discovered that the pile-dwelling was populated for a very short period of time. We assume less than a decade.[57]

Radiocarbon dates from Ajdovska jama are more numerous and they revealed the graves time range[58] from 5625 ± 130 BP to 5340 ± 120 BP[59], [60] or 5120 ± 130 BP,[61] which was subsequently shown to be too wide. According to the last published data[62] graves date to the radiocarbon time between 5485 ± 50 BP and 5340 ± 36 BP. Through modelling they even appointed a calendar time of 4340–4290 BC (1-sigma), as *terminus post quem,* when the burials in the cave actually started. Be as it may, the ritual of laying the dead lasted only a little while, "total span is equivalent to 5–120 yr (95.4% probability) with the highest probability associated with 10–20 yr." This finding also matches the homogeneity of the pottery.[63] Thus it is evident that Resnikov prekop and horizon of graves chronologically and culturally do not match. Let us repeat that typologically speaking the

[52] Tomaž 1999, 103.

[53] Dular et al. 1991, 84–90.

[54] Dular et al. 1991, 89; see also Velušček 2006b, 28, 29.

[55] Čufar, Korenčič 2006, 124, Tab. 2.

[56] Dimitrijević 1979b, 179.

[57] See Čufar, Korenčič 2006, 124; Toškan, Dirjec 2006, 148; Velušček 2006b, 24, 26.

[58] More recent articles that also mention finds from the graves in Ajdovska jama assign these to the Late Neolithic or the Alpine Lengyel culture (see Horvat 2005, 153; Bonsall et al. 2007, 730).

[59] Horvat 1989, 27.

[60] Radiocarbon dating of the sample from the second horizon of the right corridor, corresponding to the horizon of graves, points to the age from 5726 ± 130 BP to 5430 ± 120 BP (according to Horvat 1989, 25).

[61] Bonsall et al. 2007, 730.

[62] Bonsall et al. 2007, 734.

[63] See Velušček 2006b, 37.

podatkov, kot sta stratigrafija in primerjalna tipološka analiza najdb.[72]

Iz te kratke predstavitve je razvidna osnovna problematika osrednjeslovenskega neolitika in eneolitika. Gre za problem, ki ga je, kot omenjeno, pred več kot četrt stoletja izpostavil M. Budja[73] in je leta 1999 nanj ponovno nazorno opozorila A. Tomaž,[74] namreč da se iste podatke enkrat interpretira ne en način, že naslednjič pa povsem drugače.

Problema pa ne vidimo v različnih interpretacijah, preveliki svobodi izražanja mnenj, temveč v uporabi vedno enake metodologije, ki takšno variacijsko širino dopušča in znanstveno delo zelo pooseblja. Rešitev iz zagate je edino pogled preko, torej interdisciplinarno raziskovanje, ki naj bi z različnimi metodami pripeljalo do enakega ali vsaj zelo podobnega rezultata. Podobnega mnenja je npr. tudi P. J. Suter,[75] ki pri obravnavi kronologije zgodnjega 3. tisočletja pr. Kr. v srednji Evropi zapiše: "Um solche Modelle in die Urgeschichte zu übertragen, müssen wir aber zunächst die Sackgasse der reinen Typologie und Stilkunde verlassen. Nur die absoluten Daten sind eine sichere Grundlage, auf welcher die Archäologie in Kombination mit Typologie und Modellvorstellungen versuchen kann, 'Kulturgeschichte' zu schreiben."

Na podoben način bo kronološko ovrednotena tudi poselitev na Spahi. Pri tem se bomo, zaradi jasnosti, držali sheme, ki se v tem trenutku za osrednje- oz. južnoslovenski prostor zdi najprimernejša in predstavlja kompromis med interpretacijami, ki jih najdemo v sodobni slovenski arheološki literaturi[76]:

1. mlajši neolitik: savska skupina;
2. zgodnji eneolitik: lasinjska kultura;
3. srednji eneolitik: horizont keramike z brazdastim vrezom (= HKBV) in nato obdobje, ki je primerljivo z razvojem zgodnje in klasične badenske kulture v srednjem Podonavju (kulturna skupina Stare gmajne[77]).

5.3 KRONOLOGIJA POSELITVE NA SPAHI

V nadaljevanju se bomo ukvarjali s kronologijo poselitve na Spahi in kronologijo neolitika ter zgodnejšega eneolitika celinske Slovenije. Najprej bomo opravili primerjalno analizo najdb, v glavnem keramike, in postavili relativno kronologijo. Nato bo sledilo poglavje, kjer bodo predstavljeni rezultati radiokarbonskega datiranja, za Spaho žal teh podatkov ni na voljo, a bodo zato

[72] Glej še Težak - Gregl 2007, 40.

[73] 1983, 73–83.

[74] 1999, 103.

[75] 2002, 540.

[76] Prim. Budja 1992; Velušček 1999a; 2004a; 2006a; 2009a; Guštin 2005a; Tomaž 2006.

[77] Velušček 2009b, 28–34.

finds from Resnikov prekop belong to the Sava group,[64] while the finds from the vicinity of the skeletal remains in Ajdovska jama are from the Lasinja culture.[65]

This finding is extremely important since it clearly refutes Dimitrijević`s definition and division of the Lasinja culture.[66] At this moment it seems that the solution of this dilemma is to preserve the name because it is established.[67] On such basis the typical Lasinja pottery is delimited as those finds from the horizon of graves in Ajdovska jama,[68] the second settlement horizon at Gradec near Mirna,[69] the seventh settlement phase at Moverna vas,[70] and from Bukovnica.[71] For the interpretation we can no longer rely on Dimitrijević and derive conclusions from his division. The results of the absolute dating methods need to be increasingly considered and critically tested with other data collections, such as stratigraphy and comparative typological find analysis.[72]

The basic problems of the central-Slovenian Neolithic and Eneolithic is evident from this short presentation. This is the problem, which was, as stated above, more than a quarter of a century ago emphasized by M. Budja[73] and to which the attention was again drawn in 1999 by A. Tomaž,[74] namely that the same data is once interpreted in one manner and in the next instance in a completely different one.

The problem is not only in different interpretations and too great freedom of stating one`s opinion but rather in the use of the same methodology over and over again, which allows for such a variation range and personifies the scientific work. The solution can only be to look beyond, therefore, the interdisciplinary research, which is to give the same or at least a very similar result by various methods. P. J. Suter[75] is, for example, of a similar opinion, and during his discussion of the early 3rd millennium BC chronology in central Europe says: "Um solche Modelle in die Urgeschichte zu übertragen, müssen wir aber zunächst die Sackgasse der reinen Typologie und Stilkunde verlassen. Nur die absoluten Daten sind eine sichere Grundlage, auf welcher die Archäologie in

[64] E.g. Guštin 2005b, Fig. 1; Velušček 2006b, 43, 44.

[65] E.g. Težak - Gregl 2007, 38.

[66] The abandoning of Dimitrijević's division is not intended to deny the internal development of the culture, which should be evident from the division of the culture into several stages, since the Lasinja culture, e.g. in Croatia, according to the radiocarbon data could have lasted up to 400 years (see Balen 2008a, 23, and *Tab. 5.7*: 4, in this article).

[67] See Tomaž 2006; Balen 2008a, 17–35; Potrebica, Balen 2007, 116–117; Minichreiter, Marković 2009, 21–44 etc.

[68] Horvat 1989, Pls. 1–9.

[69] Dular et al. 1991, 89, Pl. 25: 10–14.

[70] Budja 1992, Fig. 4: faza 7.

[71] Šavel 1992, Pls. 7–12.

[72] See also Težak - Gregl 2007, 40.

[73] 1983, 73–83.

[74] 1999, 103.

[75] 2002, 540.

v obravnavo vključeni datumi s tipološko primerljivih najdišč, in absolutna kronologija.

5.3.1 RELATIVNA KRONOLOGIJA: PRIMERJALNA TIPOLOŠKA ANALIZA

Kot je razvidno iz poglavja o naselbinskih strukturah, je bila poselitev na Spahi skoncentrirana v glavnem na zgornjem platoju.[78] Kot prostor za hiše so izbirali debelejše zaplate prsti na sicer prevladujočem živo skalnem površju, kar se je skozi prazgodovino dogajalo večkrat. Zadnja gradbena aktivnost je dokumentirana na začetku novega veka, ko je bila na Spahi izvidniška točka, t. i. kresišče, in je bila postavljena lesena stražnica z zidanim temeljem.[79] Posledica teh aktivnosti je, da so najdbe iz različnih obdobij med seboj v veliki meri premešane. Zaprtih arheoloških kontekstov, kjer lahko z veliko stopnjo zanesljivosti trdimo, da je keramika izključno iz enega obdobja, ni najti oz. je v njih malo izpovednih najdb, zato bo tudi datiranje poselitvenih faz temeljilo na primerjalni tipološki analizi.

Pri analizi se v glavnem ne bomo spuščali v pretirane podrobnosti, ker obstoji nevarnost, da na takšen način spregledamo celoto in interpretacijo preveč poosebimo. Zato bo najprej podan širši *terminus ante quem non* za poselitev na Spahi, kar, kot bomo videli v nadaljevanju, lahko razširimo na celotno savsko skupino oz. na celotno ozemlje celinske Slovenije. Spaha kot ena izmed pomembnih prazgodovinskih višinskih naselbin z najstarejšo keramiko na tem območju bistveno ne odstopa od ostalih kronološko sorodnih najdišč. Tudi zanjo je namreč značilna keramika s pretežno rdečim premazom, posode na nogi in globoke posode "S" profila z vertikalnima trakastima ročajema.

Rdeč premaz je ena izmed najstarejših značilnosti keramike s Spahe. Tako okrašeni fragmenti so razmeroma številni.[80] Večidel so iz globljih režnjev, kot npr. v sondi II, režnji 5–3, sondi III, režnji 5–3, sondi IV, reženj 4, sondi VI/1, reženj 3 in sondi VI/2, režnja 5 in 4. V sondah VI, VI/3 in VI/4 pa jih najdemo tudi višje.[81] Zanimivo je, da se rdeč premaz kot ornamentalna zvrst pogostokrat pojavlja v kombinaciji z drugimi ornamenti, kot so vrezi, vrezi in odtisi, žlebovi, žlebovi in vbodi ali odtisi in plastične aplikacije.[82] Z rdečim premazom so ornamentirane globoke posode, sklede, sklede na nogi in zajemalke s tulastim in polnim držajem.[83]

[78] Glej poglavje 3.3, v tem zborniku.

[79] Simonič 1939, 78–80.

[80] Glej poglavje 4.2.3.2.1.2, v tem zborniku.

[81] Glej poglavje 4, *t. 4.20:* 11; *4.21:* 5; *4.31:* 2; *4.33:* 2,4,7 itd., v tem zborniku.

[82] Glej poglavje 4, *t. 4.2:* 5,10,12; *4.4:* 8; *5.6:* 8; *4.7:* 2,8,9 itd., v tem zborniku.

[83] Glej poglavje 4, *t. 4.2:* 3,5,8,10,12,14,15; *4.32:* 11 itd., v tem zborniku.

Kombination mit Typologie und Modellvorstellungen versuchen kann, 'Kulturgeschichte' zu schreiben."

The settlement at Spaha will be chronologically evaluated in a similar manner. For the sake of clarity we will follow a scheme which at the moment seems the most appropriate for the central or south-Slovenian space and represents a compromise among the interpretations found in modern Slovenian archaeological writings[76]:

1. Late Neolithic: the Sava group;
2. Early Eneolithic: the Lasinja culture;
3. Middle Eneolithic: horizon of pottery with furrowed incisions (= HKBV) and then the period which is comparable to the development of early and classical Baden culture in the central Danubian region (cultural group Stare gmajne[77]).

5.3 SETTLEMENT CHRONOLOGY AT SPAHA

Hereon we will deal with the chronology of the settlement at Spaha and the chronology of the Neolithic as well as the earlier Eneolithic of continental Slovenia. First, the comparative analysis of finds, mostly pottery, will be performed and relative chronology set. Then there is a part representing the results of the radiocarbon dating, such data is unfortunately not available for Spaha but the discussion will include data from the typologically comparable sites, and absolute chronology.

5.3.1 RELATIVE CHRONOLOGY: COMPARATIVE TYPOLOGICAL ANALYSIS

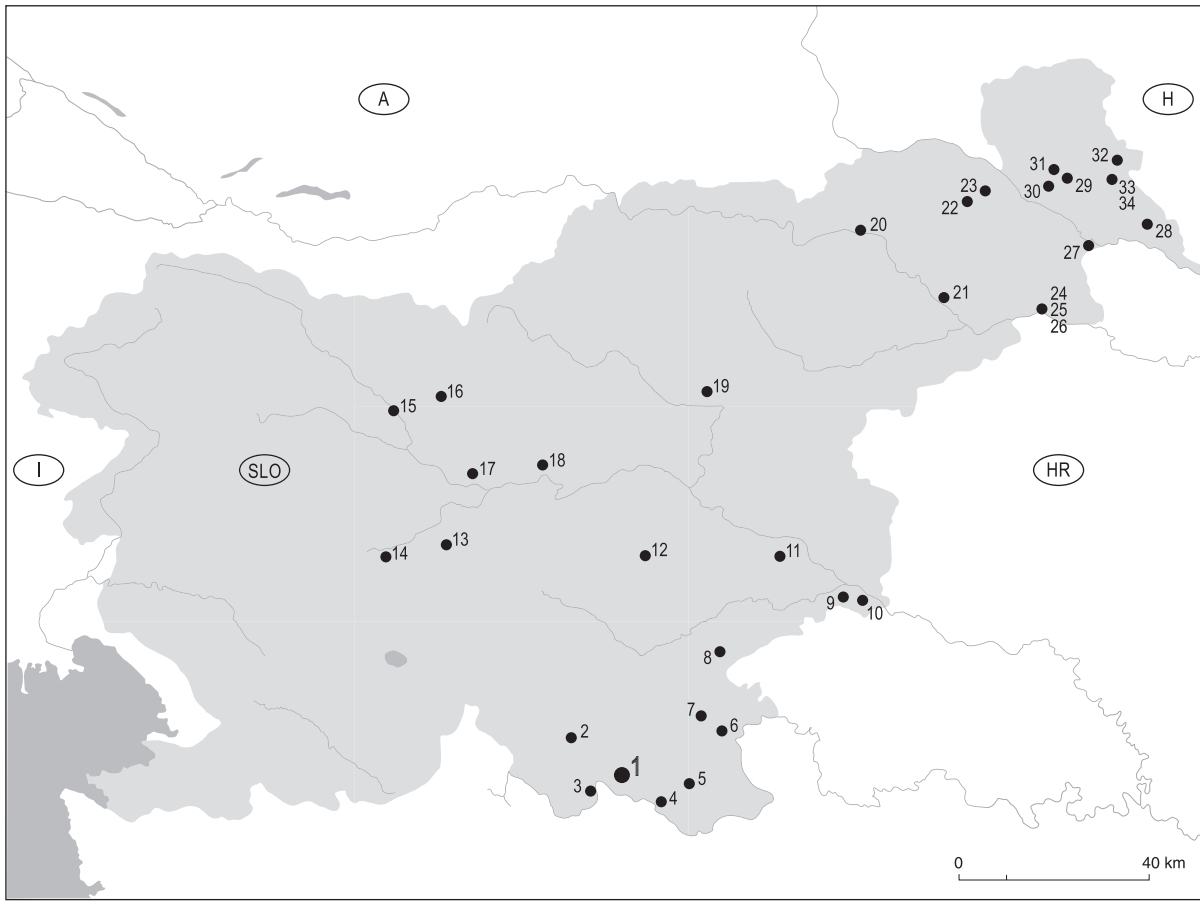
As seen in the chapter about the settlement structures, the settlement at Spaha was concentrated mainly on the upper plateau.[78] Thicker patches of soil on the prevailingly bedrock surface were chosen as the appropriate place for houses, which happened several times through prehistory. The last construction activity is documented at the beginning of the Modern Age when a scouting point, the s.c. beacon and a wooden watchtower with a built foundation was located at Spaha.[79] The consequence of these activities is the fact that finds from different periods are to a great extent mixed. Closed archaeological contexts, where we can be sure that the pottery belongs to one specific period, cannot be found or contain very few declaratory finds, thus the dating of settlement phases will be founded on the comparative typological analysis.

[76] Cf. Budja 1992; Velušček 1999a; 2004a; 2006a; 2009a; Guštin 2005a; Tomaž 2006.

[77] Velušček 2009b, 28–34.

[78] See chapter 3.3, in this monograph.

[79] Simonič 1939, 78–80.



Sl. 5.1: Karta neo- in eneolitskih najdišč Slovenije, ki so omenjena v poglavjih 5.3.1 in 5.3.2, v tem prispevku.
1 – Spaha, **2** – Ciganska jama, **3** – Kostel, **4** – Straža nad Gorenjimi Radenci, **5** – Ržišče, **6** – Gradac, **7** – Moverna vas, **8** – Grac pod Seli pri Zajčjem Vrhu, **9** – Čatež – Sredno polje, **10** – Col 1 pri Podgračenem, **11** – Ajdovska jama pri Nemški vasi, **12** – Gradec pri Mirni, **13** – Resnikov prekop, **14** – Hočevarica, **15** – Drulovka, **16** – Gradišče pri Stiški vasi, **17** – Dragomelj, **18** – Gradišče nad Dešnom, **19** – Šiman pri Gotovljah, **20** – Malečnik, **21** – Ptujski grad, **22** – Andrenci, **23** – Sodolek, **24** – Hardek, **25** – Hajndl, **26** – Škoršičev vrt, **27** – Šafarsko, **28** – Ivankovci, **29** – Zagonce, **30** – Pod Kotom – jug, **31** – Nova tabla, **32** – Bukovnica, **33** – Gorice pri Turnišču, **34** – Kalimovnjek.
Fig. 5.1: Map of Neo- and Eneolithic sites in Slovenia, mentioned in chapters 5.3.1 and 5.3.2, in this article.
1 – Spaha, **2** – Ciganska jama, **3** – Kostel, **4** – Straža above Gorenji Radenci, **5** – Ržišče, **6** – Gradac, **7** – Moverna vas, **8** – Grac under Sela pri Zajčjem Vrhu, **9** – Čatež – Sredno polje, **10** – Col 1 near Podgračeno, **11** – Ajdovska jama near Nemška vas, **12** – Gradec near Mirna, **13** – Resnikov prekop, **14** – Hočevarica, **15** – Drulovka, **16** – Gradišče near Stiška vas, **17** – Dragomelj, **18** – Gradišče above Dešen, **19** – Šiman near Gotovlje, **20** – Malečnik, **21** – Ptujski grad, **22** – Andrenci, **23** – Sodolek, **24** – Hardek, **25** – Hajndl, **26** – Škoršičev vrt, **27** – Šafarsko, **28** – Ivankovci, **29** – Zagonce, **30** – Pod Kotom – jug, **31** – Nova tabla, **32** – Bukovnica, **33** – Gorice near Turnišče, **34** – Kalimovnjek.

Analogij za rdeče premazovanje posod je v bližnji in daljni okolici Spahe veliko. Tako okrašena keramika je npr. na Straži nad Gorenjimi Radenci[84] in v Ciganski jami pri Kočevju.[85] V Moverni vasi se rdeče premazovanje posod pojavlja v naselbinskih fazah 2, 4–6,[86] pri čemer je tovrstni okras pogost predvsem na posodju iz druge in četrte naselbinske faze.[87] Na Gradcu pri Mirni je rdeč premaz prisoten na posodju iz najglobljih kulturnih slo-

In the analysis we will mostly not go into great detail since this would present the danger of missing the complete picture and excessively personifying the interpretation. Thus we will firstly give the broader *terminus ante quem non* for the settlement at Spaha, which, as will be seen here on, can be expanded to the entire Sava group or to the entire territory of continental Slovenia. Spaha, as one of the important prehistoric hilltop settlements with the oldest pottery in this area, does not significantly differ from other chronologically related sites. Namely, it also reveals pottery with predominantly red slip, vessels on foot, and deep vessels of the "S" profile with vertical ribbon handles.

[84] Dular 2001, 94, 96, t. 7: 15.
[85] Glej Velušček 2011, t. 1: 7,11; 4: 8.
[86] Budja 1992, 104, sl. 4.
[87] Tomaž 1999, 144–146.

jev, ki se ju uvršča v najstarejši (I.) kulturni horizont.[88] Keramika z rdečim premazom izhaja tudi iz druge plasti na Gracu pod Seli pri Zajčjem Vrhu, ki predstavlja najstarejšo poselitev.[89] Podobno je tudi v Ajdovski jami pri Nemški vasi. Keramika z rdečim premazom izvira iz najgloblje kulturne plasti (IV. horizont).[90] Iz poročila, ki ga je objavila P. Korošec,[91] celo izhaja, da sta bila 2 fragmenta od 5(!) naknadno poslikana z rumenkasto-belo barvo, kar se je kasneje izkazalo za neresnično.[92]

Pri večini od omenjenih primerov je nad plastjo s keramiko z rdečim premazom najti keramiko, ki se jo uvršča v lasinjsko kulturo. Najdemo pa jo tudi v "čistih" naselbinskih kontekstih, kot so npr. Resnikov prekop na Ljubljanskem barju,[93] Dragomelj pri Ljubljani[94] in Čatež – Sredno polje pri Brežicah.[95] Le-ti so radiokarbonsko datirani v okvirno 2. četrtino 5. tisočletja pr. Kr.[96]

Nekoliko drugače je v primeru naselja Sodolek, ki je locirano na zahodnem obrobju ščavniške doline, v bližini kraja Sv. Jurij ob Ščavnici. Skodela, domnevno okrašena z rdečerjavim premazom, se pojavlja v strukturi Hiša 1, ki je datirana v radiokarbonski čas 5524 ± 37 BP.[97] Keramične najdbe naj bi bile sicer enotne in značilne za lasinjsko kulturo. Na Hardeku, kjer je bilo odkrito lasinjsko naselje, je rdeč premaz najti na več posodah, med njimi na skledah, nogah, verjetno od skled na nogi, in loncih.[98] Enako velja tudi za Hajndl, kjer je rdeč premaz na loncu,[99] in Škoršičev vrt v Ormožu, kjer je navedeno, da je bila v posameznih primerih keramika premazana tudi z rdečim oz. rjavim premazom.[100] Podobno pa lahko rečemo tudi za posodje iz objekta PO 004 s Čateža – Sredno polje, ki je premazano s temno-rdečim premazom in se pojavlja v kontekstu značilne lasinjske keramike.[101]

Ugotovitve dajejo slutiti, da je rdeč premaz na posodah prisoten, a očitno redkeje, tudi v obdobju

[88] Dular et al. 1991, 88, 89.

[89] Pavlin 2006, 212, najdbe št. 4, 12, 13 in 33.

[90] Horvat 1986, 82, t. 1: 1,2,6.

[91] 1975, 170–209.

[92] "Ko govorimo o najstarejšem horizontu v desnem hodniku Ajdovske jame, pa moramo poudariti, da na lončenini v nobenem primeru nismo zasledili nikakršnih sledov slikanja površine. Aplicirano na gradivo iz levega hodnika bi to pomenilo, da ostanki jamske gline in sige na lončenini očitno niso bili pravilno interpretirani in zmotno označeni kot slikana površina posod" (Horvat 1986, 82).

[93] Velušček 2006b, 36.

[94] Turk, Svetličič 2005, 69.

[95] Tomaž 2005a, 113; Tomaž, Kavur 2006, npr. 73–75.

[96] Resnikov prekop (Velušček 2006b, 36; Čufar, Korenčič 2006, tab. 2), Dragomelj (Turk, Svetličič 2005, 69; Turk 2010, 41, 42) in Čatež – Sredno polje (Guštin 2005b, sl. 2, 4).

[97] Kavur, Tomaž, Mileusnić 2006, 121–128, najdba št. 4.

[98] Žižek 2006a, najdbe št. 3, 11, 18 in 27.

[99] Žižek 2006b, najdba št. 56.

[100] Tomanič - Jevremov, Tomaž, Kavur 2006a, 160, najdbi št. 7 in 22.

[101] Tiefengraber 2006c, 233, najdbe št. 3, 4 in 6.

The red slip is one of the oldest characteristics of pottery from Spaha. Fragments ornamented in this way are relatively numerous.[80] Mostly they originate from the deeper slices, such as trench II, slices 5–3, trench III, slices 5–3, trench IV, slice 4, trench VI/1, slice 3, and trench VI/2, slices 5 and 4. In trenches VI, VI/3, and VI/4 these can also be found higher up.[81] It is interesting that the red slip as an ornamental form frequently occurs in combination with other ornaments, such as incisions, incisions and impressions, grooves, grooves and stitch impressions, or impressions and appliqués.[82] The red slip ornaments deep vessels, dishes, dishes on foot, and ladles with a hollow and solid grip.[83]

Analogies for coating vessels red are numerous in the close and broad surroundings of Spaha, for example at Straža above Gorenji Radenci[84] and in Ciganska jama near Kočevje.[85] At Moverna vas red slip on vessels occurs in settlement phases 2, 4–6,[86] where this type of ornamentation is particularly frequent on vessels from the second and fourth settlement phase.[87] At Gradec near Mirna the red slip is present on vessels from the deepest cultural layers classified into the oldest (Ist) cultural horizon.[88] Pottery with red slip originates also from the second layer at Grac under Sela pri Zajčjem Vrhu, which represents the oldest settlement.[89] It is similar also in Ajdovska jama near Nemška vas. Pottery with red slip originates from the deepest cultural layer (horizon IV).[90] It is seen from the report published by P. Korošec[91] that 2 out of 5(!) fragments were subsequently painted with a yellowish white paint but which was later proven to be untrue.[92]

In most cases above the layer with pottery with red slip pottery from the Lasinja period can be found. But it is also found in "clear" settlement contexts, such as Res-

[80] See chapter 4.2.3.2.1.2, in this monograph.

[81] See chapter 4, *Pls. 4.20:* 11; *4.21:* 5; *4.31:* 2; *4.33:* 2,4,7 etc., in this monograph.

[82] See chapter 4, *Pls. 4.2:* 5,10,12; *4.4:* 8; *5.6:* 8; *4.7:* 2,8,9 etc., in this monograph.

[83] See chapter 4, *Pls. 4.2:* 3,5,8,10,12,14,15; *4.32:* 11 etc., in this monograph.

[84] Dular 2001, 94, 96, Pl. 7: 15.

[85] See Velušček 2011, Pls. 1: 7,11; 4: 8.

[86] Budja 1992, 104, Fig. 4.

[87] Tomaž 1999, 144–146.

[88] Dular et al. 1991, 88, 89.

[89] Pavlin 2006, 212, finds nos. 4, 12, 13, and 33.

[90] Horvat 1986, 82, Pl. 1: 1,2,6.

[91] 1975, 170–209.

[92] "When we discuss the oldest horizon in the right corridor of Ajdovska jama we must emphasize that we did not notice any signs of surface painting on pottery. Applied to the material from the left corridor this would mean that the remains of the cave clay and calcareous sinter on the pottery were obviously misinterpreted and erroneously characterised as the (yellowish white; author`s comm.) painted surface of vessels" (Horvat 1986, 82).

lasinjske kulture, ki na območju osrednjeslovenskega prostora nasledi savsko skupino.[102] Spaha verjetno dokazuje enako. Rdeč premaz se v glavnem pojavlja na keramiki, za katero najdemo analogije v krogu savske skupine in njej sočasnih kultur, nekaj pa je izjem, ki bi jih lahko uvrstili v lasinjsko kulturo.[103]

O keramiki z rdečim premazom poroča tudi S. Pahič[104] z naselbine Andrenci v Slovenskih goricah, ki jo uvrščamo v pozni Lengyel (Lengyel III).[105] V zahodni Panoniji, kjer domuje lengyelska kultura, so za njeni zgodnji dve fazi značilni najprej rdeče rumeno slikanje in vrezani motivi ter kasneje belo slikanje, medtem ko je za poznolengyelsko stopnjo karakteristična t. i. neslikana ("unpainted") keramika.[106] So pa tudi izjeme, kar kaže posodje s poznolengyelskega najdišča Zalaszentbalázs-Szőlőhegyi mező,[107] ki je sicer v manjšini, a vendar premazano z rdečim premazom. Le-ta se pojavlja predvsem na skodelah in skledah na nogi, poleg tega izkopavalci poročajo tudi o še redkejših fragmentih z motivi izvedenimi z rumeno, belo in črno barvo.[108, 109]

Posode z rdečim premazom poznamo že v tipu Ražište sopotske kulture.[110] Nato jim sledimo v brezovljanskem tipu[111] in drugi ter predvsem tretji in četrti stopnji sopotske kulture.[112] Pozna jih tudi "poznolengyelsko" najdišče Ozalj na Hrvaškem[113], enako kultura Seče.[114] Sočasno se v Avstriji tako ornamentirane posode pojavljajo na najdiščih stopnje MOG IIb, kjer je rdeč premaz lahko služil samo kot podlaga za vzorce pastozne bele barve,[115] in pozne lengyelske kulture,[116] medtem ko jih ni, kot se zdi, na najdiščih skupine Wolfsbach.[117] Na jugozahodu Slovaške je rdeč premaz na posodah, podobno kot drugod, v glavnem značilnejši za zgodnejše faze lengyelske kulture,[118] a se očitno pojavlja, sicer bolj poredko, tudi na eneolitski keramiki v skupinah Brodzany-Nitra in Ludanice.[119]

[102] Glej Guštin 2005b, sl. 4; prim. s Tomaž 1999, 147.

[103] Glej poglavje 4, *t. 4.9:* 9(?); *4.29:* 12, v tem zborniku.

[104] 1976, 57.

[105] Npr. Bánffy 2002, 46; Carnerio 2004a, 271; Tiefengraber 2006b, 102; Velušček 2006b, 33.

[106] Npr. Bánffy 1995b, 164; glej še Regeny 2006, 68.

[107] Glej komentar o rdečem premazu na npr. manjših keramičnih posodah pri Bánffy 1995b, 168.

[108] Bondár 1995, 54, 55; Bánffy 1994, 292; 1995a, 78, 79.

[109] Za podatke o premazovanju posod z barvo v poznolengyelskem obdobju glej še Horváth, Kalicz 2006, 63.

[110] Marković 1994, 77.

[111] Marković 1994, 79.

[112] Marković 1994, 84, 85, 158.

[113] Težak - Gregl 2001, 29.

[114] Marković 1994, 89.

[115] Carneiro 2004b, 108.

[116] Tiefengraber 2006a, 85.

[117] Glej Ruttkay 1995, 114, 116.

[118] Za izčrpne podatke o keramiki z rdečim premazom in njenem datiranju glej Carneiro 2004a, 267–271.

[119] Pavúk, Bátora 1995, 65, 66.

nikov prekop at the Ljubljansko barje,[93] Dragomelj near Ljubljana,[94] and Čatež – Sredno polje near Brežice.[95] Radiocarbon dates of these are approximately the 2nd quarter of the 5th millennium BC.[96]

Slightly different is the case of the settlement Sodolek, which is located at the western margin of the Ščavnica valley, near Sv. Jurij ob Ščavnici. A bowl, supposedly decorated with a red brown slip, appears in structure House 1, dated to the radiocarbon time 5524 ± 37 BP.[97] Pottery finds are generally unified and characteristic of the Lasinja culture. At Hardek, where a Lasinja settlement was discovered, red slip can be found on several vessels, among them on dishes, feet, probably from dishes on foot, and pots.[98] The same goes also for Hajndl, where the red slip is found on a pot,[99] and Škoršičev vrt in Ormož, where it is stated that pottery was in individual examples also coated red or brown.[100] The similar can be said for the vessels from context PO 004 from Čatež – Sredno polje, which is coated with a dark red slip and occurs in the context of the typical Lasinja pottery.[101]

These findings indicate that the red slip is also present on vessels but obviously not as frequently in the period of the Lasinja culture, which in the area of central Slovenia succeeds the Sava group.[102] Spaha probably proves the same. Red slip mostly appears on pottery, for which analogies can be found in the Sava group and cultures contemporary with it, nevertheless, there are some exceptions that can be attested to the Lasinja culture.[103]

S. Pahič[104] also reports about pottery with red slip from the settlement Andrenci in Slovenske gorice, which is classified into Late Lengyel (Lengyel III).[105] In western Pannonia, the home of the Lengyel culture, first the red yellow painting and incised motifs are typical for its early two phases and later white painting, while for the Late Lengyel period the s.c. unpainted pottery is characteristic.[106] There are also exceptions such as vessels from the

[93] Velušček 2006b, 36.

[94] Turk, Svetličič 2005, 69.

[95] Tomaž 2005a, 113; Tomaž, Kavur 2006, e.g. 73–75.

[96] Resnikov prekop (Velušček 2006b, 36; Čufar, Korenčič 2006, Tab. 2), Dragomelj (Turk, Svetličič 2005, 69; Turk 2010, 41, 42), and Čatež – Sredno polje (Guštin 2005b, Figs. 2, 4).

[97] Kavur, Tomaž, Mileusnić 2006, 121–128, find no. 4.

[98] Žižek 2006a, finds nos. 3, 11, 18, and 27.

[99] Žižek 2006b, find no. 56.

[100] Tomanič - Jevremov, Tomaž, Kavur 2006a, 160, finds nos. 7 and 22.

[101] Tiefengraber 2006c, 233, finds nos. 3, 4, and 6.

[102] See Guštin 2005b, Fig. 4; cf. Tomaž 1999, 147.

[103] See chapter 4, *Pls. 4.9:* 9(?); *4.29:* 12, in this monograph.

[104] 1976, 57.

[105] E.g. Bánffy 2002, 46; Carnerio 2004a, 271; Tiefengraber 2006b, 102; Velušček 2006b, 33.

[106] E.g. Bánffy 1995b, 164; see also Regeny 2006, 68.

Poleg keramike z rdečim premazom je na Spahi prisoten tudi črni premaz. Tako okrašeni fragmenti so manj številni od rdeče premazanih in kot je videti se premaz pojavlja na posodah drugačnih oblik.[120] Posebej izstopajo odlomki, ki jih lahko zanesljivo uvrstimo v lasinjsko kulturo,[121] kot da gre za značilnost, ki je bližja tej kulturi.

Za keramiko s črnim premazom je veliko manj analogij po slovenskih najdiščih. V manjšem številu jo najdemo v drugi poselitveni fazi Moverne vasi[122] in na Resnikovem prekopu.[123] Črn premaz se pojavlja tudi na lasinjski posodi s Hardeka pri Ormožu,[124] v posameznih primerih tudi na podobno stari keramiki s Škoršičevega vrta v Ormožu.[125]

Naslednja pomembna značilnost so noge kot sestavni del posod na nogi. Največkrat gre za sklede raznih tipov. Prevladujejo visoke votle (cevaste oz. zvonaste) noge.[126] Na fragmentih nog so pogosto ostanki rdečega premaza, kar velja tako za votle kot tudi za masivne noge. Noge, ornamentirane z vrezi, so manj številne.[127] Kombinacijo vrezovanja z rdečim premazovanjem smo našli samo na enem fragmentu.[128]

Analogij za posode na visoki, redkeje nizki votli nogi je po slovenskih najdiščih veliko. Poznamo jih iz najstarejših (neolitskih) poselitvenih faz v Moverni vasi,[129] z Gradca pri Mirni,[130] Resnikovega prekopa,[131] Dragomlja,[132] Čateža – Sredno polje[133] in med poznolengyelskimi najdbami iz Bukovnice.[134]

Na Spahi je v enem primeru manjša noga polna oz. masivna.[135] Z najdišča Čatež – Sredno polje sta objavljeni dve primerljivi nogi, od tega je ena z luknjo.[136] K njima lahko prištejemo tudi nogi iz Dragomlja[137] in Drulovke.[138] Njihovo število ni veliko, kar kaže, da je

[120] Glej poglavje 4, *t. 4.5:* 1; *4.6:* 13–15; *4.7:* 1,4; *4.9:* 4; *4.13:* 10; *4.18:* 2; *4.20:* 15; *4.35:* 6, v tem zborniku.

[121] Glej poglavje 4, *t. 4.5:* 1; *4.6:* 13; *4.9:* 4; *4.13:* 10; *4.18:* 2, v tem zborniku.

[122] Tomaž 1999, 144.

[123] Tomaž 1999, 78.

[124] Žižek 2006a, 137–138, najdba št. 36.

[125] Tomanič - Jevremov, Tomaž, Kavur 2006a, 160.

[126] Glej poglavje 4, *sl. 4.13:* Vn; *t. 4.2:* 14; *4.3:* 2,3; *4.4:* 3,4 itd., v tem zborniku.

[127] Glej poglavje 4, *t. 4.19:* 7; *4.32:* 1, v tem zborniku.

[128] Glej poglavje 4, *t. 4.21:* 7, v tem zborniku.

[129] Npr. Tomaž 1999, t. MV3: 3,4; MV4: 1–3,5; MV5: 2,3; MV16: 4; MV20: 1,2; MV29: 1,2; MV34: 2,4 itd.

[130] Dular et al. 1991, t. 22: 10.

[131] Npr. Korošec 1964, t. 6: 4; 13: 3; 14: 5; 18: 4.

[132] Turk, Svetličič 2005, najdbe št. 22, 32 in 50.

[133] Tomaž 2005a, najdbe št. 8, 35 in 36; 2008, sl. 21: 4; 26; 29.

[134] Šavel 1992, t. 3: 1–7.

[135] Glej poglavje 4, s*l. 4.13:* Mn; *t. 4.35:* 13, v tem zborniku.

[136] Tomaž 2005a, najdbi št. 7 in 37.

[137] Turk, Svetličič 2005, najdba št. 25.

[138] Guštin, Tomaž, Kavur 2005, 43–47, najdba št. 19 – noga sodi med najdbe, ki jih avtorji uvrščajo v savsko skupino!

Late Lengyel site Zalaszentbalázs-Szőlőhegyi mező,[107] which is to a smaller extent but still coated red. The red slip appears primarily on bowls and dishes on foot, but the excavators also report of even rarer fragments with motifs in yellow, white, and black colour.[108, 109]

Vessels with red slip are known already from the type Ražište of the Sopot culture.[110] Further on we can trace them in the type Brezovljani[111] and in the second and predominantly the third stage of the Sopot culture.[112] They are also known at the "Late Lengyel" site Ozalj in Croatia,[113] and also the Seče culture.[114] Simultaneously in Austria, in this way ornamented vessels appear at sites MOG IIb, where the red slip served only as a background for patterns made of pasty white colour,[115] and Late Lengyel culture,[116] while they seem to be absent at sites of the Wolfsbach group.[117] In the southwest of Slovakia the red slip on vessels is, similarly to elsewhere, mainly characteristic of earlier phases of the Lengyel culture,[118] but appears also, even if rarely, on the Eneolithic pottery in the groups Brodzany-Nitra and Ludanice.[119]

Black slip also appears at Spaha. Thus ornamented fragments are less numerous than the red coated and, as it seems, this slip appears on vessels of different shape.[120] Especially outstanding are those fragments which can be assigned to the Lasinja culture,[121] as if this were a characteristic closer to this culture.

There are much less analogies for the pottery with black slip at the Slovenian sites. A small number is found in the second settlement phase of Moverna vas[122] and at Resnikov prekop.[123] Black slip also appears on the Lasinja vessels from Hardek near Ormož,[124] individual examples also on similarly old pottery from Škoršičev vrt in Ormož.[125]

[107] See the comment about the red slip on e.g. smaller pottery vessels at Bánffy 1995b, 168.

[108] Bondár 1995, 54, 55; Bánffy 1994, 292; 1995a, 78, 79.

[109] For data about coating vessels with colour in the Late Lengyel period see also Horváth, Kalicz 2006, 63.

[110] Marković 1994, 77.

[111] Marković 1994, 79.

[112] Marković 1994, 84, 85, 158.

[113] Težak - Gregl 2001, 29.

[114] Marković 1994, 89.

[115] Carneiro 2004b, 108.

[116] Tiefengraber 2006a, 85.

[117] See Ruttkay 1995, 114, 116.

[118] For comprehensive data about pottery with red slip and its dating see Carneiro 2004a, 267–271.

[119] Pavúk, Bátora 1995, 65, 66.

[120] See chapter 4, *Pls. 4.5:* 1; *4.6:* 13–15; *4.7:* 1,4; *4.9:* 4; *4.13:* 10; *4.18:* 2; *4.20:* 15; *4.35:* 6, in this monograph.

[121] See chapter 4, *Pls. 4.5:* 1; *4.6:* 13; *4.9:* 4; *4.13:* 10; *4.18:* 2, in this monograph.

[122] Tomaž 1999, 144.

[123] Tomaž 1999, 78.

[124] Žižek 2006a, 137–138, find no. 36.

[125] Tomanič - Jevremov, Tomaž, Kavur 2006a, 160.

takšen tip noge za obdobje, ki ga ta naselja opisujejo, manj značilen.[139]

Keramične posode na nogah poznajo že najstarejše kulture. Tako jih najdemo npr. po najdiščih starčevske kulture na Hrvaškem.[140] V sopotski kulturi sprva prevladujejo masivnejše noge, kasneje pa so pogostejše votle noge, ki imajo lahko tudi luknjo v steni.[141]

Posode na nogah, predvsem visokih, pozna tudi lengyelska kultura.[142] Med njimi so nekatere z luknjo v steni in datirajo v poznolengyelsko obdobje,[143], [144] lahko pa so tudi mlajše.[145] V poznolengyelski fazi se pojavijo tudi votle noge z razširitvijo na zgornjem delu,[146] ki so pri nas značilne predvsem za najdišča lasinjske kulture.[147] Pozna jih tudi ludaniška skupina na Slovaškem.[148]

Tudi globoke posode[149] "S" profila z razmeroma kratkima vertikalnima trakastima ročajema na ramenu oz. vratu[150] sodijo med najstarejše najdbe na Spahi. Na nekaterih so ohranjeni sledovi rdečega premaza[151] oz. je rame ornamentirano z žlebovi.[152]

[139] Masivne noge se pojavljajo tudi v mlajših obdobjih. Tako jo npr. najdemo na najdiščih ludaniške skupine (Pavúk, Bátora 1995, sl. 36: 10).

[140] Dimitrijević 1979a, t. 41: 5; 42: 1,4; 44: 4.

[141] Dimitrijević 1968, t. 2: 12; 3: 4,13; 4: 9; 5: 9; 7: 3,4,6,7; 8: 7,8; 13: 3; 16: 2,8,9; 18: 11,12; 1979a, sl. 15: 8,9,24,25; 16: 7,15,16,23,24; brezovljanski tip sopotske kulture: sl. 19: 10,11,15; glej še Marković 1994, sopotska kultura: t. 7: 4; 8: 7; 9: 2; 10: 3; ražište tip sopotske kulture: t. 12: 4; brezovljanski tip sopotske kulture: t. 14: 5; Krznarić - Škrivanko 2006, najdbi št. 6 in 7; Balen, Potrebica 2006, 24, najdbe št. 32–34 (brezovljanski tip); Balen et al. 2009, t. 1: 1,2,7–9,13; 2: 1; 4: 6.

[142] Npr. Dombay 1960, t. 97; 98; 102: 1; 107; 112; Kalicz 1991, sl. 2: 5; 1998, sl. 41: 5,9,14 itd.; Točík 1991, sl. 1: 16a; 2: 12,16; Carneiro 2006a, t. 2: 8; 3: 4,11; 10: 7–12 itd.

[143] Npr. Bondár 1995, t. 70: 180; Bánffy 1995a, 89, t. 96: 161; 107: 247.

[144] Gre tudi za eno izmed pomembnih značilnosti tiszapolgárske keramike z grobišča Tiszapolgár-Basatanya (Bognár - Kutzián 1963, t. 127 itd.).

[145] Npr. keramika z ludaniške naselbine Jelšovce (Pavúk, Bátora 1995, 53, sl. 32: 2) in bodrogkeresztúrskega dela grobišča Tiszapolgár-Basatanya (Bognár - Kutzián 1963, t. 136: H1,H2; 137: Ia,Ib).

[146] Pavúk 1981, sl. 12: 23; 13: 15; Bánffy 1995b, 168, sl. 9; glej še Carneiro 2004b, t. 11: 5.

[147] Npr. Šavel 1992, t. 7: 4; Tomaž 1999, t. MV38: 2 (Moverna vas: 7. lasinjska faza); Žižek 2006b, najdbi št. 80 in 83.

[148] Npr. Pavúk, Bátora 1995, 53, sl. 32: 2; 37: 4,9 itd.

[149] Vrči ali amfore in globokim skledam z ročaji podobne oblike.

[150] Glej poglavje 4, *t. 4.1:* 6,7; *4.2:* 3; *4.4:* 18; *4.7:* 8,10; *4.12:* 1,2; *4.14:* 19; *4.23:* 11; *4.24:* 7; *4.29:* 18; *4.30:* 9,13,14; *4.32:* 7, v tem zborniku.

[151] Poglavje 4, *t. 4.2:* 3; *4.7:* 8; *4.14:* 19; *4.23:* 11; *4.24:* 7; *4.29:* 18; *4.32:* 7, v tem zborniku.

[152] Poglavje 4, *t. 4.1:* 6; *4.7:* 8; *4.23:* 11; *4.32:* 7, v tem zborniku.

The next important characteristic is feet as a component part of vessels on foot. Most frequently these are dishes of various types. Prevalent are high hollow (tubular or bell-shaped) feet.[126] Fragments of feet frequently reveal remains of red slip, on both hollow and massive feet. Less frequent are feet ornamented with incisions.[127] The combination of incisions and red slip was discovered in a single example.[128]

Analogies for vessels on high, rarely low hollow foot are numerous along the Slovenian sites. They are known from the oldest (Neolithic) settlement phases in Moverna vas,[129] from Gradec near Mirna,[130] Resnikov prekop,[131] Dragomelj,[132] Čatež – Sredno polje,[133] and among Late Lengyel finds from Bukovnica.[134]

At Spaha, in one example a smaller foot is full or massive.[135] Two comparable feet are published from the site Čatež – Sredno polje, one of them has a perforation.[136] Two feet from Dragomelj[137] and Drulovka[138] can be also ascribed to these. Their number is not big which indicates that this type of foot is less characteristic for the period of these settlements.[139]

Pottery on foot is known already from the oldest cultures. Thus it can be found, for example, at sites of the Starčevo culture in Croatia.[140] In the Sopot culture, at first more massive feet prevail but later hollow feet are more frequent, and some also have a perforation in the wall.[141]

[126] See chapter 4, *Fig. 4.13:* Vn; *Pls. 4.2:* 14; *4.3:* 2,3; *4.4:* 3,4 etc., in this monograph.

[127] See chapter 4, *Pls. 4.19:* 7; *4.32:* 1, in this monograph.

[128] See chapter 4, *Pl. 4.21:* 7, in this monograph.

[129] E.g. Tomaž 1999, Pls. MV3: 3,4; MV4: 1–3,5; MV5: 2,3; MV16: 4; MV20: 1,2; MV29: 1,2; MV34: 2,4 etc.

[130] Dular et al. 1991, Pl. 22: 10.

[131] E.g. Korošec 1964, Pls. 6: 4; 13: 3; 14: 5; 18: 4.

[132] Turk, Svetličič 2005, finds nos. 22, 32, and 50.

[133] Tomaž 2005a, finds nos. 8, 35, and 36; 2008, Figs. 21: 4; 26; 29.

[134] Šavel 1992, Pl. 3: 1–7.

[135] See chapter 4, *Fig. 4.13:* Mn; *Pl. 4.35:* 13, in this monograph.

[136] Tomaž 2005a, finds nos. 7 and 37.

[137] Turk, Svetličič 2005, find no. 25.

[138] Guštin, Tomaž, Kavur 2005, 43–47, find no. 19 – the foot belongs among finds which the authors assign to the Sava group!

[139] Massive feet occur also in younger periods. Thus they are found at e.g. sites of the Ludanice group (Pavúk, Bátora 1995, Fig. 36: 10).

[140] Dimitrijević 1979a, Pls. 41: 5; 42: 1,4; 44: 4.

[141] Dimitrijević 1968, Pls. 2: 12; 3: 4,13; 4: 9; 5: 9; 7: 3,4,6,7; 8: 7,8; 13: 3; 16: 2,8,9; 18: 11,12; 1979a, Figs. 15: 8,9,24,25; 16: 7,15,16,23,24; Brezovljani type of the Sopot culture: Figs. 19: 10,11,15; see also Marković 1994, the Sopot culture: Pls. 7: 4; 8: 7; 9: 2; 10: 3; Ražište type of the Sopot culture: Pl. 12: 4; Brezovljani type of the Sopot culture: Pl. 14: 5; Krznarić - Škrivanko 2006, finds nos. 6 and 7; Balen, Potrebica 2006, 24, finds nos. 32–34 (Brezovljani type); Balen et al. 2009, Pls. 1: 1,2,7–9,13; 2: 1; 4: 6.

Paralele zanje so v najstarejših poselitvenih fazah Moverne vasi,[153] kot tudi Gradca pri Mirni,[154] v Ozlju,[155] Čatežu – Sredno polje,[156] Colu 1 pri Podgračenem,[157] na Resnikovem prekopu[158] in v Dragomlju.[159]

Po podatkih iz Ajdovske jame se posode z vertikalnima trakastima ročajema pojavljajo tudi v mlajših lasinjskih kontekstih.[160] Najdemo jih npr. še na lasinjskem najdišču Hardek[161] in med lasinjskimi najdbami v Bukovnici.[162]

Po drugi strani posode "S" profila z ročaji, ki so primerljive keramiki s Spahe,[163] pozna poznolengyelski del naselbine v Bukovnici.[164] Gre namreč za eno izmed pomembnih tipoloških značilnosti, ki se v okviru lengyelske kulture dejansko uveljavi šele v njeni tretji, tj. pozni fazi.[165] Na Hrvaškem jih zaradi vpliva vinčanske kulture sicer najdemo že v drugi stopnji sopotske kulture,[166], [167] značilnejše pa so za kulturo Seče.[168] Poznata jih tudi skupini Wolfsbach[169] in Brodzany-Nitra.[170]

[153] Glej Tomaž 1999, t. MV9: 2–5; MV10: 1–3; MV12: 1; MV16: 7; MV21: 2; MV23: 1,2; MV26: 4; MV29: 3,4; MV32: 6.

[154] Dular et al. 1991, t. 24: 14.

[155] Naselbinski ostanki iz poznolengyelskega obdobja (Lengyel III) (po Težak - Gregl 2001, 29, t. 1: 7; 3: 3).

[156] Savska skupina (Guštin 2005b, najdba št. 10).

[157] Horvat 2005, sl. 11: najdbi št. 18 in 20.

[158] Savska skupina (glej Korošec 1964, t. 4: 3,6; 5: 5; 7: 11; 14: 9; 16: 1; 17: 6; Harej 1975, t. 1: 1,5,9; 2: 1,2; 6: 1; 7: 12 itd.).

[159] Savska skupina (glej Turk, Svetličič 2005, 65–79, najdbi št. 11 in 49).

[160] Horvat 1986, 82, t. 3: 1; Horvat 1989, t. 9: 160.

[161] Žižek 2006a, najdbe št. 23, 24, 26 in 31.

[162] Šavel 1992, t. 9: 1,2; 15: 1.

[163] Glej poglavje 4, *t. 4.7:* 10; *4.24:* 7, v tem zborniku.

[164] Šavel 1992, t. 2: 5,6; 5: 10,11.

[165] Pavúk 1981, 279, 281, 294, sl. 13: 8,17; Kalicz 1991, 351, sl. 2: 6,11,13,18; 2001, 15; Bánffy 1995b, 167–169, sl. 9; Horváth, Kalicz 2006, 58, najdbe št. 21–27, 29 in 30; za primerjavo glej še Ruttkay 1991, 166; Zalai - Gaál 2003, 285–309; Regeny 2006, 68, najdba št. 29.

[166] Marković 1994, 84, t. 8: 8.

[167] Primerljive globoke posode z ročaji (Balen et al. 2009, t. 2: 7; 3: 5; 4: 1) poznamo s sopotskega najdišča Ivandvor – šuma Gaj, ki ga J. Balen relativno kronološko uvršča v stopnjo Sopot I-B/II. Ena izmed takšnih posod izhaja iz SE 195, ki je radiokarbonsko datirana z datumom 5640 ± 40 (Beta-241648) (Balen et al. 2009, tab. 3; t. 3: 5). Za to najdišče je pomenljivo tudi to, da se sicer pojavlja enovita keramika, značilna za zgoraj omenjeno stopnjo, radiokarbonski vzorci pa se grupirajo v dve skupini: starejšo od 5050 do 4780 pr. Kr. in mlajšo od 4730 do 4490 pr. Kr. (Balen et al. 2009, 33). Datumski razponi za mlajšo skupino (sum radiokarbonskih datumov za vzorce Beta-241649, Beta-241648 in Beta-226731 z 68,2 % verjetnostjo da razpon od 4663 do 4366 pr. Kr. (datumi so kalibrirani s programom OxCal v4.0.5 Bronk Ramsey (2007)), pa se delno prekrivajo s primerljivimi podatki za savsko skupino (glej v nadaljevanju).

[168] Marković 1994, 89, t. 19: 10; 19a: 9; 19b: 1,5.

[169] Npr. Ruttkay 1995, sl. 2: 14.

[170] Npr. Beran 1999, 16, t. 33: 21.

Vessels on feet, primarily high, are also known to the Lengyel culture.[142] Among them some have a perforation in the wall and date to the Late Lengyel period,[143], [144] and can also be younger.[145] In the Late Lengyel phase hollow feet with a widening on the upper part[146] appear and these are in Slovenia characteristic mostly for the sites of the Lasinja culture.[147] They are also known to the Ludanice group in Slovakia.[148]

Deep vessels[149] of the "S" profile with a relatively short vertical ribbon handles at the shoulder or neck[150] also belong among the oldest finds from Spaha. Some have preserved traces of red slip[151] or the shoulder is ornamented with grooves.[152]

Parallels for them are found in the oldest settlement phases of Moverna vas[153] and also at Gradec near Mirna,[154] Ozalj,[155] Čatež – Sredno polje,[156] Col 1 near Podgračeno,[157] Resnikov prekop,[158] and Dragomelj.[159]

According to the data from Ajdovska jama vessels with vertical ribbon handles appear also in younger

[142] E.g. Dombay 1960, Pls. 97; 98; 102: 1; 107; 112; Kalicz 1991, Fig. 2: 5; 1998, Fig. 41: 5,9,14 etc.; Točík 1991, Figs. 1: 16a; 2: 12,16; Carneiro 2006a, Pls. 2: 8; 3: 4,11; 10: 7–12 etc.

[143] E.g. Bondár 1995, Pl. 70: 180; Bánffy 1995a, 89, Pls. 96: 161; 107: 247.

[144] It is also one of the important characteristics of the Tiszapolgár pottery from the burial ground Tiszapolgár-Basatanya (Bognár - Kutzián 1963, Pl. 127 etc.).

[145] E.g. pottery from the Ludanice settlement Jelšovce (Pavúk, Bátora 1995, 53, Fig. 32: 2) and Bodrogkeresztúr part of the cemetery Tiszapolgár-Basatanya (Bognár - Kutzián 1963, Pls. 136: H1,H2; 137: Ia,Ib).

[146] Pavúk 1981, Figs. 12: 23; 13: 15; Bánffy 1995b, 168, Fig. 9; see also Carneiro 2004b, Pl. 11: 5.

[147] E.g. Šavel 1992, Pl. 7: 4; Tomaž 1999, Pl. MV38: 2 (Moverna vas: Lasinja phase 7); Žižek 2006b, finds nos. 80 and 83.

[148] E.g. Pavúk, Bátora 1995, 53, Figs. 32: 2; 37: 4,9 etc.

[149] Jugs and amphorae and to deep vessels with handles similar shapes.

[150] See chapter 4, *Pls. 4.1:* 6,7; *4.2:* 3; *4.4:* 18; *4.7:* 8,10; *4.12:* 1,2; *4.14:* 19; *4.23:* 11; *4.24:* 7; *4.29:* 18; *4.30:* 9,13,14; *4.32:* 7, in this monograph.

[151] Chapter 4, *Pls. 4.2:* 3; *4.7:* 8; *4.14:* 19; *4.23:* 11; *4.24:* 7; *4.29:* 18; *4.32:* 7, in this monograph.

[152] Chapter 4, *Pls. 4.1:* 6; *4.7:* 8; *4.23:* 11; *4.32:* 7, in this monograph.

[153] See Tomaž 1999, Pls. MV9: 2–5; MV10: 1–3; MV12: 1; MV16: 7; MV21: 2; MV23: 1,2; MV26: 4; MV29: 3,4; MV32: 6.

[154] Dular et al. 1991, Pl. 24: 14.

[155] Settlement remains from the Late Lengyel period (Lengyel III) (according to Težak - Gregl 2001, 29, Pls. 1: 7; 3: 3).

[156] The Sava group (Guštin 2005b, find no. 10).

[157] Horvat 2005, Fig. 11: finds nos. 18 and 20.

[158] The Sava group (see Korošec 1964, Pls. 4: 3,6; 5: 5; 7: 11; 14: 9; 16: 1; 17: 6; Harej 1975, Pls. 1: 1,5,9; 2: 1,2; 6: 1; 7: 12 etc.).

[159] The Sava group (see Turk, Svetličič 2005, 65–79, finds nos. 11 and 49).

V mlajšem obdobju, se pravi v lasinjski kulturi, so pogostejše posode z rahlo presegajočimi ročaji, ki so modelirani iz ustja in povezujejo kolenčasto rame. Pojavljajo se na globokih posodah, kot so vrči, amfore in razni tipi običajno globljih skled oz. skodel.[171] Podobne variante posod najdemo v manjšem številu že v poznolengyelskem obdobju oz. redko tudi pred tem.[172]

Na Spahi so pogostejše posode, največkrat gre za vrče, s presegajočim ročajem.[173] V to skupino lahko prištejemo tudi fragmente, na katerih ročaj ni ohranjen oz. morda ga tudi ni bilo.[174] Analogije zanje najdemo po številnih lasinjskih najdiščih v Sloveniji, od Moverne vasi,[175] Ajdovske jame,[176] Šafarskega,[177] Zagonc[178] do Bukovnice,[179] in na Hrvaškem.[180] V okviru kulture Balaton-Lasinja v zahodni Panoniji na Madžarskem[181] in v Avstriji, v krogu skupine Bisamberg-Oberpullendorf.[182]

Na podlagi zgoraj navedenih ugotovitev lahko sklenemo, da rdeč ali črn premaz na keramiki sam po sebi ne more biti kriterij za uvrščanje posod, bodisi v savsko skupino bodisi lasinjsko kulturo, kar menita tudi J. Pavúk in J. Bátora za najdbe Spahi kronološko primerljivih najdišč z jugozahoda Slovaške.[183] Na keramiki iz osrednje in južne Slovenije sicer prevladuje rdeč premaz, pri čemer se zdi, da gre za eno izmed osnovnih značil-

[171] S Spahe v to skupino lahko vključimo samo dve posodi iz poglavja 4, *t. 4.23:* 3; *4.24:* 1, v tem zborniku, pri čemer ima druga posoda analogije tudi na lasinjskih najdiščih (glej npr. Horvat - Šavel 1980, t. 2: 5). Kakorkoli že, najdbe prim. s keramiko iz skupine Wolfsbach (Ruttkay 1995, sl. 2: 4; 3: 13), Lengyel III (Bánffy 1995b, sl. 8; Bondár 1995, t. 54: 27; 57: 61,66; 59: 81,86 itd.; Težak - Gregl 2001, t. 1: 2,5,6; 2: 5; 3: 2,4 itd.), kulture Seče (Marković 1994, t. 18: 1,7; 19: 5,8; 19a: 5) in savske skupine (npr. Tomaž 1999, t. MV2: 4; MV9: 1; MV20: 5,6; MV24: 1; MV27: 4,5; MV30: 1; 2005a, najdbe št. 11, 14 in 40) itd.

[172] Npr. Podborský 1970, sl. 12: 19; Budja 1992, sl. 4: fazi 4 in 5; Marković 1994, t. 17a: 10; Ruttkay 1995, sl. 3: 13; Težak - Gregl 2001, t. 1: 2,6; 2: 5; 3: 2,4; Regeny 2006, 68, najdba št. 11.

[173] Poglavje 4, npr. *t. 4.3:* 14; *4.5:* 5; *4.7:* 6; *4.9:* 4; *4.13:* 7; *4.19:* 16; *4.20:* 3,17; *4.23:* 4; *4.26:* 3; *4.28:* 6; *4.34:* 1, v tem zborniku.

[174] V to skupino vključujemo posode oblik Ob2 in Ob3 (glej poglavje 4, *sl. 4.1:* Ob2, Ob3: 1,2, v tem zborniku, in prim z npr. Horvat 1989, t. 7).

[175] Budja 1992, sl. 4: faza 7.

[176] Horvat 1989, t. 1: 108; 2; 3; 4: 467,434; 5; 6: 435,267; 8: 468; 9: 469.

[177] Horvat - Šavel 1984, t. 3: 1; 7: 3; 9: 3; Šavel 2006, sl. 3, najdba št. 27.

[178] Kavur 2006, najdba št. 2.

[179] Šavel 1992, t. 7: 5; 10: 2,8; 13: 16.

[180] Npr. Dimitrijević 1961, t. 7: 45c; 18: 142; Marković 1994, t. 21: 1,3; 22A: 1,4.

[181] Npr. Kalicz 1991, sl. 3; 4: 1–3,11.

[182] Npr. Ruttkay 1995, sl. 4: 1,12,13; 6: 4.

[183] "Vorläufig ist nur aufmerksam zu machen, daß das Vorkommen von Rot- oder Weißbemalung auf der Lengyel-Keramik selbst kein apriorisches Kriterium für ihre Datierung ist" (1995, 66).

Lasinja contexts.[160] They are found also at e.g. Lasinja site Hardek[161] and among the Lasinja finds in Bukovnica.[162]

On the other hand, vessels of the "S" profile with handles, comparable to the pottery from Spaha,[163] are known to the Late Lengyel part of the settlement at Bukovnica.[164] Namely, this is one of the important typological characteristics, which is within the Lengyel culture actually established no earlier than in its third, e.g. late phase.[165] In Croatia, due to the influence of the Vinča culture, they are found already in the second stage of the Sopot culture,[166], [167] but are more typical of the Seče culture.[168] They are also known to the Wolfsbach[169] and Brodzany-Nitra groups.[170]

In the younger period, therefore the Lasinja culture, vessels with slightly surpassing handles modelled from the lip and connecting the knee-shaped shoulder are more frequent. They occur on the deep vessels like jugs, amphorae, and various types of usually deeper dishes or bowls.[171] Similar variants of vessels are found in a

[160] Horvat 1986, 82, Pl. 3: 1; Horvat 1989, Pl. 9: 160.

[161] Žižek 2006a, finds nos. 23, 24, 26, and 31.

[162] Šavel 1992, Pls. 9: 1,2; 15: 1.

[163] See chapter 4, *Pls. 4.7:* 10; *4.24:* 7, in this monograph.

[164] Šavel 1992, Pls. 2: 5,6; 5: 10,11.

[165] Pavúk 1981, 279, 281, 294, Fig. 13: 8,17; Kalicz 1991, 351, Fig. 2: 6,11,13,18; 2001, 15; Bánffy 1995b, 167–169, Fig. 9; Horváth, Kalicz 2006, 58, finds nos. 21–27, 29, and 30; for comparison see also Ruttkay 1991, 166; Zalai - Gaál 2003, 285–309; Regeny 2006, 68, find no. 29.

[166] Marković 1994, 84, Pl. 8: 8.

[167] Comparable deep vessels with handles (Balen et al. 2009, Pls. 2: 7; 3: 5; 4: 1) are known from the Sopot site Ivandvor – šuma Gaj, which is by J. Balen relatively chronologically assigned to Sopot I-B/II. One of such vessels originates from SE 195, which has a radiocarbon date 5640 ± 40 (Beta-241648) (Balen et al. 2009, Tab. 3; Pl. 3: 5). Significant for this site is also that the pottery is generally unified and characteristic for the above mentioned period but the radiocarbon samples are assembled into two groups: the older from 5050 to 4780 BC and younger from 4730 to 4490 BC (Balen et al. 2009, 33). Date ranges for the younger group (sum of the radiocarbon dates for samples Beta-241649, Beta-241648, and Beta-226731 with 68.2 % probably gives the range from 4663 to 4366 BC (data are calibrated with the programme OxCal v4.0.5 Bronk Ramsey (2007)), and partly overlap with comparable data for the Sava group (see hereon)).

[168] Marković 1994, 89, Pls. 19: 10; 19a: 9; 19b: 1,5.

[169] E.g. Ruttkay 1995, Fig. 2: 14.

[170] E.g. Beran 1999, 16, Pl. 33: 21.

[171] From Spaha this group can include only two vessels from chapter 4, *Pls. 4.23:* 3; *4.24:* 1, in this monograph, where the second vessel also has analogies on Lasinja sites (see e.g. Horvat - Šavel 1980, Pl. 2: 5). Be as it may, finds can be compared to pottery from the groups Wolfsbach (Ruttkay 1995, Figs. 2: 4; 3: 13), Lengyel III (Bánffy 1995b, Fig. 8; Bondár 1995, Pls. 54: 27; 57: 61,66; 59: 81,86 etc.; Težak - Gregl 2001, Pls. 1: 2,5,6; 2: 5; 3: 2,4 etc.), the Seče culture (Marković 1994, Pls. 18: 1,7; 19: 5,8; 19a: 5), and the Save group (e.g. Tomaž 1999, Pls. MV2: 4; MV9: 1; MV20: 5,6; MV24: 1; MV27: 4,5; MV30: 1; 2005a, finds nos. 11, 14, and 40) etc.

nosti savske skupine. Na podlagi analogij rdeč premaz lahko uvrstimo v klasično lengyelsko stopnjo (Lengyel II) in tudi v kasnejše obdobje (Lengyel III, skupina Seče).

Podobno velja tudi za visoke votle noge, ki so na Spahi in drugih "sočasnih" najdiščih velikokrat premazane z rdečim premazom. Pogoste so tudi v Čatežu – Sredno polje,[184] ki se ga primerja z najdišči brezovljanskega tipa sopotske kulture,[185] kjer pa gre vendarle za drugačno keramiko,[186] torej zelo verjetno tudi kronološko za povsem drugo obdobje.[187]

Tretja skupina najdb, ki je dovolj prisotna na najdiščih savske skupine, da jo lahko smatramo za značilno,[188] so globoke posode oz. amfore "S" profila z vertikalnima trakastima ročajema na vratu. Kot že rečeno, nekateri avtorji menijo, da so v splošni uporabi že v obdobju klasične lengyelske kulture.[189] Kot argument služijo najdbe z zahodnopanonskih najdišč,[190] čeravno le-te kažejo, da gre za vsesplošno razširjeno obliko posod šele v poznolengyelskem obdobju.[191]

Lahko torej rečemo, da najstarejše najdbe na Spahi sodijo v savsko skupino,[192] ki je živela paralelno s poznim Lengyelom (Lengyel III) v zahodni Panoniji in drugimi sočasnimi kulturami oz. skupinami na Hrvaškem[193] in v Avstriji.[194]

Če si sedaj nekatere oblike posod s Spahe podrobneje ogledamo, je treba med najstarejšo keramiko uvrstiti posode "S" profila s koničnim kolenčastim prelomom, ki prehaja v vbočena ali tudi rahlo izbočena rame in spodnji del, rame in vrat pa sta ornamentirana z vrezanimi ali žlebljenimi linijami, na prelomu so odtisi (*sl. 5.2:* 1).[195] Številne analogije zanje so na Resnikovem prekopu (*sl. 5.2:* 2), kjer vidimo, da je na vratu takšne posode lahko trakast ročaj, na prelomu pa je tudi bradavica ali okrogla plastična nalepka.[196]

[184] Npr. Tomaž 2008, sl. 26, 29.

[185] Npr. Turk, Svetličič 2005, 73.

[186] Glej npr. Balen, Potrebica 2006, najdbe št. 1–34; Mihaljević 2006, najdbe št. 1–16.

[187] Z. Marković in K. Botić (2008, 22) brezovljanski tip sopotske kulture enačita s tipoma Ražište in Bicske, torej s stopnjo Sopot I-B/II.

[188] Tovrstne posode so sicer zelo pogoste na Resnikovem prekopu, ki je ena izmed najpomembnejših naselbin za kronologijo savske skupine, saj je bila poseljena malo časa (glej Velušček 2006b, 26, npr. t. 1: 5–7; 2: 5–7).

[189] Npr. Ruttkay 1991, 166; Tiefengraber 2006a, 86.

[190] Tiefengraber 2006a, 86.

[191] Prim. npr. Bánffy 1995b, sl. 8 in 9; glej še Kalicz 1991, sl. 2: 6, 11, 13, 18; Šavel 1992, 59, 60.

[192] Za najdišča savske skupine glej Guštin 2005b, 7–22; Velušček 2006b, 43–45.

[193] Npr. kultura Seče.

[194] Skupini Wolfsbach in MOG IIb.

[195] Iz poglavja 4, *t. 4.4:* 24, v tem zborniku; glej še *sl. 4.2:* Ob4/1; *t. 4.2:* 2; *4.16:* 1; *4.20:* 5.

[196] Glej Harej 1975, t. 1: 1–4,6; 2: 1,3; Velušček 2006b, t. 10: 6,7.

smaller number already in the Late Lengyel period or rarely even before.[172]

At Spaha vessels, mostly jugs, with a surpassing handle are more frequent.[173] Fragments where the handle is not preserved or possibly did not exist can also be attributed to this group.[174] Analogies for them can be found on numerous Lasinja sites in Slovenia, from Moverna vas,[175] Ajdovska jama,[176] Šafarsko,[177] Zagonce[178] to Bukovnica,[179] and in Croatia,[180] within the culture Balaton-Lasinja in western Pannonia in Hungary[181] and in Austria, in the circle of the group Bisamberg-Oberpullendorf.[182]

On the basis of the above stated finding we can conclude that solely the red and black slip on pottery cannot be a criterion for classification of vessels, either to the Sava group or to the Lasinja culture, which is agreed upon also by J. Pavúk and J. Bátora for finds of to Spaha chronologically comparable sites from the southwest of Slovakia.[183] However, red slip is prevalent on pottery from central and southern Slovenia and therefore seems to be one of the basic characteristics of the Sava group. On the basis of analogies it can be assigned to the classical Lengyel stage (Lengyel II) and also to the later period (Lengyel III, the Seče group).

It is similar for the high hollow feet which are at Spaha and other "contemporary" sites frequently coated red. They often appear in Čatež – Sredno polje,[184] which is compared to the sites of the Brezovljani type of the Sopot culture,[185] but where we are dealing with differ-

[172] E.g. Podborský 1970, Fig. 12: 19; Budja 1992, Fig. 4: phases 4 and 5; Marković 1994, Pl. 17a: 10; Ruttkay 1995, Fig. 3: 13; Težak - Gregl 2001, Pls. 1: 2,6; 2: 5; 3: 2,4; Regeny 2006, 68, find no. 11.

[173] Chapter 4, e.g. *Pls. 4.3:* 14; *4.5:* 5; *4.7:* 6; *4.9:* 4; *4.13:* 7; *4.19:* 16; *4.20:* 3,17; *4.23:* 4; *4.26:* 3; *4.28:* 6; *4.34:* 1, in this monograph.

[174] Vessels Ob2 and Ob3 are included in this group (see chapter 4, *Fig. 4.1:* Ob2, Ob3: 1,2 , in this monograph, and cf. Horvat 1989, Pl. 7).

[175] Budja 1992, Fig. 4: phase 7.

[176] Horvat 1989, Pls. 1: 108; 2; 3; 4: 467,434; 5; 6: 435,267; 8: 468; 9: 469.

[177] Horvat - Šavel 1984, Pls. 3: 1; 7: 3; 9: 3; Šavel 2006, Fig. 3, find no. 27.

[178] Kavur 2006, find no. 2.

[179] Šavel 1992, Pls. 7: 5; 10: 2,8; 13: 16.

[180] E.g. Dimitrijević 1961, Pls. 7: 45c; 18: 142; Marković 1994, Pls. 21: 1,3; 22A: 1,4.

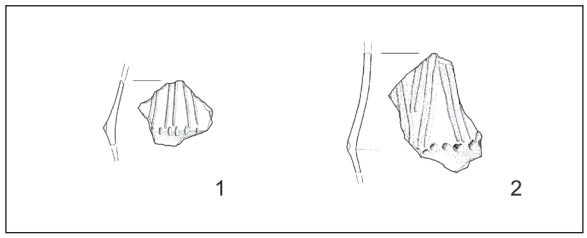
[181] E.g. Kalicz 1991, Fig. 3; 4: 1–3,11.

[182] E.g. Ruttkay 1995, Figs. 4: 1,12,13; 6: 4.

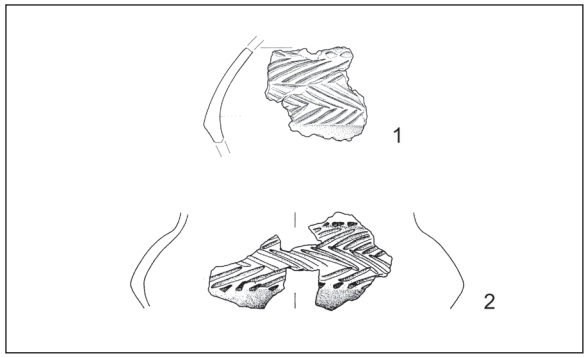
[183] "Vorläufig ist nur aufmerksam zu machen, daß das Vorkommen von Rot- oder Weißbemalung auf der Lengyel-Keramik selbst kein apriorisches Kriterium für ihre Datierung ist" (1995, 66).

[184] E.g. Tomaž 2008, Figs. 26, 29.

[185] E.g. Turk, Svetličič 2005, 73.



Sl. 5.2: 1 (Spaha); 2 (Resnikov prekop, po Velušček 2006b, t. 10: 7). M = 1 : 5.
Fig. 5.2: 1 (Spaha); 2 (Resnikov prekop, according to Velušček 2006b, Pl. 10: 7). Scale = 1 : 5.



Sl. 5.3: 1 (Spaha); 2 (Moverna vas, po Tomaž 1999, t. MV31: 4). M = 1 : 5.
Fig. 5.3: 1 (Spaha); 2 (Moverna vas, according to Tomaž 1999, Pl. MV31: 4). Scale = 1 : 5.

Parzinger[197] je najdbe z Resnikovega prekopa razvrstil v dve (oz. tri faze), od poznega Lengyela do lasinjske (oz. badenske) kulture, podobno je menil tudi Budja.[198] Zadnje raziskave so pokazale, da je bilo kolišče Resnikov prekop obljudeno malo časa in tako sodi v okvir ene naselbinske faze, ki jo uvrščamo v savsko skupino.[199] Identične dele posod, nekatere imajo poudarjen vrat, pa pozna tudi Moverna vas v drugi in četrti poselitveni fazi.[200] Najdemo jih tudi v najstarejši poselitveni fazi na Gradcu pri Mirni,[201] na Rabensteinu[202] in v kulturi Seče na Hrvaškem.[203]

V savsko skupino zagotovo sodijo tudi odlomki s cikcakastim žlebljenim motivom in odtisi na ramenu (*sl. 5.3:* 1),[204] ki smo jih uvrstili k posodju oblike 1.[205] Primerljive analogije zanje so že v četrti poselitveni fazi

[197] 1984, 31–36.
[198] 1983, 81.
[199] Velušček 2006b, 19–85.
[200] Tomaž 1999, t. MV9: 2; MV10: 3; MV11: 1; MV12: 1; MV21: 2.
[201] Dular et al. 1991, t. 23: 1,5,6,11; 24: 6.
[202] Tiefengraber 2004, t. 11: 119.
[203] Marković 1994, t. 19a: 9.
[204] Iz poglavja 4, *t. 4.3:* 5, v tem zborniku.
[205] Glej poglavje 4, *sl. 4.1:* Ob1; *t. 4.3:* 5; *4.18:* 9,10, v tem zborniku.

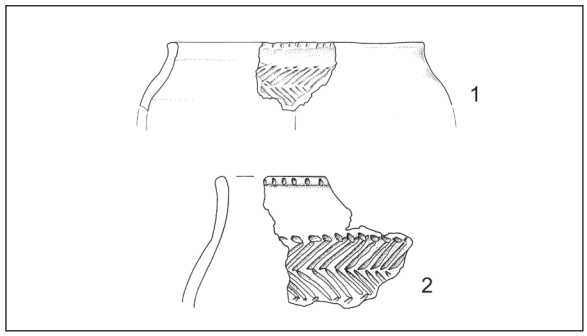
ent pottery,[186] thus very probably also chronologically a completely different period.[187]

The third group of finds, adequately present at the sites of the Sava group that can be considered characteristic,[188] are deep vessels or amphorae of the "S" profile with vertical ribbon handles on the neck. As has been already mentioned, certain authors believe it to be in general use already during the period of the classical Lengyel culture.[189] Finds from the west-Pannonian sites[190] serve as an argument even though these show that it is a generally spread form of vessels only in the Late Lengyel period.[191]

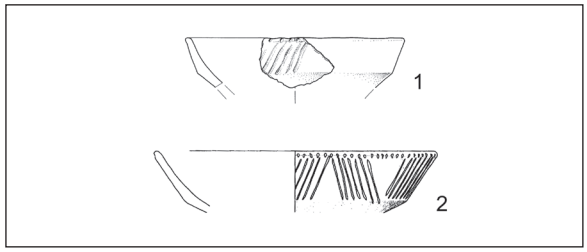
It can, therefore, be said that the oldest finds from Spaha belong to the Sava group,[192] which lived parallel to Late Lengyel (Lengyel III) in western Pannonia and other contemporary cultures or groups in Croatia[193] and Austria.[194]

If we now expect certain vessel forms from Spaha in detail, vessels of the "S" profile with a conical sharp break progressing into a concave or slightly convex shoulder and lower part, and shoulder and neck are ornamented with furrowed and grooved lines, and impressions on the break (*Fig. 5.2:* 1)[195] need to be assigned among the oldest pottery. Numerous analogies for them are found at Resnikov prekop (*Fig. 5.2:* 2), where we see that the neck of such a vessel can have a ribbon handle, an embossment or a round appliqué[196] at the sharp break. Parzinger[197] divided the finds from Resnikov prekop into two (or three phases), from Late Lengyel to Lasinja (or Baden) culture, and Budja believes alike.[198] Recent research has shown that the pile-dwelling Resnikov prekop was populated for a short period of time and thus belongs to one settlement phase, assigned to the Sava

[186] See e.g. Balen, Potrebica 2006, finds nos. 1–34; Mihaljević 2006, finds nos. 1–16.
[187] Z. Marković and K. Botić (2008, 22) equal type Brezovljani of the Sopot culture with types Ražište and Bicske, therefore with Sopot I-B/II.
[188] Such vessels are otherwise very frequent at Resnikov prekop, which is one of the most important settlements for the chronology of the Sava group since it was populated only for a short period of time (see Velušček 2006b, 26, e.g. Pls. 1: 5–7; 2: 5–7).
[189] E.g. Ruttkay 1991, 166; Tiefengraber 2006a, 86.
[190] Tiefengraber 2006a, 86.
[191] Cf. E.g. Bánffy 1995b, Figs. 8 in 9; see also Kalicz 1991, Fig. 2: 6, 11, 13, 18; Šavel 1992, 59, 60.
[192] For sites of the Sava group see Guštin 2005b, 7–22; Velušček 2006b, 43–45.
[193] E.g. the Seče culture.
[194] Groups Wolfsbach and MOG IIb.
[195] From chapter 4, *Pl. 4.4:* 24, in this monograph; see also *Fig. 4.2:* Ob4/1; *Pls. 4.2:* 2; *4.16:* 1; *4.20:* 5.
[196] See Harej 1975, Pls. 1: 1–4,6; 2: 1,3; Velušček 2006b, Pl. 10: 6,7.
[197] 1984, 31–36.
[198] 1983, 81.



Sl. 5.4: 1 (Spaha); 2 (Moverna vas, po Tomaž 1999, t. MV35: 16 (6. faza)). M = 1 : 5.
Fig. 5.4: 1 (Spaha); 2 (Moverna vas, according to Tomaž 1999, Pl. MV35: 16 (6th phase)). Scale = 1 : 5.



Sl. 5.5: 1 (Spaha); 2 (Moverna vas, po Tomaž 1999, t. MV28: 2). M = 1 : 5.
Fig. 5.5: 1 (Spaha); 2 (Moverna vas, according to Tomaž 1999, Pl. MV28: 2). Scale = 1 : 5.

Moverne vasi, a se zdijo fragmenti iz pete (*sl. 5.3:* 2)[206] in šeste faze prepričljivejši.[207]

Velika podobnost med keramiko s Spahe in najdbami iz neolitskih poselitvenih faz Moverne vasi se kaže tudi pri nekaterih loncih, ki smo jih uvrstili med posodje oblike 17 (prim. *sl. 5.4:* 1 in *5.4:* 2).[208]

Na najdiščih savske skupine so analogije tudi za nekatere sklede, ki smo jih uvrstili k tipom S6 do S9.[209] Za skledo tipa S6, ki je ornamentirana z žlebovi in odtisi (*sl. 5.5:* 1),[210] so primerjave v peti in šesti poselitveni fazi Moverne vasi (*sl. 5.5:* 2).[211] Njim podobna je tudi skleda iz najstarejše poselitvene faze Gradca, prav tako v Beli krajini.[212]

[206] A. Tomaž se zahvaljujemo za dovoljenje, da smo v tem poglavju lahko objavili najdbe iz njene magistrske naloge (glej Tomaž 1999).

[207] Tomaž 1999, t. MV26: 1 (4. faza); MV30: 1,2; MV31: 1,4; MV32: 7 (vse 5. faza); MV35: 16 (6. faza).

[208] Iz poglavja 4, *t. 4.36:* 3, v tem zborniku; glej še *sl. 4.7:* Ob17/2; *t. 4.29:* 17; glej še primerjavo iz kulture Seče (Marković 1994, t. 19: 14).

[209] Glej poglavje 4, *sl. 4.10, 4.11, 4.12*, v tem zborniku.

[210] Iz poglavja 4, *t. 4.4:* 1, v tem zborniku; glej še *t. 4.11:* 5.

[211] Glej še Tomaž 1999, t. MV33: 7.

[212] Mason 1994, t. 1: 2.

group.[199] Identical vessel parts, some with emphasized neck, are known also from Moverna vas in the second and fourth settlement phases.[200] It can also be found in the oldest settlement phase of Gradec near Mirna,[201] at Rabenstein,[202]and in the Seče culture in Croatia.[203]

Fragments with a zigzag grooved motif and impressions on the shoulder (*Fig. 5.3:* 1) also certainly belong to the Sava group[204] and have been classified under vessels of type 1.[205] Comparable analogies for them are found already in the fourth settlement phase of Moverna vas, yet fragments from the fifth (*Fig. 5.3:* 2)[206] and sixth phase seem more convincing.[207]

The great similarity between pottery from Spaha and finds from the Neolithic settlement phases of Moverna vas is revealed also with some of the pots which have been classified under vessels of type 17 (cf. *Figs. 5.4:* 1 and *5.4:* 2).[208]

Sites of the Sava group have analogies also for some dishes that we assigned to types from S6 to S9.[209] For the dish of type S6, which is ornamented with grooves and impressions (*Fig. 5.5:* 1),[210] comparisons are found in the fifth and sixth settlement phase of Moverna vas (*Fig. 5.5:* 2).[211] Similar to these is also the dish from the oldest settlement phase of Gradac, also in Bela krajina.[212]

Good comparisons are also two dishes from Dragomelj and Spaha, which are ornamented with impressions (cf. *Figs. 5.6:* 1 and *5.6:* 2).[213]

A variant of type S9 dish (*Fig. 5.7:* 1)[214] has an analogy in the settlement of the Sava group Čatež – Sredno polje (*Fig. 5.7:* 2,3), where, like in Dragomelj, dishes of this type are frequently ornamented with impressions

[199] Velušček 2006b, 19–85.

[200] Tomaž 1999, Pls. MV9: 2; MV10: 3; MV11: 1; MV12: 1; MV21: 2.

[201] Dular et al. 1991, Pls. 23: 1,5,6,11; 24: 6.

[202] Tiefengraber 2004, Pl. 11: 119.

[203] Marković 1994, Pl. 19a: 9.

[204] From chapter 4: *Pl. 4.3:* 5, in this monograph.

[205] See chapter 4: *Fig. 4.1:* Ob1; *Pl. 4.3:* 5; *4.18:* 9,10, in this monograph.

[206] We thank A. Tomaž for her permission to publish the finds from her master's work in this chapter (see Tomaž 1999).

[207] Tomaž 1999, Pls. MV26: 1 (4th phase); MV30: 1,2; MV31: 1,4; MV32: 7 (all 5th phase); MV35: 16 (6th phase).

[208] From chapter 4: *Pl. 4.36:* 3; see also *Fig. 4.7:* Ob17/2; *Pl. 4.29:* 17, in this monograph; see also the comparison from the Seče culture (Marković 1994, Pl. 19: 14).

[209] See chapter 4: *Figs. 4.10, 4.11, 4.12*, in this monograph.

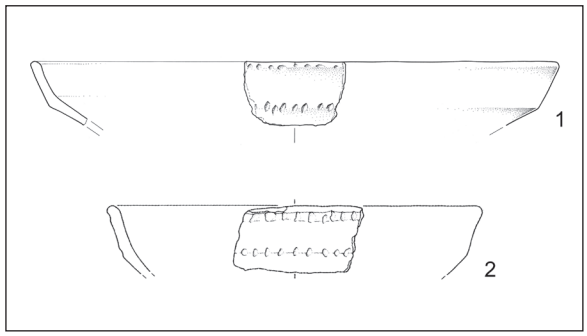
[210] From chapter 4: *Pl. 4.4:* 1, in this monograph; see also *Pl. 4.11:* 5.

[211] See also Tomaž 1999, Pl. MV33: 7.

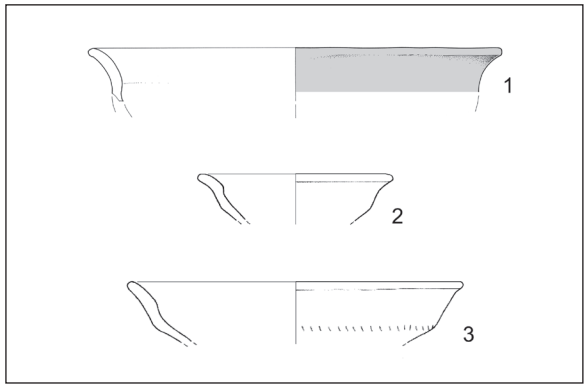
[212] Mason 1994, Pl. 1: 2.

[213] *Fig. 5.6:* 1 is taken from chapter 4: *Pl. 4.36:* 1, in this monograph.

[214] From chapter 4: *Pl. 4.33:* 7; see also *Fig. 4.12:* Ob9/2, in this monograph.



Sl. 5.6: 1 (Spaha); 2 (Dragomelj, po Turk, Svetličič 2005, najdba št. 33). M = 1 : 5.
Fig. 5.6: 1 (Spaha); 2 (Dragomelj, according to Turk, Svetličič 2005, find no. 33). Scale = 1 : 5.



Sl. 5.7: 1 (Spaha); 2,3 (Čatež – Sredno polje, po Tomaž 2008, sl. 21: 2,6). M = 1 : 5.
Fig. 5.7: 1 (Spaha); 2,3 (Čatež – Sredno polje, according to Tomaž 2008, Fig. 21: 2,6). Scale = 1 : 5.

Dobri primerjavi sta tudi skledi iz Dragomlja in s Spahe, ki sta ornamentirani z odtisi (prim. *sl. 5.6:* 1 in *5.6:* 2).[213]

Varianta sklede tipa S9 (*sl. 5.7:* 1)[214] ima analogijo v naselbini savske skupine Čatež – Sredno polje (*sl. 5.7:* 2,3), kjer so, podobno kot v Dragomlju, sklede tega tipa na prelomu in ustju pogostokrat ornamentirane z odtisi.[215] Npr. na Spahi[216] in v Moverni vasi[217] pa so pogostejši odtisi in žlebovi. Paralele zanje raziskovalci iščejo v brezovljanskem tipu sopotske kulture.[218] Na

[213] *Sl. 5.6:* 1 je iz poglavja 4, *t. 4.36:* 1, v tem zborniku.

[214] Iz poglavja 4, *t. 4.33:* 7, v tem zborniku; glej še *sl. 4.12:* Ob9/2.

[215] Čatež – Sredno polje (Tomaž 2005a, najdbe št. 4–6, 21–27 in 28–35) in Dragomelj (Turk, Svetličič 2005, najdbe št. 1–3, 21, 23, 29, 31, 34 in 35).

[216] Npr. poglavje 4, *t. 4.2:* 6, v tem zborniku; podobne tudi: *t. 4.3:* 8 (samo z žlebovi).

[217] Npr. Tomaž 1999, t. MV28: 5.

[218] Npr. Turk, Svetličič 2005, 72; glej Dimitrijević 1979a, sl. 19: 1,2,12; isto Marković 1994, t. 14: 15–17.

on the break and lip.[215] At Spaha[216] and Moverna vas,[217] for example, impressions and grooves are more frequent. Researchers seek parallels for them in the Brezovljani type of the Sopot culture.[218] In Styria in Austria these are characteristic of the period corresponding to MOG IIb, Lengyel III, and Wolfsbach.[219]

Also generally impressions are very popular on the pottery from Čatež – Sredno polje and Dragomelj.[220] The same is true for the oldest pottery from Ptujski grad.[221] Here we need to emphasize that we also found a richly decorated vessel (amphora) with impressions at Resnikov prekop,[222, 223] which without a doubt points to the same cultural background and at least approximate contemporaneity.

We have already mentioned the problem of red slip and vessels on foot. Now we focus on fragments of vessels on high hollow foot coated red (*Fig. 5.8:* 1),[224] for which we have excellent analogies on numerous central Slovenian sites assigned to the Sava group.[225] As representative comparison we state the find from the oldest settlement phase of Gradec near Mirna (*Fig. 5.8:* 2).

The period of the Sava group is followed by the Lasinja culture, which is also present at Spaha. Variants of dishes with tongue-shaped grip of types S7[226] and S8 (*Fig. 5.9:* 1) have an excellent comparison in a dish from the Lasinja settlement phase in Moverna vas (*Fig. 5.9:* 2). They are also known to other Lasinja sites, such as Bukovnica,[227] Ivankovci,[228] Šafarsko,[229] Ptujski grad[230] etc.

[215] Čatež – Sredno polje (Tomaž 2005a, finds nos. 4–6, 21–27, and 28–35) and Dragomelj (Turk, Svetličič 2005, finds nos. 1–3, 21, 23, 29, 31, 34, and 35).

[216] E.g. chapter 4: *Pl. 4.2:* 6, in this monograph; similar also: *Pl. 4.3:* 8 (only grooves).

[217] E.g. Tomaž 1999, Pl. MV28: 5.

[218] E.g. Turk, Svetličič 2005, 72; see Dimitrijević 1979a, Fig. 19: 1,2,12; also Marković 1994, Pl. 14: 15–17.

[219] Tiefengraber 2006a, 85, find no. 6.

[220] See Tomaž 2005a and Turk, Svetličič 2005.

[221] E.g. Tomanič - Jevremov, Tomaž, Kavur 2006b, Figs. 2, 3; finds nos. 2–15.

[222] Cf. Velušček 2006b, Pl. 10 s Turk, Svetličič 2005, finds nos. 8, 36 and Tomaž 2005a, find no. 13.

[223] At Resnikov prekop several vessels decorated in this manner had been found already by S. Jesse (e.g. Harej 1975, Pls. 4: 10; 6: 7) and J. Korošec (1964, Pls. 6: 5; 9: 1,2; 10: 5–7 etc.).

[224] From chapter 4: *Pl. 4.19:* 17, in this monograph; see also *Pls. 4.2:* 14; *4.3:* 2; *4.4:* 3; *4.9:* 15; *4.19:* 6 etc.

[225] E.g. Moverna vas (Velušček 1999b, 57), Grac under Sela pri Zajčjem Vrhu (Pavlin 2006, finds nos. 12 and 13), and Drulovka (Guštin, Tomaž, Kavur 2005, 45).

[226] See chapter 4, *Fig. 4.11:* S7/3; *Pls. 4.1:* 2; *4.15:* 1; *4.26:* 2; *4.34:* 8, in this monograph.

[227] Šavel 1992, Pls. 8: 2,5; 11: 2.

[228] Tušek, Kavur, Tomaž 2006, find no. 25.

[229] Horvat - Šavel 1984, Pl. 5: 4;

[230] Tomanič - Jevremov, Tomaž, Kavur 2006b, finds nos. 31 and 32.

Štajerskem v Avstriji pa so značilne za obdobje, ki ustreza MOG IIb, Lengyel III in Wolfsbach.[219]

Tudi sicer so odtisi na keramiki v Čatežu – Sredno polje in v Dragomlju zelo priljubljeni.[220] Enako velja za najstarejšo keramiko s Ptujskega gradu.[221] Na tem mestu pa je treba opozoriti, da smo na bogato z odtisi okrašeno posodo (amforo) naleteli tudi na Resnikovem prekopu,[222], [223] kar nedvomno kaže na isto kulturno ozadje in vsaj približno sočasnost.

Problematiki rdečega premaza na keramiki in posod na nogah smo že omenjali. Na tem mestu izpostavljamo fragmente rdeče premazanih posod na visoki votli nogi (*sl. 5.8:* 1),[224] za katere so odlične analogije po številnih osrednjeslovenskih najdiščih, ki jih uvrščamo v savsko skupino.[225] Kot reprezentativno primerjavo navajamo najdbo iz najstarejše poselitvene faze Gradca pri Mirni (*sl. 5.8:* 2).

Obdobju savske skupine sledi lasinjska kultura, ki je prisotna tudi na Spahi. Variante skled z jezičastim držajem tipov S7[226] in S8 (*sl. 5.9:* 1) imajo odlično primerjavo v skledi iz lasinjske poselitvene faze v Moverni vasi (*sl. 5.9:* 2). Poznajo jih tudi druga lasinjska najdišča, kot so Bukovnica,[227] Ivankovci,[228] Šafarsko,[229] Ptujski grad[230] itd.

Podobno velja za tipološko enake sklede, ki so ornamentirane z vrezanimi linijami v motivu metop.[231] Dobra in geografsko bližnja analogija je iz sedme faze Moverne vasi,[232] pa tudi v okviru lasinjskih najdb na Drulovki.[233]

Tudi za posode s trakastimi ročaji, ki povezujejo ustje s prelomom, so odlične analogije v sklopu lasinjske kulture. Za primerjavo navajamo fragment s Spahe (*sl. 5.10:* 1)[234] in fragmentiran vrč iz horizonta grobov v

[219] Tiefengraber 2006a, 85, najdba št. 6.

[220] Glej Tomaž 2005a in Turk, Svetličič 2005.

[221] Npr. Tomanič - Jevremov, Tomaž, Kavur 2006b, sl. 2, 3; najdbe št. 2–15.

[222] Prim. Velušček 2006b, t. 10 s Turk, Svetličič 2005, najdbe št. 8, 36 in Tomaž 2005a, najdba št. 13.

[223] Na Resnikovem prekopu sta več tako okrašenih posod našla tudi že S. Jesse (npr. Harej 1975, t. 4: 10; 6: 7) in J. Korošec (1964, t. 6: 5; 9: 1,2; 10: 5–7 itd.).

[224] Iz poglavja 4, *t. 4.19:* 17, v tem zborniku; glej še *t. 4.2:* 14; *4.3:* 2; *4.4:* 3; *4.9:* 15; *4.19:* 6 itd.

[225] Npr. Moverna vas (Velušček 1999b, 57), Grac pod Seli pri Zajčjem Vrhu (Pavlin 2006, najdbi št. 12 in 13) in Drulovka (Guštin, Tomaž, Kavur 2005, 45).

[226] Glej poglavje 4, *sl. 4.11:* S7/3; *t. 4.1:* 2; *4.15:* 1; *4.26:* 2; *4.34:* 8, v tem zborniku.

[227] Šavel 1992, t. 8: 2,5; 11: 2.

[228] Tušek, Kavur, Tomaž 2006, najdba št. 25.

[229] Horvat - Šavel 1984, t. 5: 4;

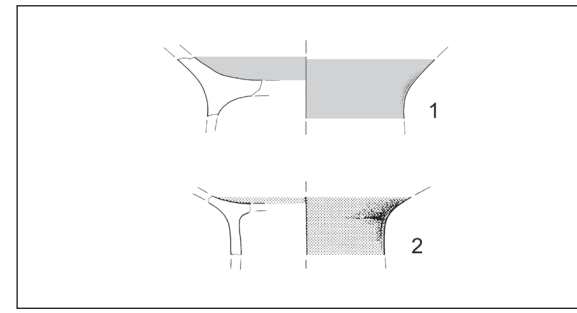
[230] Tomanič - Jevremov, Tomaž, Kavur 2006b, najdbi št. 31 in 32.

[231] Glej poglavje 4, *t. 4.6:* 11; *4.28:* 3, v tem zborniku.

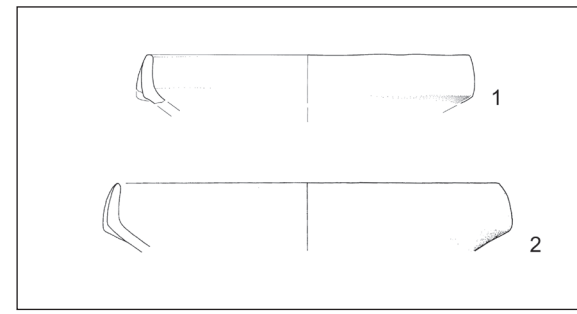
[232] Tomaž 1999, t. MV37: 4.

[233] Guštin, Tomaž, Kavur 2005, 47, najdba št. 36.

[234] Iz poglavja 4, *t. 4.3:* 14, v tem zborniku.



Sl. 5.8: 1 (Spaha); 2 (Gradec pri Mirni, po Dular et al. 1991, t. 22: 10). M = 1 : 5.
Fig. 5.8: 1 (Spaha); 2 (Gradec near Mirna, according to Dular et al. 1991, Pl. 22: 10). Scale = 1 : 5.



Sl. 5.9: 1 (Spaha); 2 (Moverna vas, po Tomaž 1999, t. MV37: 5). M = 1 : 5.
Fig. 5.9: 1 (Spaha); 2 (Moverna vas, according to Tomaž 1999, Pl. MV37: 5). Scale = 1 : 5.

Similar is true for the typologically identical dishes which are ornamented with furrowed lines in the motif of metopes.[231] A good and geographically close analogy comes from the seventh phase of Moverna vas[232] and also within the Lasinja finds at Drulovka.[233]

Excellent analogies within the Lasinja culture can also be found for vessels with ribbon handles which connect the lip with the break. For comparison we state the fragment from Spaha (*Fig. 5.10:* 1)[234] and a fragmented jug from the horizon of graves in Ajdovska jama (*Fig. 5.10:* 2). The latter find reveals also the typical Lasinja profile comparable to form 2 (Ob2) vessels at Spaha.[235]

In addition to finds from the Sava group and Lasinja culture, at Spaha vessels were also found which can be assigned to the horizon of pottery with furrowed incisions.

Only four fragments are assigned to this period with a high degree of certainty. Two come from trench I.[236] Especially interesting is a fragment of a wall orna-

[231] See chapter 4, *Pls. 4.6:* 11; *4.28:* 3, in this monograph.

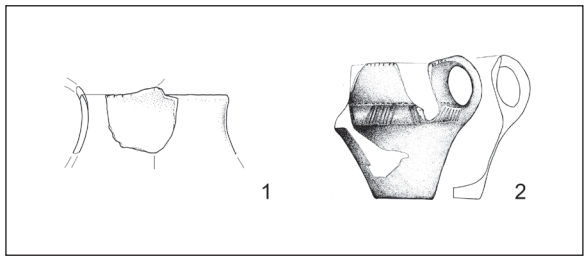
[232] Tomaž 1999, Pl. MV37: 4.

[233] Guštin, Tomaž, Kavur 2005, 47, find no. 36.

[234] From chapter 4, *Pl. 4.3:* 14, in this monograph.

[235] See chapter 4, *Fig. 4.1:* Ob2, in this monograph.

[236] See chapter 4, *Pl. 4.1:* 4,5, in this monograph.



Sl. 5.10: 1 (Spaha); 2 (Ajdovska jama, po Horvat 1989, t. 9: 469). M = 1 : 5.

Fig. 5.10: 1 (Spaha); 2 (Ajdovska jama, according to Horvat 1989, Pl. 9: 469). Scale = 1 : 5.

Ajdovski jami (*sl. 5.10:* 2). Slednja najdba se izkazuje tudi z značilnim lasinjskim profilom, ki je primerljiv posodju oblike 2 na Spahi.[235]

Poleg najdb iz savske skupine in lasinjske kulture se na Spahi pojavlja tudi posodje, ki ga lahko uvrstimo v horizont keramike z brazdastim vrezom.

V to obdobje z veliko stopnjo zanesljivosti sicer uvrščamo samo štiri fragmente. Dva sta iz sonde I.[236] Posebej izstopa fragment ostenja, ki je ornamentiran z vrezanim tračnim motivom (*sl. 5.11:* 1).[237] Zanj najdemo analogije med najdbami horizonta keramike z brazdastim vrezom v osrednji in južni Sloveniji, tj. v deveti poselitveni fazi Moverne vasi,[238] v tretji poselitveni fazi Gradca pri Mirni,[239] na Gradišču nad Dešnom (*sl. 5.11:* 2)[240] itd.[241]

Analogije z istih najdišč so tudi za fragment ostenja z ušescem, ki je glede na ornamentalno tehniko primerljiv z ravnokar opisanim fragmentom,[242] in fragment ostenja z vrezanim mrežastim motivom.[243] Tudi zanj so analogije na najdiščih istega obdobja, kot je npr. Gradišče nad Dešnom.[244] Slednja fragmenta izhajata iz sonde IV, ki je bila locirana na spodnjem naselbinskem platoju.

V obdobje horizonta keramike z brazdastim vrezom smo uvrstili tudi lonec s plastičnima rebroma in njemu tipološko podoben neokrašen lonec.[245] Spominjata na kronološko primerljive,[246] a tudi na nekoliko

[235] Glej poglavje 4, *sl. 4.1:* Ob2, v tem zborniku.

[236] Glej poglavje 4, *t. 4.1:* 4,5, v tem zborniku.

[237] Iz poglavja 4, *t. 4.1:* 5, v tem zborniku.

[238] Budja 1992, sl. 4: faza 9.

[239] Dular et al. 1991, t. 26: 10 b.

[240] Glej še Pavlin, Dular 2007, t. 16: 9 in tudi t. 13: 1,15,16,18; 14: 5 itd.

[241] Za podatke o horizontu keramike z brazdastim vrezom v osrednji Sloveniji glej Velušček 2004c, 231–261 in Velušček, Čufar 2008, 31–48.

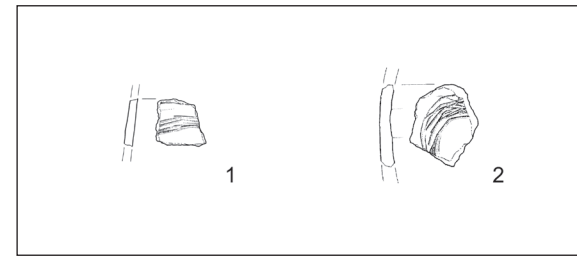
[242] Glej poglavje 4, *t. 4.16:* 11, v tem zborniku.

[243] Glej poglavje 4, *t. 4.16:* 10, v tem zborniku.

[244] Pavlin, Dular 2007, t. 14: 7; 15: 15.

[245] Poglavje 4, *t. 4.20:* 7,8, v tem zborniku.

[246] Npr. Velušček 2004c, sl. 5.3.8: 1.



Sl. 5.11: 1 (Spaha); 2 (Gradišče nad Dešnom, po Pavlin, Dular 2007, t. 13: 2). M = 1 : 5.

Fig. 5.11: 1 (Spaha); 2 (Gradišče above Dešen, according to Pavlin, Dular 2007, Pl. 13: 2). Scale = 1 : 5.

mented with the incised ribbon motif (*Fig. 5.11:* 1).[237] Analogies for this can be found among the finds from the horizon of pottery with furrowed incisions in central and southern Slovenia, e.g. in the ninth settlement phase of Moverna vas,[238] third settlement phase of Gradec near Mirna,[239] at Gradišče above Dešen (*Fig. 5.11:* 2)[240] etc.[241]

Analogies from the same sites are also present for the fragment of a wall with an ear, which is regarding the ornamental technique comparable to the just described fragment,[242] and a fragment of a wall with the incised grid motif.[243] For the latter analogies are also found on sites of the same period, such as Gradišče above Dešen.[244] Both fragments originate from trench IV, which was located on the lower settlement plateau.

A pot with plastic cordons and typologically similar, unornamented pot[245] have also been assigned to the horizon of pottery with furrowed incisions. These resemble chronologically comparable[246] but slightly smaller pots from other sites in central and also western Slovenia.[247]

Even younger and chronologically less sensitive is pottery which differs from the rest and is certainly not Neo- or Eneolithic.[248] Parallels can be found in the material from the Late Bronze Age layers at numerous hilltop settlements in the Dolenjska region[249] and at Kostel in

[237] From chapter 4, *Pl. 4.1:* 5, in this monograph.

[238] Budja 1992, Fig. 4: faza 9.

[239] Dular et al. 1991, Pl. 26: 10 b.

[240] See also Pavlin, Dular 2007, Pl. 16: 9, and Pls. 13: 1,15,16,18; 14: 5 etc.

[241] For detailed information about the horizon of pottery with furrowed incisions in central Slovenia see Velušček 2004c, 231–261 and Velušček, Čufar 2008, 31–48.

[242] See chapter 4: *Pl. 4.16:* 11, in this monograph.

[243] See chapter 4: *Pl. 4.16:* 10, in this monograph.

[244] Pavlin, Dular 2007, Pls. 14: 7; 15: 15.

[245] Chapter 4: *Pl. 4.20:* 7,8, in this monograph.

[246] E.g. Velušček 2004c, Fig. 5.3.8: 1.

[247] E.g. Velušček 2004b, Fig. 4.2.5: L21.

[248] See chapter 4: *Pl. 4.15:* 3–5, in this monograph.

[249] See Pavlin, Dular 2007, 70, Pls. 1: 1,2; 3: 3 and bibliography given there.

mlajše lonce z drugih najdišč v osrednji in tudi že zahodni Sloveniji.[247]

Še mlajša in kronološko manj občutljiva je keramika, ki odstopa od ostale in zagotovo ni neo- oz. eneolitska.[248] Paralele ima v gradivu iz poznobronastodobnih plasti na številnih višinskih naseljih na Dolenjskem[249] in na Kostelu v dolini Kolpe.[250] Tako starost podpirata tudi žarnogrobiščni depo z bronastimi predmeti in jantarnimi jagodami, ki je bil odkrit le nekaj kilometrov proč od Spahe,[251] in morda sočasni ter prav tako bližnji naselji Židovec nad Miklarji[252] in Gradišče nad Gorico.[253] Po drugi strani pa najdba halštatske železne sulične osti v Preriglju[254] kaže na morebitno poselitev Spahe v železni dobi. Kakorkoli že, tovrstna keramika s Spahe je premalo izpovedna za dokončno oceno o njeni starosti. Kljub vsemu se zdi, da je zelo dragocena, saj predstavlja doslej edini namig, da je bila Spaha poseljena tudi proti koncu prazgodovine, v obdobju kulture žarnih grobišč ali, kar je manj verjetno, v železni dobi.

Zadnja gradbena aktivnost na Spahi, ki jo težko opredelimo kot poselitev, je iz obdobja turških vpadov na slovensko ozemlje. Turki so prvič vpadli na Kočevsko leta 1469 in kasneje to naredili še večkrat, vse do konca 16. stoletja. Posebej hudo je bilo leta 1491 in maja 1522, ko so napadli Kras ter se v teku treh dni umaknili skozi Postojno, Cerknico, Ribnico in Kočevsko na Hrvaško in v Bosno. Zato se je tega leta na Kranjskem organiziral poročevalski sistem glede Turkov. Ta sistem obveščanja je določil, da se pri sporočilu "Turek se bliža", sproži en

[247] Npr. Velušček 2004b, sl. 4.2.5: L21.

[248] Glej poglavje 4, *t. 4.15:* 3–5, v tem zborniku.

[249] Glej Pavlin, Dular 2007, 70, t. 1: 1,2; 3: 3 in tam navedeno literaturo.

[250] Velušček 1996, npr. t. 17: 4,5, 6,10,12; 20: 3.

[251] Hirschbäck - Merhar 1984, 90–109; Teržan 1984, 110–118.

[252] Poleg uvrstitve najdišča v kulturo žarnih grobišč (glej Dular, Tecco - Hvala 2007, 351, sl. 24, 276), je o njegovi starosti več različnih podatkov. V *Arheološkem vestniku* je npr. označeno kot naselje, ki je najverjetneje eneolitske in poznoantične starosti (Dular 2001, 94; glej še Dular 1985, 62; 1999a, sl. 5: 12). T. Knez (Miklarji, v: *Arheološka najdišča Slovenije,* 1975, 241), ki se sklicuje na starejše vire, na Židovcu omenja prazgodovinsko naselbino, obdano s kamnitim zidom. Skupina arheologov pod vodstvom J. Dularja je na Židovcu zastavila dve manjši sondi in naletela na skromne fragmente prazgodovinske (najverjetneje eneolitske) in poznoantične keramike (Dular 1985, 62; 2001, 94). Na antično (oz. poznoantično) obdobje poleg omenjene keramike (glej Dular 1985, 62; 2001, 94; Ciglenečki 1987, 95) kažejo tudi novci iz 3. in 4. stoletja po Kr., ki jih pod najdiščnim imenom Miklarji – Židovec navaja A. Šemrov (2004, 343). Da je na hribu poleg prazgodovinske naselbine bilo tudi poznoantično naselje, meni S. Ciglenečki (1987, 95).

[253] Dular, Tecco - Hvala 2007, 353, sl. 279; glej še Dular 1985, 108, sl. 105.

[254] F. Truhlar, Prerigel, v: *Arheološka najdišča Slovenije,* 1975, 238.

the Kolpa valley.[250] This age is also supported by the Urnfield depot with bronze artefacts and amber beads, which was discovered only a few kilometres away from Spaha,[251] and possibly contemporary and also near settlements Židovec above Miklarji[252] and Gradišče above Gorica.[253] On the other hand, the find of the Hallstatt iron spear point in Prerigelj[254] indicates the possible settlement of Spaha in the Iron Age. Be as it may, such pottery from Spaha is not declaratory enough to make a final estimation of its age. Despite all it seems to be very precious since it is the only clue so far that Spaha was populated also towards the end of the prehistory, in the period of the Urnfield culture or, less probably, in the Iron Age.

The last building activity at Spaha, which is difficult to define as settlement, originates in the period of the Turkish invasions to the Slovenian territory. The Turks invaded the Kočevje region in 1469 and continued to do so frequently later on, until the end of the 16th century. Their attacks were especially severe in 1491 and in May 1522, when they attacked Kras and in the course of three days retreated through Postojna, Cerknica, Ribnica, and the Kočevje region to Croatia and Bosnia. Therefore, a reporting system as a warning against the Turks was organised that same year in Carniola. This system appointed one shot to be fired if the message was "Turks approach", while three shots are fired and beacons lit if the Turks had already entered the land. In the Kočevje region, several permanent watch posts, the s.c. beacons were organised and were managed by the subjects. They performed their duties from a wooden shed,[255] which at

[250] Velušček 1996, e.g. Pls. 17: 4,5, 6,10,12; 20: 3.

[251] Hirschbäck - Merhar 1984, 90–109; Teržan 1984, 110–118.

[252] There exist several different data beside the assignment of this site to the Urnfield culture (see Dular, Tecco - Hvala 2007, 351, Fig. 24, 276). In *Arheološki vestnik* it is, for example, classified as a settlement, most probably of the Eneolithic and Late Antiquity age (Dular 2001, 94; see also Dular 1985, 62; 1999a, Fig. 5: 12). T. Knez (Miklarji, in: *Arheološka najdišča Slovenije,* 1975, 241), who refers to older sources, mentions a prehistoric settlement surrounded by a stone wall at Židovec. A group of archaeologists led by J. Dular set two smaller tranches at Židovec and found modest fragments of prehistoric (most probably Eneolithic) and Late Antiquity pottery (Dular 1985, 62; 2001, 94). Besides the mentioned pottery (see Dular 1985, 62; 2001, 94; Ciglenečki 1987, 95) coins from the 3rd and 4th century AD also point to the Antiquity (or Late Antiquity), which are under the site name Miklarji – Židovec stated by A. Šemrov (2004, 343). S. Ciglenečki (1987, 95) believes that there was also a Late Antiquity settlement besides the prehistoric settlement on this hill.

[253] Dular, Tecco - Hvala 2007, 353, Fig. 279; see also Dular 1985, 108, Fig. 105.

[254] F. Truhlar, Prerigel, in: *Arheološka najdišča Slovenije,* 1975, 238.

[255] Simonič 1939, 68–87.

strel, pri sporočilu, da je že stopil v deželo, pa se sprožijo trije stražni streli in zakurijo kresovi. Na Kočevskem je bilo organiziranih več stalnih stražnih mest, t. i. kresišč, ki so jih morali upravljati podložniki. Le-ti so službo opravljali iz lesene kolibe,[255] ki je na Spahi imela kamnite temelje. Iz tega obdobja so najbrž tudi najdbe, katerih izbor v tem zborniku sicer objavljamo, a jih podrobneje ne obravnavamo.[256]

5.3.2 ABSOLUTNO DATIRANJE

Vključevanje radiokarbonskih datumov v interpretacije je pomenilo revolucijo v raziskovanju evropske prazgodovine, v prvi vrsti za kronologijo in kulturni razvoj predkovinskih in zgodnjekovinskih obdobij.[257] Podobno velja tudi za slovenski prostor.[258] Do znatnega napredka na tem področju je prišlo v zadnjih dveh desetletjih. Od takrat naprej se je število radiokarbonskih datumov z naših najdišč povečalo do te mere, da danes lahko že govorimo, vsaj okvirno, o absolutni starosti kultur iz obdobij kot sta neolitik in eneolitik. Tako v nadaljevanju ponovno objavljamo radiokarbonske datume in/ali 1-sigma kalibracijske razpone z najdišč savske skupine (*tab. 5.1*), lasinjske kulture (*tab. 5.2*) in horizonta keramike z brazdastim vrezom (*tab. 5.3*) v Sloveniji ter njih interpretacijo (glej *tab. 5.4*).

5.3.2.1 SAVSKA SKUPINA

Kot smo videli, so na Spahi dobro zastopane najdbe savske skupine. Za to skupino je objavljenih prek 40 radiokarbonskih datumov oz. kalibracijskih razponov s šestih najdišč: Čatež – Sredno polje, Dragomelj, Moverna vas, Resnikov prekop, Ržišče in Spodnje Škovce.[259]

Glede na podatke iz *tabele 5.1* po starosti izstopajo datumi iz SE 136, 062 B, 096 v Čatežu – Sredno polje, ki kažejo na interval 4880–4724 pr. Kr. (*tab. 5.4:* 1) in Dragomlja (glej *tab. 5.1:* 21). Na približno isto obdobje kažeta tudi datuma iz Moverne vasi (*tab. 5.4:* 6), za vzorca iz druge in, kar je presenetljivo, tudi četrte poselitvene faze (glej *tab. 5.1:* 33,34 in prim. s *tab. 5.1:* 25–29).

Keramika s Čateža[260] in Dragomlja še ni objavljena oz. objavljenih najdb ni možno uskladiti z radiokar-

[255] Simonič 1939, 68–87.

[256] Glej poglavje 4, *t. 4.1:* 9; *4.15:* 6; *4.17:* 5,6; *4.33:* 6; *4.37:* 7, v tem zborniku.

[257] Renfrew 1973.

[258] Velušček, Čufar 2003; Velušček 2004a; 2006a; Guštin 2005a itd.

[259] A. Žorž in B. Nadbath (2010, 362) objavljata približen razpon 4800 do 4500 pr. Kr. radiokarbonskega datuma za vzorec kosti z najdišča savske skupine Spodnje Škovce pri Dolskem ob Savi.

[260] Iz SE 136, 062 B in 096.

Spaha had a stone foundation. Finds which are published in this monograph but not discussed in detail probably originate from this period.[256]

5.3.2 ABSOLUTE DATING

The inclusion of radiocarbon dates into the interpretations meant a revolution in the research of the European prehistory, primarily for the chronology and cultural development of pre-metal and early-metal periods.[257] Similar is true for the Slovenian territory.[258] The last two decades in this sense showed a great improvement. From that time on the number of radiocarbon dates increased to the level that today we can already speak, at least roughly, about the absolute age of cultures from the periods like the Neolithic and Eneolithic. Thus hereon we again publish the radiocarbon dates and/or 1-sigma calibration ranges from the sites of the Sava group (*Tab. 5.1*), Lasinja culture (*Tab. 5.2*), and horizon of pottery with furrowed incisions (*Tab. 5.3*) in Slovenia and their interpretation (see *Tab. 5.4*).

5.3.2.1 SAVA GROUP

As we have seen, finds from the Sava group are well represented at Spaha. Over 40 radiocarbon dates or calibration ranges from six sites are published for this group: Čatež – Sredno polje, Dragomelj, Moverna vas, Resnikov prekop, Ržišče, and Spodnje Škovce.[259]

According to the data from *Table 5.1*, dates from SE 136, 062 B, 096 in Čatež – Sredno polje stand out since they indicate the interval 4880–4724 BC (*Tab. 5.4:* 1), and Dragomelj (see *Tab. 5.1:* 21). Dates from Moverna vas (*Tab. 5.4:* 6) point to the approximately same period, for samples from the second and, surprisingly, also the fourth settlement phase (see *Tab. 5.1:* 33,34 and cf. *Tab. 5.1:* 25–29).

Pottery from Čatež[260] and Dragomelj is not yet published or the published finds cannot be harmonised with the radiocarbon dated context,[261] but we do have the pottery selection from Moverna vas. In the second

[256] See chapter 4, *Pls. 4.1:* 9; *4.15:* 6; *4.17:* 5,6; *4.33:* 6; *4.37:* 7, in this monograph.

[257] Renfrew 1973.

[258] Velušček, Čufar 2003; Velušček 2004a; 2006a; Guštin 2005a etc.

[259] A. Žorž and B. Nadbath (2010, 362) publish the approximate range 4800 to 4500 BC of the radiocarbon date for the sample of a bone from the Sava group site Spodnje Škovce near Dolsko ob Savi.

[260] From SE 136, 062 B in 096.

[261] An exception is a vessel from SE 096 from the site Čatež – Sredno polje, which is presented on the typological table in Tomaž 2005b, Fig. 7: SU 96.

Tab. 5.1: Objavljeni radiokarbonski datumi z 1-sigma intervali z najdišč savske skupine v Sloveniji. S kurzivo so označeni "problematični" oz. pomanjkljivo objavljeni vzorci, ki v analizi na *tab. 5.4* niso upoštevani.
Tab. 5.1: Published radiocarbon dates with 1-sigma intervals from sites of the Sava group in Slovenia. Italics mark the "problematic" or insufficiently published samples which are not considered in the analysis on *Tab. 5.4*.

	NAJDIŠČE / SITE	KONTEKST / CONTEXT	LAB. ŠT. / LAB. NO.	uncal BP (14C)	BC (1-SIGMA)	VIR / SOURCE
1	**Čatež – Sredno polje**	SE / SU 136	KIA-17864	5992 ± 36	4935–4805	Guštin 2005b, sl. / fig. 2
2	**Čatež – Sredno polje**	SE / SU 062 B	KIA-17848	5935 ± 31	4845–4732	Guštin 2005b, sl. / fig. 2
3	**Čatež – Sredno polje**	SE / SU 096	KIA-17857	5888 ± 36	4795–4713	Guštin 2005b, sl. / fig. 2
4	**Čatež – Sredno polje**	SE / SU 150	KIA-17866	5839 ± 30	4773–4621	Guštin 2005b, sl. / fig. 2
5	**Čatež – Sredno polje**	SE / SU 108	KIA-17860	5828 ± 36	4771–4618	Guštin 2005b, sl. / fig. 2
6	**Čatež – Sredno polje**	SE / SU 110	KIA-17861	5820 ± 30	4768–4618	Guštin 2005b, sl. / fig. 2
7	**Čatež – Sredno polje**	SE / SU 055	KIA-17850	5811 ± 30	4766–4605	Guštin 2005b, sl. / fig. 2
8	**Čatež – Sredno polje**	SE / SU 093	KIA-17856	5806 ± 42	4765–4600	Guštin 2005b, sl. / fig. 2
9	**Čatež – Sredno polje**	SE / SU 042	KIA-17846	5804 ± 30	4713–4605	Guštin 2005b, sl. / fig. 2
10	**Čatež – Sredno polje**	SE / SU 129	KIA-17862	5797 ± 40	4712–4555	Guštin 2005b, sl. / fig. 2
11	**Čatež – Sredno polje**	SE / SU 135	KIA-17863	5791 ± 37	4709–4554	Guštin 2005b, sl. / fig. 2
12	**Čatež – Sredno polje**	SE / SU 146	KIA-17865	5787 ± 33	4706–4554	Guštin 2005b, sl. / fig. 2
13	**Čatež – Sredno polje**	SE / SU 105	KIA-17858	5782 ± 30	4690–4554	Guštin 2005b, sl. / fig. 2
14	**Čatež – Sredno polje**	SE / SU 083	KIA-17852	5758 ± 33	4673–4549	Guštin 2005b, sl. / fig. 2
15	**Čatež – Sredno polje**	SE / SU 106	KIA-17859	5752 ± 30	4671–4546	Guštin 2005b, sl. / fig. 2
16	**Čatež – Sredno polje**	SE / SU 062	KIA-17849	5751 ± 33	4672–4545	Guštin 2005b, sl. / fig. 2
17	**Čatež – Sredno polje**	SE / SU 091	KIA-17855	5750 ± 31	4672–4545	Guštin 2005b, sl. / fig. 2
18	**Čatež – Sredno polje**	SE / SU 042cII	KIA-17847	5747 ± 32	4672–4542	Guštin 2005b, sl. / fig. 2
19	**Čatež – Sredno polje**	SE / SU 152	KIA-17867	5737 ± 39	4669–4504	Guštin 2005b, sl. / fig. 2
20	**Čatež – Sredno polje**	SE / SU 090	KIA-17854	5718 ± 32	4598–4498	Guštin 2005b, sl. / fig. 2
21	**Dragomelj**		Beta-201209	5870 ± 40	4790–4700	Turk 2010, 42, sl. / fig. 1
22	**Dragomelj**		Beta-201210	5750 ± 40		Turk 2010, sl. / fig. 1
23	**Dragomelj**		Beta-201213	5740 ± 40		Turk 2010, sl. / fig. 1
24	**Dragomelj**	jama / pit 1037	Beta-162366	5730 ± 50	4660–4500	Turk, Svetličič 2006, 69
25	***Moverna vas***	*faza / phase 2*	*OxA-*		*4904–4874*	*Budja 1993, sl. / fig. 5*
26	***Moverna vas***	*faza / phase 2*	*OxA-*		*4902–4876*	*Budja 1993, sl. / fig. 5*
27	***Moverna vas***	*faza / phase 3*	*OxA-*		*4775–4442 (2-sigma)(?)*	*Budja 1993, sl. / fig. 5*
28	***Moverna vas***	faza / phase 4	OxA-		*4685–4340 (2-sigma)(?)*	*Budja 1993, sl. / fig. 5*
29	***Moverna vas***	*faza / phase 4*	*Z-*	*5700 ± 120*	*4330 ± 145*	*Budja 1990b, 16*
30	***Moverna vas***	*faza / phase 5*	*OxA-*		4598–4248 (2-sigma)(?)	*Budja 1993, sl. / fig. 5*
31	***Moverna vas***	*faza / phase 6*	*OxA-*		*4360–4033 (2-sigma)(?)*	*Budja 1993, sl. / fig. 5*
32	***Moverna vas***	*faza / phase 6*	*Z-*	*5060 ± 130*	*3900 ± 140*	*Budja 1990b, 16*
33	**Moverna vas**	faza / phase 2	MV30*	5940 ± 40	4940–4710	Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
34	**Moverna vas**	faza / phase 4	MV28*	5990 ± 40	5000–4780	Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
35	**Moverna vas**	faza / phase 4	MV29*	5800 ± 40		Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
36	**Moverna vas**	faza / phase 4	MV23*	5750 ± 40		Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
37	**Moverna vas**	faza / phase 4	MV25*	5630 ± 40		Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
38	**Moverna vas**	faza / phase 4	MV27*	5620 ± 40		Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
39	**Moverna vas**	faza / phase 4	MV24*	5550 ± 40		Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
40	**Moverna vas**	faza / phase 4	MV152*	5550 ± 40		Žibrat - Gašparič 2008, 131, sl. / fig. 5.1

	NAJDIŠČE / SITE	KONTEKST / CONTEXT	LAB. ŠT. / LAB. NO.	uncal BP (14C)	BC (1-SIGMA)	VIR / SOURCE
41	**Moverna vas**	faza / phase 5	MV26*	5610 ± 40		Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
42	**Moverna vas**	faza / phase 6	MV151*	5670 ± 40	4610–4440	Žibrat - Gašparič 2008, 131, sl. / fig. 5.1
43	***Resnikov prekop***	*kol št. 5 / pile no. 5*	*Z-354(!?)* *Z-345(!?)*	*5824 ± 150* *5856 ± 93* *5850 ± 150*		*Dimitrijević 1979b, 179* *Budja 1994b, sl. / fig. 5* *Budja, Mlekuž 2008, tab. 1*
44	**Resnikov prekop**	kol št. 33 / pile no. 33	Hd-24038	5718 ± 23	4580–4505	Čufar, Korenčič 2006, tab. 2
45	**Ržišče**		*Beta-229156* Beta-229156	*5860 ± 70* 5840 ± 70	*4790–4610 (2-sigma)(?)* 4840–4530 (2-sigma)	*Mason 2008, 20* Mason, Andrič 2009, tab. 1
46	***Spodnje Škovce***	*1. poselitvena faza / 1st settlement phase*			4800–4500**	Žorž, Nadbath 2010, 362

* Oznaka vzorca keramike, kjer je bil odvzet material za radiokarbonsko datiranje / Pottery sample mark where the material for radiocarbon dating was taken

** Ni natančnejših podatkov o datumu in razponu / No precise data about the date and range

bonsko datiranimi konteksti,[261] zato pa je znan izbor keramike iz Moverne vasi. V drugi poselitveni fazi je veliko skled na nogi, ki so premazane z rdečo barvo, analogije zanje so v najstarejši poselitveni fazi Gradca pri Mirni,[262] ali pa ornamentirane z žlebljenimi linijami oz. odtisi.[263] Najti je tudi posode z izlivom, ki so podobne oblike kot sklede brez izliva s Čateža in tudi podobno okrašene z odtisi na ustju in prelomu.[264] Poznamo jih še z Dragomlja[265] in s Spahe.[266] Lonci t. i. "S" profila iz Moverne vasi imajo analogije na Resnikovem prekopu.[267] Enako lahko trdimo tudi za podobne posode s trakastim ročajem oz. ročajema.[268] Podobno oblikovana posoda z navznoter zavihanim ustjem, kot jo poznamo iz Moverne vasi, je bila najdena na najdišču savske skupine Gradišče pri Stiški vasi pod Krvavcem.[269]

Drugo, najštevilnejšo skupino radiokarbonskih datumov predstavljajo datumi za Čatež – Sredno polje, Ržišče (glej *tab. 5.1:* 45),[270] Dragomelj in Resnikov prekop.

settlement phase there are many dishes on foot which are coated red and analogies for them are found in the oldest settlement phase of Gradec near Mirna,[262] or ornamented with grooved lines or impressions.[263] Vessels with a spout, of a similar shape to dishes without a spout from Čatež and also similarly decorated with impressions on the lip and break can also be found.[264] They are also known from Dragomelj[265] and Spaha.[266] Pots of the s.c. "S" profile from Moverna vas have analogies at Resnikov prekop.[267] The same is true for similar vessels with a ribbon handle or handles.[268] A similarly shaped vessel with an inverted lip as is known from Moverna vas was found at the site of the Sava group Gradišče near Stiška vas pod Krvavcem.[269]

The second, most numerous group of radiocarbon dates are dates for Čatež – Sredno polje, Ržišče (see *Tab. 5.1:* 45),[270] Dragomelj, and Resnikov prekop. These describe the probable range from 4691 to 4551 BC (*Tab.*

[261] Izjemo predstavlja posoda iz SE 096 z najdišča Čatež – Sredno polje, ki je predstavljena na tipološki tabeli pri Tomaž 2005b, sl. 7: SU 96.

[262] Dular et al. 1991, t. 22: 1,2,6–10.

[263] Tomaž 1999, t. MV3: 3,4; MV4; MV5: 1–3.

[264] Prim. Tomaž 1999, t. MV3: 1 in Tomaž 2005a, npr. najdba št. 6.

[265] Turk, Svetličič 2005, npr. najdba št. 31.

[266] Glej poglavje 4, *t. 4.36:* 1, v tem zborniku.

[267] Prim. Tomaž 1999, t. MV10: 4; MV11: 2 in Korošec 1964, t. 16: 4; Harej 1975, t. 1: 6; Velušček 2006b, t. 1: 8.

[268] Prim. Tomaž 1999, t. MV9: 2–4; MV10: 1,3; MV12: 1 in Harej 1975, t. 1: 1,5,9; 2: 1; Velušček 2006b, t. 1: 5.

[269] Prim. Budja 1992, sl. 4: faza 2 – spodnja vrsta: drugi lonec z desne; Tomaž 1999, t. MV11: 3 in Velušček 2005b, najdba št. 8.

[270] Uvrstitev najdišča v savsko skupino ni povsem zanesljiva, je pa najverjetnejša, saj Ph. Mason in M. Bricelj najstarejšo keramiko primerjata z najdbami iz pete in šeste

[262] Dular et al. 1991, Pl. 22: 1,2,6–10.

[263] Tomaž 1999, Pls. MV3: 3,4; MV4; MV5: 1–3.

[264] Cf. Tomaž 1999, Pl. MV3: 1, and Tomaž 2005a, e.g. find no. 6.

[265] Turk, Svetličič 2005, e.g. find no. 31.

[266] See chapter 4, *Pl. 4.36:* 1, in this monograph.

[267] Cf. Tomaž 1999, Pls. MV10: 4; MV11: 2, and Korošec 1964, Pl. 16: 4; Harej 1975, Pl. 1: 6; Velušček 2006b, Pl. 1: 8.

[268] Cf. Tomaž 1999, Pls. MV9: 2–4; MV10: 1,3; MV12: 1, and Harej 1975, Pls. 1: 1,5,9; 2: 1; Velušček 2006b, Pl. 1: 5.

[269] Cf. Budja 1992, Fig. 4: phase 2 – bottom line: second pot from the right; Tomaž 1999, Pl. MV11: 3, and Velušček 2005b, find no. 8.

[270] The assignment of the site to the Sava group is not completely certain but is most probable since Ph. Mason and M. Bricelj compare the oldest pottery with the finds from the fifth and sixth settlement phase in Moverna vas (see Mason, Bricelj 2000–2004, 41, 42).

kop. Opisujejo verjetni razpon od 4691 do 4551 pr. Kr. (*tab. 5.4:* 5). Spodnja vrednost je blizu intervalu zgoraj omenjenih starejših datumov, medtem ko se v okvir te vrednosti delno ujamejo tudi razponi četrte ter pete faze v Moverni vasi (*tab. 5.1:* 27,28) oz. po drugem naboru datumov, od četrte do šeste poselitvene faze (glej *tab. 5.1:* 35–42; *5.4:* 7). Slednji so večinoma presenetljivo visoki (glej *tab. 5.1:* 37–42), z že omenjeno izjemo, kjer je datum očitno prestar (*tab. 5.1:* 34).

Kot referenčno najdišče ponovno vzemimo Moverno vas, kjer se v četrti in peti fazi še vedno pojavljajo sklede na nogi.[271] Dobre analogije so tudi za sklede, ki so okrašene z žlebljenimi linijami in odtisi.[272] Najdemo jih npr. v Ozlju[273] in na Spahi.[274] Ornamentirane posode z ročaji podobnih oblik kot so v Moverni vasi[275] pozna tudi Ozalj,[276] so pa še na Resnikovem prekopu[277] in v naselbini savske skupine na Drulovki.[278]

Glede na kalibracijski razpon znatno odstopa datum vzorca iz šeste faze v Moverni vasi (*tab. 5.1:* 31), kar pa ne pomeni, da je napačen. Po razpoložljivih podatkih je bila značilna lasinjska posoda[279] najprej uvrščena v sedmo, kasneje pa je postalo jasno, da izhaja iz šeste t. i. neolitske poselitvene faze.[280] Zato lahko sklepamo, da je verjetno prišlo do mešanja najdb in drugih, tudi organskih, ostankov iz različnih poselitvenih faz, kar niti ne preseneča, saj je bilo izkopavališče zastavljeno v kraški vrtači. Na verjetno mešanje plasti kažejo tudi najnovejši radiokarbonski datumi, ki jih objavlja A. Žibrat - Gašparič[281] (glej *tab. 5.1:* 33–42).

Skratka, na podlagi 26 radiokarbonskih datumov se zdi, da je najzgodnejši verjetni datumski začetek savske skupine iskati nekje proti koncu 48. stoletja, medtem ko lahko postavimo najkasnejši verjetni konec savske skupine najkasneje okoli sredine 46. stoletja pr. Kr. oz. med letoma 4712 in 4547 (glej *tab. 5.4:* 11). V primeru, da jim priključimo tudi po našem mnenju sporne datume za Moverno vas (glej *tab. 5.1:* 33–42), se razpon razširi na obdobje med letoma 4767 in 4500 (*tab. 5.4:* 9). Brez najmanj dveh verjetnih "outlierjev" s tega najdišča (*tab.*

poselitvene faze v Moverni vasi (glej Mason, Bricelj 2000–2004, 41, 42).

[271] Tomaž 1999, t. MV19: 3–5; MV20: 1–3; MV27: 1; MV29: 1,2.

[272] Npr. Budja 1992, sl. 4: faza 4; Tomaž 1999, t. MV18: 2–4; MV28: 2,5.

[273] Težak - Gregl 2005, najdbe št. 1,3,4,12 in 13.

[274] Glej poglavje 4, npr. *t. 4.2:* 6, v tem zborniku.

[275] Budja 1992, sl. 4: faza 4 – spodnja vrsta: druga in tretja posoda, faza 5 – spodnja vrsta: prva posoda z leve; Tomaž 1999, t. MV22: 2,3; MV23; MV24; MV25; MV30: 1.

[276] Težak - Gregl 2005, najdbe št. 20–22.

[277] Harej 1975, t. 7: 12.

[278] Guštin, Tomaž, Kavur 2005, najdbi št. 22 in 25.

[279] Glej Budja 1992, 104, sl. 4: faza 7 – spodnja vrsta: prva posoda z desne.

[280] Tomaž 1999, t. MV34: 5.

[281] 2008, sl. 5.1.

5.4: 5). The bottom value is near to the interval of the above mentioned older dates, while ranges of the fourth and fifth phase of Moverna vas (*Tab. 5.1:* 27,28) partly fit the frame of this value or according to the second collection of dates, from the fourth to the sixth settlement phase (see *Tabs. 5.1:* 35–42; *5.4:* 7). The latter are mostly surprisingly high (see *Tab. 5.1:* 37–42), with the above mentioned exception where the date is obviously too old (*Tab. 5.1:* 34).

As a reference site we will again take Moverna vas, where in the fourth and fifth phase dishes on foot still appear.[271] Good analogies are also for dishes ornamented with grooved lines and impressions.[272] They can be found e.g. at Ozalj[273] and Spaha.[274] Ornamented vessels with handles of similar shape as in Moverna vas[275] are also known to Ozalj,[276] and are also present at Resnikov prekop[277] and at the settlement of the Sava group at Drulovka.[278]

Regarding the calibration range the date of the sample from the sixth phase in Moverna vas (*Tab. 5.1:* 31) stands out but this does not mean that it is wrong. According to the available data the typical Lasinja vessel[279] was first assigned to the seventh, but it later became clear that it originates from the sixth, s.c. Neolithic settlement phase.[280] Thus we can conclude that the mixing of finds and other, also organic, remains from different settlement phases probably occurred, which is not really surprising since the excavation site was set in the Karstic sinkhole. To the probable mixing of layers point also the most recent radiocarbon data, published by A. Žibrat - Gašparič[281] (see *Tab. 5.1:* 33–42).

On the basis of 26 radiocarbon dates it seems that the earliest probable date of the beginning of the Sava group is somewhere towards the end of the 48th century, while we can set the latest probable end of the Sava group around the middle of the 46th century BC at the latest or between 4712 and 4547 (see *Tab. 5.4:* 11). If we add to these also, in our opinion questionable, dates for Moverna vas (see *Tab. 5.1:* 33–42), the range widens to the period between 4767 and 4500 (*Tab. 5.4:* 9). Without at least two probable "outliers" from this site (*Tab. 5.1:*

[271] Tomaž 1999, Pls. MV19: 3–5; MV20: 1–3; MV27: 1; MV29: 1,2.

[272] E.g. Budja 1992, Fig. 4: phase 4; Tomaž 1999, Pls. MV18: 2–4; MV28: 2,5.

[273] Težak - Gregl 2005, finds nos. 1, 3, 4, 12, and 13.

[274] See chapter 4, e.g. *Pl. 4.2:* 6, in this monograph.

[275] Budja 1992, Fig. 4: phase 4 – bottom line: second and third vessel, phase 5 – bottom line: first vessel from the left; Tomaž 1999, Pls. MV22: 2,3; MV23; MV24; MV25; MV30: 1.

[276] Težak - Gregl 2005, finds nos. 20–22.

[277] Harej 1975, Pl. 7: 12.

[278] Guštin, Tomaž, Kavur 2005, finds nos. 22 and 25.

[279] See Budja 1992, 104, Fig. 4: phase 7 – bottom line: first vessel from the right.

[280] Tomaž 1999, Pl. MV34: 5.

[281] 2008, Fig. 5.1.

5.1: 39,40), dobimo razpon od 4726 do 4504 pri 1-sigma (*tab. 5.4:* 10).

Trenutno so najstarejši datumi z 1-sigma razponi z najdišč na jugovzhodu oz. jugu skupine (Čatež – Sredno polje in Moverna vas) (*tab. 5.1:* 1–3,25,26,33,34, in *5.4:* 1,6). Le nekoliko mlajši je najstarejši datum za Dragomelj (*tab. 5.1:* 21), kjer pa lahko govorimo celo o "outlierju". Najmlajši so datumi tako na jugovzhodu (jugu) kot tudi severozahodu razprostranjenosti (Čatež – Sredno polje, Moverna vas, Ržišče, Dragomelj in Resnikov prekop).

5.3.2.2 LASINJSKA KULTURA

Na Spahi je dokumentirana poselitev tudi v obdobju lasinjske kulture. V Sloveniji je iz tega časa objavljenih več kot 30 radiokarbonskih datumov s kar 11 najdišč: Ajdovska jama, Col 1 pri Podgračenem, Čatež – Sredno polje, Gorice pri Turnišču, Gradišče nad Dešnom, Hardek, Ivankovci, Malečnik, Moverna vas, Ržišče in Sodolek. V tem prispevku jih objavljamo 28 (glej *tab. 5.2*).[282]

Najbolj izpovedni so podatki za Ajdovsko jamo, ki kažejo na verjetni razpon 4342–4237 pr. Kr. (*tab. 5.4:* 17). Z njim se prekriva interval za datume "čistih" lasinjskih kontekstov na Malečniku, Goricah pri Turnišču, Sodoleku in Hardeku (*tab. 5.4:* 12). Na zgornjo mejo 4351–4075 pr. Kr. pa kaže združeni interval za Ajdovsko jamo, Col 1 pri Podgračenem, Čatež – Sredno polje, Ržišče in Gradišče nad Dešnom (*tab. 5.4:* 16). Na slednjem najdišču v dolini Save pred Litijo sicer prevladuje keramika horizonta keramike z brazdastim vrezom, značilnih lasinjskih najdbi ni, najti pa je posode z rdečim premazom in zajemalke s tulastim držajem.[283] Nekoliko drugače je z objektom 070 z najdišča Čatež – Sredno polje, ki sicer sodi v savsko skupino.[284] Kljub temu menimo, da datum (*tab. 5.2:* 12) zaradi prisotnosti značilnih lasinjskih[285] najdb na najdišču, zelo verjetno kaže na aktivnosti, ki so se v naselju odvijale v obdobju lasinjske kulture.[286]

[282] Za datacijo horizonta grobov v Ajdovski jami je upoštevano samo 10 novejših datumov iz laboratorija v Oxfordu, ki jih objavljajo C. Bonsall in sodelavci (2007, tab. 1), medtem ko starejših datumov v analizo nismo vključili, predvsem zaradi zelo velike standardne napake (glej npr. Horvat 1989; Culiberg, Horvat, Šercelj 1992). Zelo problematični in nejasno podani pa so tudi radiokarbonski datumi za Moverno vas (prim. Obelić 1989; Budja 1990b; 1992; 1993), ki jih v glavnem pri interpretaciji ne moremo upoštevati in jih zato v analizo na *tab. 5.4* prav tako ne vključujemo.

[283] Pavlin, Dular 2007, t. 7–19.

[284] Ustna informacija A. Tomaž.

[285] Glej Tiefengraber 2006c, 229–234.

[286] Uvrstitev v lasinjsko kulturo radiokarbonskega datuma za vzorec iz objekta 070 ne nasprotuje mnenju A. Tomaž, ki neolitsko naselje oz. naselje savske skupine v Čatežu – Sredno polje postavlja v starejše obdobje, v absolutni čas

39,40) we get the range from 4726 to 4504 at 1-sigma (*Tab. 5.4:* 10).

Currently, the oldest dates with 1-sigma range come from the sites in the southeast or south of the group (Čatež – Sredno polje and Moverna vas) (*Tabs. 5.1:* 1–3,25,26,33,34, and *5.4:* 1,6). Only slightly younger is the oldest date for Dragomelj (*Tab. 5.1:* 21), where we can even speak about the "outlier". The youngest are data in the southeast (south) and also in the northwest of the spread (Čatež – Sredno polje, Moverna vas, Ržišče, Dragomelj, and Resnikov prekop).

5.3.2.2 LASINJA CULTURE

At Spaha, the settlement in the period of the Lasinja culture is also documented. In Slovenia, we have over 30 radiocarbon dates from that time published from 11 sites: Ajdovska jama, Col 1 near Podgračeno, Čatež – Sredno polje, Gorice near Turnišče, Gradišče above Dešen, Hardek, Ivankovci, Malečnik, Moverna vas, Ržišče, and Sodolek. In this article we publish 28 (see *Tab. 5.2*).[282]

The most declaratory are the data for Ajdovska jama, which indicate the probable range 4342–4237 BC (*Tab. 5.4:* 17). The interval for data of "pure" Lasinja contexts overlaps with them at Malečnik, Gorice near Turnišče, Sodolek, and Hardek (*Tab. 5.4:* 12). The upper limit 4351–4075 BC is indicated by the united interval for Ajdovska jama, Col 1 near Podgračeno, Čatež – Sredno polje, Ržišče, and Gradišče above Dešen (*Tab. 5.4:* 16). At the latter site in the Sava valley near Litija pottery of the horizon of pottery with furrowed incisions generally prevails, there are no typical Lasinja finds, nevertheless, there were some vessels with red slip and ladles with a hollow grip found.[283] Somewhat different is facility 070 from the site Čatež – Sredno polje, which generally belongs to the Sava group.[284] Despite that we believe that the date (*Tab. 5.2:* 12), due to the presence of typical Lasinja[285] finds at the site, very probably indicates activities happening at the settlement in the period of the Lasinja culture.[286]

[282] Dating of the horizon of graves in Ajdovska jama accounts for only 10 of the newest dates from the laboratory in Oxford, which are published by C. Bonsall and colleagues (2007, Tab. 1), while older dates were not included into the analysis, primarily due to the big standard error (see e.g. Horvat 1989; Culiberg, Horvat, Šercelj 1992). Very problematic and unclearly given are also the radiocarbon dates for Moverna vas (cf. Obelić 1989; Budja 1990b; 1992; 1993), which mainly cannot be considered in the interpretation and are thus also not included into the analysis on *Tab. 5.4*.

[283] Pavlin, Dular 2007, Pls. 7–19.

[284] By word of mouth A. Tomaž.

[285] See Tiefengraber 2006c, 229–234.

[286] The assignment into the Lasinja culture of the radiocarbon date for the sample from facility 070 does not contradict

Trenutno so najmlajši datumi iz sedme faze Moverne vasi (*tab. 5.2:* 26),[287] Cola 1 pri Podgračenem (*tab. 5.2:* 11), Ržišča (*tab. 5.2:* 27) in Ivankovcev (*tab. 5.2:* 23,24). Najdbe iz Moverne vasi so značilno lasinjske, le kalibracijski razpon, v primerjavi z drugimi, se zdi nekoliko previsok in kaže na prvo polovico 4. tisočletja pr. Kr. Zanimiv je tudi radiokarbonski datum s Cola 1. Po podatkih, ki jih navaja Mi. Horvat, so se v neolitskem keramičnem zbiru iz 002/1/1 ponovile keramične oblike, kakršne srečamo v četrti in deloma peti fazi Moverne vasi (SE 050 in SE 022) in delno v najstarejšem horizontu grobov v Ajdovski jami pri Nemški vasi (SE 044), ki pa, kot smo videli, sodi v lasinjsko kulturo.[288] 1-sigma razpon datuma iz Cola 1 je 4036–3956 (*tab. 5.2:* 11). Še manj je podatkov za Ržišče v Beli krajini, kjer je navedeno, da gre za nižinsko naselbino, ki se jo uvršča tudi v lasinjsko kulturo.[289] 2-sigma razpon kaže na čas med 3960–3700 (glej *tab. 5.2:* 27).

Brez celovite objave je enako problematična kulturna opredelitev najdišča Ivankovci. Objavljena keramika kaže na lasinjsko kulturo,[290] B. Kavur pa najdbe iz bakrenodobne jame pogojno uvršča v horizont keramike z brazdastim vrezom,[291] kamor, glede na radiokarbonske datume, dejansko bolj sodi (prim. *tab. 5.4:* 18 in *5.4:* 21).[292]

Tab. 5.2: Na podlagi 24 radiokarbonskih datumov, ki so bili pridobljeni večinoma v zadnjem času, lahko rečemo, da je verjetni časovni razpon lasinjske kulture v Sloveniji iskati med letoma 4366 in 4080 (*tab. 5.4:* 20). Skupaj z datumoma za Ivankovce, ki sta po našem mnenju problematična, pa med 4367 in 3653 pri 1-sigma (*tab. 5.4:* 19).

Opazno je, da najstarejši datumi za lasinjsko kulturo prihajajo z najdišč na severovzhodu (*tab. 5.2:* 17,25,28) in tudi jugu države, kar morda dokazujeta "savska outlierja" iz četrte poselitvene faze v Moverni vasi (glej *tab. 5.1:* 39,40). Najmlajši datumi so tako s severovzhodnega kot tudi osrednjega dela države (prim. *tab. 5.2* in *5.4:* 12–17).

med 4800 in 4600 cal BC (Tomaž 2005a, 113; glej še Guštin 2005b, 16).

[287] Radiokarbonske datume za Moverno vas objavlja tudi B. Obelić (1989, sl. 3), a jih zaradi drugačnih stratigrafskih podatkov ni mogoče uskladiti z datumi, ki so objavljeni pri Budji (npr. 1990b; 1992; 1993).

[288] Glej še poglavji 5.3.1, v tem prispevku in 1.4, v tem zborniku. Za podatke o radiokarbonskem datiranju SE 044 (horizont grobov) iz Ajdovske jame pa glej še Bonsall et al. 2007, tab. 2 (fazi 44 in 43).

[289] Mason 2008, 20, 21, zemljevid 1: 22.

[290] Tušek, Kavur, Tomaž 2006, 113–119.

[291] B. Kavur (2010, 64, 65, tab. 1) najdbe z Ivankovcev pogojno uvršča v horizont keramike z brazdastim vrezom. Med njimi je prepoznati tudi številne lasinjske elemente.

[292] Glej npr. Chmielewski 2008, 99.

At present, the youngest dates are from the seventh phase of Moverna vas (*Tab. 5.2:* 26),[287] Col 1 near Podgračeno (*Tab. 5.2:* 11), Ržišče (*Tab. 5.2:* 27), and Ivankovci (*Tab. 5.2:* 23,24). Finds from Moverna vas are typically Lasinja, only the calibration range, in comparison to others, seems a little too high and points to the first half of the 4th millennium BC. The radiocarbon date from Col 1 is also interesting. According to the data given by Mi. Horvat pottery forms were repeated in the Neolithic pottery collection from 002/1/1, which can be encountered in the fourth and partly fifth phase of Moverna vas (SE 050 and SE 022), and partly in the oldest horizon of graves in Ajdovska jama near Nemška vas (SE 044) but which belongs to the Lasinja culture.[288] 1-sigma range of the date from Col 1 is 4036–3956 (*Tab. 5.2:* 11). There is less data for Ržišče in Bela krajina, where the settlement is stated to be a lowland settlement assigned also to the Lasinja culture.[289] 2-sigma range points to the time between 3960–3700 (see *Tab. 5.2:* 27).

Without the comprehensive publication the cultural delimitation of the site Ivankovci is just as problematic. The published pottery indicates the Lasinja culture,[290] while B. Kavur conditionally assigns the finds from the Copper Age cave to the horizon of pottery with furrowed incisions,[291] to which, according to the radiocarbon dates, it actually belongs (cf. *Tabs. 5.4:* 18 and *5.4:* 21).[292]

On the basis of 24 radiocarbon dates mostly acquired recently we can say that the probable time range of the Lasinja culture in Slovenia is between 4366 and 4080 (*Tab. 5.4:* 20). While together with the two dates for Ivankovci, which are in our opinion problematic, it is between 4367 and 3653 at 1-sigma (*Tab. 5.4:* 19).

It can be noticed that the oldest dates for the Lasinja culture come from the sites in the northeast (*Tab. 5.2:* 17,25,28) and also the south of the country, which the "Sava outliers" from the fourth settlement phase in Moverna vas (see *Tab. 5.1:* 39,40) also possibly prove. Thus the youngest dates come from the north-eastern and central part of the country (cf. *Tabs. 5.2* and *5.4:* 12–17).

the opinion of A. Tomaž, who places the Neolithic settlement or settlement of the Sava group in Čatež – Sredno polje into the older period, into the absolute time between 4800 and 4600 cal BC (Tomaž 2005a, 113; see also Guštin 2005b, 16).

[287] Radiocarbon dates for Moverna vas are published also by B. Obelić (1989, Fig. 3) but these cannot, due to different stratigraphic data, be harmonised with dates published by Budja (e.g. 1990b; 1992; 1993).

[288] See also chapters 5.3.1, in this article, and 1.4, in this monograph. For the data about radiocarbon dating SE 044 (horizon of graves) from Ajdovska jama see also Bonsall et al. 2007, Tab. 2 (phases 44 and 43).

[289] Mason 2008, 20, 21, Map 1: 22.

[290] Tušek, Kavur, Tomaž 2006, 113–119.

[291] B. Kavur (2010, 64, 65, Tab. 1) conditionally assigns the finds from Ivankovci to the horizon of pottery with furrowed incisions. Among them many Lasinja elements can be recognised.

[292] See e.g. Chmielewski 2008, 99.

Tab. 5.2: Objavljeni radiokarbonski datumi za obdobje lasinjske kulture z najdišč po Sloveniji. S kurzivo so označeni "problematični" oz. pomanjkljivo objavljeni vzorci, ki v analizi na *tab. 5.4* niso upoštevani.
Tab. 5.2: The published radiocarbon dates for the period of the Lasinja culture from sites in Slovenia. Italics mark the "problematic" or insufficiently published samples which are not considered in the analysis on *Tab. 5.4*.

	NAJDIŠČE / SITE	KONTEKST / CONTEXT	LAB. ŠT. / LAB. NO.	uncal BP (14C)	BC (1-SIGMA)	VIR / SOURCE
1	**Ajdovska jama**	SE / SU 044	OxA-15041	5485 ± 50	4448–4243	Bonsall et al. 2007, tab. 1
2	**Ajdovska jama**	SE / SU 043	OxA-15095	5471 ± 31	4363–4257	Bonsall et al. 2007, tab. 1
3	**Ajdovska jama**	SE / SU 044	OxA-15092	5436 ± 30	4343–4243	Bonsall et al. 2007, tab. 1
4	**Ajdovska jama**	SE / SU 044	OxA-15091	5421 ± 30	4340–4235	Bonsall et al. 2007, tab. 1
5	**Ajdovska jama**	SE / SU 044	OxA-15074	5416 ± 35	4345–4173	Bonsall et al. 2007, tab. 1
6	**Ajdovska jama**	SE / SU 043	OxA-15094	5405 ± 31	4339–4172	Bonsall et al. 2007, tab. 1
7	**Ajdovska jama**	SE / SU 043	OxA-15093	5389 ± 30	4335–4075	Bonsall et al. 2007, tab. 1
8	**Ajdovska jama**	SE / SU 044	OxA-15073	5369 ± 31	4328–4061	Bonsall et al. 2007, tab. 1
9	**Ajdovska jama**	SE / SU 043	OxA-15072	5365 ± 31	4310–4250	Bonsall et al. 2007, tab. 1
10	**Ajdovska jama**	SE / SU 044	OxA-15119	5340 ± 36	4317–4049	Bonsall et al. 2007, tab. 1
11	**Col 1**	SE / SU 002/1/1	KIA-21323	5165 ± 35	4036–3956	Guštin 2005b, sl. / fig. 3
12	**Čatež – Sredno polje**	SE / SU 070	KIA-17851	5309 ± 45	4222–4044	Guštin 2005b, sl. / fig. 2
13	**Gorice pri Turnišču**	SE / SU 438	KIA-31894	5434 ± 36	4335–4250	Plestenjak 2010, 156, sl. / fig. 86
14	**Gorice pri Turnišču**	SE / SU 479	Wk-23911	5416 ± 30	4330–4255	Plestenjak 2010, 160, sl. / fig. 93
15	**Gorice pri Turnišču**	SE / SU 473	Wk-23910	5396 ± 30	4325–4235	Plestenjak 2010, 160, sl. / fig. 94
16	**Gradišče nad Dešnom**	plast / layer 4	KIA-21331	5303 ± 29	4221–4119	Guštin 2005b, sl. / fig. 3
17	**Hardek**	ognjišče / fireplace 3	Beta-112120	5530 ± 60	4485–4335	Žižek 2006a, sl. / fig. 2
18	**Hardek**	ognjišče / fireplace 2	Beta-112117	5480 ± 40	4350–4325	Žižek 2006a, sl. / fig. 2
19	**Hardek**	jama / pit 40b	Beta-112122	5410 ± 50	4330–4230	Žižek 2006a, sl. / fig. 2
20	**Hardek**	SE / SU 015	Beta-112115	5380 ± 50	4340–4160	Žižek 2006a, sl. / fig. 2
21	**Hardek**	ognjišče / fireplace 1	Beta-112118	5300 ± 50	4225–4035	Žižek 2006a, sl. / fig. 2
22	***Hardek***		Z-2742	5200 ± 120	4230–3810	Žižek 2006a, sl. / fig. 3
23	**Ivankovci**	jama / pit	KIA-38224	4915 ± 30	3761–3644 (2-sigma)	Kavur 2010, 64, 65
24	**Ivankovci**	jama / pit	KIA-38225	4885 ± 25	3703–3640	Kavur 2010, 64, 65
25	**Malečnik**	SE / SU 021	KIA-22920	5503 ± 38	4439–4258	Guštin 2005b, sl. / fig. 3
26	***Moverna vas***	*plast / layer 5* *faza / phase 7*	*Z-1476* *Z-1476*	*4050 ± 120*	*3875 ± 130*	*Srdoč et al. 1987, 139* *Budja 1993, sl. / fig. 5*
27	**Ržišče**		Beta-229154	5040 ± 50	3960–3700 (2-sigma)	Mason, Andrič 2009, tab. 1
28	**Sodolek**	PO 134	KIA-26992	5524 ± 37	4446–4336	Guštin 2005b, sl. / fig. 3

5.3.2.3 HORIZONT KERAMIKE Z BRAZDASTIM VREZOM

Najmlajšo eneolitsko poselitev na Spahi opredeljujejo najdbe horizonta keramike z brazdastim vrezom. Za to obdobje razpolagamo z najmanj 17 radiokarbonskimi datumi z 8 arheoloških najdišč: Ajdovska jama, Gorice pri Turnišču, Hočevarica, Kalimovnjek, Moverna vas, Nova tabla, Pod Kotom – jug pri Krogu in Šiman pri Gotovljah.

Največjo vrednost imajo datumi s kolišča Hočevarica na Ljubljanskem barju, kjer so radiokarbonsko datirane dendrokronološke kronologije. Z "wiggle-

5.3.2.3 HORIZON OF POTTERY WITH FURROWED INCISIONS

The youngest Eneolithic settlement of Spaha is defined by finds from the horizon of pottery with furrowed incisions. For this period we have at least 17 radiocarbon dates from 8 archaeological sites: Ajdovska jama, Gorice near Turnišče, Hočevarica, Kalimovnjek, Moverna vas, Nova tabla, Pod Kotom – jug near Krog, and Šiman near Gotovlje.

The highest value belongs to the dates from the pile-dwelling Hočevarica at the Ljubljansko barje, where dendrochronological chronologies are dated

Tab. 5.3: Objavljeni radiokarbonski datumi za horizont keramike z brazdastim vrezom z najdišč po Sloveniji. S kurzivo so označeni "problematični" oz. pomanjkljivo objavljeni vzorci, ki v analizi na *tab. 5.4* niso upoštevani.
Tab. 5.3: The published radiocarbon dates for the horizon of pottery with furrowed incisions from sites in Slovenia. Italics mark the "problematic" or insufficiently published samples which are not considered in the analysis in *Tab. 5.4*.

	NAJDIŠČE / SITE	KONTEKST / CONTEXT	LAB. ŠT. / LAB. NO.	uncal BP (14C)	BC (1-SIGMA)	VIR / SOURCE
1	***Ajdovska jama***	*III. horizont / horizon*	*Z-*	*5175 ± 145*		*Horvat 1989, 28*
2	***Ajdovska jama***	*SE / SU 42*	*Z-*	*4990 ± 130*		*Culiberg, Horvat, Šercelj 1992, sl. / fig. 2*
3	***Ajdovska jama***	*SE / SU 5*	*Z-*	*4902 ± 105*		*Culiberg, Horvat, Šercelj 1992, sl. / fig. 2*
4	***Ajdovska jama***	*SE / SU 42*	*Z-2043*	*4824 ± 104*	*3773–3387*	*Culiberg, Horvat, Šercelj 1992, sl. / fig. 3*
5	**Gorice pri Turnišču**	SE / SU 342	Wk-23909	4640 ± 30	3500–3360	Plestenjak 2010, 161, sl. / fig. 95
6	**Hočevarica**	kol št. / pile no. 34	Hd-22139	4972 ± 25	3780–3710	Čufar, Kromer 2004, tab. 6.3.1
7	**Hočevarica**	kol št. / pile no. 33	Hd-18976	4822 ± 39	3650–3545	Čufar, Kromer 2004, tab. 6.3.1
8	**Hočevarica**	kol št. / pile no. 56	Hd-20765	4746 ± 26	3635–3520	Čufar, Kromer 2004, tab. 6.3.1
9	**Kalimovnjek**	SE / SU 119	KIA-32870	4971 ± 30	3773–3708	Kerman 2010, sl. / fig. 6
10	***Kalimovnjek***	*SE / SU 111*	KIA-32869		*3757–3743*	*Kerman 2010, sl. / fig. 6*
11	**Kalimovnjek**	SE / SU 422	KIA-32876	4889 ± 29	3697–3677	Kerman 2010, sl. / fig. 6
12	***Moverna vas***	*plast / layer 6*	*Z-1475*	*4917 ± 125*	*3930–3539*	*Obelić 1989, sl. / fig. 3*
13	**Nova tabla**	jama / pit PO 132	KIA-21386	4914 ± 37	3709–3652	Šavel, Guštin 2006, 208
14	**Pod Kotom – jug**	grob / grave 20	KIA-21325	4735 ± 40	3631–3383	Hüls 2009, sl. / fig. 74
15	**Pod Kotom – jug**	grob / grave 141	KIA-21324	4710 ± 35	3626–3378	Hüls 2009, sl. / fig. 73
16	***Šiman***	*SE / SU 74*	*OxA-8260*	*4900 ± 45*	*3780–3640*	*Tomažič, Olić 2009, 48*
17	***Šiman***	*SE / SU 36*	*OxA-8619*	*4705 ± 50*	*3610–3370*	*Tomažič, Olić 2009, 48*

matchingom" smo prišli do datuma, ki postavlja konec manj kot stoletne poselitve najdišča na začetek druge polovice 36. stoletja pr. Kr. Pri tem naj spomnimo, da se že okoli leta 3500 pr. Kr., približno 15 km vzhodno od Hočevarice, pojavi kolišče kulturne skupine Stare gmajne, ki keramike z brazdastim vrezom ne pozna več.[293]

Podatki kažejo, da lahko v isti verjetni časovni okvir, kot velja za Hočevarico, vpnemo tudi 1-sigma razpone z najdišč Ajdovska jama, Kalimovnjek, Nova tabla, Pod Kotom – jug in Šiman pri Gotovljah. Najdbe z najdišč Ajdovska jama,[294] Kalimovnjek,[295] Nova tabla[296] in Pod Kotom – jug[297] absolutno datacijo potrjujejo, medtem ko je kulturna opredelitev najdišča Šiman pri Gotovljah problematična. Datuma (glej *tab. 5.3:* 16,17) dobesedno visita, saj sta brez podpore v najdbah.[298] Še več, datiranje oglja iz SE 74 v laboratoriju v Zagrebu je pokazalo na precej drugačno starost 3745 ± 105 BP

radiocarbonally. By the "wiggle-matching" we came to the date which sets the end of the less than a hundred year settlement of the site to the beginning of the second half of the 36th century BC. Let us here remind you that already around 3500 BC, approximately 15 km east of Hočevarica, a pile-dwelling of the cultural group Stare gmajne appears and no longer knows pottery with furrowed incisions.[293]

The data show that we can assign to the same probable time frame as Hočevarica also 1-sigma ranges from sites Ajdovska jama, Kalimovnjek, Nova tabla, Pod Kotom – jug, and Šiman near Gotovlje. Finds from sites Ajdovska jama,[294] Kalimovnjek,[295] Nova tabla,[296] and Pod Kotom – jug[297] confirm the absolute dating, while the cultural definition of the site Šiman near Gotovlje is problematic. The two dates (see *Tab. 5.3:* 16,17) literally hang since they have no support from the finds.[298]

[293] Čufar et al. 2010.
[294] Glej Velušček 2004c, 243–245, sl. 5.3.11.
[295] Kerman 2010, 49–61, sl. 3,4.
[296] Šavel, Guštin 2006, 208–210, najdbe št. 25–30.
[297] Šavel 2009a, 59–113; 2009b.
[298] Glej Olić 2009, 16, 17; Tomažič 2009b, najdbe št. 407–414.

[293] Čufar et al. 2010.
[294] See Velušček 2004c, 243–245, Fig. 5.3.11.
[295] Kerman 2010, 49–61, Fig. 3,4.
[296] Šavel, Guštin 2006, 208–210, finds nos. 25–30.
[297] Šavel 2009a, 59–113; 2009b.
[298] See Olić 2009, 16, 17; Tomažič 2009b, finds nos. 407–414.

Tab. 5.4: Najverjetnejši kalibracijski razponi radiokarbonskih datumov z najdišč savske skupine (1–11), lasinjske kulture (12–20) in horizonta keramike z brazdastim vrezom (21). Datumi so kalibrirani s programom OxCal v4.0.5 Bronk Ramsey (2007).
Tab. 5.4: The most probable calibration ranges of radiocarbon dates from the sites of the Sava group (1–11), Lasinja culture (12–20), and horizon of pottery with furrowed incisions (21). The dates are calibrated with the programme OxCal v4.0.5 Bronk Ramsey (2007).

ANALIZA ŠT. / ANALYSIS NO.	**NAJDIŠČE / SITE**	**LAB. ŠT. / LAB. NO.**	**sum BC (1-SIGMA)**
1	Čatež – Sredno polje	KIA-17864, KIA-17848, KIA-17857	4880–4724
2	Čatež – Sredno polje	KIA-17866, KIA-17860, KIA-17861, KIA-17850, KIA-17856, KIA-17846, KIA-17862, KIA-17863, KIA-17865, KIA-17858, KIA-17852, KIA-17859, KIA-17849, KIA-17855, KIA-17847, KIA-17867, KIA-17854	4695–4555
3	Čatež – Sredno polje	vsi analizirani vzorci (Savska skupina) / all analysed samples (Sava group) (glej / see *tab. 5.1:* 1–20)	4712–4553
4	Dragomelj, Resnikov prekop	Beta-201209, Beta-201210, Beta-201213, Beta-162366, Hd-24038	4682–4503
5	Čatež – Sredno polje, Dragomelj, Resnikov prekop, Ržišče	KIA-17866, KIA-17860, KIA-17861, KIA-17850, KIA-17856, KIA-17846, KIA-17862, KIA-17863, KIA-17865, KIA-17858, KIA-17852, KIA-17859, KIA-17849, KIA-17855, KIA-17847, KIA-17867, KIA-17854, Beta-201210, Beta-201213, Beta-162366, Hd-24038, Beta-229156	4691–4551
6	Moverna vas	najstarejši datumi / the oldest dates (glej / see *tab. 5.1:* 33,34)	4882–4747
7	Moverna vas	najmlajši datumi / the youngest dates (glej / see *tab. 5.1:* 35–42)	4529–4352
8	Moverna vas	vsi analizirani vzorci / all analysed samples (glej / see *tab. 5.1:* 33–42)	4845–4346
9	**savska skupina / Sava group**	**vsi analizirani vzorci (glej / see *tab. pl. 5.1*)**	**4767–4500**
10	**savska skupina/ Sava group**	**vsi analizirani vzorci brez vzorcev s *tab. 5.1:* 39,40 (Moverna vas) / all analysed samples with the exception of *tab. 5.1:* 39,40 (Moverna vas)**	**4726–4504**
11	**savska skupina / Sava group**	**vsi analizirani vzorci brez Moverne vasi / all analysed samples with the exception of Moverna vas (glej / see *tab. 5.1*)**	**4712–4547**
12	Sodolek, Malečnik, Hardek, Gorice pri Turnišču	KIA-26992, KIA-22920, Beta-112120, Beta-112117, Beta-112122, Beta-112115, Beta-112118, KIA-31894, Wk-23910, Wk-23911	4438–4236
13	Sodolek, Malečnik	KIA-26992, KIA-22920	4444–4332
14	Hardek	Beta-112120, Beta-112117, Beta-112122, Beta-112115, Beta-112118	4442–4079
15	Gorice pri Turnišču	KIA-31894, Wk-23910, Wk-23911	4330–4258
16	Col 1, Čatež – Sredno polje, Ajdovska jama, Gradišče nad Dešnom, Ržišče	KIA-21323, KIA-17851, OxA-15041, OxA-15095, OxA-15092, OxA-15091, OxA-15074, OxA-15094, OxA-15093, OxA-15073, OxA-15072, OxA-15119, KIA-21331, Beta-229154	4351–4075
17	Ajdovska jama	OxA-15041, OxA-15095, OxA-15092, OxA-15091, OxA-15074, OxA-15094, OxA-15093, OxA-15073, OxA-15072, OxA-15119	4342–4237
18	Ivankovci	KIA-38224, KIA-38225	3696–3649
19	**lasinjska kultura / Lasinja culture**	**vsi analizirani vzorci / all analysed samples (glej / see *tab. 5.2*)**	**4367–3653**
20	**lasinjska kultura / Lasinja culture**	**vsi analizirani vzorci brez vzorcev z Ivankovcev / all analysed samples with the exception of Ivankovci (glej / see *tab. 5.2*)**	**4366–4080**
21	**HKBV / "Furchenstich" horizon**	**vsi analizirani vzorci / all analysed samples (glej / see *tab. 5.3*)**	**3775–3519**

(Z-2821).[299] Visok pa je tudi datum z Goric pri Turnišču (*tab. 5.3:* 5), kjer najdbe sicer pritrjujejo uvrstitvi SE 342 v obravnavani horizont.[300]

Skratka, datacija horizonta keramike z brazdastim vrezom v Sloveniji, ki smo jo predlagali v monografiji o Hočevarici, še vedno ostaja enaka, tj. okvirno druga četrtina 4. tisočletja pr. Kr.[301]

Furthermore, the dating of the charcoal from SE 74 in the laboratory in Zagreb revealed a significantly different age of 3745 ± 105 BP (Z-2821).[299] The date from Gorice near Turnišče is also high (*Tab. 5.3:* 5) but the finds here agree with the assignment of SU 342 to the discussed horizon.[300]

To sum up, the dating of the horizon of pottery with furrowed incisions in Slovenia that we had suggested in the monograph about Hočevarica remains the same, e.g. approximately the second quarter of the 4th millennium BC.[301]

[299] Obelić 2009, sl. 61, 64.
[300] Glej Plestenjak 2010, sl. 74–76 in prim. s sl. 83.
[301] Velušček 2004d, 295.

[299] Obelić 2009, Fig. 61, 64.
[300] See Plestenjak 2010, Fig. 74–76 and cf. Fig. 83.
[301] Velušček 2004d, 295.

5.3.2.4 PRIMERJAVE S SOSEDNJIMI OBMOČJI

Da bi ocenili vrednost zgoraj predlagane absolutne kronologije za neo- in eneolitsko obdobje v osrednji, južni in severovzhodni Sloveniji (*tab. 5.4:* 9–11,19–21), jo je treba primerjati s primerljivimi podatki z najdišč na sosednjih območjih, predvsem s celinske Hrvaške, iz južne in vzhodne Avstrije ter zahodne Madžarske.

Po kronologiji, ki jo je leta 1994 objavil Z. Marković,[302] je v 5. tisočletju pr. Kr. v obravnavanem delu Hrvaške živela sopotska kultura. Najstarejše sopotske pojave, ki naj bi bili primerljivi s savsko skupino,[303] je označil za brezovljanski tip sopotske kulture, nasledi ga tip Pepelane, zatem so na vrsti najprej zgodnjeeneolitska seška kultura, nato lasinjska in končno retzgajaryska kultura.

O radiokarbonskih datacijah za sopotsko kulturo smo pisali že leta 2006 v monografiji o kolišču Resnikov prekop.[304] Od takrat do danes se podatki niso bistveno spremenili,[305] zato naj ponovimo, da intervali za sopotsko kulturo – vzorci so iz plasti, ki se jih relativnokronološko uvršča v stopnje I-B, II-A, II-B in III – pokrivajo drugo polovico 6. in celotno 5. tisočletje pr. Kr. (glej *tab. 5.5*). Glede na interval 4786–4466 je stopnja II-B sopotske kulture sočasna s savsko skupino (prim. *tab. 5.5:* 3 in *5.4:* 9–11). Od nje veliko mlajša lasinjska kultura se v Sloveniji prekriva z vrednostmi za III. stopnjo sopotske kulture (4341–3981 pr. Kr.) in seške kulture (glej *tab. 5.6*), kar se ne ujema z relativno kronologijo[306] in tudi ne z ugotovitvijo, da v primeru sprejetja takšne absolutne datacije, v istem obdobju pokrivajo isti prostor tri povsem različne kulture.[307] Novejši radiokarbonsko datirani vzorci z lasinjskih najdišč na Hrvaškem namreč jasno kažejo, da za lasinjsko kulturo z veliko verjetnostjo govorimo o obdobju med 4330 in 3963 pr. Kr. (*tab. 5.7:* 4),[308] kar je skoraj povsem primerljivo s podatki s slovenskih lasinjskih najdišč (glej *tab. 5.4:* 20). Naj ob tem omenimo še izjemno odkritje v kraju Potočani severno od Požege, kjer so po naključju naleteli na kulturno jamo s fragmenti verjetno lasinjske keramike in ostanki več kot 50 človeških skeletov. Radiokarbonsko datirana vzorca odvzeta iz dveh človeških kosti, sta pokazala na čas okoli 4200 pr. Kr.[309]

[302] 1994, tab. 1.

[303] Glej npr. Turk, Svetličič 2005, 72.

[304] Velušček 2006b, 39–41, sl. 18–21.

[305] Glej še npr. Krznarić - Škrivanko 2006, 13, 14, 16; 2007, 67; Marković, Botić 2008, 17, sl. 1; Balen et al. 2009, 33, 34, tab. 3 in 4.

[306] Podobno mnenje zagovarja tudi J. Balen (Balen et al. 2009, 34–35), ki meni, da se je klasična sopotska kultura končala do najkasneje okoli 4500 pr. Kr.

[307] Glej npr. Marković 1994, tab. 1 in prim. karte 6, 7 in 9.

[308] Glej še Balen 2006b, 103, 104; 2008a, 22; Bekić, Čimin 2006, 135; Minichreiter, Marković 2009, 36.

[309] Potrebica, Balen 2007, 118.

5.3.2.4 COMPARISONS TO NEIGHBOURING TERRITORIES

To estimate the value of the above proposed absolute chronology for the Neo- and Eneolithic period in central, southern, and north-eastern Slovenia (*Tab. 5.4:* 9–11,19–21) it should be compared to the comparable data from sites in the neighbouring territories, primarily from continental Croatia, southern and eastern Austria, and western Hungary.

According to the chronology published by Z. Marković[302] in 1994, the Sopot culture lived in this part of Croatia in the 5th millennium BC. He denoted the oldest Sopot phenomena, which are supposedly comparable to the Sava group,[303] as the Brezovljani type of the Sopot culture, followed by the Pepelane type, then first the Early Eneolithic Seče culture, then Lasinja, and finally the Retz-Gajary culture.

We discussed the radiocarbon dates of the Sopot culture already in 2006 in the monograph about the pile-dwelling Resnikov prekop.[304] Since then the data has not changed significantly[305] therefore let us repeat that the intervals for the Sopot culture – samples taken from the layers relatively chronologically classified into stages I-B, II-A, II-B, and III – cover the second half of the 6th and the entire 5th millennium BC (see *Tab. 5.5*). According to interval 4786–4466, stage II-B of the Sopot culture is contemporary to the Sava group (cf. *Tabs. 5.5:* 3 and *5.4:* 9–11). Much younger Lasinja culture in Slovenia overlaps with the values for stage III of the Sopot culture (4341–3981 BC) and Seče culture (see *Tab. 5.6*), which is inconsistent to the relative chronology[306] and also with the finding that in the case of acceptance of such absolute dating three completely different cultures cover the same space in the same period.[307] More recent radiocarbon dated samples from the Lasinja sites in Croatia clearly show that for the Lasinja culture we can speak with great probability about the period between 4330 and 3963 BC (*Tab. 5.7:* 4),[308] which is completely comparable to the data from the Slovenian Lasinja sites (see *Tab. 5.4:* 20). Let us here mention the exceptional discovery from Potočani, north of the town Požega, where a cultural cave with fragments of probably Lasinja pottery and the remains of over 50 human skeletons were discovered by

[302] 1994, Tab. 1.

[303] See e.g. Turk, Svetličič 2005, 72.

[304] Velušček 2006b, 39–41, Fig. 18–21.

[305] See also e.g. Krznarić - Škrivanko 2006, 13, 14, 16; 2007, 67; Marković, Botić 2008, 17, Fig. 1; Balen et al. 2009, 33, 34, Tabs. 3 in 4.

[306] J. Balen is of a similar opinion (Balen et al. 2009, 34–35) and thinks that the classical Sopot culture ended around 4500 BC at the latest.

[307] See e.g. Marković 1994, Tab. 1 and cf. Maps 6, 7, and 9.

[308] See also Balen 2006b, 103, 104; 2008a, 22; Bekić, Čimin 2006, 135; Minichreiter, Marković 2009, 36.

Tab. 5.5: Najverjetnejši kalibracijski razponi radiokarbonskih datumov z najdišč sopotske kulture na Hrvaškem. Datumi so kalibrirani s programom OxCal v4.0.5 Bronk Ramsey (2007).
Tab. 5.5: The most probable calibration ranges of radiocarbon dates from sites of the Sopot culture in Croatia. The dates are calibrated with the programme OxCal v4.0.5 Bronk Ramsey (2007).

ANALIZA ŠT. / ANALYSIS NO.	**SOPOTSKA KULTURA / SOPOT CULTURE**	**ŠT. DATUMOV / NO. OF DATES**	**VIR / SOURCE**	**sum BC (1-SIGMA)**
1	I-B	5	Obelić et al. 2004, 254, tab. 1, 2	5485–5079
2	II-A	3	Obelić et al. 2004, 254, tab. 1, 2	5020–4730
3	II-B	3	Obelić et al. 2004, 254, tab. 1, 2	4786–4466
4	III	5	Obelić et al. 2004, 254, tab. 1, 2	4341–3981

Tab. 5.6: Radiokarbonski datum za kulturo Seče.
Tab. 5.6: The radiocarbon date for the Seče culture.

ANALIZA ŠT. / ANALYSIS NO.	**NAJDIŠČE / SITE**	**ŠT. DATUMOV / NO. OF DATES**	**cal BC**	**VIR / SOURCE**
1	Gromača 2	1	4293 ± 33	Brnić 2008, 73

Tab. 5.7: Najverjetnejši kalibracijski razponi novejših radiokarbonskih datumov z najdišč lasinjske kulture na Hrvaškem. Datumi so kalibrirani s programom OxCal v4.0.5 Bronk Ramsey (2007). S kurzivo sta označena "problematična" oz. pomanjkljivo objavljena vzorca, ki v analizi na *tab. 5.7:* 4 nista upoštevana.
Tab. 5.7: The most probable calibration ranges of the recent radiocarbon dates from sites of the Lasinja culture in Croatia. The dates are calibrated with the programme OxCal v4.0.5 Bronk Ramsey (2007). Italics mark the two "problematic" or insufficiently published samples that were not considered in the analysis in *Tab. 5.7:* 4.

ANALIZA ŠT. / ANALYSIS NO.	**NAJDIŠČE / SITE**	**ŠT. DATUMOV / NO. OF DATES**	**VIR / SOURCE**	**sum BC (1-SIGMA)**
1	Tomašanci – Palača	4	Balen 2008a, 22, sl. / fig. 3	4336–3976
2	Đakovački Selci – Pajtenica	7 (brez / without Beta-227934)	Balen 2008a, 22, sl. / fig. 3	4335–3972
3	Jurjevac – Stara Vodenica	6	Balen 2008a, 22, sl. / fig. 3	4221–3957
4	**1–3 (skupaj / total)**	**17**		**4330–3963**
5	*Blizna*	*1*	*Brnić 2008, 73; Minichreiter, Marković 2009, 36*	*4208 ± 91 (cal BC)*
6	*Brezje 1*	*1*	*Bekić, Čimin 2006, 135*	*4157 ± 68 (cal BC)*

Tab. 5.8: Najverjetnejši kalibracijski razponi novejših radiokarbonskih datumov z najdišč retzgajaryske kulture na Hrvaškem. Datumi so kalibrirani s programom OxCal v4.0.5 Bronk Ramsey (2007).
Tab. 5.8: The most probable calibration ranges of the recent radiocarbon dates from sites of the Retz-Gajary culture in Croatia. The dates are calibrated with the programme OxCal v4.0.5 Bronk Ramsey (2007).

ANALIZA ŠT. / ANALYSIS NO.	**NAJDIŠČE / SITE**	**ŠT. DATUMOV / NO. OF DATES**	**VIR / SOURCE**	**sum BC (1-SIGMA)**
1	Tomašanci – Palača	1 (Beta-238075)	Balen 2008a, 19–22, sl. / fig. 3	3693–3536
2	Virovitica – Korija	2	Balen 2008a, 19–22, sl. / fig. 3	3692–3539
3	Virovitica – Batelije	2	Balen 2008a, 19–22, sl. / fig. 3	3641–3357
4	**1–3 (skupaj / total)**	**5**		3696–3363

Podobno kot za lasinjsko pa velja tudi za retzgajarysko kulturo (3696–3363 pr. Kr.) (*tab. 5.8:* 4),[310] chance. The two radiocarbon dated samples taken from two human bones revealed the time around 4200 BC.[309]

[310] Balen 2008a, 23, sl. 3.

[309] Potrebica, Balen 2007, 118.

ki je glede na najdbe in verjetni absolutni interval primerljiva horizontu keramike z brazdastim vrezom (glej *tab. 5.4:* 21).

Glede na podatke iz tabele, ki jo objavljajo P. Stadler in sodelavci,[311] je lengyelska kultura (MOG) v Avstriji z največjo verjetnostjo trajala v razponu od 4845–4755 do 4180–4050 pr. Kr. Od 4180–4050 do 4130–3920 pr. Kr. je bil čas Epi-Lengyela. Od 3780 do 3350 pr. Kr. pa je 1-sigma interval za baalberško skupino.[312]

Savska skupina je v celoti živela v obdobju lengyelske kulture (MOG). Glede na absolutne datume (*tab. 5.4:* 10,11) je bila paralelna z Ia in Ib fazo,[313] kar ni v skladu z relativno kronologijo. Kot že omenjeno, keramika z najdišč savske skupine je primerljiva poznolengyelskim najdbam,[314] a po mnenju nekaterih drugih raziskovalcev lahko tudi za stopnjo starejšim najdbam iz stopnje MOG IIa.[315]

Verjetni razpon epilengyelske stopnje se prekriva z najmlajšimi vrednostmi za lasinjsko kulturo (prim. *tab. 5.4:* 20 in *5.9:* 1),[316] medtem ko se interval za baalberško skupino[317] prekriva s horizontom keramike z brazdastim vrezom v Sloveniji.

Za primerjavo vzemimo še absolutne datume s koliščarske naselbine s Hodiškega jezera na Koroškem blizu Celovca, kjer so izpričane najdbe kanzianiberg-lasinjske kulture in tudi horizonta keramike z brazdastim vrezom.[318] Radiokarbonsko datirani dendrokronološko protokolirani vzorci kažejo na čas med 4200–4090 in 3810–3640 pr. Kr.[319] S kombiniranjem dendrokronološke metode (sinhronizacija) in radiokarbonskega datiranja so za dva kola celo ugotovili, kdaj natančno sta bila posekana, in sicer v zimah 3947/46 in 3871/70 pr. Kr.[320] S tega koliščа je zanimiv tudi vrč (*sl. 5.12:* 2), ki je oblikovno primerljiv lasinjskim vrčem iz Ajdovske jame (npr. *sl. 5.12:* 1),[321] s tem, da je ornament na vrču krivolinijski in naj bi bil torej značilen za zaključno obdobje lasinjske kulture,[322] kar se ujema z absolutnim datiranjem.

[311] Stadler et al. 2006, tab. 5.

[312] Stadler 1995, tab. 2.

[313] Faza MOG Ia (od 4715–4660 do 4650–4580 pr. Kr.) in MOG Ib (od 4650–4580 do 4550–4495 pr. Kr.) (po Stadler et al. 2006, tab. 5).

[314] Glej npr. Carneiro 2006a, 108, 109, ki obravnava večperiodno najdišče Mannersdorf ter ob tem največ pozornosti posveti srednje- in poznolengyelski keramiki, za slednjo najdemo analogije po najdiščih savske skupine.

[315] Carneiro 2006b, 77; 1-sigma interval za MOG IIa: od 4550–4495 do 4405–4345 pr. Kr. (po Stadler et al. 2006, tab. 5)!

[316] Glej Stadler et al. 2006.

[317] Glej "Baalberger Gruppe mit Furchenstichkeramik (Typus Retz)" (Ruttkay 1995, 129–138).

[318] Glej Samonig 2003, 92–97; Velušček 2004d, 293.

[319] Cichocki 2003, 30–34, tab. 1.

[320] Cichocki 2003, 32–34, sl. 6; Cichocki, Dworsky 2006, 92.

[321] Glej še Horvat 1989, t. 2: 206; 5: 430; 6: 435; 8: 468; 9: 469.

[322] Npr. Dimitrijević 1979b, 159, sl. 5.

Similar as for the Lasinja culture is true also for the Retz-Gajary culture (3696–3363 BC) (*Tab. 5.8:* 4),[310] which is according to the finds and probable absolute interval comparable to the horizon of pottery with furrowed incisions (see *Tab. 5.4:* 21).

According to the data from the table published by P. Stadler and colleagues[311] the Lengyel culture (MOG) in Austria with the greatest probability lasted during the range from 4845–4755 to 4180–4050 BC. From 4180–4050 to 4130–3920 BC was the time of Epi-Lengyel. From 3780 to 3350 BC is the 1-sigma interval for the Baalberg group.[312]

The Sava group lived entirely during the period of the Lengyel culture (MOG). According to the absolute dates (*Tab. 5.4:* 10,11) it was parallel to phases Ia and Ib,[313] which is inconsistent with the relative chronology. As said before, the pottery from sites of the Sava group is comparable to the Late Lengyel finds,[314] yet according to the opinion of some other researchers could also be compared to the stage older finds from stage MOG IIa.[315]

The probable range of the Epi-Lengyel stage overlaps with the youngest values for the Lasinja culture (cf. *Tabs. 5.4:* 20 and *5.9:* 1),[316] while the interval for the Baalberg group[317] overlaps with the horizon of pottery with furrowed incisions in Slovenia.

For the comparison we will consider also the absolute dates from the pile-dwelling settlement from Keutschacher See near Klagenfurt, where finds from the Kanzianiberg-Lasinja culture and also from the horizon of pottery with furrowed incisions are attested.[318] Radiocarbon dated dendrochronologically protocoled samples indicate the time between 4200–4090 and 3810–3640 BC.[319] By combining dendrochronological method (synchronization) and radiocarbon dating it was discovered when exactly two piles were cut down, which was during winters of 3947/46 and 3871/70 BC.[320] A pitcher (*Fig. 5.12:* 2) is also interesting from this site

[310] Balen 2008a, 23, Fig. 3.

[311] Stadler et al. 2006, Tab. 5.

[312] Stadler 1995, Tab. 2.

[313] Phases MOG Ia (from 4715–4660 to 4650–4580 BC) and MOG Ib (from 4650–4580 to 4550–4495 BC) (according to Stadler et al. 2006, Tab. 5).

[314] See e.g. Carneiro 2006a, 108, 109, who discusses the multi-period site Mannersdorf and focuses on Middle and Late Lengyel pottery, for the latter the analogies can be found on sites of the Sava group.

[315] Carneiro 2006b, 77; 1-sigma interval for MOG IIa: from 4550–4495 to 4405–4345 BC (according to Stadler et al. 2006, Tab. 5)!

[316] See Stadler et al. 2006.

[317] See "Baalberger Gruppe mit Furchenstichkeramik (Typus Retz)" (Ruttkay 1995, 129–138).

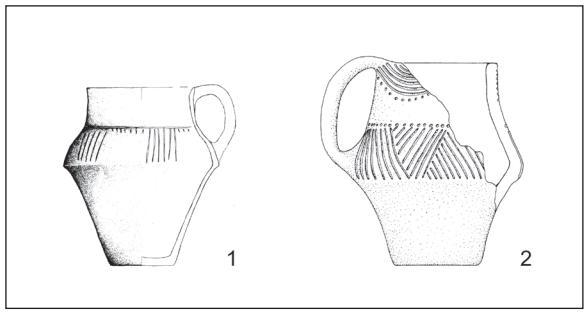
[318] See Samonig 2003, 92–97; Velušček 2004d, 293.

[319] Cichocki 2003, 30–34, Tab. 1.

[320] Cichocki 2003, 32–34, Fig. 6; Cichocki, Dworsky 2006, 92.

Tab. 5.9: Najverjetnejši kalibracijski razpon radiokarbonskega datuma za Epi-Lengyel. Datum je kalibriran s programom OxCal v4.0.5 Bronk Ramsey (2007).
Tab. 5.9: The most probable calibration range of the radiocarbon date for Epi-Lengyel. The date is calibrated with the programme OxCal v4.0.5 Bronk Ramsey (2007).

ANALIZA ŠT. / ANALYSIS NO.	NAJDIŠČE / SITE	ŠT. DATUMOV / NO. OF DATES	VIR / SOURCE	cal BC (1-SIGMA)
1	Pitten	1	Stadler et al. 2006, sl. / fig. 10	4226–3971



Sl. 5.12: 1 (Ajdovska jama, po Horvat 1989, t. 1: 108); 2 (Hodiško jezero, po Samonig 2003, t. 1: 1). M = 1 : 5.
Fig. 5.12: 1 (Ajdovska jama, according to Horvat 1989, t. 1: 108); 2 (Keutschacher See, according to Samonig 2003, Pl. 1: 1). Scale = 1 : 5.

Pet radiokarbonskih datumov s poznolengyelske naselbine Zalaszentbalázs-Szőlőhegyi mező v zahodni Panoniji kaže na najverjetnejši razpon med 4681–4457 pr. Kr. (glej *tab. 5.10:* 1).[323] Če upoštevamo mnenje L. Horvátha in N. Kalicza,[324] da je najmlajši datum "outlier" in ga iz analize izločimo, se razpon zoži na vrednosti med 4681 in 4489 (glej *tab. 5.10:* 2). Slednja avtorja tudi poudarita,[325] da se kalibrirane vrednosti prekrivajo z absolutnimi datacijami prototiszapolgárske faze na vzhodu Madžarske (4570–4270 pr. Kr.), kar pa se ponovno ne ujema z relativno kronologijo in korelacijo Lengyel III – Tiszapolgár.[326] V nadaljevanju še menita, da za verodostojno oceno o absolutnokronološkem mestu poznolengyelske stopnje v zahodni Panoniji potrebujemo večje število datumov.

Zagotovo je na tem področju še ogromno dela. V zadnjem času o radiokarbonskih datacijah za konec neolitskega in iz začetnega eneolitskega obdobja (tiszapolgárska kultura) na vzhodu Madžarske izčrpno pišejo R. W. Yerkes in sodelavci,[327] kjer pritrjujejo Horváthu in Kaliczu. Prvo polovico 5. tisočletja pokrivajo datumi za pozni neolitik (kulture Tisza, Csoszhalom in Herpály), okoli sredine je datirana faza Proto-Tiszapolgár, v drugi

[323] Velušček 2006b, 37, 39, 42, sl. 16.
[324] 2006, 63.
[325] Horváth, Kalicz 2006, 63.
[326] Glej npr. Kalicz 1991, sl. 22; 1998, 136; Bánffy 2002, sl. 10; Horváth, Kalicz 2006, 63.
[327] Yerkes, Gyucha, Parkinson 2009, 1071–1109.

and can be compared in form to the Lasinja pitcher from Ajdovska jama (e.g. *Fig. 5.12:* 1),[321] with the exception that the ornament on the pitcher has curved lines and is thus typical of the final period of the Lasinja culture,[322] which agrees with the absolute dating.

Five radiocarbon dates from the Late Lengyel settlement of Zalaszentbalázs-Szőlőhegyi mező in western Pannonia indicate the most probable range between 4681–4457 BC (see *Tab. 5.10:* 1).[323] If we consider the opinion of L. Horváth and N. Kalicz[324] that the youngest date is an "outlier" and is excluded from the analysis, the range narrows to the values between 4681 and 4489 (see *Tab. 5.10:* 2). These authors also emphasize[325] that the calibrated values overlap with the absolute dates of Proto-Tiszapolgár phase in the east of Hungary (4570–4270 BC), but which again does not match the relative chronology and correlation Lengyel III – Tiszapolgár.[326] They also believe that for the credible estimation of the absolute chronological place of Late Lengyel stage in western Pannonia we need a bigger number of dates.

Much work is still to be done in this area. Recently, radiocarbon dates for the end of the Neolithic and beginning of the Eneolithic period (Tiszapolgár culture) in the east of Hungary have been extensively discussed by R. W. Yerkes and colleagues,[327] where they agree with Horváth and Kalicz. The first half of the 5th millennium is covered by dates for the Late Neolithic (cultures Tisza, Csoszhalom, and Herpály), around the Middle is the date for phase Proto-Tiszapolgár, while the period of Tiszapolgár culture is in the second half. They also believe that the final Neolithic, Proto-Tiszapolgár, and Tiszapolgár phases partly overlap each other.[328]

The horizon Karanovo VI in Bulgaria is also parallel to the Tiszapolgár culture. Radiocarbon dates indicate

[321] See also Horvat 1989, Pls. 2: 206; 5: 430; 6: 435; 8: 468; 9: 469.
[322] E.g. Dimitrijević 1979b, 159, Fig. 5.
[323] Velušček 2006b, 37, 39, 42, Fig. 16.
[324] 2006, 63.
[325] Horváth, Kalicz 2006, 63.
[326] See e.g. Kalicz 1991, Fig. 22; 1998, 136; Bánffy 2002, Fig. 10; Horváth, Kalicz 2006, 63.
[327] Yerkes, Gyucha, Parkinson 2009, 1071–1109.
[328] For the absolute and relative chronology of the discussed period in eastern Europe see also Chmielewski 2008, 41–100.

Tab. 5.10: Najverjetnejša kalibracijska razpona radiokarbonskih datumov za Zalaszentbalázs-Szőlőhegyi mező (Lengyel III). Datumi so kalibrirani s programom OxCal v4.0.5 Bronk Ramsey (2007).
Tab. 5.10: The most probable calibration ranges of the radiocarbon dates for Zalaszentbalázs-Szőlőhegyi mező (Lengyel III). Dates are calibrated with the programme OxCal v4.0.5 Bronk Ramsey (2007).

ANALIZA ŠT. / ANALYSIS NO.	ŠT. DATUMOV / NO. OF DATES	VIR / SOURCE	sum BC (1-SIGMA)
1	5	Hertelendi 1995, 105, 106	4681–4457
2	4 (brez / without Deb-3380)	Hertelendi 1995, 105, 106	4681–4489

polovici pa je obdobje tiszapolgárske kulture. Menijo tudi, da se zaključna neolitska, prototiszapolgárska in tiszapolgárska faza med seboj delno prekrivajo.[328]

Vzporeden s tiszapolgársko kulturo je tudi horizont Karanovo VI v Bolgariji. Radiokarbonski datumi kažejo na čas druge polovice 5. tisočletja pr. Kr.[329] Zato vse na glavo, ali pa tudi ne, obrnejo novi absolutni datumi za grobišče Varna I, ki je relativnokronološko datirano v zadnjo (III.) fazo lokalne varnske kulture,[330] širše gledano v obdobje, ki je npr. paralelno ali celo nekoliko mlajše od Lengyela III v zahodni Panoniji oz. tiszapolgárske kulture na vzhodu Madžarske.[331] Preliminarni AMS datumi namreč kažejo, da je bilo grobišče v uporabi malo več kot 100 let med intervaloma 4608–4551 in 4480–4430 (1-sigma) oz. z največjo verjetnostjo med letoma 4560 in 4450 pr. Kr. S tem, da se je pokopavanje bogatih grobov začelo po 4632–4552 pr. Kr. in ni trajalo več kot dve generaciji (pribl. 50–60 let). Začetek polaganja umrlih v revnejše grobove pa je datiran po letu 4500 pr. Kr.[332]

V zahodni Panoniji poznolengyelsko stopnjo nasledi kultura Balaton-Lasinja. Radiokarbonskih datumov je malo. N. Kalicz je objavil konvencionalni datum z najdišča Nagykanizsa-Sánc: 3040–2980 uncal BC ± 80.[333] Mlajša sta datuma z najdišča te kulture Keszthely-Fenékpuszta (Bln-500: 4890 ± 80 BP; Bln-501: 4780 ± 80 BP) in kažeta na prvo polovico 4. tisočletja ter po mnenju T. Chmielewskega[334] bolj ustrezata obdobju keramike z brazdastim vrezom.

Kot primerjavo vzemimo verjetni razpon grobov iz zgodnje faze ludaniške skupine v Jelšovcah na Slovaškem, ki je med 4444 in 3969 pr. Kr. (*tab. 5.11:* 1), ob tem, da je najverjetnejša starost pokopov ocenjena na čas med letoma 4300 in 4200.[335] Razvidno je, da se starost grobišča, ponovno, kot v primeru kultur Tiszapolgár in Lengyel III (glej zgoraj), ne prekriva z intervalom relativnokronološko sočasne bodrogkeresztúrske kulture, za

the time of the second half of the 5th millennium BC.[329] Thus everything is, or maybe not, turned upside down by the new absolute dates for Varna I, which is relative chronologically dated to the last (IIIrd) phase of the local Varna culture,[330] and in a wider sense into the period which is e.g. parallel or even somewhat younger from Lengyel III in western Pannonia or Tiszapolgár culture in the east of Hungary.[331] Preliminary AMS dates show that the burial ground was in use for just over 100 years between the intervals 4608–4551 and 4480–4430 (1-sigma) or with the highest probability between 4560 and 4450 BC. The burial of rich graves started after 4632–4552 BC and did not last for more than two generations (approx. 50–60 years). The beginning of laying the dead into the poorer graves is dated after 4500 BC.[332]

In western Pannonia the Late Lengyel stage is succeeded by the culture Balaton-Lasinja. Radiocarbon dates are few. N. Kalicz published a conventional date from the site Nagykanizsa-Sánc: 3040–2980 uncal BC ± 80.[333] Younger are the two dates from the site of this culture Keszthely-Fenékpuszta (Bln-500: 4890 ± 80 BP; Bln-501: 4780 ± 80 BP) and point to the first half of the 4th millennium, and according to T. Chmielewski[334] correspond more to the period of pottery with furrowed incisions.

As a comparison we can take the probable range of graves from the early phase of the Ludanice group in Jelšovce in Slovakia, which is between 4444 and 3969 BC (*Tab. 5.11:* 1), considering that the most probable age of burials is estimated to the time between 4300 and 4200.[335] It is obvious that the age of the burial ground, again, as in the case of the cultures Tiszapolgár and Lengyel III (see above), does not overlap with the interval of the relative chronologically contemporary Bodrogkeresztúr culture, for which the dates point to the first half of the 4th millennium[336] but to a great extent

[328] Za absolutno in relativno kronologijo obravnavanega obdobja v vzhodni Evropi glej še Chmielewski 2008, 41–100.
[329] Krauß 2008, sl. 46.
[330] Higham et al. 2007, 641 in tam navedena literatura.
[331] Prim. Garašanin 1982, 145; Parzinger 1993, 318 in Bánffy 2002, sl. 10.
[332] Higham et al. 2007, 640–654.
[333] Povzeto po Bánffy 1995b, 182.
[334] 2008, 99, sl. 21.
[335] Görsdorf 1995, 207.

[329] Krauß 2008, Fig. 46.
[330] Higham et al. 2007, 641 and bibliography given there.
[331] Cf. Garašanin 1982, 145; Parzinger 1993, 318 and Bánffy 2002, Fig. 10.
[332] Higham et al. 2007, 640–654.
[333] According to Bánffy 1995b, 182.
[334] 2008, 99, Fig. 21.
[335] Görsdorf 1995, 207.
[336] Forenbaher 1993, 246, Fig. 3; Bánffy 2002, Fig. 10; Yerkes, Gyucha, Parkinson 2009, 1081, Fig. 4.

Tab. 5.11: Najverjetnejši kalibracijski razpon radiokarbonskih datumov iz grobov v Jelšovcah na Slovaškem (ludaniška skupina). Datumi so kalibrirani s programom OxCal v4.0.5 Bronk Ramsey (2007).
Tab. 5.11: The most probable calibration ranges of radiocarbon dates from graves in Jelšovce in Slovakia (Ludanice group). Dates are calibrated with the programme OxCal v4.0.5 Bronk Ramsey (2007).

ANALIZA ŠT. / ANALYSIS NO.	ŠT. DATUMOV / NO. OF DATES	VIR / SOURCE	sum BC (1-SIGMA)
1	4	Görsdorf 1995, 205, 206	4444–3969

katero datumi kažejo na prvo polovico 4. tisočletja,[336] zato pa se v večji meri prekriva z datumi za lasinjsko kulturo v Sloveniji (*tab. 5.4:* 20) in na Hrvaškem (*tab. 5.7:* 4) ter tudi z epilengyelskim obdobjem v Avstriji.[337]

Kulturo Balaton-Lasinja zamenja keramika z brazdastim vrezom, ki se jo relativnokronološko uvršča pred badensko,[338] začetek slednje pa je absolutnokronološko postavljen v obdobje po 3850/3700/3650/3500/itd. pr. Kr.[339] Npr. na Ljubljanskem barju se je prehod iz horizonta keramike z brazdastim vrezom v skupino Stare gmajne zgodil med 3550 in 3500 pr. Kr.[340]

5.4 SKLEP

V prispevku smo pokazali, da je bila Spaha poseljena v petih kronološko in kulturno različnih obdobjih, od savske skupine preko lasinjske kulture, horizonta keramike z brazdastim vrezom, kulture žarnih grobišč do obdobja turških vpadov na slovensko ozemlje v 15. in 16. stoletju, ko nekdaj naselbinski vrhnji plato dobi novo obrambno oz. vojaško funkcijo.

Zanimala nas je predvsem najstarejša neo- in eneolitska poselitev. Prvo naselje smo postavili v obdobje savske skupine. Pri analizi najdb se je pokazalo, da je najti veliko primerjav za najdbe po vseh najdiščih savske skupine, ki jih navaja M. Guštin.[341] Še več, analiza je pokazala, da je treba v savsko skupino vključiti tudi skoraj vsa najdišča, ki jih Guštin uvršča v lengyelsko kulturo.[342] Izjemi sta poznolengyelski Andrenci in Bukovnica, saj so njune najdbe vsekakor bolj primerljive sočasnim najdbam iz zahodne Panonije,[343] pa tudi z vzhodnoštajerskih poznolengyelskih najdišč v Avstriji.[344]

[336] Forenbaher 1993, 246, sl. 3; Bánffy 2002, sl. 10; Yerkes, Gyucha, Parkinson 2009, 1081, sl. 4.

[337] Stadler et al. 2006, tab. 5; Schmitsberger 2009, 347; prim. s Somogyi 2000, 46.

[338] Npr. Kalicz 1991, sl. 22; Bánffy 2002, sl. 10.

[339] Npr. Petrasch 1984, 283–287; Forenbaher 1993, 246, sl. 4; Balen 2008a, 23; Brnić 2008, 73, 74; Furholt 2008, 620, 622, 623, tab. 1; Horváth, Svingor, Molnár 2008, 452, 453; Horváth 2009, 104.

[340] Glej Čufar et al. 2010; glej še Velušček 2009a.

[341] Guštin 2005b, sl. 1: 1–7.

[342] Guštin 2005b, sl. 1: 8–11.

[343] Npr. Bondár 1995, 51–70; Bánffy 1995a, 71–102.

[344] Tiefengraber 2006a, 81–87.

overlaps with the dates for the Lasinja culture in Slovenia (*Tab. 5.4:* 20) and Croatia (*Tab. 5.7:* 4) and also with the Epi-Lengyel period in Austria.[337]

The culture Balaton-Lasinja is replaced by pottery with furrowed incisions, which is relative chronologically classified under Baden,[338] and the beginning of the latter is absolute chronologically set to the period after 3850/3700/3650/3500/etc. BC.[339] At the Ljubljansko barje, for example, the transition from the horizon of pottery with furrowed incisions to the group Stare gmajne occurred between 3550 and 3500 BC.[340]

5.4 CONCLUSION

This contribution reveals that Spaha was populated in five chronologically and culturally different periods, from the Sava group and Lasinja culture, horizon of pottery with furrowed incisions, the Urnfield culture to the period of the Turkish invasions to the Slovenian territory in the 15th and 16th centuries, when the once settlement upper plateau acquired a new defensive or military function.

We were most interested in the oldest, Neo- and Eneolithic settlement. The first settlement was assigned to the period of the Sava group. The analysis of finds showed that many comparisons for finds can be found on all sites of the Sava group listed by M. Guštin.[341] Moreover, the analysis revealed that also almost all sites that Guštin assigns to the Lengyel culture[342] should also be included in the Sava group. The exceptions are Late Lengyel Andrenci and Bukovnica since their finds are certainly more comparable to the contemporary finds from western Pannonia[343] and also east Styrian Late Lengyel sites in Austria.[344]

[337] Stadler et al. 2006, Tab. 5; Schmitsberger 2009, 347; cf. Somogyi 2000, 46.

[338] E.g. Kalicz 1991, Fig. 22; Bánffy 2002, Fig. 10.

[339] E.g. Petrasch 1984, 283–287; Forenbaher 1993, 246, Fig. 4; Balen 2008a, 23; Brnić 2008, 73, 74; Furholt 2008, 620, 622, 623, Tab. 1; Horváth, Svingor, Molnár 2008, 452, 453; Horváth 2009, 104.

[340] See Čufar et al. 2010; see also Velušček 2009a.

[341] Guštin 2005b, Fig. 1: 1–7.

[342] Guštin 2005b, Fig. 1: 8–11.

[343] E.g. Bondár 1995, 51–70; Bánffy 1995a, 71–102.

[344] Tiefengraber 2006a, 81–87.

Bilo je pričakovati, da so si najdbe z bližnjih naselij med seboj bolj podobne, kar se je nato potrdilo z analizo. Veliko analogij za Spaho je na belokranjskih[345] in osrednjedolenjskih najdiščih[346] ter tudi v bližnjem Ozlju[347], [348] na Hrvaškem, kjer je očitno bilo priljubljeno žlebljenje v kombinaciji z odtisi. Odtisi so značilnost keramike z najdišč Čatež – Sredno polje,[349] Ptujski grad[350] in, kar je presenetljivo, tudi Dragomelj,[351] kjer so sicer, podobno kot na Resnikovem prekopu,[352] Drulovki[353] in Gradišču pri Stiški vasi,[354] pogoste tudi žlebljene oz. vrezane linije, lahko v kombinaciji z odtisi. Zanimiv je tudi material z Rabensteina v Labotski dolini, kjer je ponovno presenetljivo opaziti večjo podobnost z npr. Spaho in Resnikovim prekopom, kot ornamentalna zvrst pa je kljub temu zelo pogosto odtiskovanje.[355] Kakorkoli že, v tem trenutku je še prezgodaj trditi, da znotraj savske skupine lahko razlikujemo dve ali celo tri geografsko ločene variante oz. da omenjene razlike predstavljajo kronološko razliko. Za dokončno ocene bo treba vsekakor počakati na celovite objave ključnih najdišč, kot so Čatež – Sredno polje, Col 1, Moverna vas in Ozalj.

Zahvaljujoč naravoslovnim metodam datiranja lahko danes govorimo tudi o verjetnem absolutnokronološkem okvirju za savsko skupino. 26 radiokarbonskih datumov s 4 najdišč je dalo razpon med 4712 in 4547 pr. Kr. (*tab. 5.4:* 11) oz. 4726 in 4504 (*tab. 5.4:* 10), če v obravnavo vzamemo tudi "problematične" podatke za Moverno vas. Kar se prekriva z datumi za MOG Ia in Ib v Avstriji,[356] II.-B stopnjo sopotske kulture na Hrvaškem (glej *tab. 5.5:* 3), na vzhodu Madžarske to sovpada z datumi za poznoneolitsko obdobje in začetkom prototiszapolgárske faze,[357] na njenem zahodu v zahodni Panoniji pa z datumi s poznolengyelskega naselja (*tab. 5.10:* 1),[358] ki se relativnokronološko vzporeja z datumsko mlajšima tiszapolgársko kulturo in horizontom Karanovo VI.[359]

[345] Moverna vas in Gradac (Mason 1994, t. 1: 2,3).

[346] Gradec pri Mirni (npr. Dular 1999a, sl. 6: 1,8,9) in Grac pod Seli pri Zajčjem Vrhu (Pavlin 2006, npr. najdbe št. 7, 9 in 20).

[347] Npr. Težak - Gregl 2001, t. 1: 6; 4: 7.

[348] Uvrstitev Ozlja k skupini slovenskih najdišč zagovarjata tudi Horváth in Kalicz (2006, 64).

[349] Guštin, Tomaž, Kavur 2006, 386; Tomaž, Kavur 2006, 60, 61.

[350] Tomanič - Jevremov, Tomaž, Kavur 2006b, najdbe št. 2–15.

[351] Turk, Svetličič 2005, 71, 75, 77.

[352] Tomaž, Velušček 2005, najdbe št. 9, 26, 30, 31 in 37.

[353] Guštin, Tomaž, Kavur 2005, 44, 45, sl. 6.

[354] Velušček 2005b, npr. najdbe št. 4, 8, 9 in 10.

[355] Tiefengraber 2004, t. 2: 12,13,19; 3: 28,29; 7: 67,68,70,71; 9: 95,96.

[356] Stadler et al. 2006, tab. 5.

[357] Yerkes, Gyucha, Parkinson 2009, sl. 4.

[358] Glej še Kalicz 1998, 136: kronološka tabela.

[359] Npr. Bánffy 2002; Kalicz 2002, 387; Horváth, Kalicz 2006.

It was expected that the finds from nearby settlements resemble each other more and this assumption was confirmed by the analysis. Many analogies for Spaha are at Bela krajina[345] and central Dolenjska region sites[346] and also at the nearby Ozalj[347], [348] in Croatia, where grooving in combination with impressions was obviously very popular. Impressions are typical of pottery from sites Čatež – Sredno polje,[349] Ptujski grad,[350] and surprisingly also Dragomelj,[351] where generally, similar to Resnikov prekop,[352] Drulovka,[353] and Gradišče near Stiška vas,[354] grooved or incised lines, sometimes in combination with impressions, are frequent. The material from Rabenstein in Lavamünd valley is also interesting where a greater similarity to e.g. Spaha and Resnikov prekop is again to be noticed, despite the fact that the impressed ornament is very frequent.[355] Nevertheless, it is at the moment too early to claim that within the Sava group we can distinguish between two or even three geographically separate variants or that the mentioned differences present the chronological distinction. For the final evaluation we must wait for the comprehensive publications of the key sites, such as Čatež – Sredno polje, Col 1, Moverna vas, and Ozalj.

Thanks to the absolute dating methods today we can speak about the probable absolute chronological frame for the Sava group. 26 radiocarbon dates from 4 sites gave the range between 4712 and 4547 BC (*Tab. 5.4:* 11) or 4726 and 4504 (*Tab. 5.4:* 10) if we also consider the "problematic" data for Moverna vas. That which overlaps with the dates for MOG Ia and Ib in Austria,[356] and II.-B stage of the Sopot culture in Croatia (see *Tab. 5.5:* 3) in the east of Hungary coincides with the dates for the Late Neolithic period and the beginning of the Proto-Tiszapolgár phase[357]and at the west in western Pannonia with the dates from a Late Lengyel settlement (*Tab. 5.10:* 1),[358] which is relative chronologically compared to younger in date Tiszapolgár culture and

[345] Moverna vas and Gradac (Mason 1994, Pl. 1: 2,3).

[346] Gradec near Mirna (e.g. Dular 1999a, Fig. 6: 1,8,9) and Grac under Sela pri Zajčjem Vrhu (Pavlin 2006, e.g. finds nos. 7, 9, and 20).

[347] E.g. Težak - Gregl 2001, Pls. 1: 6; 4: 7.

[348] The classification of Ozalj to the group of Slovenian sites is also agreed to by Horváth and Kalicz (2006, 64).

[349] Guštin, Tomaž, Kavur 2006, 386; Tomaž, Kavur 2006, 60, 61.

[350] Tomanič - Jevremov, Tomaž, Kavur 2006b, finds nos. 2–15.

[351] Turk, Svetličič 2005, 71, 75, 77.

[352] Tomaž, Velušček 2005, finds nos. 9, 26, 30, 31, and 37.

[353] Guštin, Tomaž, Kavur 2005, 44, 45, Fig. 6.

[354] Velušček 2005b, e.g. finds nos. 4, 8, 9, and 10.

[355] Tiefengraber 2004, Pls. 2: 12,13,19; 3: 28,29; 7: 67,68,70,71; 9: 95,96.

[356] Stadler et al. 2006, Tab. 5.

[357] Yerkes, Gyucha, Parkinson 2009, Fig. 4.

[358] See also Kalicz 1998, 136: chronological Table.

Da je zmešnjava še večja, se v zadnjem času na koledarski konec savske skupine datira tudi začetek slavnega varnskega grobišča (Varna I) v Bolgariji.[360]

Zaradi (navideznega(?)) neujemanja absolutnih datumov se trenutno zdi relativnokronološka uvrstitev savske skupine še pomembnejša, kot je to razvidno na prvi pogled. Analiza je pokazala, da je največ primerjav na najdiščih iz poznolengyelskega obdobja, kamor uvrščamo tudi skupine Wolfsbach, MOG IIb, Brodzany-Nitra in kulturo Seče, in kar se sklada tudi z mnenji drugih raziskovalcev, kot so npr. L. Horváth, N. Kalicz,[361] T. Težak - Gregl,[362] G. Tiefengraber[363] in tudi Â. Carneiro,[364] ki sicer eno izmed ključnih najdišč savske skupine Čatež – Sredno polje uvrsti v stopnjo, ki je paralelna z MOG IIa v Avstriji.[365] S slednjim se ne moremo strinjati. Analiza je pokazala, da sodita Čatež – Sredno polje in npr. Resnikov prekop v savsko skupino, kar zagotovo ni sporno.[366] Še več, sočasnost je dodatno potrjena z radiokarbonskim datiranjem (glej *tab. 5.1:* 18–20,44). Medtem ko so z najdišča Čatež objavljene očitno samo reprezentativne posode,[367] je material z Resnikovega prekopa objavljen v celoti.[368] In kar je pomembnejše, za kolišče Resnikov prekop ugotavljamo, da je bilo v uporabi malo časa in po opustitvi nikoli več poseljeno.[369]

Znano je, da je bilo veliko keramičnih oblik lengyelske kulture trdoživih in so jih izdelovali dolgo časa.[370] Za relativno kronologijo pa so izredno pomembne amfore "S" profila,[371] ki so ena izmed značilnih oblik Resnikovega prekopa[372] in kot že omenjeno jih je najti npr. tudi v Moverni vasi[373] in na Spahi (glej *sl. 5.2* s komentarjem). Menimo, da je to ena izmed ključnih oblik glede na številčnost, ki savsko skupino uvršča v obdobje poznega Lengyela (Lengyel III). V Slavoniji na Hrvaškem se pod vplivom vinčanske kulture podobna posoda sicer pojavi že v okviru 2. sopotske stopnje,[374] a je za območja vzhodno, severovzhodno in severno od Slovenije dejansko značilna šele za poznolengyelsko obdobje.[375]

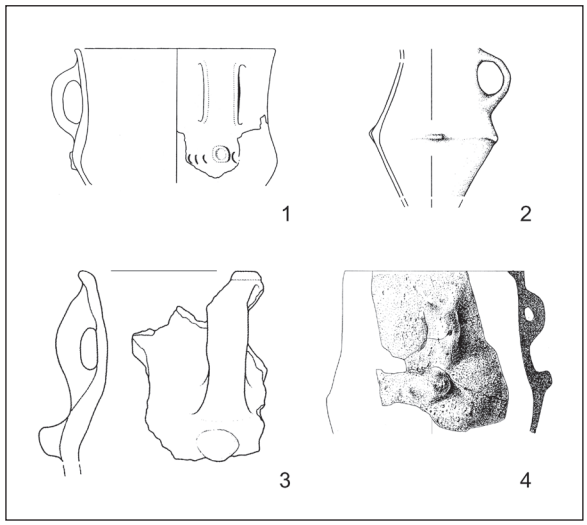
[360] Higham et al. 2007, 640–654; prim. s Kalicz 2002, 387.
[361] Horváth, Kalicz 2006, 63–65.
[362] 2006, 109, 110.
[363] 2006a, 85.
[364] Carneiro 2004a, 266.
[365] Carneiro 2004a, 271; 2006b, 77.
[366] Npr. Guštin 2005b, sl. 4; Tomaž 2005a, 122.
[367] Guštin, Bekić 2002; Tomaž 2005a; 2005b; 2008.
[368] Korošec 1964; Harej 1975; Velušček 2006b.
[369] Čufar, Korenčič 2006, 124; Toškan, Dirjec 2006, 148; Velušček 2006b, 26.
[370] Npr. Bánffy 1995b, sl. 8.
[371] Glej npr. Bánffy 1995b, sl. 9.
[372] Npr. Harej 1975, t. 1: 1,5,9; 2: 1,2; 6: 1; 7: 12.
[373] Budja 1992, sl. 4: neolitske poselitvene faze.
[374] Npr. Marković 1994, 84, t. 8: 8.
[375] Pavúk 1981, 279, 281, 294, sl. 13: 8,17; Kalicz 1991, 351, sl. 2: 6,11,13,18; Marković 1994, 89, t. 19: 5,10; 19a: 9; 19b: 5; Bánffy 1995b, 167–169, sl. 9; Carneiro 2004a, 261.

horizon Karanovo VI.[359] To further complicate the situation, the beginning of the famous Varna burial ground (Varna I) in Bulgaria[360] has been recently also dated to the calendar end of the Sava group.

Due to the (apparent(?)) incongruity of the absolute dates the relative chronological classification of the Sava group seems all the more important than it seemed at first. The analysis has shown that the most comparisons are found at sites from the Late Lengyel period, into which we also assign groups Wolfsbach, MOG IIb, Brodzany-Nitra, and the Seče culture, and what is consistent with opinions of other researchers, such as L. Horváth, N. Kalicz,[361] T. Težak - Gregl,[362] G. Tiefengraber,[363] and also Â. Carneiro,[364] who assigns one of the key sites of the Sava group Čatež – Sredno polje to the stage parallel to MOG IIa in Austria.[365] We cannot agree with the latter statement. The analysis has shown that Čatež – Sredno polje and e.g. Resnikov prekop belong to the Sava group, which cannot be questionable.[366] Moreover, the contemporaneity is additionally confirmed by radiocarbon dating (see *Tab. 5.1:* 18–20,44). While only the representative vessels are obviously published from the site Čatež,[367] the material from Resnikov prekop is published in full.[368] What is even more important, for the pile-dwelling Resnikov prekop we find that it was in use for only a short period of time and after abandonment never settled again.[369]

It is known that many pottery forms of the Lengyel culture were very enduring and were thus manufactured for a long time.[370] For the relative chronology amphorae of "S" profile are extremely important[371] and are one of the typical forms from Resnikov prekop.[372] As stated before, these can be found at e.g. Moverna vas[373] and at Spaha (see *Fig. 5.2* with the comment). We believe that this is one of the key forms regarding the number which places the Sava group in the period of the Late Lengyel (Lengyel III). In the Slavonija region in Croatia, similar vessels, under the influence of the Vinča culture, appear already within the second Sopot stage[374] but is for the

[359] E.g. Bánffy 2002; Kalicz 2002, 387; Horváth, Kalicz 2006.
[360] Higham et al. 2007, 640–654; cf. Kalicz 2002, 387.
[361] Horváth, Kalicz 2006, 63–65.
[362] 2006, 109, 110.
[363] 2006a, 85.
[364] Carneiro 2004a, 266.
[365] Carneiro 2004a, 271; 2006b, 77.
[366] E.g. Guštin 2005b, Fig. 4; Tomaž 2005a, 122.
[367] Guštin, Bekić 2002; Tomaž 2005a; 2005b; 2008.
[368] Korošec 1964; Harej 1975; Velušček 2006b.
[369] Čufar, Korenčič 2006, 124; Toškan, Dirjec 2006, 148; Velušček 2006b, 26.
[370] E.g. Bánffy 1995b, Fig. 8.
[371] See e.g. Bánffy 1995b, Fig. 9.
[372] E.g. Harej 1975, Pls. 1: 1,5,9; 2: 1,2; 6: 1; 7: 12.
[373] Budja 1992, Fig. 4: Neolithic settlement phases.
[374] E.g. Marković 1994, 84, Pl. 8: 8.



Sl. 5.13: 1 (Resnikov prekop, po Tomaž 1999, t. R4: 5); 2 (Moverna vas, po Tomaž 1999, t. MV9: 4); 3 (Inkey-Kapelle, po Horváth, Kalicz 2006, najdba št. 23); 4 (Zalaszentbalázs-Szőlőhegyi mező, po Bánffy 1995a, t. 99: 169). M = 1 : 5.
Fig. 5.13: 1 (Resnikov prekop, according to Tomaž 1999, Pl. R4: 5); 2 (Moverna vas, according to Tomaž 1999, Pl. MV9: 4); 3 (Inkey-Kapelle, according to Horváth, Kalicz 2006, find no. 23); 4 (Zalaszentbalázs-Szőlőhegyi mező, according to Bánffy 1995a, Pl. 99: 169). Scale = 1 : 5.

Horváth in Kalicz[376] za posodo z vertikalnima ročajema z najdišča poznolengyelske kulture Inkey-Kapelle, ki ima na prelomu plastični nalepki, najdeta analogije na najdišču iste kulture Zalaszentbalázs-Szőlőhegyi mező in na Resnikovem prekopu, kjer je plastična aplikacija bolj sploščena. Poznamo pa jo tudi iz druge poselitvene faze v Moverni vasi (*sl. 5.13:* 1–4).

Podobne starosti so tudi zelo zanimive posode s t. i. rilčastima ročajema ("Rüsselhenkel"), ki jih najdemo med osnovnimi keramičnimi oblikami savske skupine na najdišču Čatež – Sredno polje (*sl. 5.14:* 1,2).[377] E. Bánffy se je podrobneje posvetila obravnavi teh posod.[378] Ugotavlja, da so značilne za poznolengyelski horizont zahodne Panonije (*sl. 5.14:* 3,4) in v sočasnih kulturah na Balkanu.

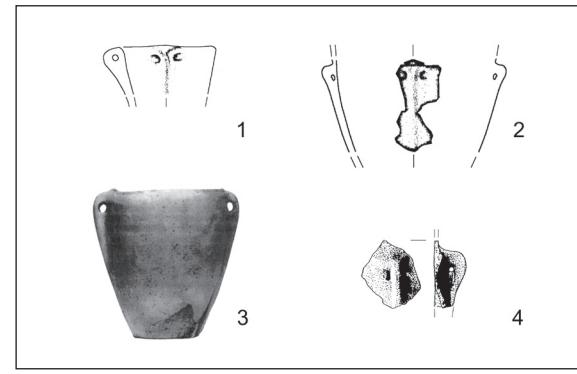
Po naselju iz obdobja savske skupine je bila Spaha ponovno poseljena v času lasinjske kulture. Analiza keramike kaže, da je veliko primerjav po lasinjskih najdiščih osrednje, južne in vzhodne Slovenije. Tudi v tem primeru neobjavljeni rezultati izkopavanj s ključnih najdišč, kot sta Ajdovska jama[379] in ponovno Moverna vas, predstavljajo problem za natančnejšo analizo in morebitno delitev na več faz.

[376] 2006, 58.

[377] Tomaž 2005b, sl. 4: 3. vrsta druga posoda z leve; 5: 6. vrsta; glej še Tomaž, Kavur 2006, 70, 84, najdba št. 3(?).

[378] Bánffy 2002, 48–54.

[379] Izkopavanja v osemdesetih letih prejšnjega stoletja.



Sl. 5.14: 1,2 (Čatež – Sredno polje, po Tomaž 2005b, sl. 4, 5); 3,4 (Zalaszentbalázs-Szőlőhegyi mező, po Bánffy 2002, sl. 6, 5: 3). M = 1 : 5.
Fig. 5.14: 1,2 (Čatež – Sredno polje, according to Tomaž 2005b, Figs. 4, 5); 3,4 (Zalaszentbalázs-Szőlőhegyi mező, according to Bánffy 2002, Figs. 6, 5: 3). Scale = 1 : 5.

territories east, northeast, and north to Slovenia actually typical only in the Late Lengyel period.[375] Horváth and Kalicz[376] find analogies for the vessel with vertical handles, which has two appliqués on the break, from the site of the Late Lengyel culture Inkey-Kapelle, at the site of the same culture Zalaszentbalázs-Szőlőhegyi mező and at Resnikov prekop, where the appliqué is more flattened. It is also known from the second settlement phase in Moverna vas (*Fig. 5.13:* 1–4).

Very interesting vessels with the s.c. "Rüsselhenkel" found among the basic pottery forms of the Sava group at the site Čatež – Sredno polje (*Fig. 5.14:* 1,2) are also of similar age.[377] E. Bánffy discusses these vessels in detail.[378] She discovers that they are characteristic of the Late Lengyel horizon of western Pannonia (*Fig. 5.14:* 3,4) and in contemporary cultures of the Balkans.

After the period of the Sava group Spaha was resettled in the time of the Lasinja culture. The pottery analysis shows that there are many analogies on the Lasinja sites of central, southern, and eastern Slovenia. Here again the unpublished results of the excavations from the key sites, such as Ajdovska jama[379] and again Moverna vas, present a problem for the precise analysis and possible division into several phases.

On the basis of 24 radiocarbon dates from nine sites we calculated the probable interval of the Lasinja culture in Slovenia between 4366 and 4080 BC (*Tab.*

[375] Pavúk 1981, 279, 281, 294, Fig. 13: 8,17; Kalicz 1991, 351, Fig. 2: 6,11,13,18; Marković 1994, 89, Pls. 19: 5,10; 19a: 9; 19b: 5; Bánffy 1995b, 167–169, Fig. 9; Carneiro 2004a, 261.

[376] 2006, 58.

[377] Tomaž 2005b, Figs. 4: line 3, the second vessel from the left; 5: line 6; see also Tomaž, Kavur 2006, 70, 84, find no. 3(?).

[378] Bánffy 2002, 48–54.

[379] Excavations in the 1980s.

Na podlagi 24 radiokarbonskih datumov z devetih najdišč smo izračunali verjetni interval lasinjske kulture v Sloveniji med 4366 in 4080 pr. Kr. (*tab. 5.4:* 20). Razpon se dobro prekriva z novimi intervali za lasinjska najdišča na Hrvaškem (*tab. 5.7:* 4), delno tudi s koliščarsko vasjo na Hodiškem jezeru,[380] z začetnim obdobjem Epi-Lengyela[381] in z začetkom ludaniške skupine na Slovaškem (*tab. 5.11:* 1), kar verjetno sugerira, da je lasinjska kultura tudi v Sloveniji živela vsaj še na začetku 4. tisočletja pr. Kr.[382]

Zadnja bakrenodobna vasica na Spahi je obstajala v obdobju horizonta keramike z brazdastim vrezom. Na to napeljujejo sicer skromne, a zelo značilne najdbe. Zanje je veliko analogij po slovenskih najdiščih (npr. *sl. 5.11:* 1,2), kar je zelo pomembno, tudi iz zahodne Slovenije. Maloštevilni radiokarbonski datumi s petih najdišč kažejo na verjeten časovni interval med 3775 in 3519 pr. Kr. (*tab. 5.4:* 21), kar potrjujejo tudi primerljivi podatki, pridobljeni pri raziskovanju kolišč na Ljubljanskem barju.[383] To pa je tudi čas, ki se datumsko, vsaj delno, prekriva z ustreznimi podatki za retzgajarysko kulturo na Hrvaškem in širše.[384]

Najmlajša prazgodovinska keramika s Spahe verjetno sodi v obdobje kulture žarnih grobišč. Tovrstne keramike je sicer zelo malo, a vendar kaže, da je bil zgornji plato še zadnjič poseljen proti koncu bronaste dobe.

Drugače lahko interpretiramo srednje- oz. novoveške najdbe in ostanke stražnice iz 16. stoletja.[385] Slednji jasno kažejo na vojaški karakter in očitno pomembno strateško lego arheološkega najdišča Spaha. Z njenega vrha se lahko enostavno vrši kontrolo nad najkrajšo potjo, ki po porečju Kolpe, bodisi neposredno preko Bele krajine bodisi po dolini Kolpe do Predgrada in nato po Poljanski dolini, povezuje zahodni Balkan in osrednji del vzhodnojadranske obale z osrednjo Slovenijo, Apeninskim polotokom in severno Evropo.

[380] Cichocki 2003, 30–34, tab. 1.

[381] Stadler et al. 2006, tab. 5.

[382] Prim. z Velušček 2004d, 292–295; Balen 2008a, 23.

[383] Čufar et al. 2010; Velušček 2009b.

[384] Forenbaher 1993, sl. 2; Stadler 1995, tab. 2; Bánffy 2002, sl. 10; Balen 2008a, 23; Chmielewski 2008, 99.

[385] Simonič 1939, 78–80.

5.4: 20). The range overlaps well with new intervals for the Lasinja sites in Croatia (*Tab. 5.7:* 4), partly with the pile-dwelling village at Keutschacher See,[380] with the starting period of Epi-Lengyel,[381] and with the beginning of the Ludanice group in Slovakia (*Tab. 5.11:* 1), which probably suggests that the Lasinja culture also in Slovenia lived still at least at the beginning of the 4th millennium BC.[382]

The last Copper Age village at Spaha existed in the period of the horizon of pottery with furrowed incisions, to which humble, yet very typical finds testify. Many analogies for them are found on Slovenian sites (e.g. *Fig. 5.11:* 1,2), and what is very important, also from western Slovenia. Few radiocarbon dates from five sites reveal the probable time interval between 3775 and 3519 BC (*Tab. 5.4:* 21), which is confirmed also by the comparable data acquired during the research of pile-dwellings at the Ljubljansko barje.[383] This is also the time which, in date, at least partly overlaps with the appropriate data for the Retz-Gajary culture in Croatia and wider.[384]

The youngest prehistoric pottery from Spaha probably belongs to the period of the Urnfield culture. This type of pottery is scarce but still indicates that the upper plateau was settled for the last time towards the end of the Bronze Age.

The Middle Age or Early Modern Age finds and the remains of a watchtower from the 16th century can be interpreted differently.[385] The latter clearly indicate the military character and obvious important strategic location of the archaeological site Spaha. Its top is a perfect location for the control over the shortest route which through the Kolpa river basin, either directly over Bela krajina or through the valley of the Kolpa to Predgrad and then through Poljanska dolina, connects the western Balkans and the central part of the east Adriatic coast to central Slovenia, the Apennine peninsula, and northern Europe.

[380] Cichocki 2003, 30–34, Tab. 1.

[381] Stadler et al. 2006, Tab. 5.

[382] Cf. Velušček 2004d, 292–295; Balen 2008a, 23.

[383] Čufar et al. 2010; Velušček 2009b.

[384] Forenbaher 1993, Fig. 2; Stadler 1995, Tab. 2; Bánffy 2002, Fig. 10; Balen 2008a, 23; Chmielewski 2008, 99.

[385] Simonič 1939, 78–80.

6. POLISHED STONE AXES FROM SPAHA

6. GLAJENE KAMNITE SEKIRE S SPAHE

Federico BERNARDINI, Antonio ALBERTI, Gabriella DEMARCHI, Angelo DE MIN, Maruska DI REMIGIO in Emanuela MONTAGNARI - KOKELJ

Abstract

Eight polished stone axes, found at the archaeological site of Spaha, have been analysed using different analytical methods in order to characterize the artefacts and define their most probable provenance. The small Spaha collection testifies to connections with the Balkans and the Danubian area. Raw materials coming from Italy or Eastern Alps, which are known in the archaeological sites of the Ljubljansko barje, are here completely absent. This difference can be partially explained by the geographical position of the site at the Southern part of nowadays Slovenia.

Keywords: Spaha, polished stone axes, archaeometric analyses, prehistoric connections, Sava Group period, Lasinja Culture, HKBV phase.

Izvleček

Z različnimi analitičnimi metodami smo analizirali osem glajenih kamnitih sekir z arheološkega najdišča Spaha, da bi tako opredelili artefakte in jim določili najverjetnejši izvor. Majhna zbirka s Spahe priča o povezavah z Balkanom in Podonavjem. Surovin iz Italije ali območja vzhodnih Alp, ki jih poznamo na arheoloških najdiščih Ljubljanskega barja, tukaj ni. To razliko lahko delno razložimo z geografsko lego najdišča, ki se nahaja v južnem delu današnje Slovenije.

Ključne besede: Spaha, glajene kamnite sekire, arheometrične analize, prazgodovinske povezave, savska skupina, lasinjska kultura, HKBV.

6.1 INTRODUCTION

Eight polished stone axes have been found at the archaeological site of Spaha: 1 shoe last axe (Sp8), 3 shaft-hole axes (Sp2, Sp6–Sp7), 1 shaft-hole mace (Sp1) and 3 axe blades (Sp3–Sp5).[1] Depending on the rock type, different analytical methods have been applied in order to characterize the artefacts and define their most probable provenance area (*Tab. 6.1*).

6.1 UVOD

Na arheološkem najdišču Spaha je bilo najdenih osem glajenih kamnitih sekir: 1 sekira v obliki čevljarskega kopita (Sp8), 3 sekire na uho (Sp2, Sp6–Sp7), 1 bat na uho (Sp1) in 3 ploščate sekire (Sp3–Sp5).[1] Glede na vrsto kamna smo posegli po različnih analitičnih metodah, da bi z njihovo pomočjo artefakte natančneje opredelili in določili najverjetnejše območje njihovega izvora (*tab. 6.1*).

[1] See Chapter 4, in this monograph.

[1] Glej poglavje 4, v tem zborniku.

Tab. 6.1: List of the studied axes from Spaha; XRD = x-ray diffraction; OM = optical microscopy; ICP-MS = inductively coupled plasma-mass spectrometry; * = siliceous cream-coloured cryptocrystalline rock.
Tab. 6.1: Seznam preučenih sekir s Spahe; XRD = rentgenska difrakcija; OM = optična mikroskopija; ICP-MS = induktivno sklopljena plazma z masno spektrometrično detekcijo; * = silikatna kriptokristalna kamnina krem barve.

INVENTORY NO. / INVENTARNA ŠT.	TYPOLOGY / TIPOLOGIJA	ROCK TYPE / VRSTA KAMNINE	CHRONOLOGY / KRONOLOGIJA	CONSERVATION STATE / OHRANJENOST	ANALYTICAL METHOD / ANALITIČNA METODA
Sp1 (P 4439) *Pl. 4.17:* 4, in this monograph / *t. 4.17:* 4, v tem zborniku	shaft-hole mace / bat na uho	meta-ultramafite / ultra mafična kamnina	"Furchenstich" horizon / HKBV	fragmented / fragmentiran	XRD; OM
Sp2 (P 196) *Pl. 4.8:* 6, in this monograph / *t. 4.8:* 6,v tem zborniku	shaft-hole axe / sekira na uho	meta-dolerite / meta-dolerit	Lasinja Culture / lasinjska kultura	proximal fragment / proksimalni fragment	OM; ICP-MS
Sp3 (P 6932) *Pl. 4.37:* 1, in this monograph / *t. 4.37:* 1, v tem zborniku	axe blade / ploščata sekira	sandstone / peščenjak	Sava Group / savska skupina	complete / popolnoma	XRD
Sp4 (S. N.) *Pl. 4.37:* 16, in this monograph / *t. 4.37:* 16, v tem zborniku	axe blade / ploščata sekira	altered siliceous rock / spremenjena silikatna kamnina	Sava Group / savska skupina	complete / popolnoma	XRD
Sp5 (S. N.) *Pl. 4.36:* 12, in this monograph / *t. 4.36:* 12, v tem zborniku	axe blade / ploščata sekira	siltstone / meljevec	Sava Group or Lasinja Culture / savska skupina ali lasinjska kultura	complete / popolnoma	XRD
Sp6 (P 4440) *Pl. 4.16:* 13, in this monograph / *t. 4.16:* 13, v tem zborniku	shaft-hole axe / sekira na uho	meta-dolerite / meta-dolerit	"Furchenstich" horizon / HKBV	median fragment / osrednji fragment	OM
Sp7 (P 177) *Pl. 4.31:* 1, in this monograph / *t. 4.31:* 1, v tem zborniku	shaft-hole axe / sekira na uho	coarse lithic tuff / zrnat litičen tuf	Lasinja Culture / lasinjska kultura	distal fragment / distalni fragment	XRD; OM
Sp8 (P 3957) *Pl. 4.8:* 7, in this monograph / *t. 4.8:* 7,v tem zborniku	shoe last axe / sekira v obliki čevljarskega kopita	"white stone"* / "beli kamen"*	Sava Group / savska skupina	median fragment / osrednji fragment	XRD

6.2 TYPOLOGY AND RAW MATERIALS

6.2.1 SHOE LAST AXES

One artefact (Sp8; *Fig. 6.1*; *Tabs. 6.1–6.2*), a medial fragment of a shoe last axe with a flat-convex transversal section, can be dated to the Sava Group period.[2] Traces of flaking are still visible, although the preserved surfaces have been accurately polished. The raw material, analysed through XRD, is a cream-coloured cryptocrystalline rock with conchoidal fracture, consisting of quartz and feldspar (*Tab. 6.2*).

[2] Chapters 4 and 5, in this monograph.

6.2 TIPOLOGIJA IN SUROVINE

6.2.1 SEKIRE V OBLIKI ČEVLJARSKEGA KOPITA

Enega izmed artefaktov (Sp8; *sl. 6.1*; *tab. 6.1–6.2*), srednji odlomek sekire v obliki čevljarskega kopita z ravno-izbočenim prečnim presekom, lahko datiramo v obdobje savske skupine.[2] Čeprav so bile ohranjene površine natančno glajene, so na njem še vidni sledovi odbijanja. Surovina, ki smo jo analizirali s pomočjo XRD, je kriptokristalna kamnina krem barve školjkastega loma, sestavljena iz kremena in glinenca (*tab. 6.2*).

[2] Poglavji 4 in 5, v tem zborniku.

Tab. 6.2: Results of XRD analysis. Srp = serpentine; Amph = amphibole; Px = pyroxene; Qtz = quartz; Feld = feldspar; Chl = chlorite.
Tab. 6.2: Rezultati XRD analize. Srp = serpentin; Amph = amfibol; Px = piroksen; Qtz = kremen; Feld = glinenec; Chl = klorit.

INVENTORY NO. / INVENTARNA ŠT.	Srp	Amph	Px	Qtz	Feld	Chl
Sp1 (P 4439)	x	x	x			x
Sp3 (P 6932)				x	x	
Sp4 (S. N.)				x		
Sp5 (S. N.)				x	x	x
Sp7 (P 177)				x	x	x
Sp8 (P 3957)				x	x	

Fig. 6.1: Shoe last axe Sp8 from Spaha (maximum length: 50 mm).
Sl. 6.1: Sekira v obliki čevljarskega kopita Sp8 s Spahe (največja dolžina: 50 mm).

Similar artefacts are common in the Balkans and in the Danubian area and have been defined white rock axes for the peculiar fine-grained and cream-coloured raw material they are made of.[3] Several of them come from Hódmezővásárhely-Gorzsa, a Late Neolithic, Tisza Culture tell-site in Hungary.[4] However, they are particularly abundant in the lithic assemblages of central and western Serbia associated to Late Vinča horizons; possible sources exist in this area.[5] The distribution of such tools reaches North-Eastern Italy, where some shoe last axes have been found at Sammardenchia[6] and in the Tartaruga cave in the Trieste Karst.[7] Further analyses are necessary to verify these preliminary comparisons.

6.2.2 AXE BLADES

Two axe blades (Sp3, Sp5; *Fig. 6.2; Tabs. 6.1–6.2*), probably dating back to the Sava Group period,[8] have small size and irregular shapes. The surfaces are polished but many areas are rough and not flattened by the polishing process. These technological features distinguish them from the HP metaophiolite assemblages, quite common along the costal regions of *Caput Adriae* since the Danilo/Vlaška Culture.[9] HP metaophiolite axes, mainly made from jades and eclogites, have regular shapes and are accurately polished, with the exception of the edge, whose surfaces are often hammered.

[3] Antonović 1997; 2006; Szakmány et al. 2009.
[4] Szakmány et al. 2009.
[5] Antonović 1997; 2006.
[6] Pessina, D'Amico 1999.
[7] Cannarella, Redivo 1978–1981.
[8] Chapters 4 and 5, in this monograph.
[9] Bernardini et al. 2009b.

Podobne artefakte poznamo z Balkana in Podonavja in so po zaslugi drobnozrnate surovine krem barve, iz katere so narejeni, opredeljeni kot sekire iz "belega kamna".[3] Številne so našli na Hódmezővásárhely-Gorzsa, poznoneolitskem najdišču Tisza kulture na Madžarskem.[4] Še posebno veliko pa se jih pojavlja med litičnim gradivom osrednje in zahodne Srbije, ki so povezani s poznovinčanskimi horizonti; morda je na tem območju mogoče iskati njihov izvor.[5] Razpršenost takih orodij doseže tudi severovzhodno Italijo, kjer so nekaj sekir v obliki čevljarskega kopita našli v Smardenči

[3] Antonović 1997; 2006; Szakmány et al. 2009.
[4] Szakmány et al. 2009.
[5] Antonović 1997; 2006.

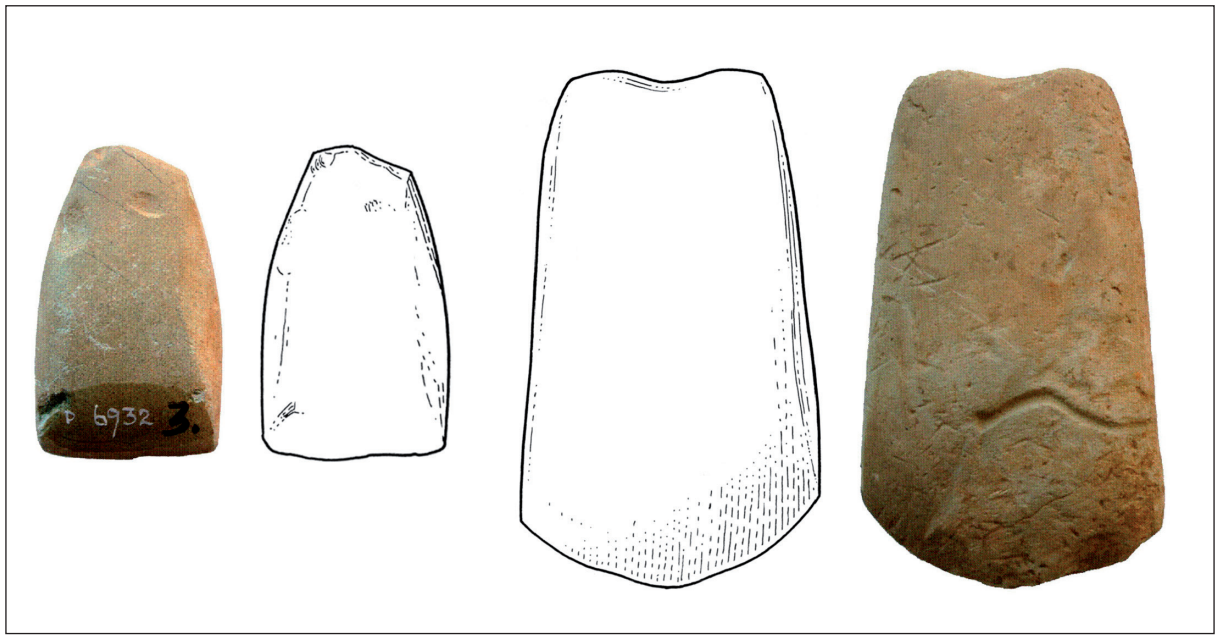


Fig. 6.2: Axe blade Sp3 (left; maximum length: 54 mm) and Sp4 (right; maximum length: 89 mm).
Sl. 6.2: Ploščata sekira Sp3 (levo; največja dolžina: 54 mm) in Sp4 (desno; največja dolžina: 89 mm).

Both of them have been analysed by XRD and the results indicate the exploitation of sedimentary rocks with different grain size (sandstone in Sp3; siltstone in Sp5). In the sample Sp5, the main mineralogical phases are quartz, feldspar and chlorite, while in the sample Sp3 only quartz and feldspar have been recognized.

The axe blade Sp4 shows a sub-trapezoidal shape with a peculiar concave heel (*Fig. 6.2; Tabs. 6.1–6.2*). The same morphological feature can be found in some axes from the Deschmann Pile Dwellings.[10] However, this axe should be much older since it dates back to the Sava Group period or to the Lasinja Culture.[11] The concavity of the heel could be linked to the same handling system, used in different periods. The raw material is extremely soft and unsuitable for the production of functional tools. Following the XRD analysis, quartz is the only detected mineral phase, although the softness and the rock appearance indicate that quartz cannot be the only component. At this stage it is difficult to say if the softness of the rock is due to the original conditions or to post-depositional degradation processes. In the first case, a symbolic value has probably to be postulated.

6.2.3 SHAFT-HOLE AXES

The shaft-hole axes Sp2 and Sp6 (*Tabs. 6.1–6.2*) are strongly fragmented and only small fragments of the proximal and medial parts are respectively preserved. The first one has been dated back to the Lasinja Culture

[10] Korošec, Korošec 1969.
[11] Chapters 4 and 5, in this monograph.

pri Vidmu[6] in v Jami v Zavodu na tržaškem Krasu.[7] Za potrditev teh začetnih primerjav pa bodo potrebne še nadaljnje analize.

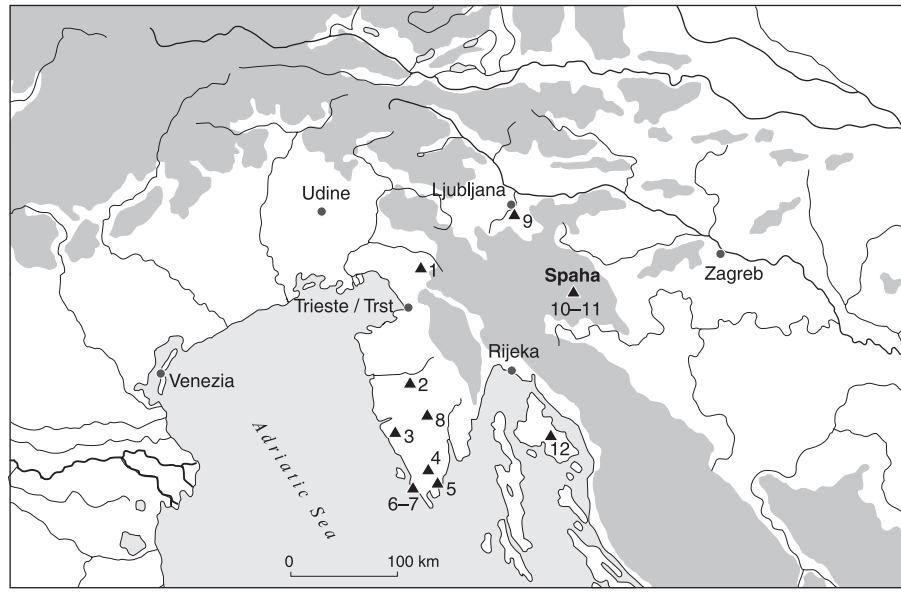
6.2.2 PLOŠČATE SEKIRE

Dve ploščati sekiri (Sp3, Sp5; *sl. 6.2; tab. 6.1–6.2*), ki verjetno izvirata iz obdobja savske skupine,[8] sta majhni in nepravilne oblike. Površine so zglajene, a so mnogi deli vendarle grobi in jih postopek glajenja ni uravnal. Te tehnološke lastnosti ju ločijo od HP metaofiolitskih artefaktov, ki so v obalnih regijah *Caput Adriae* dokaj pogosti vse od kulture Danilo/Vlaška.[9] HP metaofiolitske sekire, ki so v glavnem narejene iz žadov in eklogitov, so pravilnih oblik in natančno zglajene, kar pa ne velja za rob, katerega površina je pogosto obdelana s tolčenjem.

Obe sta bili analizirani z XRD, rezultati pa nakazujejo na izkoriščanje sedimentnih kamnin z različno velikimi zrni (peščenjak pri Sp3; meljevec pri Sp5). V vzorcu Sp5 so glavne mineraloške skupine kremen, glinenec in klorit, v vzorcu Sp3 pa smo prepoznali le kremen in glinenec.

Ploščata sekira Sp4 je sub-trapezoidne oblike z nenavadno vbočenim temenom (*sl. 6.2; tab. 6.1–6.2*). Enake morfološke lastnosti lahko najdemo pri nekaterih sekirah z Dežmanovih kolišč.[10] Vendar pa bi morala

[6] Pessina, D'Amico 1999.
[7] Cannarella, Redivo 1978–1981.
[8] Poglavji 4 in 5, v tem zborniku.
[9] Bernardini et al. 2009b.
[10] Korošec, Korošec 1969.



1 – Lozice
2 – Sv. Ivan od Šterne
3 – Monkodonja
4 – Montursino
5 – Nesactium
6 – Veruda
7 – Uvala Veruda
8 – Istra
9 – Deschmann pile dwellings / Dežmanova kolišča (Ljubljansko barje)
10–11 – Spaha
12 – Vrbnik

Fig. 6.3: Distribution of shaft-hole axes made from meta-dolerite in the *Caput Adriae*.
Sl. 6.3: Razpršenost sekir na uho, narejenih iz meta-dolerita, na območju *Caput Adriae*.

period while the axe Sp6 should be more recent (HKBV phase).[12]

Both of them are manufactured from meta-dolerite. Shaft-hole axes of the same type are particularly abundant in the southern Istrian peninsula (7 artefacts are known so far), 1 comes from Krk island, 1 from western Slovenia and 1 from Deschmann pile Dwellings (*Tab. 6.3; Figs. 6.3–6.4*). A recent archaeometric study has shown their common petrographical and geochemical features. All the samples show magmatic textures and well recognizable relicts of primary mineralogical phases. Petrographical observations suggest an ophiolitic provenance of the protolithic source(s), while geochemical data indicate that the original magmas originated in a fore arc or pre arc tectonic setting. A strong similarity has been found with several lithotypes from the Banija Ophiolite Complex (Croatia), indicated as the most probable source area. For a detailed discussion concerning the meta-dolerite axes from *Caput Adriae*, including the Spaha ones, see Bernardini et al.[13]

The shaft-hole axe Sp7 is a distal fragment with a sub-triangular shape, a sub-rectangular transversal section and polished surfaces. It can be dated to the Lasinja Culture period.[14]

Following Schmid's classification,[15] the raw material, studied in thin section (*Tabs. 6.1–6.2; Fig. 6.4*), can

[12] Chapters 4 and 5, in this monograph.
[13] 2009a.
[14] Chapters 4 and 5, in this monograph.
[15] 1981.

biti ta sekira veliko starejša, saj jo datiramo v čas savske skupine ali lasinjske kulture.[11] Vbočenost temena bi lahko bila povezana s podobnim načinom nasaditve, ki je bil v uporabi v različnih obdobjih. Surovina je izjemno mehka in neprimerna za izdelavo uporabnih orodij. Glede na XRD analizo je kremen edini zaznan mineral, čeprav mehkoba in videz kamnine nakazujeta, da kremen ne more biti njen edini sestavni del. Na tej stopnji je težko reči ali je mehkoba kamnine posledica izvirnih pogojev ali rezultat razpadanja že odloženega artefakta. V prvem primeru je najbrž potrebno predvideti njegovo simbolno vrednost.

6.2.3 SEKIRE NA UHO

Sekiri na uho Sp2 in Sp6 (*tab. 6.1–6.2*) sta močno fragmentirani in so od proksimalnih ter medialnih delov ohranjeni samo majhni fragmenti. Prva je datirana v obdobje lasinjske kulture, sekira Sp6 pa bi morala biti mlajša (HKBV).[12]

Obe sta izdelani iz meta-dolerita. Sekire na uho istega tipa so najbolj pogoste na južnem delu polotoka Istra (do sedaj poznamo 7 artefaktov), 1 prihaja z otoka Krka, 1 iz zahodne Slovenije in 1 z Dežmanovih kolišč (*tab. 6.3; sl. 6.3–6.4*). Nedavna arheometrična raziskava je pokazala, da imajo skupne petrografske in geokemične lastnosti. Vsi vzorci razkrivajo magmatsko strukturo in

[11] Poglavji 4 in 5, v tem zborniku.
[12] Poglavji 4 in 5, v tem zborniku.

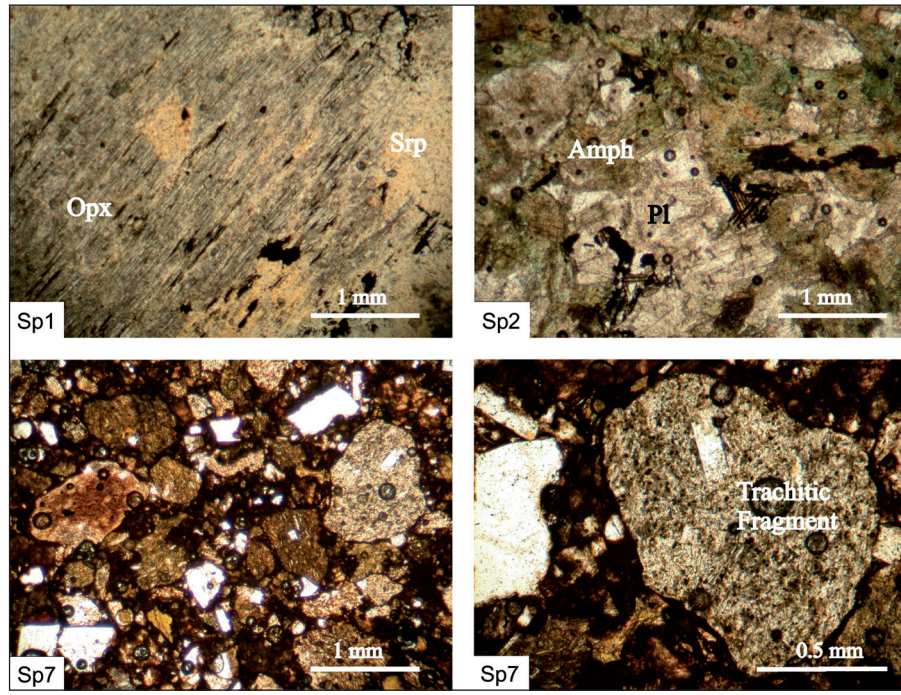


Fig. 6.4: Microphotographs of polished thin sections of artefacts Sp1, Sp2 and Sp7. Opx = orthopyroxene; Srp = serpentine; Amph = amphibole
Sl. 6.4: Mikrofotografije zglajenih tankih delov artefaktov Sp1, Sp2 in Sp7. Opx = ortopiroksen; Srp = serpentin; Amph = amfibol.

be defined as a coarse lithic tuff. The rock is composed of 2 main components: pyroclasts (~ 75 %) and the matrix (~ 25 %).

Different types of pyroclasts are present:

– scarce crystalline angular fragments consisting of prevalent plagioclase and subordinate quartz and sanidine (dimensions between 0.05 and 0.5 mm);

– abundant trachytic fragments (dimensions between 0.1 and 0.8 mm), consisting of feldspar microlithes and variably weathered glass.

The matrix is composed of strongly weathered clayey material, probably derived from volcanic ashes. Small and scarce greenish patches have been interpreted as smectite.

6.2.4 SHAFT-HOLE MACES

The artefact Sp1 is characterized by a circular shape with a central hole (*Tabs. 6.1–6.2*) and probably dates back to the HKBV phase. Similar artefacts are unknown in North-Eastern Italy and in Central Slovenia; on the contrary they are present in Northern Croatia[16] and Eastern Slovenia.[17]

The raw material is a meta-ultramafite with a cumulitic and heteroblastic texture (*Fig. 6.4*). The main mineral phases are colourless amphiboles and orthopy-

dobro vidne ostanke primarnih mineraloških skupin. Petrografska opažanja namigujejo na ofiolitski izvor protolitičnega vira(ov), geokemični podatki pa nakazujejo, da so originalne magme izvirale z območja med cono subdukcije, kjer ena tektonska plošča rine, oziroma tone pod drugo ploščo, in cono vulkanske aktivnosti. Veliko podobnost smo odkrili tudi z več litotipi iz banijskega ofiolitskega kompleksa (Hrvaška), ki je tudi najverjetnejše območje izvora. Za podrobnejšo razlago sekir iz meta-dolerita z območja *Caput Adriae*, vključno s temi s Spahe, glej Bernardini et al.[13]

Sekira na uho Sp7 je distalen fragment sub-trikotne oblike, sub-pravokotnega prečnega preseka in zglajenih površin. Mogoče jo je datirati v obdobje lasinjske kulture.[14]

Glede na Schmidovo klasifikacijo[15] je mogoče surovino, ki jo tukaj obravnavamo (*tab. 6.1–6.2; sl. 6.4*), opredeliti kot zrnat litičen tuf. Kamnina je sestavljena iz dveh glavnih sestavnih delov: piroklastov (~ 75 %) in osnove (~ 25 %).

Prisotnih je več tipov piroklastov:

– redki fragmenti z grobo kristalno strukturo, ki vsebujejo prevladujoče plagioklaze in slabši kremen ter sanidin (dimenzije med 0,05 in 0,5 mm);

[16] Šimek, Kurtanjer, Paunović 2002.
[17] Lubšina - Tušek 1993.
[13] 2009a.
[14] Poglavji 4 in 5, v tem zborniku.
[15] 1981.

Tab. 6.3: List of the shaft-hole axes made from meta-dolerite in the *Caput Adriae*; conservation institution: (1) Tolmin Museum; (2–8) Archaeological Museum of Istria; (9) National Museum of Slovenia, Ljubljana; (10–11) Museum of Kočevje; (12) Natural History Museum of Trieste.
Tab. 6.3: Seznam sekir na uho, narejenih iz meta-dolerita, na območju *Caput Adriae*; inštitucije, kjer so bile konzervirane: (1) Tolminski muzej; (2–8) Arheološki muzej Istre; (9) Narodni muzej Slovenije, Ljubljana; (10–11) Pokrajinski muzej Kočevje; (12) Muzej zgodovine narave, Trst.

ARCHAEOLOGICAL SITE / ARHEOLOŠKO NAJDIŠČE	INVENTORY NO. / INVENTARNA ŠT.	SAMPLE NUMBER / OZNAKA VZORCA	CONSERVATION STATE / OHRANJENOST
Lozice	P 3022	1	distal fragment / distalni del
Sv. Ivan od Šterne	P 195 (IS3)	2	distal fragment / distalni del
Monkodonja	101036	3	median fragment / osrednji del
Montursino	P 15799	4	proximal fragment (?) / proksimalni del (?)
Nesactium	Nesactium – 2003 (IS1)	5	distal fragment / distalni del
Veruda	P 1075 (IS5)	6	proximal fragment / proksimalni del
Uvala Veruda	P 26810 (IS4)	7	proximal fragment / proksimalni del
Istra	P 13 (IS2)	8	distal fragment / distalni del
Deschmann pile dwellings / Dežmanova kolišča (Ljubljansko barje)	B 57	9	distal fragment / distalni del
Spaha	P 196 (Sp2)	10	proximal fragment / proksimalni del
Spaha	P 4440 (Sp6)	11	median fragment / osrednji del
Vrbnik	Ve	12	fragment reworked as a pestle / odlomek predelan v tolkač

roxenes, partially replaced by very fine felt-like patches consisting of amphiboles, serpentine and probably chlorite. Scarce relics of olivine and serpentine patches are also present.

This rock is different from the meta-ultramafite used for the production of shaft-hole axes from the Ljubljansko barje and Trieste Karst[18] due to the presence of ortopyroxenes and serpentine. The origin, not yet identified, could be located in the northern Balkans.

6.3 DISCUSSION AND CONCLUSIONS

All the axe blades (Sp3–Sp5) and the shoe last axe Sp8 should date back to the most ancient phase of the site, the Sava Group period. The axe blade Sp4 could be also more recent (Lasinja Culture). These artefacts are made from sedimentary materials, probably gathered from short distance outcrops, with the exception of the shoe last axe Sp8. The typology and the raw material recall those of similar white stone artefacts particularly abundant in central and western Serbia associated to Late Vinča horizons.[19] Possible raw material sources are located in the Sava-Vardar zone.[20] This object has been probably traded from the Balkans or from the Danubian area.

All the shaft-hole artefacts belong to the Lasinja Culture (Sp2 and Sp7) or to the following HKBV phase

– veliko količino trahitskih fragmentov (dimenzije med 0,1 in 0,8 mm), ki vsebujejo majhne kose glinenca in različno preperelo steklo.

Osnovo sestavlja močno preperela glinasta surovina, ki verjetno izhaja iz vulkanskih pepelov. Redke majhne zelenkaste zaplate smo interpretirali kot glineni mineral.

6.2.4 BATI NA UHO

Artefakt Sp1 je okrogle oblike s sredinsko postavljenim ušesom (*tab. 6.1–6.2*) in verjetno datira v obdobje HKBV. Podobnih predmetov v severovzhodni Italiji in osrednji Sloveniji ne poznamo; so pa prisotni v severni Hrvaški[16] in vzhodni Sloveniji.[17]

Surovina je meta-ultramafična kamnina s kumulitsko in heteroblastično teksturo (*sl. 6.4*). Glavne mineralni so brezbarvni amfiboli in ortopirokseni, ki jih deloma nadomeščajo na dotik zelo fine zaplate, sestavljene iz amfibolov, serpentina in verjetno klorita. Prisotni so tudi zelo majhni ostanki zaplat olivina in serpentina.

Ta kamnina se zaradi prisotnosti ortopiroksenov in serpentina razlikuje od meta-ultramafita, uporabljenega za izdelavo sekir na uho z Ljubljanskega barja in tržaškega Krasa.[18] Izvor, ki do sedaj še ni bil prepoznan, bi lahko iskali na severnem Balkanu.

[18] Bernardini et al. 2009b.
[19] Antonović 1997; 2006.
[20] Antonović 1997; 2006; Szakmány et al. 2009.

[16] Šimek, Kurtanjer, Paunović 2002.
[17] Lubšina - Tušek 1993.
[18] Bernardini et al. 2009b.

(Sp1 and Sp6). The origin of the artefact Sp7 is probably to look for not too far from the settlement. On the contrary the axes made from crystalline rocks testify to longer exchange systems with northern Balkans. The most probable source area of the two meta-dolerite axes (Sp2 and Sp6) is, in fact, the Banija Ophiolite Complex (Croatia), at the northernmost edge of the Central Dinaric Ophiolitic Belt.

Despite the small number of artefacts, the lithic assemblage of the Spaha collection testifies to connections with the Balkans and the Danubian area. Raw materials coming from Italy or Eastern Alps (e.g. HP metaophiolites from North-Western Italy or serpentinites from Eastern Alps), which are known in the archaeological sites of the Ljubljansko barje,[21] are here completely absent. This difference can be partially explained by the geographical position of the site at the Southern part of nowadays Slovenia.

[21] Bernardini et al. 2008; 2009b; 2010.

6.3 RAZPRAVA IN ZAKLJUČKI

Vse ploščate sekire (Sp3–Sp5) in sekira v obliki čevljarskega kopita Sp8 datirajo v najstarejšo fazo tega najdišča, t. j. v savsko skupino. Ploščata sekira Sp4 bi lahko bila tudi mlajša (lasinjska kultura). Ti artefakti so narejeni iz sedimentnih surovin, ki so jih najverjetneje našli na bližnjih izdankih, kar pa ne velja za sekiro v obliki čevljarskega kopita Sp8. Tipologija in surovina spominjata na artefakte iz podobnega belega kamna, ki so še posebno pogosti v osrednji in zahodni Srbiji in jih povezujemo s poznovinčanskimi horizonti.[19] Možni viri te surovine se nahajajo na območju Sava-Vardar.[20] Ta predmet je na Spaho verjetno prišel preko trgovine z Balkanom ali Podonavjem.

Vsi artefakti na uho sodijo v obdobje lasinjske kulture (Sp2 in Sp7) ali njej sledečo fazo HKBV (Sp1 in Sp6). Izvor artefakta Sp7 je iskati nedaleč od same naselbine. Nasprotno pa sekire, izdelane iz kamnin s kristalno strukturo, pričajo o dolgotrajnejših izmenjavah s severnim Balkanom. Najverjetnejši izvor obeh sekir iz meta-dolerita (Sp2 in Sp6) je, dejansko, banijsko ofiolitski kompleks (na Hrvaškem), ob najsevernejšem robu centralnega dinarskega ofiolitskega pasu.

Majhnemu številu najdb navkljub litična zbirka s Spahe priča o povezavah z Balkanom in Podonavjem. Surovine, ki prihajajo iz Italije ali vzhodnih Alp (npr. HP metaofioliti iz severozahodne Italije ali serpentini iz vzhodnih Alp), in jih poznamo na arheoloških najdiščih Ljubljanskega barja,[21] tukaj povsem izostanejo. To razliko lahko vsaj delno razložimo z geografsko lego najdišča na južnem delu današnje Slovenije.

[19] Antonović 1997; 2006.
[20] Antonović 1997; 2006; Szakmány et al. 2009.
[21] Bernardini et al. 2008; 2009b; 2010.

7. KLESANA KAMENA ORODJA Z NAJDIŠČA SPAHA NAD BREZOVICO PRI PREDGRADU

7. KNAPPED STONE TOOLS FROM THE SITE SPAHA ABOVE BREZOVICA PRI PREDGRADU

Matija TURK

Izvleček

Na najdišču Spaha nad Brezovico pri Predgradu je bilo odkritih 60 kamenih artefaktov, izdelanih s tehniko odbijanja. Med retuširanimi orodji gre v glavnem za priložnostna orodja, z izjemo obojestransko ploskovno retuširanega orodja in puščičnih osti. Pestra surovinska slika kaže tudi uporabo surovin iz oddaljenih nahajališč. Orodja pripisujemo neolitiku in eneolitiku.

Ključne besede: Spaha, kamena orodja, ploskovna retuša, puščične osti.

Abstract

The site Spaha above Brezovica pri Predgradu revealed 60 stone artefacts made by the stone-flaking technique. Among retouched tools we are mainly dealing with occasional tools, with the exception of bifacially retouched tools and arrow points. The wide selection of raw materials also points to the use of raw materials from the distant deposits. The tools are assigned to Neolithic and Eneolithic.

Keywords: Spaha, stone tools, bifacial retouch, arrow points.

7.1 UVOD

Kameni inventar z najdišča Spaha nad Brezovico pri Predgradu šteje 60 artefaktov, izdelanih s tehniko odbijanja (*tab. 7.1*). Od tega je retuširanih 17 kosov (28,3 %). Zastopanost kamenih artefaktov sega od odpadnih produktov, ki nastanejo med izdelavo kamenih orodij (jedro, jedrni in kortikalni odbitki, razbitine), preko neretuširanih in retuširanih odbitkov in klin do vrhunskih izdelkov, kot so ploskovno retuširana orodja.

7.2 DISKUSIJA IN SKLEP

Kameni artefakti so bili odkriti v sondah II, III, VI in VII (*tab. 7.2*). Največ (42 kosov) jih je bilo odkritih

7.1 INTRODUCTION

The stone inventory of the site Spaha above Brezovica pri Predgradu comprises of 60 artefacts made by the stone-flaking technique (*Tab. 7.1*), of which 17 pieces are retouched (28.3 %). The representation of stone artefacts encompasses the waste products, which appear during the stone tool manufacturing (core, core and cortical flakes, shatters), non-retouched and retouched flakes and blades as well as the high-quality products, such as the tools with invasive retouch.

7.2 DISCUSSION AND CONCLUSION

Stone artefacts were discovered in trenches II, III, VI, and VII (*Tab. 7.2*). The majority (42 pieces) were

Tab. 7.1: Pregled kamenih artefaktov po tipih.
Tab. 7.1: Overview of stone artefacts according to types.

TIP / TYPE	ŠT. / NO.
razbitina / shatter	10
jedro / core	1
jedrni odbitek / core flake	3
kortikalni odbitek / cortical flake	4
odbitek / flake	21
retuširan odbitek / retouched flake	8
odbitek s strmo retušo / flake with steep retouch	1
izjeda / notch	1
praskalo / endscraper	1
klina / blade	4
retuširana klina / retouched blade	1
klinica / bladelet	1
obojestransko plosk. ret. orodje / bifacially retouched tool	1
konica / point	2
puščična ost / arrow point	1
SKUPAJ / TOTAL	**60**

v sondi VI. Večina jih izvira iz režnjev 3 in 2.[1] Z izjemo obojestransko ploskovno retuširanega orodja in konic, ostala retuširana orodja ne kažejo skrbnejše izdelave. Lahko bi rekli, da gre za priložnostna orodja. Nasprotno izstopa orodje z obojestransko ploskovno retušo in tri konice, od katerih sta dve ploskovno retuširani.[2] Pri obojestransko ploskovno retuširanem orodju (*t. 7.1:* 1) je ohranjen le bazalni del, tako da nam njegova dolžina in oblika nista znani. Glede na dodatno retuširane lateralne robove gre verjetno za podaljšano koničasto rezilo, ki je lahko služilo kot bodalo. Artefakt je na dorzalni strani baze dodatno stanjšan, kar je olajšalo nasaditev na leseno ali roženo držalo, ki je domnevno segalo do mesta odloma. Obe površini artefakta sta skrbno obdelani s ploskovno retušo. Na dorzalni strani je nad bazo ohranjen del korteksa. Obojestransko ploskovno retuširana orodja v obliki podaljšanih koničastih rezil oz. bodal so pri nas redka. Po številu najdb tovrstnih orodij izstopajo kolišča pri Igu,[3] ki sodijo v 3. in morda tudi 2. tisočletje pr. Kr.[4]

Dodatno stanjšano bazo imata tudi obe manjši, v celoti ohranjeni konici (*t. 7.1:* 3,4). V prvem primeru (*t. 7.1:* 3) je rob baze z retušo na ventralni strani nekoliko priostren, v drugem primeru (*t. 7.1:* 4) pa je baza z retušo stanjšana na obeh straneh. Pri slednji konici je bil naknadno odbit še bulbus. Odstranitev moteče izbočenega bulbusa je že od paleolitika dalje pogost pojav pri orodjih, ki so bila nasajena. Konica (*t. 7.1:* 3) ima

[1] Za stratigrafske podatke glej poglavje 3, v tem zborniku.

[2] Za tipološko opredelitev ploskovno retuširanih konic glej Bagolini 1970.

[3] Glej Korošec, Korošec 1969, t. 73; 74.

[4] Velušček, Čufar 2010, 350–352.

Tab. 7.2: Pregled kamenih artefaktov po sondah.
Tab. 7.2: Overview of stone artefacts according to trenches.

INV. ŠT. / INV. NO.	TIP / TYPE	KV. / SQ.	REŽENJ / SLICE
SONDA / TRENCH II			
P 3214	jedro / core	6	2
P 3207	jedrni odbitek / core flake	5	2
P 3916	odbitek / flake	1	3
P 3939	odbitek / flake	4	3
P 3885	odbitek s strmo retušo / flake with steep retouch	3	5
SONDA / TRENCH III			
P 4258	razbitina / shatter	7	4
P 4259	kortikalni odbitek / cortical flake	7	4
P 4379	kortikalni odbitek / cortical flake	7	5
P 173	odbitek / flake	6	3
P 4260	retuširan odbitek / retouched flake	7	4
P 175	obojestransko plosk. ret. orodje / bifacially retouched tool	6	3
SONDA / TRENCH VI			
S. N.	razbitina / shatter	19	2
S. N.	razbitina / shatter	17	2
S. N.	razbitina / shatter	17	2
S. N.	razbitina / shatter	18	2
P 5113	razbitina / shatter	11	3
P 5160	razbitina / shatter	12	3
S. N.	jedrni odbitek / core flake	22	2
S. N	kortikalni odbitek / cortical flake	20	2
S. N	kortikalni odbitek / cortical flake	22	2
S. N.	odbitek / flake	11	?
S. N.	odbitek / flake	11	1
S. N.	odbitek / flake	11	1
P 4654	odbitek / flake	11	1
P 4655	odbitek / flake	11	1
P 4657	odbitek / flake	11	1
P 4646	odbitek / flake	11	2
P 4624	odbitek / flake	5	2
P 4647	odbitek / flake	11	2
P 4662	odbitek / flake	12	2
S. N.	odbitek / flake	15	2
S. N.	odbitek / flake	16	2
S. N.	odbitek / flake	18	2
S. N.	odbitek / flake	20	2
P 5114	odbitek / flake	11	3
P 5115	odbitek / flake	11	3
S. N.	retuširan odbitek / retouched flake	11	1

INV. ŠT. / INV. NO.	TIP / TYPE	KV. / SQ.	REŽENJ / SLICE
S. N.	retuširan odbitek / retouched flake	13	2
S. N.	retuširan odbitek / retouched flake	16	2
S. N.	retuširan odbitek / retouched flake	16	2
S. N.	retuširan odbitek / retouched flake	17	2
S. N.	retuširan odbitek / retouched flake	18	2
S. N.	retuširan odbitek / retouched flake	22	2
P 5112	klina / blade	11	3
P 5110	klina / blade	11	3
P 5111	klina / blade	11	3
P 5159	klina / blade	12	3
S. N.	retuširana klina / retouched blade	22	2
S. N.	izjeda / notch	22	2
P 4656	praskalo na odbitku / endscraper on the flake	11	1
P 4638	puščična ost / arrow point	10	2
P 176	konica / point	12	2
S. N.	konica / point	12	3–4
SONDA / TRENCH VII			
P 6928	razbitina / shatter	3	2
P 6926	retuširan jedrni odbitek / retouched core flake	2	3
BREZ PODATKOV / WITHOUT DATA			
P 3956	razbitina / shatter		
P 3937	razbitina / shatter		
P 3923	odbitek / flake		
P 3922	odbitek / flake		
P 3924	zlomljena klinica / broken bladelet		

ploskovno retuširano dorzalno stran. Na ventralni strani so na levem in deloma na desnem lateralnem robu plitve paralelne retuše. Glede na dimenzije obeh konic in obdelavo baze domnevamo, da sta konici služili kot puščični osti za lok. Puščično ost predstavlja še en artefakt (*t. 7.1:* 2). Gre za majhno obojestransko ploskovno retuširano konico trikotne oblike, z odlomljenim terminalnim delom, ki se je odlomil med uporabo. Podobna puščica je bila najdena v eneolitskem kontekstu na najdišču Šiman pri Gotovljah na Štajerskem.[5]

Med ostalimi retuširanimi artefakti prevladujejo retuširani odbitki, med njimi odbitek z obojestransko retušo (*t. 7.1:* 6), odbitek s strmo retušo (*t. 7.1:* 7), odbitek z inverzno retušo (*t. 7.1:* 9), odbitek z drobtinčasto retušo (*t. 7.1:* 11), odbitek z izjedo in retuširan jedrni odbitek (*t. 7.1:* 8). Kot praskalo na odbitku smo določili

[5] Forenbaher 2009, 44; Tomažič 2009a, 49; 2009b, 143.

found in trench VI. Most of them originate from slices 3 and 2.[1] With the exception of bifacially retouched tools and points no other tool reveals careful carving. Thus we could say that these are occasional tools. Opposite to this, a tool with bifacial retouch and three points, out of which two are unifacially retouched, stand out.[2] Only the base part is preserved from the bifacially retouched tool (*Pl. 7.1:* 1), therefore, its length and form are unknown. Due to additionally retouched lateral edges this is probably a prolonged pointy blade, which could have been used as a dagger. The artefact is on its dorsal side additionally thinned, which made hafting to a wooden or horn handhold, which supposedly reached till the point of fracture, easier. Both artefact surfaces are carefully worked by a unifacially retouch. A piece of cortex is preserved above the base on the dorsal side. Bifacially retouched tools in the form of prolonged pointy blades or daggers are rare in these parts. Exception to this in the number of such tools are pile-dwellings at Ig,[3] which belong to the 3rd and possibly also 2nd millennium BC.[4]

Both smaller, completely preserved points also have an additionally thinned base (*Pl. 7.1:* 3,4). In the first case (*Pl. 7.1:* 3), the edge of the base with a retouch on the ventral side is slightly sharpened, and in the second case (*Pl. 7.1:* 4), the base with a retouch is thinned on both sides. With the latter point also the bulbus was subsequently flaked. Removal of the obtrusively convex bulbus has ever since the Palaeolithic been a frequent occurrence with hafted tools. The point (*Pl. 7.1:* 3) has a retouched dorsal side. On the ventral side, there are shallow parallel retouches on the left and partly also on the right lateral edge. Considering the dimensions of both points and carving of the base we assume that the points were used as arrow points for a bow. An arrow point is represented by another artefact (*Pl. 7.1:* 2), which is a small bifacially retouched point of triangular shape, which terminal part was broken off during use. A similar arrow was found in the Eneolithic context at the site Šiman near Gotovlje in Štajerska.[5]

Retouched flakes prevail among other retouched artefacts, among which are also a flake with bifacial retouch (*Pl. 7.1:* 6), a flake with steep retouch (*Pl. 7.1:* 7), a flake with inverse retouch (*Pl. 7.1:* 9), a flake with fine retouch (*Pl. 7.1:* 11), a flake with a notch and a retouched core flake (*Pl. 7.1:* 8). The piece with steep retouch and semi-steep retouch on the terminal part was defined as the endscraper on the flake (*Pl. 7.1:* 10).

Numerous blades have characteristic damage, which occurs if the raw material is exposed to fire (*Pl. 7.1:* 12,14,15). By prior thermal treatment of the core

[1] For stratigraphic data see chapter 3, in this monograph.

[2] For typological definition of retouched points see Bagolini 1970.

[3] See Korošec, Korošec 1969, Pl. 73; 74.

[4] Velušček, Čufar 2010, 350–352.

[5] Forenbaher 2009, 44; Tomažič 2009a, 49; 2009b, 143.

primerek s strmo in polstrmo retušo na terminalnem delu (*t. 7.1:* 10).

Izmed klin jih ima več značilne poškodbe, ki nastanejo, če je surovina izpostavljena ognju (*t. 7.1:* 12,14,15). S predhodno toplotno obdelavo jedra postane odbijanje klin lažje in učinkovitejše.[6] Izdelavo klin lahko vidimo zlasti v povezavi s kompozitnimi žetvenimi orodji. S tem lahko pojasnimo segmentiranost klin, saj so prazgodovinski poljedelci kratke segmente klin kot rezila vstavljali v lesene ročaje srpov.

Tako kot je prisotna velika razlika v kvaliteti izdelave, je prisotna tudi razlika v kakovosti uporabljenih surovin. Kljub majhnemu številu pobranih kamenih artefaktov, je surovinska slika precej pestra. Zastopani so tako roženci slabe kot dobre kakovosti. Vse tri konice in obojestransko ploskovno retuširano orodje so izdelani iz kakovostnih, homogenih rožencev, kakor tudi večina ostalih retuširanih artefaktov in klin. Zanimivo je, da je vsaka konica izdelana iz drugačne surovine. Konica (*t. 7.1:* 2) je izdelana iz temnosivega roženca, konica (*t. 7.1:* 4) iz črnega roženca, konica (*t. 7.1:* 3) iz svetlosivega roženca z belimi vložki in obojestransko ploskovno retuširano orodje (*t. 7.1:* 1) iz svetlorjavega roženca z belimi vložki. Nahajališč visokokakovostnih rožencev z belimi vložki, ki so značilni za območje Monti Lessini v severovzhodni Italiji, na ozemlju Slovenije nimamo. Import surovine iz severovzhodne Italije je na naših tleh prvič dokumentiran v neolitskih najdiščih na Krasu, njena uporaba pa se domneva tudi na najdiščih neolitske savske skupine ob zgornjem toku Save.[7] Na Spaho je ta eksotična surovina brez dvoma prišla kot posledica trgovanja in izmenjave dobrin na velike razdalje.

Slika kamenih artefaktov iz Spahe nad Brezovico pri Predgradu nam kaže mešanico artefaktov, namenjenih lovski dejavnosti (puščične osti), in artefaktov, ki jih povezujemo s poljedelstvom (segmentirane kline). Slednji se dobro navezujejo na številne žrmlje, odkrite na najdišču.[8] Glede na tipologijo lahko orodje z obojestransko ploskovno retušo in konice uvrstimo v čas neolitika in eneolitika. Ostali retuširani artefakti so časovno neizpovedni, saj se lahko pojavljajo od paleolitika do vključno kovinskih obdobij. Ker je Spaha večplastno najdišče, ki je bilo poseljeno v različnih obdobjih, moramo pri natančnejši časovni interpretaciji kamenih orodij dati prednost predvsem kontekstu, v katerem so bila odkrita.

[6] Inzian, Roche, Tixier 1977.

[7] Guštin, Tomaž, Kavur 2005, 59; Guštin 2005b, 14.

[8] Glej poglavji 1 in 8, v tem zborniku.

blade flaking becomes easier and more efficient.[6] The manufacturing of blades can be perceived especially in connection to composite harvesting tools. We can thus explain the segmentation of the blades because the prehistoric farmers inserted short segments of the blades into the wooden sickle hafts.

Just as we can notice the great difference in the quality of manufacturing, there is also a difference in the quality of the used raw material. Despite the small number of the gathered stone artefacts the raw material selection is very diverse. We find cherts of both, poor and high quality. All three points and bifacially retouched tool are made of quality, homogenous cherts, the same goes for most other retouched artefacts and blades. The interesting part is that every point is made of a different material. Point (*Pl. 7.1:* 2) is made of dark grey chert, point (*Pl. 7.1:* 4) of black chert, point (*Pl. 7.1:* 3) of light grey chert with white inserts, and bifacially retouched tool (*Pl. 7.1:* 1) of light brown chert with white inserts. There are no deposits of high-quality cherts with white inserts, typical of the area Monti Lessini in the northeastern Italy, in Slovenia. The raw material import from the northeastern Italy is on our soil documented for the first time at the Neolithic sites on Kras, and its use is also presumed at the sites of the Neolithic Sava group along the upper stream of the Sava.[7] This exotic material must have come to Spaha as a consequence of trade and exchange of goods over long distances.

Stone artefacts from Spaha above Brezovica pri Predgradu involve a mixture of artefacts intended for hunting (arrow points) and artefacts connected to agriculture (segmented blades). The latter nicely correspond to the numerous querns found at the site.[8] According to the typology the tools with bifacial retouch and points can be ascribed to the Neolithic and Eneolithic. The rest of the retouched artefacts cannot be limited to a certain time period since they occur from the Palaeolithic until the metal periods. Since Spaha is a multi-layered site, which was inhabited during several different periods, we need to, when precisely interpreting the dates of stone tools, put the context, in which they were discovered, first.

[6] Inzian, Roche, Tixier 1977.

[7] Guštin, Tomaž, Kavur 2005, 59; Guštin 2005b, 14.

[8] See chapters 1 and 8, in this monograph.

7.3 KATALOG NAJDB

d = dolžina v mm
š = širina v mm
db = debelina v mm
s. = sonda
r. = reženj
kv. = kvadrant

Tabla 7.1

1. Zlomljeno obojestransko ploskovno retuširano orodje; svetlorjav roženec z belimi vložki; d = 41, š = 41, db = 10; s. III, r. 3, kv. 6; inv. št. P 175.

2. Zlomljena obojestransko ploskovno retuširana puščična ost; temnosiv roženec; d = 14, š = 16,5, db = 4; s. VI, r. 2, kv. 10; inv. št. P 4638.

3. Ploskovno retuširana konica; svetlosiv roženec z belimi vložki; d = 43, š = 18, db = 5; s. VI, r. 2, kv. 12; inv. št. P 176.

4. Konica; črn roženec; d = 35, š = 19,5, db = 4; s. VI, r. 3–4, kv. 12; inv. št.: S. N.

5. Frag. retuširane kline; rjav roženec; d = 19, š = 12,5, db = 3; s. VI, r. 2, kv. 22; inv. št. S. N.

6. Obojestransko retuširan odbitek; temno siv roženec; d = 17, š = 23, db = 6,9; s. VI, r. 2, kv. 13; inv. št. S. N.

7. Odbitek s strmo retušo; rjav roženec; d = 20,8, š = 18, db = 5; s. II, r. 5, kv. 3; inv. št. P 3885.

8. Retuširan jedrni odbitek; siv roženec; d = 52, š = 16, db = 11; s. VII, r. 3, kv. 2; inv. št. P 6926.

9. Retuširan odbitek; črn roženec; d = 21,5, š = 16, db = 8; s. VI, r. 2, kv. 16; inv. št. S. N.

10. Praskalo na odbitku; svetlo siv roženec; d = 19, š = 21, db = 6; s. VI, r. 1, kv. 11; inv. št. P 4656.

11. Retuširan odbitek; svetlo siv roženec; d = 20, š = 13, db = 4,8; s. VI, r. 2, kv. 22; inv. št. S. N.

12. Segmentirana krakelirana klina; rumenkast roženec z belimi vložki; d = 25, š = 14, db = 4,5; s. VI, r. 3, kv. 11; inv. št. P 5112.

13. Segmentirana retuširana klina; siv roženec; d = 29, š = 14, db = 4; s. VI, r. 3, kv. 12; inv. št. P 5159.

14. Segmentirana krakelirana klina z uporabno retušo; rumenkast roženec z belimi vložki; d = 20, š = 11, db = 4; s. VI, r. 3, kv. 11; inv. št. P 5110.

15. Segmentirana krakelirana klina z uporabno retušo; rumenkast roženec z belimi vložki; d = 30, š = 15, db = 5; s. VI, r. 3, kv. 11; inv. št. P 5111.

7.3 CATALOGUE OF FINDS

d = length in mm
š = width in mm
db = thickness in mm
s. = trench
r. = slice
kv. = square

Plate 7.1

1. Broken bifacially retouched tool; light brown chert with white inserts; d = 41, š = 41, db = 10; s. III, r. 3, kv. 6; inv. no. P 175.

2. Broken bifacially retouched arrow point; dark grey chert; d = 14, š = 16.5, db = 4; s. VI, r. 2, kv. 10; inv. no. P 4638.

3. Retouched point; light grey chert with white inserts; d = 43, š = 18, db = 5; s. VI, r. 2, kv. 12; inv. no. P 176.

4. Point; black chert; d = 35, š = 19.5, db = 4; s. VI, r. 3–4, kv. 12; inv. no.: S. N.

5. Frag. of a retouched blade; brown chert; d = 19, š = 12.5, db = 3; s. VI, r. 2, kv. 22; inv. no. S. N.

6. Bifacially retouched flake; dark grey chert; d = 17, š = 23, db = 6.9; s. VI, r. 2, kv. 13; inv. no. S. N.

7. Flake with steep retouch; brown chert; d = 20.8, š = 18, db = 5; s. II, r. 5, kv. 3; inv. no. P 3885.

8. Retouched core flake; grey chert; d = 52, š = 16, db = 11; s. VII, r. 3, kv. 2; inv. no. P 6926.

9. Retouched flake; black chert; d = 21.5, š = 16, db = 8; s. VI, r. 2, kv. 16; inv. no. S. N.

10. Endscraper on a flake; light grey chert; d = 19, š = 21, db = 6; s. VI, r. 1, kv. 11; inv. no. P 4656.

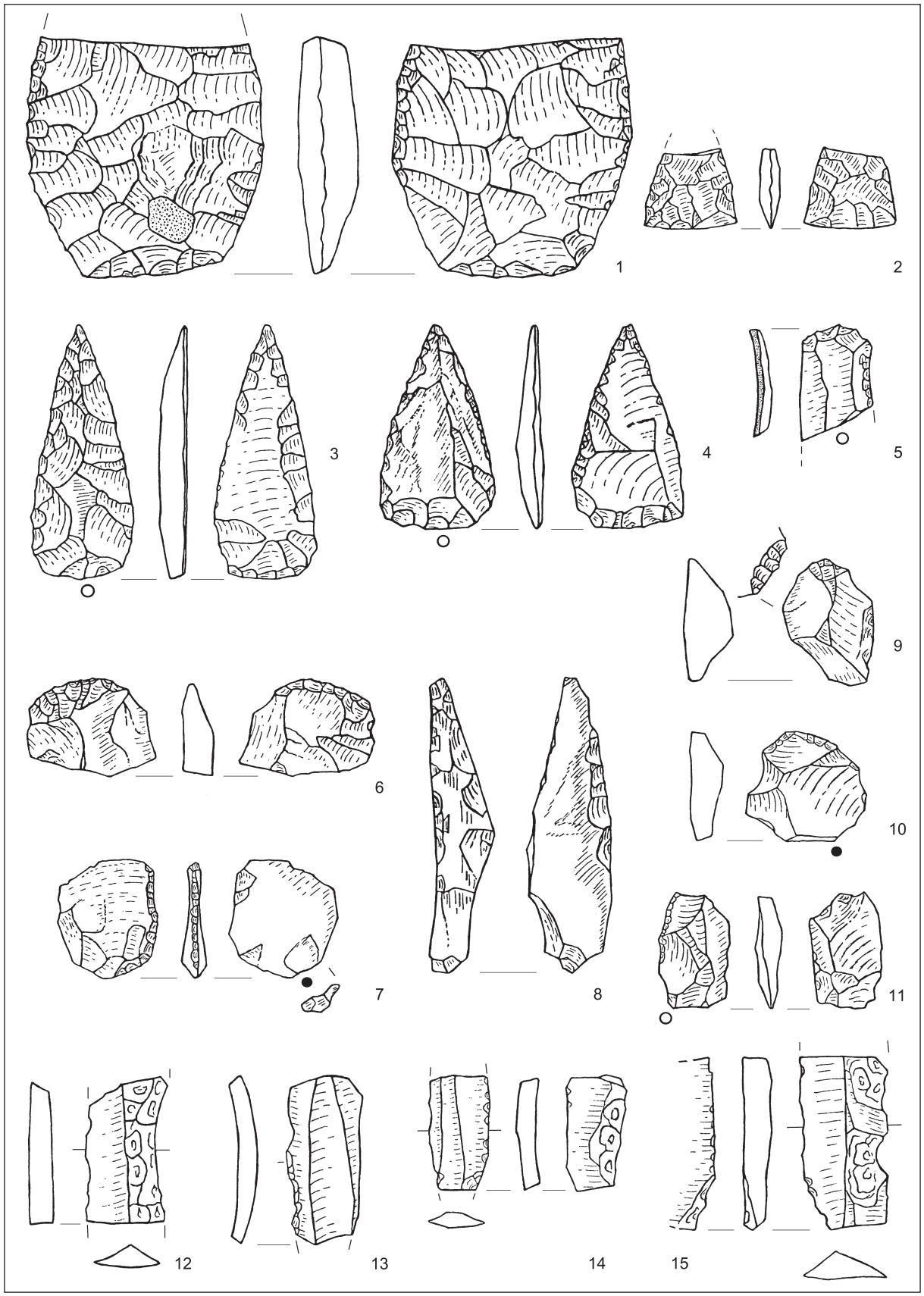
11. Retouched flake; light grey chert; d = 20, š = 13, db = 4.8; s. VI, r. 2, kv. 22; inv. no. S. N.

12. Segmented thermally altered blade; yellowish chert with white inserts; d = 25, š = 14, db = 4.5; s. VI, r. 3, kv. 11; inv. no. P 5112.

13. Segmented retouched blade; grey chert; d = 29, š = 14, db = 4; s. VI, r. 3, kv. 12; inv. no. P 5159.

14. Segmented thermally altered blade with a use wear retouch; yellowish chert with white inserts; d = 20, š = 11, db = 4; s. VI, r. 3, kv. 11; inv. no. P 5110.

15. Segmented thermally altered blade with a use wear retouch; yellowish chert with white inserts; d = 30, š = 15, db = 5; s. VI, r. 3, kv. 11; inv. no. P 5111.



T. 7.1: Kamen. M = 1 : 1.
Pl. 7.1: Stone. Scale = 1 : 1.

8. PETROLOŠKA SESTAVA IN IZVOR ŽRMELJ S SPAHE NAD BREZOVICO PRI PREDGRADU

8. PETROLOGIC COMPOSITION AND ORIGIN OF QUERNS FROM SPAHA ABOVE BREZOVICA PRI PREDGRADU

Janez TURK

Izvleček

Kamnite žrmlje z arheološkega najdišča Spaha nad Brezovico pri Predgradu imajo razmeroma enovito petrološko sestavo. Pregledani kamniti fragmenti žrmelj pripadajo izključno kremenovo-sljudnatemu peščenjaku in konglomeratu. Pregledali smo še nekaj kamnitih kosov, ki sicer niso bili sestavni deli žrmelj, vendar so bili zagotovo prineseni v naselbino in uporabljeni v druge namene. Te kamnite najdbe pripadajo rožencu in boksitu.

Glede na uporabljeni material za žrmlje sklepamo, da so prebivalci Spahe izkoriščali nahajališča karbonsko-permskih klastičnih kamnin, ki jih je najti že manj kot 2 km zračne razdalje od naselbine.

Ključne besede: prazgodovina, višinsko naselje, žrmlje, petrološka analiza.

Abstract

Stone querns from the archaeological site Spaha above Brezovica pri Predgradu have a relatively unified petrologic composition. The assessed stone quern fragments belong exclusively to the quartz-mica sandstone and conglomerate. We also inspected a few other stone pieces, which were not the component parts of querns but had been most certainly brought to the settlement and used for other purposes. These stone finds are of chert and bauxite.

Considering the material used for querns we assume that the inhabitants of Spaha exploited the deposits of Carboniferous-Permian clastic rocks, which can be found within less than 2 km straight distance from the settlement.

Keywords: prehistory, hilltop settlement, querns, petrologic analysis.

8.1 UVOD

Vsem arheologom dobro znane žrmlje so pripomočki za drobljenje oziroma mletje žita. Z. Modrijan, po njej delitev povzema tudi I. Smerdel, razlikuje terilnike (ang. *saddle-querns*) in žrmlje (ang. *rotary-querns*).[1] Uporaba ročnih mlinov – terilnikov je v Sloveniji izpričana že v času mlajše kamene dobe,[2] v spremenjeni obliki kot žrmlje s principom rotacije pa so se ohranile praktično do današnjega časa. V polpreteklem obdobju so slednje uporabljali predvsem v odročnejših, revnej-

[1] Navedeno pri Smerdel 2002, 142, op. 1.

[2] Kavur 2005, 131.

8.1 INTRODUCTION

To every archaeologist well known querns are aids for crushing and grinding grain. Z. Modrijan, whose division is followed also by I. Smerdel, distinguishes between *saddle-querns* and *rotary-querns*.[1] The use of manual mills – saddle querns has been in Slovenia attested already in the Neolithic period,[2] in a somewhat changed form, as querns with the principle of rotation, and these have been preserved until the present day. More recently querns have been used mostly in the more

[1] Listed at Smerdel 2002, 142, footnote 1.

[2] Kavur 2005, 131.

ših krajih in tam, kjer naravne danosti niso omogočale mletja žita na vodni pogon.[3] Kakor koli že, zaradi uveljavljenosti besede žrmlje v tem prispevku izraz ohranjamo, pri tem pa imamo v mislih dejansko orodje, ki ga Z. Modrijan označuje za terilnik, torej preprosto napravo za drobljenje žit brez principa rotacije.

Sestava in oblika žrmelj se je v prazgodovini le malo spreminjala. J. Dular in S. Tecco - Hvala[4] npr. pišeta, da se žrmlje iz starejše železne dobe po obliki in velikosti v ničemer ne razlikujejo od poznobronastodobnih. Njim podobne so tudi še starejše žrmlje. Te, kot je znano, sestavljata večja spodnja, ravna ali sedlasto vglobljena kamnita plošča ("čok" ali "spodnjak") in manjši zgornji, okrogel ali valjast kamen ("terač" ali "vrhnjak"), s katerim so drgnili sem in tja ter tako drobili žita.[5]

Ker so žrmlje namenjene drobljenju oziroma mletju, je praktično, da se uporabi kamnina, ki ima čim večjo trdoto. Trša kot je kamnina, iz katere so oblikovane žrmlje, daljša je njihova uporabnost. V nasprotnem primeru se obrabijo in tudi razpadejo hitreje. Za žrmlje so najbolj primerne predvsem kamnine, ki vsebujejo veliko kremena, to so kremenovi konglomerati in peščenjaki in pa predvsem razne magmatske kamnine.[6]

8.2 METODA

Pregledali smo 237 kamnitih predmetov z arheološkega najdišča Spaha nad Brezovico pri Predgradu. Večinoma gre za fragmente žrmelj, ki izvirajo skoraj iz vseh režnjev. Največ jih je iz sonde II, režnja 3 in 2, sonde III, režnji 4 do 2, in sonde VI, režnji 3 do 1.[7] Celi kosi praktično niso ohranjeni, z izjemo nekaj krogelnih sestavnih delov. Posamezni kamni so razpadli na večje število fragmentov, vendar rekonstrukcija zaradi prevelike fragmentiranosti ni bila izvedena. To pomeni, da večje število analiziranih fragmentov zagotovo pripada enemu sestavnemu delu žrmelj.

Vsi kosi so bili pregledani le makroskopsko, pri čemer so nas v grobem zanimale le glavne značilnosti kamnitih kosov, to je tip kamnine in sklepanje na bližnje ali daljne nahajališče. Pri iskanju izvora oziroma nahajališča smo se naslonili na podatke iz Osnovne geološke karte Slovenije, oziroma na "Tolmač" k tej karti. Širše območje Spahe obsegata lista Črnomelj in Delnice. Preučili smo tudi lista Ribnica ter Novo mesto. Na podlagi značilnosti in na grobo določene petrološke sestave kamnitih kosov smo sklepali na njihov izvor oziroma nahajališče.

[3] Smerdel 2002, 142.

[4] 2007, 207.

[5] Po Smerdel 2002, 142, 144 in Dular, Tecco - Hvala 2007, 207.

[6] Horvat, Župančič 1987.

[7] Glej poglavje 1: *tab. 1.1*, v tem zborniku.

remote, poorer areas and where natural characteristics did not enable the grinding of grain by water power.[3] Be as it may, due to the prominence of the word quern we retain the word in this article and by it we think of the actual tool, which is by Z. Modrijan called the saddle-quern, namely the simple device for grinding grain without the principle of rotation.

The composition and form of the querns changed only slightly through the prehistoric period. J. Dular and S. Tecco - Hvala[4], for example, write that querns from the Early Iron Age show no variation in form or size to those of the Late Bronze Age querns. Even older querns are also similar. These are composed of the bigger, flat or saddle-like bent stone plate, and a smaller upper, round or cylindrical stone used for rubbing to and fro and thus crushing grain.[5]

Since querns are intended for crushing or grinding it seems practical to make them from rock with the greatest possible hardness. The harder the rock of the querns is, the longer their usefulness. Otherwise they wear thin and more quickly fall apart. The most appropriate material for querns are those rocks which contain a lot of quartz, therefore, quartz conglomerates and sandstones and, especially, various igneous rocks.[6]

8.2 METHODOLOGY

We have examined 237 stone objects from the archaeological site Spaha above Brezovica pri Predgradu. These are mostly quern fragments which were found in almost all slices. The majority is from trench II, slices 3 and 2, trench III, slices 4 to 2, and trench VI, slices 3 to 1.[7] There are practically no complete parts preserved, except a few ball component parts. Individual stones fell apart into a number of fragments but the reconstruction was not performed due to the high extent of fragmentation. As a result we can say that several analysed fragments belong to one component part of querns.

All pieces were examined solely macroscopically and we were only interested in the main characteristics of the stone parts, t.i. the type of rock and deduction to near or remote deposit site. In our search for the origin or deposit we leaned on the data from the Basic geological map of Slovenia, more precisely on its "Legend". The wider area of Spaha is encompassed in sheets Črnomelj and Delnice. We have also studied sheets Ribnica and Novo mesto. Based on the characteristics and roughly defined petrologic composition of the stone parts we assumed their origin or deposit site.

[3] Smerdel 2002, 142.

[4] 2007, 207.

[5] According to Smerdel 2002, 142, 144 and Dular, Tecco - Hvala 2007, 207.

[6] Horvat, Župančič 1987.

[7] See chapter 1: *Tab. 1.1*, in this monograph.

8.3 UGOTOVITVE IN RAZPRAVA

Pregled žrmelj oziroma njihovih fragmentov je pokazal razmeroma enostavno petrološko sestavo. Prazgodovinski prebivalci naselbine na Spahi so za žrmlje uporabljali le dva tipa kamnin: peščenjak in konglomerat. Gradniki (pesek in prodniki) kamnin po sestavi pripadajo večinoma kremenu, prodniki so v manjši meri tudi litični. Visok odstotek zrn v peščenjaku pripada tudi sljudi. Podobno je ta pogosto zastopana tudi v peščenem vezivu, ki povezuje prodnike (večinoma kremenove, deloma litične) v konglomerat.

Breče in peščenjake lahko glede na zrnavost razdelimo na tri skupine. Zaradi makroskopskega določanja je lahko uvrščanje deloma problematično. Za breče lahko z gotovostjo trdimo, da prevladujejo drobnozrnate, srednje in debelozrnatih je bilo malo (po 5 oziroma 7 od skupno 55 breč). Bolj problematična je delitev peščenjakov. Drobno, srednje in debelozrnati naj bi bili po makroskopski klasifikaciji, ki je lahko deloma subjektivna, vsi prisotni v velikih razmerjih, najmanjša napaka je, če trdimo, da prevladujejo srednje in debelozrnati.

Na podlagi tipa kamnin in njihove petrološke sestave lahko sklepamo, da so peščenjake in prodnike, ki so jih staroselci uporabljali za izdelavo žrmelj, prinesli iz enotnega območja. Oziroma da je sedimentacija takšnih kamnin potekala v enakih okoljskih razmerah, torej pripadajo istemu faciesu.

K pregledanemu kamnitemu inventarju moramo prišteti še nedoločljive in močno preperele kose, kose, za katere lahko rečemo, da niso deli žrmelj (20), kar velja tudi za 14 kosov z drugačno petrološko sestavo, ki pripadajo meljevcu, rožencu in boksitu.

Kamnine, ki vsebujejo kremen, so razmeroma trpežne. Zaradi tega so najbolj primerne za izdelavo kamnitih orodij, kakršne so tudi žrmlje. Kremen dosega trdoto 7 po 10 stopenjski lestvici.

Širše območje Spahe gradijo karbonatne kamnine jurske starosti, ki niso primerne za izdelavo žrmelj. Tr-

8.3 FINDINGS AND DISCUSSION

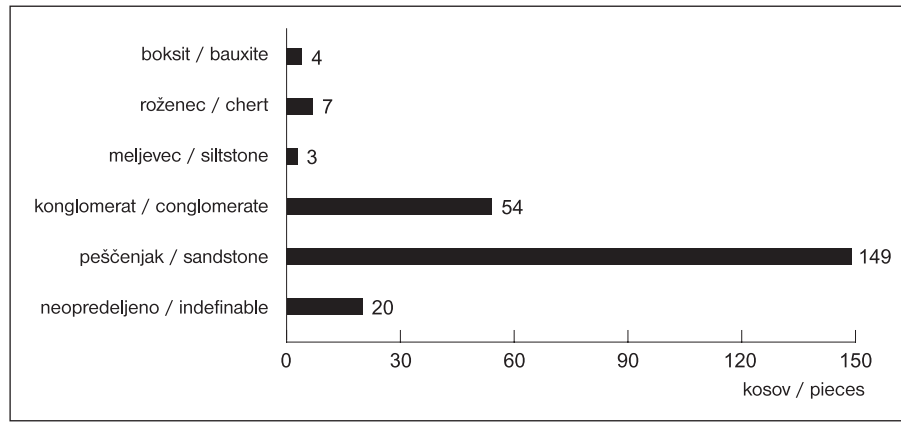
The examination of querns and their component parts revealed a relatively simple petrologic composition. Prehistoric inhabitants of the settlement on Spaha used only two types of rock for their querns: sandstone and conglomerate. Rock parts (sand and pebbles) according to their composition belong mostly to quartz, a small part of pebbles is also lithic. A high percentage of grain in the sandstone also belongs to mica. Mica is similarly frequent also in the sand binder connecting pebbles (mostly quartz, partly lithic) into a conglomerate.

Breccias and sandstones can, according to grain composition, be divided into three groups. Due to the macroscopic examination the classification can be partly problematic. With breccias we can be certain that there is a prevalence of fine grained, while there are few of medium and coarse grained (5 or 7 out of 55 breccias total). The division of sandstones is more problematic. Fine, medium, and coarse grained are supposedly, according to the macroscopic classification which can be partly subjective, all present in large proportions; the smallest error is to say that medium and coarse grained are prevalent.

On the basis of rock type and its petrologic composition we can say that sandstones and pebbles, used by the indigenous people to produce querns, were all brought from one area or that the sedimentation of these rocks happened in the same environmental circumstance, therefore, they belong to the same facies.

We also need to involve the undefined and badly weathered pieces – pieces for which we can say that are not part of querns (20), including also the 14 pieces of different petrologic composition (siltstone, chert, and bauxite).

Rocks containing quartz are relatively durable. Thus they are most appropriate for the manufacturing of stone tools such as querns. Quartz has hardness 7 according to the 10 point scale.



Sl. 8.1: Razvrstitev analiziranih kamnitih najdb glede na vrsto kamnine.
Fig. 8.1: Classification of analysed stone finds according to rock type.

dota kalcitnih mineralov kot glavne sestavine apnenca znaša le 3, dolomita pa do 4.[8]

Sljude, med katere uvrščamo minerale biotit, muskovit, flogopit, lepidolit in margarit, pa dosegajo trdoto med 2,5 in 4,5.[9] Velik delež sljude v peščenjakih in konglomeratih poslabša mehansko trdoto kamnine, zato so bile žrmlje s Spahe verjetno hitreje podvržene obrabljenosti.

8.4 GEOLOGIJA OBMOČJA

Kremenovi peščenjaki in kremenovi konglomerati permske starosti izdanjajo na območju Knežje Lipe. Glede na litološki razvoj delimo te kamnine na dva člena:

konglomerati z občasnimi prehodi v peščenjak, meljevec in črni glinavec pripadajo spodnjemu permu, medtem ko zgornjemu permu pripadajo peščenjaki, meljevci in glinavci, konglomerati pa nastopajo v podrejenem številu.

Konglomerati so večinoma drobnozrnati (velikost prodnikov znaša 0,5–2 cm). Mineraloško gledano se v peščenjakih poleg kremena pojavljajo še minerali cirkon, turmalin, rutil in apatit. Takšna mineralna sestava klastitov nakazuje zaključek turbiditnega grauvaka faciesa s prehodom v klastitni facies plitve sredine.[10]

Nahajališča obravnavanih permskih kamnin se skupaj s karbonatnimi raztezajo tudi med Mozljem, Banja Loko in Čabrom. Skrilavi glinavci, kremenovi peščenjaki in konglomerati se običajno med seboj menjavajo, ponekod pa zavzema ena kamnina večja območja.

Permske kamnine konkordantno prehajajo v spodnje triasne karbonate. Območje Knežje Lipe gradi tudi dolomit liasne starosti (spodnja jura), ki ponekod prehaja v apnenec. V jurskih apnencih, ki gradijo širše območje Spahe, nastopajo razmeroma pogosti vložki roženca.

V okolici Mozlja in Kočevja se nahajajo redki izdanki pliokvartarnih boksitno-glinenih sedimentov. Pleistocenske boksitne gline so nastale kot netopen ostanek pri kemičnem preperevanju karbonatnih kamnin. Takšen netopen ostanek se nahaja predvsem na Hrvaškem.[11]

8.5 SKLEP

V skladu s pričakovanji smo ugotovili, da so prebivalci Spahe izrabljali izvorna nahajališča v neposredni bližini naselbine. Takšni so izdanjki permskih klastitov na območju Knežje Lipe, ki ležijo manj kot 2 km zračne razdalje od Spahe, ter med Rajndolom in Mozljem, še

[8] Mottana, Crespi, Liborio 1987.
[9] Mottana, Crespi, Liborio 1987.
[10] Bukovac et al. 1976.
[11] Savig, Dozet 1976.

The wider area of Spaha is composed of carbonate rocks of Jurrasic age, which are not appropriate for making querns. Hardness of calcite minerals, as the main component of limestone, amounts to only 3 and dolomite to only 4.[8]

Mica, among which we classify the minerals biotite, muscovite, phlogopite, lepidolite, and margarite, reach the hardness between 2.5 and 4.5.[9] The high proportion of mica in sandstones and conglomerates weakens the mechanic hardness of rock, therefore, the querns from Spaha were probably the subject of quick wearing out.

8.4 GEOLOGY OF THE AREA

Quartz sandstones and quartz conglomerates of Permian age outcrop near Knežja Lipa. According to the lithologic development these rocks are divided into two parts:

conglomerates with occasional transitions into sandstone, siltstone, and black mudstone belong to the Lower Permian, while sandstones, siltstones, and mudstones belong to the Upper Permian; and conglomerates appear in a smaller number.

Conglomerates are mostly fine grained (pebble size 0.5-2 cm). From the mineralogical point of view there are, besides quartz, in the sandstone also minerals zircon, tourmaline, rutile, and apatite. Such mineral composition of clast rocks suggests the end of turbidite grauwacke facies with transition to clast facies.[10]

Deposits of the mentioned Permian rocks are along with the carbonate found also between Mozelj, Banja Loka, and Čaber. Shale, quartz sandstones, and conglomerates usually alternate, and sometimes one rock occupies larger areas.

Permian rocks concordantly traverse into Lower Triassic carbonates. The area of Knežja Lipa is composed also of a dolomite of Liassic age (Lower Jurassic), which in places traverses into limestone. In Jurassic limestones, which make up the wider area of Spaha, a relatively frequent inserts of chert appear.

The surroundings of Mozelj and Kočevje reveal rare outcrops of Plio-Quaternary bauxite-clay sediments. Pleistocene bauxite clays were made as insoluble remains of chemical weathering of carbonate rocks. Such insoluble remains are found mostly in Croatia.[11]

8.5 CONCLUSION

In accordance with the expectations we found that the inhabitants of Spaha used the source deposits in

[8] Mottana, Crespi, Liborio 1987.
[9] Mottana, Crespi, Liborio 1987.
[10] Bukovac et al. 1976.
[11] Savig, Dozet 1976.

nekaj kilometrov zahodneje. Permske kamnine izdanjajo v večjem obsegu predvsem na območju Gorskega Kotarja, med Srpskimi Moravicami in Čabrom na Hrvaškem.[12] Vsa druga območja so oddaljena še precej več. Prebivalci Spahe so zelo verjetno pridobivali surovine le iz najbližjih nahajališč.[13]

[12] Glej poglavje 1: *sl. 1.3*, v tem zborniku.

[13] Do podobnih ugotovitev smo prišli tudi pri raziskovanju kolišč na Ljubljanskem barju (npr. Turk 2009, 285, sl. 13.4).

the immediate vicinity of the settlement. Such are the outcrops of Permian clastes in the area of Knežja Lipa, which lies less than 2 km of straight distance from Spaha, and between Rajndol and Mozelj, a few kilometres to the west. Permian rocks outcrop in a greater extent mostly in the area of Gorski Kotar, between Srpske Moravice and Čaber in Croatia.[12] All other deposits are much further away. The people from Spaha most probably used materials only from the nearest deposits.[13]

[12] See chapter 1: *Fig. 1.3*, in this monograph.

[13] We came to the similar conclusions also with the exploration of pile-dwellings in the Ljubljansko barje (e.g. Turk 2009, 285, Fig. 13.4).

9. ŽIVALSKI OSTANKI

9. ANIMAL REMAINS

Borut TOŠKAN

Izvleček

V prispevku so predstavljeni živalski ostanki s Spahe, med katerimi je zastopanih najmanj osem vrst iz štirih družin. Od skupno 411 najdb jih je bilo mogoče v čas z zanesljivostjo umestiti tretjino in sicer v obdobje savske skupine in lasinjske kulture. Po številu določenih primerkov prednjačijo domestikati, predvsem domače govedo, ki je očitno predstavljalo osrednji vir mesa in maščob že tudi prvim prebivalcem lokacije v 5. tisočletju pr. Kr. Ti so verjetno med svojim bivanjem na Spahi izkoriščali prednost poletne planinske paše, obstoj pravega transhumantnega gospodarstva pa se ne zdi verjeten. Skromno število ostankov skeletnih elementov iz najbolj mesnatih delov trupa med gradivom iz 5. tisočletja bi lahko bilo posledica intenzivnega drobljenja mozgovnih kosti z namenom ekstrakcije maščobe.

Ključne besede: Spaha, savska skupina, lasinjska kultura, živalski ostanki.

Abstract

This chapter presents animal remains from Spaha, among which at least eight species from four families are represented. Out of total 411 finds we could with certainty ascribed to a certain time period one third of them, belonging to the period of the Sava group and Lasinja culture. According to the number of identified specimens domesticates are in the lead, these are mostly cattle which was obviously the main source of meat and fat already for the first settlers of this location in the 5th millennium BC. During their stay at Spaha these people were probably benefiting from summer mountain grazing, while the existence of true transhumant economy seems unlikely. The modest representation of skeletal elements from the meatiest body-parts among the material from the 5th millennium could be the consequence of intensive fracturing of long bones with the purpose of marrow extraction.

Keywords: Spaha, Sava group, Lasinja culture, animal remains.

9.1 UVOD

Analiza živalskih ostankov z najdišča Spaha je zajela 411 ostankov kosti in zob, ki so bili izkopani med leti 1979 in 1984. Vsaj do nivoja rodu (v primeru drobnice pa do nivoja poddružine) jih je bilo mogoče determinirati 129 (oz. 31,4 %), sicer pripisanih najmanj osmim vrstam iz štirih družin. Na najdišču so bile odkrite ostaline iz konca mlajše kamene dobe (savska skupina), starejše in srednje bakrene dobe (lasinjska kultura, horizont keramike z brazdastim vrezom = HKBV), bronaste dobe (kultura žarnih grobišč) ter iz prehoda med srednjim in

9.1 INTRODUCTION

Animal remains analysis from the site Spaha comprises 411 remains of bones and teeth, excavated between 1979 and 1984. Of these, 129 (or 31.4 %) could be identified at least to the level of genus (in case of ovicaprids to the level of subfamily), which are ascribed to no less than eight species from four families. Represented at the site are the remains from the end of the Neolithic (the Sava group), Early and Middle Eneolithic (Lasinja culture, horizon of pottery with furrowed incisions = "Furchenstich" horizon), Bronze Age (Urnfield culture), and

Tab. 9.1: Zastopanost posameznih sesalskih taksonov v gradivu s Spahe. Ločeno so podani podatki za ostanke, ki jih je mogoče z gotovostjo umestiti v 5. tisočletje (tj. savska skupina in/ali lasinjska kultura). Količina najdb je izražena kot najmanjše število določenih primerkov (*Minimum Number of Identified Specimens*; NISP). Obrazložitev simbola: O.s.C.s.C. – *Ovis* s. *Capra* s. *Capreolus*.
Tab. 9.1: Representation of individual mammal taxa in the faunistic material from Spaha. The data for those remains which can with certainty be ascribed to the 5th millennium (the Sava group and/or Lasinja culture) are given separately. The number of finds is expressed as the *Minimum Number of Identified Specimens* (NISP). Symbol explanation: O.s.C.s.C. – *Ovis* s. *Capra* s. *Capreolus*.

TAKSON / TAXON	**5. tisočletje / 5th millennium**	**OSTALO / REST**	**SKUPAJ / TOTAL**	
			NISP	**% NISP**
Bos taurus	15	50	65	50,4
Caprinae	3	12	15	11,6
***Sus* sp.**	10	22	32	24,8
Cervus elaphus	4	5	9	7,0
Bos* cf. *primigenius	1	-	1	0,8
Meles meles	1	-	1	0,8
O.s.C.s.C.	4	2	6	4,6
SKUPAJ / TOTAL	**38**	**91**	**129**	**100**

novim vekom.[1] Žal so najdbe iz različnih obdobij med seboj v precejšnji meri pomešane, saj je gradnja stavb ob vsakokratni vnovični poselitvi lokacije praviloma posegla v ostaline predhodnih naselbin. Toliko bolj zato, ker so ljudje iz različnih obdobij hiše postavljali na skoraj povsem istih mestih, to je tam, kjer sta konfiguracija terena in debelina zemlje nad geološko osnovo to tudi edino zares omogočala. Glede na navedeno je bilo tako mogoče od zgoraj omenjenih 411 živalskih ostankov v čas z zanesljivostjo umestiti zgolj 154 kosti in zob, ki so datirane v 5. ter eventualno še začetek 4. tisočletja pr. Kr. (tj. savska skupina in lasinjska kultura). Preostale najdbe izvirajo bodisi iz 5. ali 4. tisočletja bodisi iz prehodnega obdobja med 2. in 1. tisočletjem (tj. kultura žarnih grobišč) oz. med srednjim in novim vekom (*tab. 9.1*).

9.2 ANALIZA

9.2.1 NASELBINI IZ OBDOBJA SAVSKE SKUPINE IN LASINJSKE KULTURE

Favnistično gradivo iz 5. tisočletja je na tem mestu obravnavano kot enoten vzorec, čeprav med naselbino iz obdobja savske skupine in tisto iz časa lasinjske kulture najbrž ni obstajala kontinuiteta. Takšen pristop je bil nujen, saj razpoložljiva terenska dokumentacija in način vzorčenja najdb razlikovanja med živalskimi ostanki iz obeh navedenih poselitvenih faz ni omogočala. Poleg tega bi nadaljnje drobljenje že tako skromnega vzorca le še dodatno zmanjšalo izpovedno vrednost dobljenih rezultatov.

Sestava vzorca (*tab. 9.1*) kaže na prisotnost ostankov najmanj šestih vrst, od katerih najvišji, skoraj 50-odstotni delež zastopanosti pripada domačemu govedu (*Bos taurus*). Tudi sicer med taksonomsko določenimi ostanki prevladujejo kosti in zobje domačih živali,

[1] Glej poglavji 1 in 5, v tem zborniku.

from the transitional period between the Middle Ages and Early Modern Times.[1] Unfortunately, the finds from different periods are substantially mixed since building of each new settlement interfered with the remains of the previous settlements. Even more so because people from different periods built their houses on the almost exact same spot that is the place where the terrain configuration and soil thickness over the geologic base actually allowed it. Considering all this, we could with certainty assign to a period only 154 out of 411 above mentioned animal remains, which date to the 5th or possibly the beginning of the 4th millennium BC (t.i. the Sava group and Lasinja culture). The rest of the finds originate from the 5th or 4th millennium or the transitional period between the 2nd and 1st millennium (t.i. Urnfield culture) or the Middle Ages and the Early Modern Period (*Tab. 9.1*).

9.2 ANALYSIS

9.2.1 SETTLEMENTS FROM THE PERIOD OF THE SAVA GROUP AND LASINJA CULTURE

Faunistic material from the 5th millennium is here treated as a unified sample, even though there probably did not exist any continuity between the settlement from the period of the Sava group and that from the Lasinja culture. Such approach was necessary since the available terrain documentation and the manner of find sampling did not enable the differentiation among animal remains from both settlement phases. Moreover, the further crumbling of the already modest sample would additionally reduce the illustrative value of the obtained results.

Sample composition (*Tab. 9.1*) reveals the presence of remains from at least six species, from which

[1] See chapters 1 and 5, in this monograph.

Sl. 9.1: Nekateri ostanki lovnih vrst s Spahe (gradivo datirano v 5. tisočletje): a - zgornja čeljustnica divjega prašiča (sonda II, kv. 1–3, reženj 5 – 2. poglobitev); b – lobanja jazbeca (sonda II, kv. 1–3, režnja 4–5); c – druga prstnica velikega bovida, domnevno pragoveda (sonda II, kv. 1–3, režnja 4–5). Foto: I. Lapajne.
Fig. 9.1: Some remains of the hunted species from Spaha (material dated to the 5th millennium): a – maxilla of wild boar (trench II, sq. 1–3, slice 5 – 2nd deepening); b – badger scull (trench II, sq. 1–3, slices 4–5); c – second phalange of a large bovid, supposedly aurochs (trench II, sq. 1–3, slices 4–5). Photo: I. Lapajne.

čeprav ob pičlem številu najdb razlike v zastopanosti posameznih taksonov ne presegajo meje statistične značilnosti (χ^2 test: $p > 0{,}05$). Od lovnih vrst je mogoče z zanesljivostjo potrditi prisotnost ostankov jelena (*Cervus elaphus*), divjega prašiča (*Sus scrofa*; *sl. 9.1a*) in jazbeca (*Meles meles*; *sl. 9.1b*), pri čemer gre v slednjem primeru morda zgolj za ostanek v brlogu poginule živali.[2] Povsem mogoče je, da je v obravnavanem vzorcu zastopano tudi pragovedo (*Bos primigenius*) in sicer z drugo prstnico iz sonde II (*sl. 9.1c*). Takšno sklepanje izhaja iz velikosti omenjene najdbe, ki nekoliko presega vrednosti za domače govedo z bakrenodobnih, bronastodobnih in visokosrednjeveških najdišč s Slovenskega in se tako povsem približuje dimenzijam pri pragovedu (*sl. 9.2*). Nenazadnje pa bi lahko v 5. tisočletje datirano favnistično gradivo s Spahe vključevalo tudi ostanke srne (*Capreolus capreolus*), saj v primeru štirih kostnih odlomkov zanesljivo razlikovanje med omenjeno vrsto in pa drobnico ni bilo možno.

Če so razlike v deležu zastopanosti posameznih taksonov pri tukaj obravnavanem gradivu ostale pod mejo statistične značilnosti (glej zgoraj), pa razlika v številu ostankov domačih živali nasproti lovnim to mejo z zanesljivostjo presega: kosti in zob prvih je namreč očitno več[3] (χ^2 test: $p < 0{,}05$). V tem smislu se favnistični vzorec iz obeh najstarejših poselitvenih faz s Spahe umešča ob

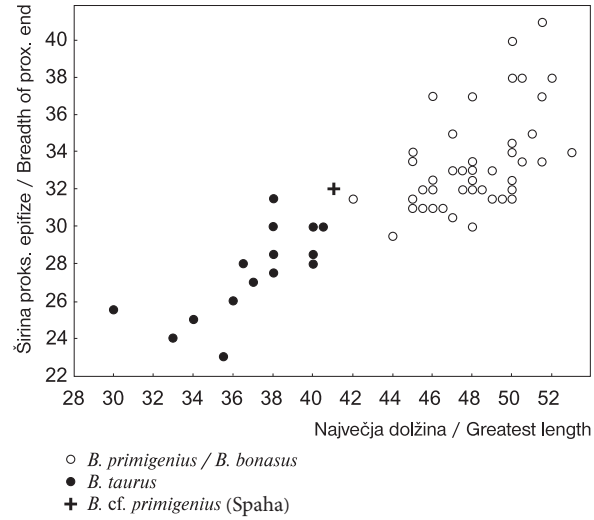
[2] Prim. s Kryštufek 1991, 220.

[3] V primeru rodu *Sus* nekaterih ostankov ni bilo mogoče določiti do nivoja vrste, zato ti v predstavljeni analizi niso bili upoštevani.

the highest, almost 50 percent share belongs to cattle (*Bos taurus*). In general, among taxonomically assigned remains bones and teeth of domestic animals prevail, even though considering the scarce number of finds the differences in individual taxon representation do not exceed the limit of statistical significance (χ^2 test: $p > 0.05$). With hunted species we can certainly confirm the presence of red deer (*Cervus elaphus*), wild boar (*Sus scrofa*; *Fig. 9.1a*), and badger remains (*Meles meles*; *Fig. 9.1b*), although in the case of the latter we could also simply be dealing with an animal which died in its lair.[2] It is quite possible that the discussed sample also includes aurochs (*Bos primigenius*), namely with the second phalange from trench II (*Fig. 9.1c*). This possibility derives from the size of the mentioned find which somewhat exceeds the range seen in Late Eneolithic, Bronze, and High Middle Ages cattle from the Slovenian territory and thus completely nears the dimensions of aurochs (*Fig. 9.2*). Last but not least, to the 5th millennium dated faunistic material from Spaha could also include the remains of roe deer (*Capreolus capreolus*), since in the case of four bone fragments the differentiation between the mentioned species and ovicaprids cannot be made with certainty.

If the differences in the representation share of individual taxa did not reach the level of statistical significance (see above), the difference in the number of domestic versus wild animal remains certainly exceeds this limit: there is obvious majority of bones and teeth from domes-

[2] Cf. Kryštufek 1991, 220.



Sl. 9.2: Odnos med največjo dolžino druge prstnice in širino njene proksimalne epifize pri bovidih (mere so izražene v mm). Podani so podatki za domače govedo s Spahe, Ciganske jame, Gradišča nad Dešnom (gradivo iz obdobja horizonta keramike z brazdastim vrezom), Ormoža (najdbe iz časa med kulturo žarnih grobišč in starejšeželeznodobno fazo Ha C) ter Novega mesta (gradivo iz 15. do 17. stoletja po Kr.; vse lastni neobjavljeni podatki) ter za pragovedo oz. zobra eneolitske starosti iz Švice (Boessneck, Jéquier, Stampfli 1963, 195 s).
Fig. 9.2: The relation between the greatest length of the second phalange and breadth of its proximal end in bovids (measures are given in mm). Presented is the data for cattle from Spaha, Ciganska jama, Gradišče nad Dešnom (material from the period of horizon of pottery with furrowed incisions), Ormož (finds from the time between Urnfield culture and Early Iron Age phase Ha C), and Novo mesto (material from the 15th to 17th century AD; all my own unpublished data), as well as for Eneolithic aurochs/wisent from Switzerland (Boessneck, Jéquier, Stampfli 1963, 195 f).

Tab. 9.2: Zastopanost osrednjih sesalskih taksonov med živalskimi ostanki s Spahe in nekaterih drugih istodobnih najdišč oz. najdiščnih faz v širši regiji. Količina najdb je izražena kot najmanjše število določenih primerkov (NISP). Viri podatkov: Resnikov prekop (Drobne 1964; Toškan, Dirjec 2006); Zamedvedica (Turk, Vuga 1984, 85); Gradec pri Mirni, fazi 1a in 1b (lasten neobjavljen podatek); Gradec pri Blečjem vrhu, plast 3 (lasten neobjavljen podatek); Ajdovska jama, levi hodnik: plast 6 ter desni hodnik: plasti 3–5 (Pohar 1988); Čatež – Sredno polje, neolitsko gradivo (Guštin et al. 2005, 107 ss; Z. Hincak, ustno poročilo).
Tab. 9.2: Representation of the main mammal taxa among animal remains from Spaha and some other contemporary sites or site phases in the wider region. The number of finds is expressed as the *Minimum Number of Identified Specimens* (NISP). Data sources: Resnikov prekop (Drobne 1964; Toškan, Dirjec 2006); Zamedvedica (Turk, Vuga 1984, 85); Gradec pri Mirni, phases 1a and 1b (my own unpublished data); Gradec pri Blečjem vrhu, layer 3 (my own unpublished data); Ajdovska jama, left corridor: layer 6, and right corridor: layers 3–5 (Pohar 1988); Čatež – Sredno polje, Neolithic material (Guštin et al. 2005, 107 ff; Z. Hincak, personal report).

NAJDIŠČE / SITE	**NISP**	***B. taurus***	**Caprinae**	***Sus* sp.**	***C. familiaris***	***C. elaphus***	***C. capreolus***	***A. alces***	***B. primigenius***	**OSTALO / REST**
Spaha (5. tisočletje / 5th millennium)	38	15	3	10	-	4	-	-	1	5
Spaha (ostalo / rest)	91	50	12	22	-	5	-	-	-	2
Ciganska jama	84	53	10	10	-	2	-	-	1	8
Resnikov prekop	108	14	5	19	2	37	4	20	-	7
Zamedvedica	15	-	-	3	-	10	-	-	1	1
Gradec pri Mirni	8	3	1	1	-	3	-	-	-	-
Gradec pri Blečjem vrhu	7	3	2	2	-	-	-	-	-	-
Ajdovska jama	86	23	28	6	4	2	-	-	-	22
Čatež – Sredno polje	166	22	26	31	-	37	11	-	39	-

bok tistim iz drugih okvirno sočasnih naselbin v širši regiji. Ob lokacijah iz *tabele 9.2*[4] takšno sliko zagotovo ticates[3] (χ^2 test: $p < 0.05$). In this sense the faunistic sample from both of the oldest settlement phases at Spaha can be set alongside those from other roughly contemporary settlements in the wider region. Besides the locations in *Table 9.2*[4] such image is most certainly revealed also by

[4] Številčno prevlado domestikatov izkazuje tudi skromen (NISP = 8) vzorec z Gradca pri Mirni, ne glede na tri najdbe jelena in ene rodu *Sus*. V primeru slednje gre namreč za ostanek domačega prašiča, od treh najdb jelena pa vse predstavljajo odlomke rogovij, tj. (tudi) takrat zelo cenjene surovine za izdelavo orodij in orožja, do katere je človek često prihajal tudi preprosto s pobiranjem spomladi naravno odpadlih primerkov (Toškan 2010).

[3] In the case of the genus *Sus* some remains were impossible to identify to the level of species thus these were not included in the present analysis.

[4] The numeral supremacy of domesticates is revealed also by the modest (NISP = 8) sample from Gradec pri Mirni.

kažejo tudi zgodnjebakrenodobni živalski ostanki s Kostela in Lukove jame v dolini Kolpe, čeprav točni podatki o deležih zastopanosti posameznih taksonov v objavah navedenih dveh najdišč sicer niso zajeti.[5]

Potencialno bi lahko izjemo glede relativnega pomena lova nasproti živinoreji med arheozoološko obdelanimi najdišči iz 5. tisočletja z območja jugovzhodne Slovenije predstavljal Čatež – Sredno polje, kjer je ob sicer neobjavljenem (nepoznanem?) razmerju med količino najdb domačega in divjega prašiča delež lovnih vrst najmanj enak deležu domačih. Je pa po drugi strani tudi res, da gre takšna slika predvsem na rovaš izjemno visokega, celo večinskega deleža zastopanosti ostankov pragoveda, kar je za slovenski prostor vsekakor (sumljiv?) unikum. Zares svojstveno sliko v smislu očitne številčne prevlade ostankov divjadi tako vendarle kažeta zgolj obe najdišči z Ljubljanskega barja, kjer pa je bila – upoštevajoč sočasno stanje drugod na Slovenskem – vloga lova pri zagotavljanju dodatnih količin mesa izstopajoče visoka skozi celotno bakreno dobo[6] ter (vsaj) še v začetku bronaste.[7]

Zanimivi so tudi podatki o zastopanosti posameznih delov trupa osrednjih živalskih vrst, tj. goveda, drobnice, prašiča in jelena. Kot je razvidno iz *tabele 9.3,* namreč delež ostankov skeletnih elementov iz bolj mesnatih anatomskih regij močno zaostaja za deležem ostankov glave ter spodnjih delov okončin (tj. dlančnic, stopalnic, zapestnih in nartnih kosti ter prstnic). Vzorec je resda skromen, a po vsej verjetnosti odseva stanje na celotnem[8] najdišču. Majhno število ostankov hrbtenice z medenico ter kosti zgornjih delov okončin je bilo namreč ugotovljeno na območju obeh[9] s favnističnimi najdbami kolikor toliko bogatih stavb iz obdobja savske skupine oz. lasinjske kulture, kar je mogoče razumeti kot indic za to, da ugotovljena slika ni naključna (*sl. 9.3*). Nenazadnje primerljive (ali celo še bolj skromne) deleže zastopanosti ostankov iz spodnjih delov okončin in glave kažejo tudi druga[10] arheozoološko obdelana najdišča iz

[5] Dirjec 1996, 68; Turk et al. 1996, 45.

[6] Toškan 2008a, 154 s.

[7] Toškan 2008b.

[8] Pri analizah gradiva s pičlim številom najdb se pogosto zgodi, da slika celotnega vzorca odseva predvsem stanje znotraj nekega potencialno povsem atipičnega skupka kosti, ki pa vključuje velik (lahko celo večinski) del vseh izkopanih najdb.

[9] Velušček (glej poglavje 3, v tem zborniku) je z analizo horizontalne in vertikalne razpršenosti arheoloških najdb *sensu stricto* na območju Spahe sicer določil približno lego najmanj devetim oz. desetim hišam iz obdobja savske skupine ali lasinjske kulture.

[10] Seveda bi za metodološko neoporečno izvedbo takšne primerjave morali upoštevati zgolj najdišča, kjer so bile pri terenskem raziskovanju uporabljene primerljive tehnike in metode izkopavanja oz. vzorčenja najdb. Da temu v našem primeru ni povsem tako, jasno kaže visok delež ostankov iz najbolj mesnatih delov trupa med gradivom iz Lubniške jame, sicer datiranim v 4. tisočletje pr. Kr. Kot je nenazadnje

the Early Eneolithic animal remains from Kostel and Lukova jama in the Kolpa valley, even though precise data about representation shares of individual taxa in the publications of the above mentioned sites are not given.[5]

Among the archaeozoologically researched sites from the 5th millennium from the area of southeastern Slovenia, an exception regarding the relative importance of hunting versus animal keeping could potentially be Čatež – Sredno polje, where, alongside the unpublished (unknown?) ratio between the number of domestic pig and wild boar finds, the share of hunted species is at least equal to the share of the domestic. Nevertheless, such a picture is mostly on the account of the extremely high, even majority representation share of aurochs remains, which is certainly a (suspicious?) unicum in the Slovenian space. A truly unique picture regarding the obvious supremacy in number of game remains is thus shown only by the two sites at the Ljubljansko barje, where – considering the contemporary situation elsewhere in Slovenia – the role of hunting in ensuring additional meat supplies was strikingly high throughout the entire Eneolithic[6] and (at least) at the beginning of the Bronze Age.[7]

The data about the representation of individual body-parts of the main animal species, t.i., cattle, ovicaprids, pig, and red deer, are also interesting. As can be seen from *Table 9.3* the share of skeletal element remains from meatier anatomic regions is much smaller than the share of remains of the head and lower parts of extremities (t.i. metacarpals, metatarsals, carpal and tarsal bones, phalanges). Despite being modest the sample most probably reflects the situation at the entire[8] site. This is indicated by the number of spine remains with pelvis and bones of the upper parts of extremities being small in the area of both[9] buildings from the period of the Sava group or Lasinja culture, which yielded a relatively rich faunistic sample (*Fig. 9.3*). After all, the similarly (or even more) modest representation shares

The fact that three remains were ascribed to red deer and one to the genus *Sus* does not seem to be problematic, as the suine bone is ascribable to domestic pig and the three red deer finds all present antler remains, at that time a highly valued material for the manufacturing of tools and weapons, which people often acquired by simply collecting the naturally shed specimens (Toškan 2010).

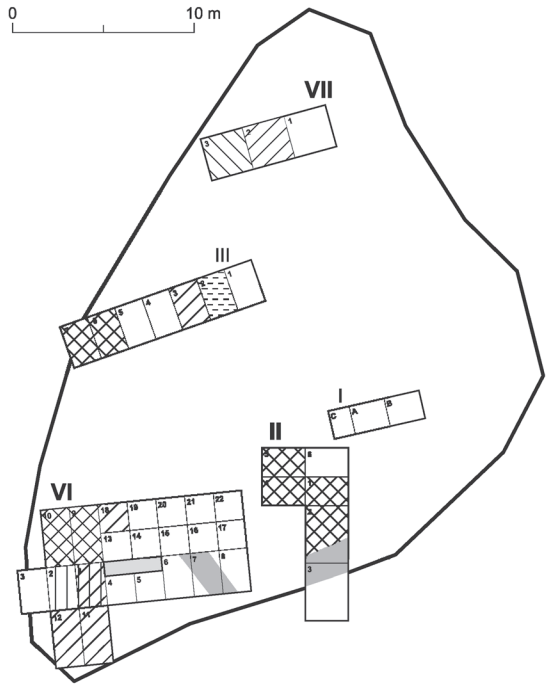
[5] Dirjec 1996, 68; Turk et al. 1996, 45.

[6] Toškan 2008a, 154 f.

[7] Toškan 2008b.

[8] It often happens with analysis of material with scarce number of finds that the conclusions based on the entire sample reflect mostly the situation within some potentially totally atypical sub-assemblage of bones, which happens to include a great (possibly even the majority) part of all studied finds.

[9] Velušček (see chapter 3, in this monograph) determined the approximate position of at least nine or ten houses from the period of the Sava group or Lasinja culture by horizontal and vertical dispersion analysis of archaeological finds *sensu stricto*.



sonda / trench VII

Takson / Taxon	Dens
B. taurus	1

sonda / trench VI

Takson / Taxon	Mandibula	Dentes	Metacarpalia	Phalanges I–III	Tibia	Astragalus	Calcaneus	SKUPAJ / TOTAL
B. taurus		3		1				4
Caprinae					1			1
Sus sp.	1				1			2
C. elaphus						1		1
O.s.C.s.C			1				1	2
SKUPAJ / TOTAL	1	3	1	1	2	1	1	10

sonda / trench II

Takson / Taxon	Cranium	Maxilla	Mandibula	Dentes	Vertebrae	Humerus	Radius	Carpalia	Metacarpalia	Phalanges I–III	Tibia	Astragalus	Metatarsalia	SKUPAJ / TOTAL
B. taurus			3	2	1			1		1		2		10
Caprinae				1						1				2
Sus sp.		3	1	2				1	1	1				8
C. elaphus						2					1			3
B. primigenius										1				1
M. meles	1													1
O.s.C.s.C							1						1	2
SKUPAJ / TOTAL	1	3	4	5	1	2	1	1	1	4	1	2	1	27

Sl. 9.3: Zastopanost posameznih sesalskih taksonov na območju treh hiš iz 5. tisočletja (tj. savska skupina in/ali lasinjska kultura) na Spahi. Količina najdb je izražena kot najmanjše število določenih primerkov (NISP). Skeletni elementi iz bolj mesnatih delov trupa so osenčeni.

Fig. 9.3: Representation of individual mammal taxa at the area of three houses from the 5th millennium (t.i. the Sava group and/or Lasinja culture) from Spaha. The number of finds is expressed as the *Minimum Number of Identified Specimens* (NISP). Skeletal elements from the meatier body-parts are shaded.

5. (in morda še tudi začetka 4.) tisočletja v širši regiji, medtem ko je ta delež v okviru najdišč iz obdobja horizonta keramike z brazdastim vrezom praviloma znatno manjši (*tab. 9.4*). Skladne s tem so tako ugotovitve v zvezi z neolitsko favno iz Čateža - Sredno polje, kjer več

mogoče sklepati že iz izredno visoke stopnje določljivosti živalskih ostankov iz navedene lokacije (tj. skoraj 50 odstotna nasproti običajnim 20 do 30 odstotkom), je moralo biti namreč v tem primeru vzorčenje živalskih ostankov izrazito selektivno v korist večjih primerkov, kakršne so predvsem dolge kosti okončin iz bolj mesnatih delov trupa.

of lower part extremities and head remains are also revealed by other[10] arhaeozoologically researched sites

[10] For the methodologically incontestable execution of such comparison we certainly should have considered only those sites where comparable techniques and methods of excavation as well as sampling have been used in field research. This is not always true in our case as is indicated by the high share of remains from the meatiest body-parts among the material from Lubniška jama, which is dated to the 4th millennium BC. As it can be concluded from the exceptionally high level of animal remains determination from the dis-

Tab. 9.3: Zastopanost posameznih skeletnih elementov v gradivu s Spahe po taksonih. Ločeno so podani podatki za ostanke, ki jih je mogoče z gotovostjo umestiti v 5. tisočletje (tj. savska skupina in/ali lasinjska kultura). Količina najdb je izražena kot najmanjše število določenih primerkov (NISP). Skeletni elementi iz bolj mesnatih delov trupa so osenčeni. Obrazložitev simbola: O.s.C.s.C. – *Ovis* s. *Capra* s. *Capreolus*.
Tab. 9.3: Representation of individual skeletal elements in the material from Spaha according to taxa. Data for remains, which can be assigned to the 5th millennium (t.i. the Sava group and/or Lasinja culture) with certainty, are presented separately. The number of finds is expressed as the *Minimum Number of Identified Specimens* (NISP). Skeletal elements from the meatier body-parts are shaded. Symbol explanation: O.s.C.s.C. – *Ovis* s. *Capra* s. *Capreolus*.

VZOREC / SAMPLE	TAKSON / TAXON	CRANIUM	MAXILLA	MANDIBULA	DENTES	VERTEBRAE	SCAPULA	HUMERUS	RADIUS	ULNA	CARPALIA	METACARPALIA	PHALANX I	PHALANX II	PHALANX III	PELVIS	SACRUM	FEMUR	TIBIA	FIBULA	CALCANEUS	ASTRAGALUS	METATARSALIA	SKUPAJ / TOTAL
5. tisočletje / 5th millennium	*B. taurus*			3	6	1					1		1	1								2		15
	Caprinae				1								1						1					3
	Sus sp.		3	2	2							1	1						1					10
	C. elaphus							2											1			1		4
	B. primigenius													1										1
	M. meles	1																						1
	O.s.C.s.C								1			1									1		1	4
	SKUPAJ / TOTAL	**1**	**3**	**5**	**9**	**1**	**-**	**2**	**1**	**-**	**1**	**2**	**3**	**2**	**-**	**-**	**-**	**-**	**3**	**-**	**1**	**3**	**1**	**38**
OSTALO / REST	*B. taurus*			6	14	2		4	2			3	2	4	1	4			3		2		3	50
	Caprinae			4	5	1							1				1							12
	Sus sp.		1	3	7	1	1		1	3		1		1					1		1		1	22
	C. elaphus			1	1		2				1													5
	B. primigenius																							
	M. meles																							-
	O.s.C.s.C					1																	1	2
	SKUPAJ / TOTAL	**-**	**1**	**14**	**27**	**5**	**3**	**4**	**3**	**3**	**1**	**4**	**3**	**5**	**1**	**4**	**1**	**-**	**4**	**-**	**3**	**-**	**5**	**91**

kot dvotretjinski delež ostankov predstavljajo odlomki zob,[11] kot tudi podatki za tisti del najdb s Spahe, ki jih zaradi premešanih plasti ni bilo mogoče z zanesljivostjo umestiti v čas. Med slednjimi namreč pomemben delež predstavljajo ravno odlomki kosti iz (naj)bolj mesnatih delov živali, kar pa je v luči dejstva, da je ta del gradiva vsaj deloma zagotovo mlajši od 5. tisočletja, pravzaprav pričakovano.

9.2.2 GRADIVO BREZ POZNANEGA ČASOVNEGA KONTEKSTA

Število živalskih ostankov s Spahe brez poznanega časovnega konteksta precej presega število tistih, ki jih lahko z gotovostjo povezujemo bodisi z naselbino iz

[11] Guštin et al. 2005, 108. [V tem primeru naj bi sicer pomembno vlogo odigrale večje tafonomske izgube kostnih odlomkov nasproti zobem, saj so slednji v sedimentu obstojnejši.]

from the 5th (and possibly also the beginning of the 4th) millennium in the wider region. Notably, within the sites from the subsequent period of the horizon of pottery with furrowed incisions the share of these skeletal elements is generally significantly smaller (*Tab. 9.4*). In line with this are the findings connected to the Neolithic fauna from Čatež – Sredno polje, since over two thirds of the remains are represented by teeth fragments,[11] and also those emerging from the chronologically problematic material from Spaha, which originate from mixed layers, but is at least partly surely younger than the 5th millennium BC.

cussed location (t.i. almost 50 percent versus the usual 20 to 30 percent), the sampling of animal bones in this case must have been distinctly selective in favour of larger specimens, such as are the meaty upper limb long bones.

[11] Guštin et al. 2005, 108. [In this case the most important role should have been played by larger taphonomic losses of bone fragments versus teeth because the latter are more durable in the sediment.]

Tab. 9.4: Delež zastopanosti skeletnih elementov iz bolj mesnatih (skupina 1) in manj mesnatih (skupina 2) delov trupa goveda, drobnice, prašiča, jelena, losa in srne po posameznih najdiščih oz. najdiščnih fazah, datiranih v 5. tisočletje (savska skupina, lasinjska kultura; obdobje A) oz. drugo četrtino 4. tisočletja (horizont kulture z brazdastim vrezom; obdobje B). Skupino 1 sestavljajo naslednji skeletni elementi: vretenca, medenica, križnica, nadlahtnica, koželjnica, komolčnica, stegnenica, golenica in piščal; ostali skeletni elementi so zaobjeti v skupini 2. Seznam najdišč oz. najdiščnih faz iz obdobja A: Resnikov prekop, izkopavanja iz leta 2002 (Toškan, Dirjec 2006); Gradec pri Mirni, fazi 1a in 1b; Gradec pri Blečjem vrhu, plast 3; Lubniška jama (vse lastni neobjavljeni podatki). Seznam najdišč oz. najdiščnih faz iz obdobja B: Kostel, plast 1, reženj 3 (J. Dirjec: neobjavljen podatek); Hočevarica, faza 1 in 2 (Toškan, Dirjec 2004a); Gradec pri Mirni, faza 3; Gradišče nad Dešnom, sonda 1: interpret. plast 1 in 2, sonda 2: interpret. plast 1 in 3 (oboje lastni neobjavljeni podatki).
Tab. 9.4: Representation share of skeletal elements from the meatier (group 1) and less meaty (group 2) body parts parts of cattle, ovicaprids, pig/wild boar, red deer, moose, and roe deer according to individual sites or site phases, dated to the 5th millennium (the Sava group, Lasinja culture; period A) or the second quarter of the 4th millennium (horizon of pottery with furrowed incisions; period B). Group 1 consists of the following skeletal elements: vertebra, pelvis, sacrum, humerus, radius, ulna, femur, tibia, and fibula; other skeletal elements are assembled in group 2. The list of sites or site phases from period A: Resnikov prekop, excavations from 2002 (Toškan, Dirjec 2006); Gradec pri Mirni, phases 1a and 1b; Gradec pri Blečjem vrhu, layer 3; Lubniška jama (all my own unpublished data). The list of sites or site phases from period B: Kostel, layer 1, slice 3 (J. Dirjec: unpublished data); Hočevarica, phase 1 and 2 (Toškan, Dirjec 2004a); Gradec pri Mirni, phase 3; Gradišče nad Dešnom, trench 1: interpret. layers 1 and 2, trench 2: interpret. layers 1 and 3 (both my own unpublished data).

OBDOBJE / PERIOD	NAJDIŠČE / SITE	SKUPINA / GROUP	
		1	2
A	Resnikov prekop	3	57
	Gradec pri Mirni	1	7
	Gradec pri Blečjem vrhu	2	6
	Lubniška jama	21	27
B	Kostel	15	23
	Hočevarica	68	384
	Gradec pri Mirni	5	7
	Gradišče nad Dešnom	70	174

obdobja savske skupine bodisi s tisto lasinjske kulture (*tab. 9.1*). Med ostanki iz premešanih plasti so sicer zelo verjetno tudi taki, ki izvirajo ravno iz 5. (oz. eventualno tudi začetka faz 4.) tisočletja, ob njih pa lahko pričakujemo še tiste iz druge četrtine 4. tisočletja, konca 2. oz. začetka 1. tisočletja ter vsaj še iz časa prehoda med srednjim in novim vekom.

Velušček[12] je na osnovi rezultatov analize horizontalne in vertikalne razpršenosti lončenine in hišnega ometa uspel določiti približno lego najmanj dveh hiš horizonta keramike z brazdastim vrezom (tj. na območju sond IV in VI), nekaj keramičnih najdb iz tega obdobja pa je bilo sicer pobranih tudi znotraj sonde I (*sl. 9.3*). Iz navedenega izhaja, da se je v tem času poselitev Spahe nekoliko razširila in ob zgornjem platoju dosegla tudi severno stran spodnjega. Po drugi strani so tudi najdbe iz obdobja kulture žarnih grobišč skromne, čeprav naj bi sicer lokacija bila poseljena tudi v tem času: hiša iz žarnogrobiščnega obdobja je verjetno stala v bližini sonde III. Ob koncu srednjega oz. v začetku novega veka so okoličani na Spahi postavili leseno stražnico z zidanim temeljem; lokacija tako takrat najverjetneje ni bila stalno poseljena.[13]

[12] Glej poglavje 3, v tem zborniku.
[13] Glej poglavja 1, 3 in 5, v tem zborniku.

9.2.2 MATERIAL WITHOUT KNOWN TIME CONTEXT

The number of animal remains from Spaha without known time context greatly exceeds the number of those that can be surely associate with either the settlement from the period of the Sava group or the one from the Lasinja culture (*Tab. 9.1*). The remains from the mixed layers most probably include additional specimens originating precisely from the 5th (or possibly the early phases of the 4th) millennium BC, as well as those from the second quarter of the 4th millennium, the end of the 2nd or the beginning of the 1st millennium, and from the transitional period from the Middle Ages to the Early Modern Times.

Veluščeк[12] managed to determine, on the basis of the results of horizontal and vertical pottery and house plaster dispersion analysis, the approximate position of at least two houses from the horizon of pottery with furrowed incisions (t.i. in the area of trenches IV and VI). A few pottery finds from this period have been collected also in trench I (*Fig. 9.3*). From this we can deduce that in this time the settlement at Spaha was somewhat extended and reached alongside the upper plateau also

[12] See chapter 3, in this monograph.

Sl. 9.4: Okretač koze v gradivu s Spahe (sonda III, kv. 5–7, režnji 1–3). Foto: I. Lapajne.
Fig. 9.4: Goat epistropheus in the material from Spaha (trench III, sq. 5–7, slices 1–3). Photo: I. Lapajne.

Vprašanje, ali lahko tudi znotraj favnističnih najdb[14] pričakujemo pomembnejši delež tistih iz obdobja horizonta keramike z brazdastim vrezom, ostaja seveda odprto. Dejstvo je, da se po vrstni pestrosti navedeni vzorec bistveno ne razlikuje od tistega, ki ga povezujemo z naselbinama iz 5. tisočletja. Skromne so tudi razlike v vrstni sestavi: ob odsotnosti kosti oz. zob pragoveda in jazbeca je bilo med ostanki iz premešanih plasti mogoče "na novo" z zanesljivostjo potrditi le prisotnost koze (*Capra hircus*; *sl. 9.4*). Na drugi strani pa velja poudariti, da je gradivo brez poznanega časovnega konteksta tako v smislu nekoliko višjega deleža domačega goveda ob nižjem deležu lovnih vrst (*tab. 9.2*), kot tudi glede boljše zastopanosti ostankov iz bolj mesnatih delov trupa (*tab. 9.4*) skladnejše z lokalnimi favnami iz srednje bakrene dobe kot pa s tistimi iz obdobja savske skupine ali lasinjske kulture.

Pri poskusu razlikovanja med najdbami (srednje) bakrenodobne in žarnogrobiščne oz. srednje-/novoveške starosti smo želeli izkoristiti razlike v velikosti domačih živali iz različnih obdobij. Te razlike so še posebej očitne pri domačem govedu, katerega velikost se je v srednji Evropi od udomačitve pa tja do začetka rimske dobe praviloma bolj ali manj enakomerno zmanjševala, prihod Rimljanov je botroval hitremu porastu kot posledici razvoja novih, naprednih pasem, s propadom imperija pa se je trend ponovno obrnil, tako da so (zgodnje) srednjeveške črede goved spet sestavljale predvsem nizkorasle živali tradicionalnih lokalnih form.[15] Spričo skromnega števila razpoložljivih najdb, ki so povečini tudi močno fragmentirane, v primeru gradiva s Spahe ni bilo mogoče oceniti absolutne velikosti goved, kot bi jo sicer lahko predstavljal podatek o višini ob vihru. Namesto tega so bile kot kazalec velikosti uporabljene (pretežno

[14] Na tem mestu so seveda mišljene zgolj t. i. najdbe brez poznanega časovnega konteksta.

[15] Bökönyi 1974, sl. 9.

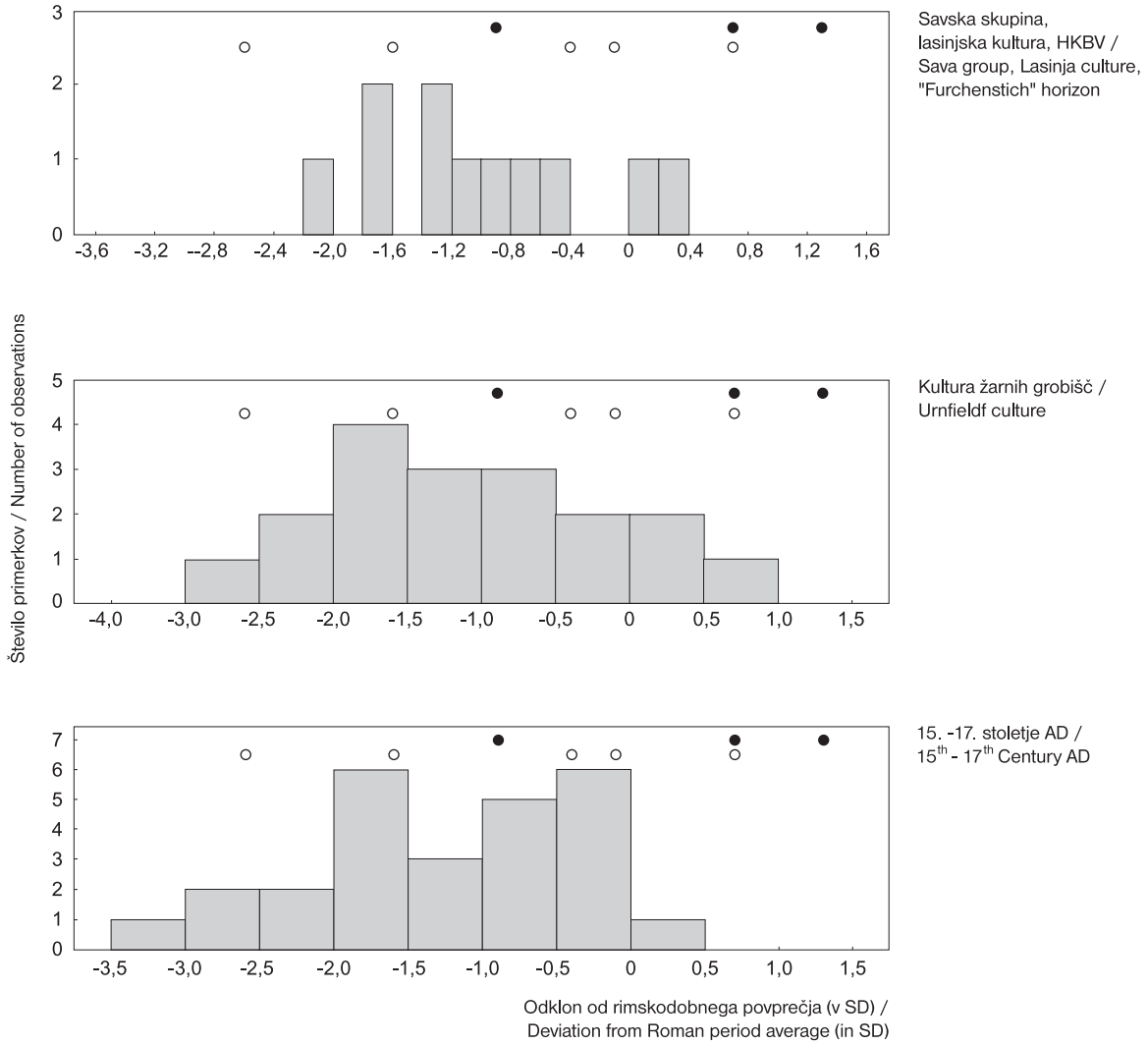
the northern side of the lower plateau. Similarly scarce are also the finds from the period of the Urnfield culture, even though the location was supposedly inhabited also during this time: the house from the Urnfield period was probably located near trench III. At the end of the Middle Ages or at the beginning of the Early Modern Period the surrounding villagers built a wooden guardhouse with a built foundation at Spaha; therefore, the location was at that time probably not permanently inhabited.[13]

The question whether within the faunistic material[14] we can expect a significant share of finds from the period of horizon of pottery with furrowed incisions remains open. The fact is that regarding the species richness, the discussed sample does not significantly differ from the one connected to the settlements from the 5th millennium. There is also little difference in species composition: while aurochs and badger bones or teeth were absent among the remains in the mixed layers, the only certain "new entry" is goat (*Capra hircus*; *Fig. 9.4*). On the other hand it is worth mentioning that the material without the known time context is both in the sense of a slightly bigger proportion of domestic cattle with a smaller proportion of hunted species (*Tab. 9.2*) and also regarding better representation of the remains from the meatiest body-parts (*Tab. 9.4*), more concordant with the local faunas from the Middle Eneolithic than with those from the period of the Sava group or Lasinja culture.

While trying to distinguish between finds from (Middle) Eneolithic and Urnfield culture as well as the Middle Age/Early Modern Period we wanted to take advantage of the differences in size of domestic animals from the mentioned periods. These differences are especially obvious with cattle, the size of which generally decreased evenly in the central Europe from the domestication all

[13] See chapters 1, 3, and 5, in this monograph.

[14] Here we, naturally, refer only to the s.c. finds without the known time context.



Sl. 9.5: Porazdelitev standardiziranih dimenzij dolgih kosti ter petnic, skočnic in tretjih spodnjih meljakov domačega goveda s Spahe (●; upoštevano je zgolj kronološko slabše opredeljeno gradivo) in iz Ciganske jame (○). Primerjalno (histogrami) so prikazani podatki za govedo z najdišč iz zgodnje in srednje bakrene dobe (savska skupina, lasinjska kultura, horizont keramike z brazdastim vrezom oz. HKBV), bronaste dobe (kultura žarnih grobišč) ter s prehoda srednjega v novi vek (15.–17. stoletje). Vsak skeletni element je zastopan le s po eno dimenzijo. Postopek standardiziranja dimenzij je opisan v besedilu. Vrednost '0' na abscisni osi predstavlja rimskodobno povprečje, izračunano na osnovi govejih ostankov iz rimskega mesta Tác/*Gorsium* (Madžarska; Bökönyi 1984). Seznam najdišč: Spaha, gradivo datirano v 5. tisočletje (savska skupina, lasinjska kultura); Gradec pri Mirni, faze 1a, 1b in 3 (savska skupina, lasinjska kultura, horizont keramike z brazdastim vrezom); Gradišče nad Dešnom, sonda 1: interpret. plast 1 in 2, sonda 2: interpret. plast 1 in 3 (horizont keramike z brazdastim vrezom); Hočevarica, fazi 1 in 2 (horizont keramike z brazdastim vrezom); Gornja Radgona, gradivo iz plasti globljih od 50 cm (kultura žarnih grobišč); Novo mesto, mestno jedro (15.–17. stoletje po Kr.). Podatki za Hočevarico so povzeti po Toškan, Dirjec (2004a); ostalo predstavljajo lastni neobjavljeni podatki.

Fig. 9.5: Distribution of standardised dimensions of long bones and calcaneuses, taluses, and third lower molars of cattle from Spaha (●; only chronologically poorly defined material is considered) and Ciganska jama (○). Data for cattle from the sites of the Early and Middle Eneolithic (the Sava group, Lasinja culture, horizon of pottery with furrowed incisions or HKBV), Bronze Age (Urnfield culture), and the transition from the Middle Ages to the Early Modern Period (15th-17th century) are presented comparatively (histograms). Each skeletal element is represented by a single dimension. The process of metric data standardisation is described in the text. Value '0' on the abscissa represents the Roman period average, calculated on the basis of cattle remains from the Roman town Tác/*Gorsium* (Hungary; Bökönyi 1984). List of sites: Spaha, material dated to the 5th millennium (the Sava group, Lasinja culture); Gradec pri Mirni, phases 1a, 1b, and 3 (the Sava group, Lasinja culture, horizon of pottery with furrowed incisions); Gradišče nad Dešnom, trench 1: interpret. layer 1 and 2, trench 2: interpret. layer 1 and 3 (the horizon of pottery with furrowed incisions); Hočevarica, phases 1 and 2 (horizon of pottery with furrowed incisions); Gornja Radgona, material from layers deeper than 50 cm (the Urnfield culture); Novo mesto, town centre (15th–17th century AD). Data for Hočevarica according to Toškan, Dirjec (2004a); the rest are my own unpublished data.

nedolžinske) mere dolgih kosti okončin ter še nekaterih drugih dovolj ohranjenih skeletnih elementov. Ker je bilo razpoložljivo število metričnih podatkov zelo skromno (N = 3), smo te obravnavali hkratno. V ta namen smo posamezne meritve standardizirali v skladu s formulo:

standardizirana vrednost = (*x* – *M*) / *SD,*

pri čemer *x* predstavlja posamezno meritev, *M* in *SD* pa povprečno vrednost oz. standardno deviacijo za isto dimenzijo pri referenčnem vzorcu.[16] Na enak način so bili transformirani tudi metrični podatki za goveje kosti treh kronološko opredeljenih primerjalnih vzorcev, tj. gradivo iz 5. in prve polovice 4. tisočletja (N = 11), ostanki iz konca 2. oz. začetka 1. tisočletja (N = 18) ter tisti iz prehoda med srednjim in novim vekom (N = 26; *sl. 9.5*). Žal so rezultati pokazali obsežno prekrivanje med vzorci iz različnih obdobij, kar onemogoča verodostojno sklepanje o časovni pripadnosti osteološkega gradiva, razen morda vtisa, da znotraj kronološko neopredeljenega gradiva s Spahe vendarle prevladujejo v povprečju dokaj veliki ostanki goved, kakršne poznamo iz prazgodovinskih obdobij. Na podoben način lahko sklepamo, da so prazgodovinke najdbe prevladovale tudi med favnističnim gradivom iz Ciganske jame pri Kočevju, ki ga sicer prav tako ni mogoče natančneje časovno opredeliti.

9.2.3 ŽIVALSKI OSTANKI IZ CIGANSKE JAME PRI KOČEVJU[17]

Ciganska jama je v literaturi poznana predvsem kot najpomembnejše slovensko gravettiensko najdišče,[18] so pa med terenskim raziskovanjem v sedemdesetih letih prejšnjega stoletja tam našli tudi najdbe holocenske starosti, vključno s kostmi. Iz tipološke analize lončenine je mogoče sklepati, da sicer premešano gradivo izvira iz treh prazgodovinskih kulturnih horizontov, nekaj pa je tudi fragmentov iz zgodovinskih obdobij. Slednje naj bi v jamo prinesli Romi, ki so tu občasno živeli (vsaj) v prejšnjem stoletju.[19]

Najzgodnejšo keramiko iz Ciganske jame je Velušček[20] datiral v savsko skupino, prisotne pa so tudi najdbe lasinjske kulture in predvsem horizonta keramike z brazdastim vrezom. Gre torej za ista obdobja, ki so

[16] V tukajšnjem primeru je bilo kot referenčni vzorec izbrano gradivo iz rimskega mesta Tác (*Gorsium*) na Madžarskem (Bökönyi 1984), kar omogoča neposredno primerjavo velikosti prazgodovinskih oz. srednje-/novoveških govedi z antičnimi.

[17] Najdišče je poznano tudi kot Ciganske jame pri Željnah ali Željn(sk)e jame.

[18] Brodar 2009, 478 ss.

[19] Velušček 2011.

[20] 2011.

through to the start of the Roman era. The arrival of Romans fostered the quick increase as the result of the development of new, advanced breeds, nevertheless, the downfall of the Empire again turned the trend and so the (Early) Middle Age cattle herds were again composed of mostly short-grown animals of traditional local forms.[15] Due to the small number of available finds, which are mostly also badly fragmented, in the case of the material from Spaha we could not evaluate the absolute cattle size as represented by the withers height data. Instead, (mostly non-linear) measures of limb long extremity bones and some other well preserved skeletal elements were used as an indicator of size. Since the available number of metric data was very small (N = 3) we analyzed them jointly. For this purpose individual measurements were standardised according to the formula:

Standardised value = (*x* – *M*) / *SD*

where *x* stands for an individual measurement, while *M* and *SD* represent the average value and standard deviation for the same dimension in a reference sample.[16] A similar transformation was applied to the metrical data for cattle bones of three chronologically delimited comparative samples, t.i. the material from the 5th and the first half of the 4th millennium (N = 11), remains from the end of the 2nd or the beginning of the 1st millennium (N = 18), and those from the transition from the Middle Ages to the Early Modern Period (N = 26; *Fig. 9.5*). Unfortunately, the results have shown an extensive overlap among samples of different periods which prevents the reliable deduction about time periods of osteological material, except maybe for the impression that within the chronologically poorly defined material from Spaha there is certain prevalence of, in average, fairly large remains of cattle as we know them from the prehistoric periods. According to the same logic, we can assume that the prehistoric finds also predominated among the chronologically similarly problematic faunistic material from Ciganska jama near Kočevje.

9.2.3 ANIMAL REMAINS FROM CIGANSKA JAMA NEAR KOČEVJE[17]

In the scientific writings Ciganska jama is known predominantly as the most important Slovenian Gravettien site,[18] nevertheless, during the field research in

[15] Bökönyi 1974, fig. 9.

[16] In this case the material from the Roman town Tác (*Gorsium*) in Hungary (Bökönyi 1984) was chosen as the reference sample, which enables the direct comparison of the prehistoric or Middle Age/Early Modern Period cattle size to the size of Roman specimens.

[17] The site is known also as Ciganske jame pri Željnah or Željn(sk)e jame.

[18] Brodar 2009, 548 ff.

Tab. 9.5: Zastopanost posameznih sesalskih taksonov v gradivu iz Ciganske jame po skeletnih elementih. Količina najdb je izražena kot najmanjše število določenih primerkov (NISP).
Tab. 9.5: Representation of individual mammal taxa in the material from Ciganska jama according to skeletal elements. The number of finds is expressed as the *Minimum Number of Identified Specimens* (NISP).

TAKSON / TAXON	CRANIUM	MAXILLA	MANDIBULA	DENTES	VERTEBRAE	SCAPULA	HUMERUS	RADIUS	ULNA	CARPALIA	METACARPALIA	PHALANGES I–III	PELVIS	SACRUM	FEMUR	PATELLA	TIBIA	FIBULA	CALCANEUS	ASTRAGALUS	METATARSALIA	INDET. METAPOD.	SKUPAJ / TOTAL
B. taurus	3	-	1	18	1	1	-	1	2	3	4	11	-	1	2	-	1	-	1	1	2	-	53
Caprinae	-	1	-	6	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	10
***Sus* sp.**	-	-	1	3	1	-	-	-	-	-	1	1	-	-	1	-	-	-	1	-	-	1	10
E. caballus	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
C. elaphus	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	2
B. primigenius	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
M. meles	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
SKUPAJ / TOTAL	**3**	**1**	**2**	**33**	**3**	1	-	3	3	3	5	14	-	1	3	-	1	-	2	1	4	1	84

poznana tudi s Spahe. Skupna navedenima najdiščema je tudi vrstna sestava obeh favnističnih vzorcev: med 117 živalskimi kostmi in zobmi iz Ciganske jame[21] so namreč zastopane zgolj tiste vrste, katerih ostanki so poznani že tudi s Spahe (*tab. 9.5*). V tem smislu edino izjemo predstavlja šest konjskih zob, domnevno pripadajočih isti živali, ki pa so verjetno novodobni.[22]

Skupna favnističnima vzorcema iz Ciganske jame in s Spahe je tudi večinska zastopanost domačih vrst, predvsem goveda. To slednje je še posebej očitno v primeru, ko od gradiva s Spahe upoštevamo zgolj najdbe brez natančneje opredeljenega časovnega konteksta, med katerimi so tudi (sodeč po podatkih iz *tabel 9.2* in *9.4* pa morda celo predvsem) tiste iz srednje bakrene dobe. To seveda še ne pomeni, da je tudi večino favnističnega gradiva iz Ciganske jame mogoče datirati v obdobje horizonta keramike z brazdastim vrezom. Se pa zdi ob pogledu na *sliko 9.5* vendarle legitimno domnevati, da med obravnavanimi 117 živalskimi ostanki (ali pa vsaj med 53 ostanki goveda) iz tega najdišča ni prav veliko novodobnih. Znano je namreč, da se je v zadnjih stoletjih povprečna velikost domačih živali spričo razvoja novih pasem in uvedbe naprednejših živinorejskih prijemov očitno povečala. Ker se je to seveda odrazilo tudi na

[21] Upoštevano je gradivo, ki je bilo pridobljeno med izkopavanji v letih 1971–1976. Enako sicer velja tudi za najdbe, ki jih je skupina jamarjev v Ciganski jami pobrala sredi devetdesetih let prejšnjega stoletja (Jamnik 1997b).

[22] To je mogoče soditi iz (še vedno) svetlorjave obarvanosti najdb; podoben odtenek sicer označuje še nekaj drugih (domnevno torej ravno tako novodobnih) ostankov iz istega vzorca.

the 70s of the last century finds - including bones - of Holocene age were also discovered there. It is possible to deduce on the basis of the typological analysis of pottery that though mixed material originates from three prehistoric cultural horizons, with individual fragments originating from the historic periods. The latter could have been brought to the cave by the Roma people, who occasionally dwelt here (at least) in the last century.[19]

The earliest pottery from Ciganska jama was dated by Velušček[20] to the Sava group, while other finds belong to the Lasinja culture and predominantly the horizon of pottery with furrowed incisions. Thus Ciganska jama seems to have been inhabitated in the very same periods as was the case with the nearby Spaha. The species composition of both faunistic samples is also common to both discussed sites: namely, among 117 animal bones and teeth from Ciganska jama[21] we only find those species, the remains of which are known already from Spaha (*Tab. 9.5*). In this sense the only exception are the six horse teeth, presumably belonging to the same animal, which are probably modern.[22]

Common to the faunistic samples from Ciganska jama and Spaha is also the majority representation of

[19] Velušček 2011.

[20] 2011.

[21] Here considered is the material acquired during the excavations of 1971–1976 . Notably, the same holds true also for the finds which were collected by a group of cavers in Ciganska jama in the middle 90s of the last century (Jamnik 1997b).

[22] This can be inferred from the (still) light brown colouration of the teeth; a few other (presumably also modern) remains from the same sample are marked by the same shade of colour.

velikosti posameznih skeletnih elementov[23], bi se ob pomembnejši zastopanosti ostankov novodobnih goved to moralo poznati tudi na *sliki 9.5*.

9.2.4 TAFONOMIJA

V zvezi s časovno dobro opredeljenim gradivom s Spahe (tj. tistim iz 5. tisočletja) je zgoraj že bila na kratko omenjena pičlost ostankov iz (naj)bolj mesnatih delov trupa osrednjih živalskih vrst (*tab. 9.3*). Ugotovitev je zanimiva in si zasluži nekoliko bolj poglobljeno analizo. Toliko bolj zato, ker o podobno nizkih vrednostih poročajo tudi z drugih okvirno sočasnih naselbin v širši regiji, zaradi česar bi bilo morda celo utemeljeno govoriti o nekem splošno razširjenem pojavu.

Znano je, da je obstoj živalskih ostankov v sedimentu med drugim odvisen od strukturne gostote kostne substance posamezne kosti oz. zobovine/sklenine.[24] Nobenega dvoma tako ni, da so tudi v primeru neo-eneolitskega gradiva s Spahe tafonomske izgube prizadele predvsem manj obstojne skeletne elemente. Vendar pa zgolj s tem podatkov iz *tabele 9.3* ni mogoče zadovoljivo razložiti. Skleninskih delov zob, sicer najbolj obstojnih elementov znotraj celotnega skeleta, je bilo namreč v gradivu iz obdobja savske skupine in lasinjske kulture na Spahi najdenih zgolj devet, kar predstavlja skromnih sedem odstotkov vseh izkopanih živalskih ostankov. Načeloma bi sicer pičlemu številu zob lahko botrovalo ročno pobiranje najdb brez sejanja sedimenta; takšen način vzorčenja namreč praviloma pripelje do precenjenega deleža velikih (odlomkov) kosti na račun tistih manjših, vključno z zobmi.[25] Ker pa osteološko gradivo s Spahe vključuje tudi številne majhne, do 2 cm velike kostne odlomke (*sl. 9.6*), lahko domnevamo, da je bila med izkopavanji vendarle pobrana večina prisotnih zob.

K ugotovljenim deležem zastopanosti posameznih skeletnih elementov so v določeni meri prispevali tudi psi; v okviru gradiva s Spahe je bilo namreč najdenih več primerkov obgrizenih kosti (*sl. 9.7*). Kot sta s poskusom pokazala Payne in Munson[26], pasjemu uničenju najbolje kljubujejo zobje (ob tem pa tudi npr. distalni deli nadlahtnic in golenic, proksimalni deli koželjnic), katerih število pa je v našem primeru povsem primerljivo s številom ostankov zapestnih in nartnih kosti ter prstnic, ki jih psi ob zaužitju največkrat popolnoma uničijo. Sodeč po številčnosti ostankov posameznih skeletnih elementov (*tab. 9.3*), je morala biti torej vloga tega dejavnika v primeru Spahe dokaj majhna.

Majhna je tudi verjetnost, da bi bile kosti iz (naj) bolj mesnatih delov trupa goved, prašičev, drobnice in jelenov deponirane na neraziskanem delu najdišča, saj

[23] Prim. z Vann, Grimm 2010.
[24] Lyman 1999, 234 ss.
[25] Toškan, Dirjec 2004b, 158 ss.
[26] 1985.

domestic species, mainly cattle. The latter is especially obvious if only the material from mixed layers is used for Spaha, among which are also (considering data from *Tables 9.2* and *9.4* possibly mostly) those from the Middle Eneolithic. This certainly does not yet mean that most of the faunistic material from Ciganska jama can be dated to the horizon of pottery with furrowed incisions. But it seems legitimate to assume while looking at *Figure 9.5* that the discussed 117 animal remains (or at least 53 remains of cattle) from this site do not include many modern specimens. It is widely known that in recent centuries the average size of domestic animals greatly increased due to the development of new breeds and implementation of progressive animal-husbandry techniques. Since this naturally reflected also on the size of individual skeletal elements[23], if there were significant numbers of modern cattle present this should have been clear also from *Figure 9.5*.

9.2.4 TAPHONOMY

In connection to the chronologically well defined material from Spaha (t.i. that from the 5th millennium) we have above shortly mentioned the scarceness of remains from the meatiest body-parts of the main animal species (*Tab. 9.3*). This finding is interesting and thus deserves a more in-depth analysis, even more so because there are reports of similarly low numbers also on other roughly contemporary settlements in the wider region – hence there could possibly even be grounds to discuss it as some common phenomenon.

It is known that the preservation of animal remains in the sediment is among other things dependent also on the bone substance/tooth structural density[24] so there is no doubt that in the case of Neo-Eneolithic material from Spaha taphonomic losses affected primarily less durable skeletal elements. Nevertheless, this is not enough to satisfactorily explain the data from *Table 9.3*. As no more than nine enamel tooth fragments - which are generally the most durable elements of the entire skeleton - were found in the material from the period of the Sava group and Lasinja culture at Spaha, which accounts for just seven percent of all the excavated animal remains. In principle, the scarce number of teeth could be the result of manual gathering without sediment sieving; such manner of sampling generally leads to an overrated share of large bones (fragments) on the account of the smaller ones, including teeth.[25] But since the osteological material from Spaha includes also numerous small, up to 2 cm big bone fragments (*Fig. 9.6*) we can assume that the majority of present teeth were actually collected.

[23] Cf. Vann, Grimm 2010.
[24] Lyman 1999, 234 ff.
[25] Toškan, Dirjec 2004b, 157 ff.

Sl. 9.6: Drobni kostni odlomki v gradivu s Spahe (sonda VI, kv. 2). Foto: I. Lapajne.
Fig. 9.6: Tiny bone fragments in the material from Spaha (trench VI, sq. 2). Photo: I. Lapajne.

Sl. 9.7: Obgrizene goveje kosti v gradivu s Spahe. Najdbi izvirata iz premešanih plasti. Foto: I. Lapajne.
Fig. 9.7: Gnawed cattle bones in the material from Spaha. Both finds originate from the mixed layers. Photo: I. Lapajne.

Another factor that obviously affected the preservation of bones from Spaha is the dog (*Fig. 9.7*). Nevertheless, as demonstrated in an experiment by Payne and Munson[26], despite teeth defy the canine destruction best (followed by e.g. distal parts of humerus and tibia, proximal parts of radius), the share of teeth in our case does not deviate from the number of carpal and tarsal bones as well as phalanges, which dogs usually completely destroy during consummation. Judging from the number of individual skeletal elements remains (*Tab. 9.3*) the destructive role of the dog at Spaha thus had to be relatively small.

The possibility of bones from the meatiest parts of cattle, pig, ovicaprids, and red deer bodies being deposited at the unresearched part of the site is also very small since practically all locations that are suitable for settlement have been excavated.[27] But humans can be connected to the determined representation shares of individual skeletal elements also in another way. Scarce number of humerus, radius, femur, tibia, and vertebra fragments could also be the consequence of intensive systematic crushing of the stated skeletal elements with the purpose of marrow extraction.[28] Similar action was – according to the great

[26] 1985.
[27] See chapter 3.3, in this monograph.
[28] Cf. Rowley-Conwy 1996, 76 ff.

so izkopavanja zajela praktično vse za poselitev primerne lokacije.[27] Je pa človek z ugotovljenimi deleži zastopanosti posameznih skeletnih elementov lahko povezan tudi drugače. Skromno število odlomkov nadlahtnic, koželjnic, stegnenic, golenic in vretenc bi namreč lahko bilo posledica intenzivnega sistematičnega razbijanja navedenih skeletnih elementov z namenom izločanja kostne maščobe (t. i. *bone grease*).[28] Podobno početje je bilo – sodeč po veliki količini drobnih kostnih odlomkov in često razmeroma pičli zastopanosti ostankov dolgih cevastih kosti – domnevno precej razširjeno v mezolitskem obdobju,[29] kasneje pa naj bi potreba po tako intenzivnem sistematičnem razbijanju kosti postopoma izostala (*tab. 9.4*).[30] Seveda pa velja na tem mestu ponovno opozoriti, da so tovrstni podatki močno odvisni od načina vzorčenja najdb,[31] v tem pogledu pa najdišča iz *tabele 9.4* žal tvorijo precej heterogeno skupino.

9.3 SKLEP

Spričo nezanesljive časovne umestitve pomembnega dela favnističnega gradiva s Spahe, je na tem mestu nekaj trdnejših sklepov mogoče podati zgolj za najdbe iz 5. tisočletja, tj. za obdobje savske skupine in lasinjske kulture. Tudi za ta vzorec pa sicer opravljena analiza odpira več novih vprašanj, kot ponuja odgovorov na stara.

Večinska zastopanost ostankov domačih živali (*tab. 9.1*), če je reprezentativna, bi vsekakor lahko kazala na (sezonsko?) živinorejsko dejavnost v okviru najmanj ene od obeh naselbin iz 5. tisočletja. V nasprotnem primeru bi tamkajšnji prebivalci verjetno pogosteje posegali po mesu lovnih živali, kot je bilo temu npr. tako v primeru sočasnih naselbin z Ljubljanskega barja (*tab. 9.2*). Nobenega dvoma namreč ni, da je bilo razgibano in povečini z gozdom pokrito območje Kočevske tudi v tistem času gosto poseljeno z divjadjo.

V bližnji okolici Spahe je za manjši pašnik primeren že plato neposredno pod mestom, kjer so stale posamezne stavbe, še dodatne potencialne pašne površine pa najdemo na območju zgolj nekaj minut hoda oddaljene vasice Prerigelj. Obe navedeni lokaciji sta (bili) seveda primerni tudi za kmetijsko izrabo, čeprav (je) kvaliteta zemlje tu nedvomno zaostaja(la) za tisto v okolici sočasnih nižinskih naselbin Moverna vas, Gradac ali Pusti Gradec na območju bližnje Bele krajine, katerih gospodarstvo naj bi temeljilo prav na intenzivni izrabi

[27] Glej poglavje 3.3, v tem zborniku.

[28] Prim. z Rowley-Conwy 1996, 76 ss.

[29] Pohar 1984; 1986; Miracle, Galanidou, Forenbaher 2000; Turk, Toškan, Dirjec 2004; Toškan, Dirjec 2004b.

[30] Glej še npr. Drobne 1975, 135; Velušček et al. 2004, 46; a tudi Toškan, Dirjec 2004b, 152 ss.

[31] Prim. s Turk, Toškan, Dirjec 2004, 201 s; Toškan, Dirjec 2004b, 158 ss.

number of tiny bone fragments and frequently relatively scarce representation of long tubular bone remains – supposedly quite common in the Mesolithic period,[29] while later the need for such intensive systematic bone crushing gradually ceased (*Tab. 9.4*).[30] Here we must again point out that these data is heavily dependent on the manner of sampling,[31] and unfortunately in this respect the sites from *Table 9.4* form a relatively heterogeneous group.

9.3 CONCLUSION

In view of the unreliable time determination of the important part of faunistic material from Spaha here we can state a few solid conclusions only for the finds from the 5th millennium, therefore for the period of the Sava group and Lasinja culture. And even for this sub-sample the performed analysis opens more new questions than answers the old.

The majority representation of domestic animal remains (*Tab. 9.1*), if representative, could definitely indicate the (seasonal?) animal-husbandry within at least one out of two settlements from the 5th millennium. Otherwise its inhabitants would probably search for the meat of hunted animals more often, as was the case at the contemporary settlements from the Ljubljansko barje (*Tab. 9.2*). There is no doubt whatsoever that the diverse and wooded area around Kočevje was in that time densely inhabited with game.

In the vicinity of Spaha, a plateau beneath the spot where individual buildings were located is appropriate for a small pasture, while additional potential grazing areas are found just a few minute walk towards the village of Prerigelj. Both given locations are (were) suitable also for agriculture, even though the quality of soil is (was) here definitely inferior to the one in the vicinity of contemporary lowland settlements Moverna vas, Gradac or Pusti Gradec in the area of the nearby Bela krajina, the economy of which was supposedly based on the intensive use of the high quality ploughing soil.[32] Scientific writings also mention that Spaha could – similar to Židovec, Straža or Topli vrh – have been a hilltop station within the framework of mountain grazing,[33] but which opposes the archaeological finds.[34] Considering the fact that Kočevarji (Gottschee Germans) maintained many mountain pastures even at the beginning of the

[29] Pohar 1984; 1986; Miracle, Galanidou, Forenbaher 2000; Turk, Toškan, Dirjec 2004; Toškan, Dirjec 2004b.

[30] See also e.g. Drobne 1975, 135; Velušček et al. 2004, 46; but also Toškan, Dirjec 2004b, 151 ff.

[31] Cf. Turk, Toškan, Dirjec 2004, 201 f; Toškan, Dirjec 2004b, 157 ff.

[32] Mason 1994, 192 ff.

[33] Cf. Mason 1994, 194.

[34] See chapter 5, in this monograph.

visoko kvalitetne orne zemlje.[32] V literaturi se omenjena tudi možnost, da bi Spaha – podobno kot tudi Židovec, Straža ali Topli vrh – lahko bila predstavljala višinsko postajo v okviru planinskega pašništva,[33] kar pa je v nasprotju z arheološkimi najdbami.[34] Glede na to, da so Kočevarji še v začetku prejšnjega stoletja vzdrževali mnoge gorske pašnike,[35] se sicer izkoriščanje prednosti planinske paše v poletnih mesecih s strani prazgodovinskih prebivalcev Spahe ne zdi nemogoče. Obstoj "prave" selitvene paše (transhumance), kakršna je bila npr. še do pred nekaj desetletji poznana na Pivškem in ki naj bi celo osmišljala naselitev navedene lokacije, pa bi tudi na osnovi etnoloških virov težko potrdili. Toliko bolj zato, ker (vsaj) neo-eneolitska poselitev Spahe morda sploh ni bila zgolj sezonska. Izgradnja kamnitega obrambnega zidu, ki je na lažje dostopnih mestih varoval takratne hiše, bi namreč prej kazala na stalno prisotnost ljudi.

Če so razlogi, zaradi katerih je bila kot prostor za bivanje najmanj petkrat izbrana ravno Spaha, torej še vedno do neke mere nejasni, pa mednje zagotovo sodi strateška lega kraja. S tega mesta se namreč ponuja odličen pregled nad povezavo med Kočevsko, dolino Kolpe in Belo krajino, ki je bila vsaj v nekaterih prazgodovinskih obdobjih dokazano zelo pomembna.[36] Zanimiva pa so vsekakor tudi razmišljanja o tem, da naj bi bila neo-eneolitska poselitev obravnavane točke povezana s prvimi iskalci bakra in z izkoriščanjem permskih klastičnih kamnin v manj kot 2 km oddaljenem ležišču pri Knežji Lipi, sicer enem redkih v okolici "poljedelske" Bele krajine.[37]

[32] Mason 1994, 185 ss.
[33] Prim. z Mason 1994, 188.
[34] Glej poglavje 5, v tem zborniku.
[35] Rus 1939, 159.
[36] Glej poglavje 1, v tem zborniku.
[37] Glej poglavji 1 in 8, v tem zborniku.

previous century,[35] the use of mountain grazing benefits during the summer months by the prehistoric inhabitants of Spaha does not seem impossible. Nevertheless the existence of true transhumant economy, as it was known until a few decades ago in the surroundings of Pivka and which would even give meaning to the settling of this location, would be also on the basis of ethnologic sources difficult to confirm. Even more so because the (at least) Neo-Eneolithic settlement of Spaha was possibly not solely seasonal. The building of the stone defence wall, which then protected the houses at the more easily accessible points, would be more indicative of the permanent presence of settlers.

If the whys and whereabouts of Spaha having been at least five times chosen as the dwelling place are still to some extent unclear, one of the obvious reasons was definitely its strategic location. From this place there is an excellent view of the connection between the Kočevje region, the Kolpa valley, and Bela krajina, which was at least in some prehistoric periods proven to be very important.[36] Another interesting thought is the idea that the Neo-Eneolithic settlement of the discussed location could be connected to the first copper seekers and to the exploitation of the Permian clastic rocks in the less than 2 km distant Knežja Lipa, which is one of the rare ones in the surroundings of the "agricultural" Bela krajina.[37]

[35] Rus 1939, 159.
[36] See chapter 1, in this monograph.
[37] See chapters 1 and 8, in this monograph.

Priloga 9.1: Metrični podatki za dovolj ohranjene živalske ostanke s Spahe, ki jih je mogoče z zanesljivostjo umestiti v čas; tj. 2. pol. 5. tisoč. Zvezda (*) označuje najdbe divjega prašiča. Dimenzije so povzete po von den Driesch (1976). Legenda: M – meritev. Vse mere so v mm.

Appendix: Metric data for well preserved animal remains from Spaha which can be dated with certainty to the 2nd half of the 5th millennium. Asterisk (*) marks the finds of wild boar. Dimensions are according to von den Driesch (1976). Legend: M – measurement. All measurements are in mm.

TAKSON / TAXON	**SKELET. ELEMENT**	**DIM.**	**MERITEV / MEASUREMENT**
Bos taurus	Astragalus	GLl	68,0
		GLm	61,5
		Dm	39,0
		Bd	48,0
	Phalanx I	Bp	32,5
	Phalanx II	Bp	31,5
		Bd	27,5
		GL	38,0
Bos* cf. *primigenius	Phalanx II	Bp	32,0
		Bd	29,0
		GL	41,0
Caprinae	Tibia	Dd	20,0
	Phalanx I	Bp	12,0
		SD	10,0
		DD	7,0
		GL	34,5
***Sus* sp.**	Maxilla*	P^1–P^4	53,0
	Mc IV	Bp	17,5
	Tibia	Dd	28,5
	Phalanx I	GL	38
Cervus elaphus	Humerus	BT	61,5
	Astragalus	GLm	57,0
		Dm	37,0
Meles meles	Cranium	M_1	127,0
		M_7	78,0
		M_9	59,0
		M_22	20,0
		M_23	59,0
		M_29	48,5
		M_30	71,5
		M_31	24,5
		M_32	34,5
		M_33	29,0
		M_37	17,0
		M_38	43,0

10. LITERATURA / REFERENCES

Uredil / Edited by Anton VELUŠČEK

ANDRIČ, M. 2007a, Why were the Neolithic landscapes of Bela krajina and Ljubljana Marshes regions of Slovenia so dissimilar? – *Documenta Praehistorica* 34, Ljubljana, 177–189.

ANDRIČ, M. 2007b, Holocene vegetation development in Bela krajina (Slovenia) and the impact of first farmers on the landscape. – *Holocene* 17/6, 763–776.

ANTONOVIĆ, D. 1997, Use of Light White Stone in the Central Balkans Neolithic. – *Starinar* (Nova serija) 48, Beograd, 33–39.

ANTONOVIĆ, D. 2006, On importance of study of the Neolithic ground stone industry in the territory of Southeast Europe. – *Analele Banatului* (S. N., Arheologie – Istorie) 14/1, 53–61.

BAGOLINI, B. 1970, Ricerche tipologiche sul gruppo dei foliati nelle industrie di età olocenica della Valle Padana. – *Annali del' Università di Ferrara* (Nuova Serie) 11/1, Ferrara, 221–254.

BALEN, J. 2006a, Redni broj: 11; lokalitet: Pajtenica. – *Hrvatski arheološki godišnjak* 3, Zagreb, 27–29.

BALEN, J. 2006b, Redni broj: 60; lokalitet: Virovitica – Batelije. – *Hrvatski arheološki godišnjak* 3, Zagreb, 103–104.

BALEN, J. 2008a, Apsolutni datumi sa zaštitnih istraživanja na prostoru Slavonije kao prilog poznavanju srednjeg Eneolitika. – *Vjesnik arheološkog muzeja u Zagrebu* (3. serija) 41, Zagreb, 17–35.

BALEN, J. 2008b, *Rezultati zaštitnih istraživanja na trasi autoceste Beli Manastir–Osjek–Svilaj.* – Katalog izložbe, Zagreb.

BALEN, J., T. BILIĆ, M. BUNČIĆ, I. DRNIĆ in A. SOLTER 2009, Rezultati zaštitnih istraživanja na lokalitetu Ivandar – šuma Gaj. – *Vjesnik arheološkog muzeja u Zagrebu* (3. serija) 42, Zagreb, 23–72.

BALEN, J. in H. POTREBICA 2006, Nalazište Radovanci u Požeškoj kotlini. – V: Tomaž 2006, 21–27.

BÁNFFY, E. 1994, Transdanubia and Eastern Hungary in the Early Copper Age. – *A Nyíregyházi Jósa András Múzeum Évkönyve* 36, 291–296.

BÁNFFY, E. 1995a, Early Chalcolithic settlement at Zalaszentbalázs-Szőlőhegyi mező. – *Antaeus* 22, 71–102.

BÁNFFY, E. 1995b, South-West Transdanubia as a mediating area. On the cultural history of the Early and Middle Chalcolithic. – *Antaeus* 22, 157–196.

BÁNFFY, E. 2002, A unique southeastern vessel type from early Calcholithic Transdanubia – data on the "western route". – *Acta Archaeologica Academiae Scientiarum Hungaricae* 53, 41–60.

BARFIELD, L. H. 1972, The first Neolithic cultures of north eastern Italy. – Fundamenta A/3, zv. 7, 182–216.

BAVDEK, A. in A. MIHEVC 1995, Spodmol pod Macesnovo gorico – arheološko najdišče. – *Naše jame* 37, Ljubljana, 76–84.

BEKIĆ, L. in R. ČIMIN 2006, Redni broj: 75; lokalitet: Brezje 1. – *Hrvatski arheološki godišnjak* 3, Zagreb, 134–136.

BERAN, J. 1999, Brodzany-Nitra-Gruppe. – V: J. Preuß (ur.), *Das Neolithikum in Mitteleuropa,* zv. 2, 16–17.

BERNARDINI, F., A. ALBERTI, G. DEMARCHI, E. MONTAGNARI - KOKELJ in A. VELUŠČEK 2008, Archaeometric study of prehistoric polished stone artefacts found in the Ljubljanica river (Slovenia). – *Atti della Società di Preistoria e Protostoria della regione Friuli-Venezia Giulia* 16, Trieste, 53–70.

BERNARDINI, F., A. DE MIN, G. DEMARCHI, E. MONTAGNARI - KOKELJ, A. VELUŠČEK in D. KOMŠO 2009a, Shaft-hole axes from Slovenia and north western Croatia – a first archaeometric study on artefacts manufactured from meta-dolerites. – *Archaeometry* 51/6, 894–912.

BERNARDINI, F., A. DE MIN, D. EICHERT, A. ALBERTI, G. DEMARCHI, A. VELUŠČEK, C. TUNIZ in E. MONTAGNARI - KOKELJ 2010, Shaft-hole axes from Caput Adriae. – *Archaeometry* 53/2, 261–284.

BERNARDINI, F., E. MONTAGNARI - KOKELJ, G. DEMARCHI in A. ALBERTI 2009b, Scambi e strategie di approvvigionamento nel Ljubljansko Barje del IV millennio a.C. dedotti dallo Studio archeometrico di manufatti in pietra. – V: Velušček 2009a, 251–279.

BIAGI, P. in B. A. VOYTEK 1994, The Neolithisation of the Trieste Karst in North-Eastern Italy and its

neighbouring countries. – *A Nyíregyházi Jósa András Múzeum Évkönyve* 36, 63–73.

BIZJAK, J., P. JAMNIK in T. OBERSTAR 2001, Arheološke prvine v kraških jamah Suhe krajine. – *Naše jame* 43, Ljubljana, 118–127.

BÖKÖNYI, S. 1974, *History of domestic mammals in Central and Eastern Europe*. – Budapest.

BÖKÖNYI, S. 1984, *Animal husbandry and hunting in Tác-Gorsium. The vertebrate fauna of a roman town in Pannonia*. – Studia Archaeologica 8.

BOESSNECK, J., J.-P. JÉQUIER in H. R. STAMPFLI 1963, Seeberg Burgäschisee-Süd, Die Tierreste. – *Acta Bernensia* 2/3, 1–215.

BOGNÁR - KUTZIÁN, I. 1963, *The Copper Age cemetry of Tiszapolgár-Basatanya.* – Archaeologia Hungarica (Series nova) 42.

BONDÁR, M. 1995, The settlement of the Lengyel culture at Zalaszentbalázs. – *Antaeus* 22, 51–70.

BONSALL, C., Mi. HORVAT, K. McSWEENEY, M. MASSON, T. F. G. HIGHAM, C. PICKARD in G. T. COOK 2007, Chronological and Dietary Aspects of the Human Burials from Ajdovska cave, Slovenia. – *Radiocarbon* 49/2, 727–740.

BREGANT, T. 1964, Poročilo o raziskovanju kolišča in gradbenih ostalin ob Resnikovem prekopu pri Igu. – *Poročilo o raziskovanju neolita in eneolita v Sloveniji* 1, Ljubljana, 7–24.

BRNIĆ, Ž. 2008, Prapovijesni keramički nalazi s utvrde Čanjevo. – V: L. Bekić (ur.), *Utvrda Čanjevo – istraživanja 2003–2007,* Visoko, 71–95.

BRODAR, M. 1964–1965, Poročilo o paleolitskih poskusnih izkopavanjih. – *Arheološki vestnik* 15–16, Ljubljana, 167–174.

BRODAR, M. 1974, Ciganska jama pri Željnah. – *Varstvo spomenikov* 17–19/1, Ljubljana, 180–181.

BRODAR, M. 1978, Paleolitska slika mamuta pri izviru Kolpe? – *Arheološki vestnik* 29, Ljubljana, 729–734.

BRODAR, M. 1985, Iskanje novih paleolitskih postaj v letih 1971–1982. – *Arheološki vestnik* 36, Ljubljana, 25–38.

BRODAR, M. 1989, Luknje v kosteh iz Dolarjeve jame in Nevelj. – *Acta carsologica* 18, Ljubljana, 89–101.

BRODAR, M. 1991, Paleolitik Ciganske jame pri Željnah. – *Arheološki vestnik* 42, Ljubljana, 23–64.

BRODAR, M. 2009, *Stara kamena doba v Sloveniji.* – Ljubljana.

BUDJA, M. 1983, Tri desetletja razvoja teorij o poznem neolitu in eneolitu severozahodne Jugoslavije. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 11, Ljubljana, 73–83.

BUDJA, M. 1990a, Arheološka stratigrafija – stratigrafska konceptualizacija neo-eneolitskih kultur in preteklega časa. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 18, Ljubljana, 113–134.

BUDJA, M. 1990b, 3. Moverna vas, Črnomelj. – V: D. Breščak et al. (ur.), *Arheološka najdišča Dolenjske,* Arheo, Ljubljana, 13–16.

BUDJA, M. 1991, Sevnica. – *Varstvo spomenikov* 33, Ljubljana, 194–199.

BUDJA, M. 1992, Pečatniki v slovenskih neolitskih naselbinskih kontekstih. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 20, Ljubljana, 95–109.

BUDJA, M. 1993, Neolithic studies in Slovenia – an overview. – *Atti della Società per la Preistoria e Protostoria della Regione Friuli-Venezia Giulia* 8, Trieste, 7–28.

BUDJA, M. 1994a, Neolithisation in Slovenia. – *A Nyíregyházi Jósa András Múzeum Évkönyve* 36, 75–78.

BUDJA, M. 1994b, Spreminjanje naravne in kulturne krajine v neolitiku in eneolitiku na Ljubljanskem barju I. – *Poročilo o raziskovanju paleolitika, neolitika in eneolitika v Sloveniji* 22, Ljubljana, 163–181.

BUDJA, M. in D. MLEKUŽ 2008, Settlements, landscape and paleoclimate dynamics on the Ižica floodplain of the Ljubljana Marshes. – *Documenta Praehistorica* 35, Ljubljana, 45–54.

BUKOVAC, J., M. POLJAK, M. ŠUŠNJAR in M. ČAKALO 1976, Tolmač za list Črnomelj. – V: *Osnovna geološka karta 1 : 100.000,* Beograd.

CANNARELLA, D. in B. REDIVO 1978–1981, La grotta della Tartaruga. Livelli a ceramica. Nota preliminare. – *Atti della Società per la Preistoria e Protostoria della Regione Friuli-Venezia Giulia* 4, Trieste, 45–71.

CARNEIRO, Â. 2004a, Die Interpretation der Keramikfunde von Rabenstein im Lavanttal – Überlegungen zur Lengyelbesiedlung im Südostalpenraum. – *Carinthia* I 194, Klagenfurt, 255–272.

CARNEIRO, Â. 2004b, Unterlanzendorf, eine Fundstelle der Endphase der Lengyelkultur in Niederösterreich. Fragen zur kulturellen und chronologischen Definition der Endlengyelzeit in Ostösterreich. – *Fundberichte aus Österreich* 43, 103–134.

CARNEIRO, Â. 2006a, Die lengyelzeitliche Besiedlung von Mannersdorf an der March, Niederösterreich. – *Fundberichte aus Österreich* 45, 99–161.

CARNEIRO, Â. 2006b, Die eingetiefte Siedlungskonstruktion von Mannersdorf an der March in Niederösterreich und die eingetieften Bauten der Lengyelkultur. – *Archäologie Österreichs* 17/2, 70–81.

CHMIELEWSKI, T. 2008, Remarks on relative and absolute chronology of Early and Middle Eneolithic in the area of South-East Poland and West Ukraine. – *Przegląd Archeologiczny* 56, Wrocław, 41–100.

CICHOCKI, O. 2003, Der Pfahlbau im Keutschacher See. – V: Samonig 2003, 30–34.

CICHOCKI, O. in C. DWORSKY 2006, Unterwasserarchäologie in Kärntner Seen. – *Archäologie Österreichs* 17/2, 90–95.

CIGLENEČKI, S. 1987, *Höhenbefestigungen aus der Zeit vom 3. bis. 6. Jh. im Ostalpenraum.* – Dela 1. razreda SAZU 31, Ljubljana.

CRADDOCK, P. T. 1995, *Early Metal Mining and Production.* – Edinburgh.

CULIBERG, M., Mi. HORVAT in A. ŠERCELJ 1992, Karpološke in antrakotomske analize rastlinskih ostankov iz neolitske jamske nekropole Ajdovska jama. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 20, Ljubljana, 111–126.

ČREŠNAR, M. 2007, Načini lesenih gradenj v času bronaste in starejše železne dobe v Sloveniji. – *Arheo* 24, Ljubljana, 39–68.

ČREŠNAR, M. 2010, New research on the Urnfield period of Eastern Slovenia. A case study of Rogoza near Maribor. – *Arheološki vestnik* 61, Ljubljana, 7–119.

ČUFAR, K. in T. KORENČIČ 2006, Raziskave lesa z Resnikovega prekopa in radiokarbonsko datiranje. – V: Velušček 2006a, 123–127.

ČUFAR, K. in B. KROMER 2004, Radiokarbonsko datiranje kronologij širin branik s Hočevarice. – V: Velušček 2004a, 281–285.

ČUFAR, K., B. KROMER, T. KORENČIČ in A. VELUŠČEK 2010, Dating of 4th millennium BC piledwellings on Ljubljansko barje, Slovenia. – *Journal of Archaeological Science* 37/8, 2031–2039.

DIMITRIJEVIĆ, S. 1961, Problem neolita i eneolita u sjeverozapadnoj Jugoslaviji. – *Opuscula archaeologica* 5, Zagreb.

DIMITRIJEVIĆ, S. 1968, *Sopotsko-lenđelska kultura.* – Monographiae Archaeologicae 1, Zagreb.

DIMITRIJEVIĆ, S. 1979a, Sjeverna zona. – V: *Praistorija jugoslavenskih zemalja* 2, Sarajevo, 227–360.

DIMITRIJEVIĆ, S. 1979b, Lasinjska kultura. – V: *Praistorija jugoslavenskih zemalja* 3, Sarajevo, 137–181.

DIMITRIJEVIĆ, S. 1979c, Retz-Gajary kultura. – V: *Praistorija jugoslavenskih zemalja* 3, Sarajevo, 343–365.

DIRJEC, J. 1996, Analiza osteoloških ostankov favne. – V: Velušček 1996, 67–69.

DIRJEC, J., G. HIRSCHBÄCK - MERHAR in I. TURK 1984, Spodnja Bilpa. – *Varstvo spomenikov* 26, Ljubljana, 201–202.

DOBEŠ, M. 1989, Zu den äneolitischen Kupferflachbeilen in Mähren, Böhmen, Polen und in der DDR. – V: M. Buchvaldek et al. (ur.), *Das Äneolithikum und die früheste Bronzezeit (C^{14} 3000–2000 b.c.) in Mitteleuropa – kulturelle und chronologische Beziehungen,* Praehistorica 15, 39–48.

DOBEŠ, M. in J. PEŠKA 2010, Eine frühäneolithische kupferne hammeraxt des Typs Pločnik aus Olomouc-Holice. – *Archeologické rozhledy* 42, 117–125.

DOMBAY, J. 1960, *Die Siedlung und das Gräberfeld in Zengővárkony. Beiträge zur Kultur des Aeneolithikums in Ungarn.* – Archaeologia Hungarica (Series nova) 37.

DRIESCH, von den A. 1976, *A guide to the measurement of animal bones from archaeological sites.* – Peabody Museum Bulletin 1.

DROBNE, K. 1964, Živalske kosti z Resnikovega prekopa. – *Poročilo o raziskovanju neolita in eneolita v Sloveniji* 1, Ljubljana, 61–64.

DROBNE, K. 1975, Živalski ostanki iz kolišča ob Maharskem prekopu iz let 1973 in 1974. – *Poročilo o raziskovanju neolita in eneolita v Sloveniji* 4, Ljubljana, 135–141.

DULAR, J. 1982, *Halštatska keramika v Sloveniji.* – Dela 1. razreda SAZU 23, Ljubljana.

DULAR, J. 1985, *Topografsko področje XI (Bela krajina).* – Arheološka topografija Slovenije, Ljubljana.

DULAR, J. 1999a, Höhensiedlungen in Zentralslowenien von der Kupfer- bis zur Eisenzeit - Bericht über ein Forschungsprojekt. – *Praehistorische Zeitschrift* 74/2, 129–153.

DULAR, J. 1999b, Copper Age highland settlements in Central Slovenia. – *Pars archaeologica* 24/3, Szombathely, 65–71.

DULAR, J. 2001, Neolitska in eneolitska višinska naselja v osrednji Sloveniji. – *Arheološki vestnik* 52, Ljubljana, 89–106.

DULAR, J., B. KRIŽ, D. SVOLJŠAK in S. TECCO - HVALA 1991, Utrjena prazgodovinska naselja v Mirenski in Temeniški dolini. – *Arheološki vestnik* 42, Ljubljana, 65–198.

DULAR, J., B. KRIŽ, D. SVOLJŠAK in S. TECCO - HVALA 1995, Prazgodovinska višinska naselja v Suhi krajini. – *Arheološki vestnik* 46, Ljubljana, 89–167.

DULAR, J. in S. TECCO - HVALA 2007, *South-Eastern Slovenia in the Early Iron Age.* – Opera Instituti Archaeologici Sloveniae 12, Ljubljana.

FERENC, M. 2005, *Kočevska, pusta in prazna.* – Ljubljana.

FORENBAHER, S. 1993, Radiocarbon dates and absolute chronology of the central European Early Bronze Age. – *Antiquity* 67/255, 218–256.

FORENBAHER, S. 2009, Flaked Stone Artifacts. – V: Tomažič, Olić 2009, 37–46.

FURHOLT, M. 2008, Pottery, cultures, people? The European Baden material re-examined. – *Antiquity* 82/317, 617–628.

GABROVEC, S. 1965, Ciganska jama pri Željnah. – *Varstvo spomenikov* 10, Ljubljana, 191.

GARAŠANIN, M. 1982, The Eneolithic period in the Central Balkan Area. – V: J. Boardman et al. (ur.), *The Cambridge Ancient History. The Prehistory of the Balkans; and the Middle East and the Aegean world, tenth to eight centuries B.C.,* zv. 3/1, 136–162.

GLEIRSCHER, P. 2007, Frühes Kupfer und früher Kupferbergbau im und um den Ostalpenraum. – V: M. Blečić et al. (ur.), *Scripta praehistorica in honorem Biba Teržan*, Situla 44, Ljubljana, 93–110.

GLEIRSCHER, P. 2008, Ausgrabungen und Forschungen. – *Rudolfinum – Jahrbuch des Landesmuseums Kärnten 2006,* Klagenfurt, 7–12.

GÖRSDORF, J. 1995, Datierung von Menschenknochen aus dem Gräberfeld Jelšovce. – V: Pavúk, Bátora 1995, 205–208.

GREIF, T. 1997, Prazgodovinska kolišča Ljubljanskega barja. Arheološka interpretacija in poskus rekonstrukcije načina življenja. – *Arheo* 18, Ljubljana.

GREIF, T. in E. MONTAGNARI - KOKELJ 2002, Venezia Giulia (north-eastern Italy) and central and western Slovenia in the "Late Neolithic". – V: A. Ferrari et al. (ur.), *Il declino del mondo neolitico. Ricerche in Italia centro-settentrionale fra aspetti peninsulari, occidentali e nord-alpini,* Quaderni del Museo Archeologico del Friuli Occidentale 4, Pordenone, 177–186.

GUŠTIN, M. (ur.) 2005a, *Prvi poljedelci.* – Annales Mediterranea, Koper.

GUŠTIN, M. 2005b, *Savska skupina lengyelske kulture.* – V: Guštin 2005a, 7–22.

GUŠTIN, M. in L. BEKIĆ 2002, Autocesta Ljubljana–Zagreb, iskustvo na dionici kod Brežica. – *Obavijesti* 34, Hrvatsko arheološko društvo, Zagreb, 60–66.

GUŠTIN, M. in G. TIEFENGRABER 2001, Prazgodovinske najdbe z avtocestnega odseka Murska Sobota-Nova tabla. – *Arheološki vestnik* 52, Ljubljana, 107–116.

GUŠTIN, M., A. TOMAŽ in B. KAVUR 2005, Drulovka pri Kranju. – V: Guštin 2005a, 37–63.

GUŠTIN, M., A. TOMAŽ in B. KAVUR 2006, The Neolithic site at Čatež – Sredno polje (Slovenia). – V: A. Pessina et al. (ur.), *Preistoria dell'Italia Settentrionale,* Studi in ricordo di Bernardino Bagolini, Udine, 381–390.

GUŠTIN, M., A. TOMAŽ, B. KAVUR, Z. MILEUSNIĆ, G. TIEFENGRABER, A. JAKIMOVSKI in Z. HINCAK 2005, Neolitska naselbina Čatež – Sredno polje. – V: Guštin 2005a, 101–112.

HAREJ, Z. 1975, Kolišče ob Resnikovem prekopu – II. – *Poročilo o raziskovanju neolita in eneolita v Sloveniji* 4, Ljubljana, 145–169.

HERTELENDI, E. 1995, 14Carbon dating of Zalaszentbalázs-Szőlőhegyi mező 1992–1993. – *Antaeus* 22, 105–107.

HIGHAM, T., J. CHAPMAN, V. SLAVCHEV, B. GAYDARSKA, N. HONCH, Y. YORDANOV in B. DIMITROVA 2007, New perspecitves on the Varna cemetry (Bulgaria) – AMS dates and social implications. – *Antiquity* 81/313, 640–654.

HIRSCHBÄCK - MERHAR, G. 1979, Sondiranje v vasi Čeplje in na hribu Spaha nad Preriglom. – *Arheološki pregled* 21, Beograd, 231–233.

HIRSCHBÄCK - MERHAR, G. 1981, Čeplje. – *Varstvo spomenikov* 23, Ljubljana, 307.

HIRSCHBÄCK - MERHAR, G. 1982, Brezovica. – *Varstvo spomenikov* 24, Ljubljana, 139–140.

HIRSCHBÄCK - MERHAR, G. 1984, Prazgodovinski depo Debeli vrh nad Predgradom. – *Arheološki vestnik* 35, Ljubljana, 90–109.

HÖPPNER, B., M. BARTELHEIM, M. HUIJSMANS, R. KRAUSS, K.-P. MARTINEK, E. PERNICKA in R. SCHWAB 2005, Prehistoric copper production in the Inn valley (Austria), and the earliest copper in Central Europe. – *Archaeometry* 47/2, 293–315.

HORNAK, M. in U. STEPIŠNIK 2008, Prispevek k razumevanju zgodovinske poselitve južnega dela Ribniške Male gore. – *Dela oddelka za geografijo FF UL* (Razprave) 30, Ljubljana, 39–49.

HORVAT, A. in M. ŽUPANČIČ 1987, Prazgodovinske in rimske žrmlje v zahodni Sloveniji (prvi rezultati petrografske analize). – *Geološki zbornik* 8, Ljubljana, 105–110.

HORVAT, Ma. 1986, Ajdovska jama pri Nemški vasi – desni hodnik. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 14, Ljubljana, 77–88.

HORVAT, Mi. 1989, *Ajdovska jama pri Nemški vasi*. – Razprave Filozofske fakultete, Ljubljana.

HORVAT, Mi. 2005, Col 1 pri Podgračenem. Tipološka opredelitev neolitskega keramičnega zbira SE 002/1/1. – V: Guštin 2005a, 145–153.

HORVAT, Mi. 2009, Prvi prebivalci v Posavju. – V: J. Peternel (ur.), *Ukročena lepotica – Sava in njene zgodbe,* Sevnica, 25–35.

HORVAT - ŠAVEL, I. 1980, Rezultati sondiranj v Šafarskem. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 8, Ljubljana, 51–77.

HORVAT - ŠAVEL, I. 1984, Poročilo o raziskovanju od leta 1981–1983 v Šafarskem. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 12, Ljubljana, 39–71.

HORVÁTH, L. A. 2010, Funde und Befunde mittelkupferzeitlichen Siedlung im 3. Stadtbezirk von Budapest. – *Acta Archaeologica Academiae Scientiarum Hungaricae* 61, 57–106.

HORVÁTH, L. in N. KALICZ 2006, Siedlungsfunde der spätesten Phase der Lengyel-Kultur bei Nagykanizsa (Südwestungarn). (Die letzten zwei drittel des 5. Jahrtausends v. Chr., kalibriert). – V: Tomaž 2006, 53–66.

HORVÁTH, T. 2009, The intercultural connections of the Baden "culture". – V: I. Gábor (ur.), *Raw materials and trade,* Proceedings of the 6th Meeting for the Researchers of Prehistory, Szombathely, 101–149.

HORVÁTH, T., S. É. SVINGOR in M. MOLNÁR 2008, New Radiocarbon Dates for the Baden Culture. – *Radiocarbon* 50/3, 447–458.

HRVATIN, M. 2001, Mala gora, Kočevski rog in Poljanska gora. – V: D. Perko et al. (ur.), *Slovenija, pokrajine in ljudje,* Ljubljana, 436–446.

HÜLS, M. 2009, Results of radiocarbon dating of samples KIA 21324 and KIA 21325. – V: Šavel 2009a, 137–138.

INZIAN, M. L., H. ROCHE in J. TIXIER 1977, Avantages d'un traitement thermique pour la taille des roches siliceuses. – *Quaternaria* 19, 1–18.

JAMNIK, P. 1993, Jama treh bratov ob Kolpi. – *Proteus* 55/7, Ljubljana, 254–259.

JAMNIK, P. 1997a, Ponovno o luknjah v nosorogovih kosteh iz Dolarjeve jame. – *Acta carsologica* 26/2, Ljubljana, 411–430.

JAMNIK, P. 1997b, Kočevje, Željne jame. – *Varstvo spomenikov* 36, Ljubljana, 160.

JAMNIK, P., 2004, Nenavadna poškodba na losovi čeljustnici iz Franc - Losovega brezna nad Glažuto pri Ribnici. – *Acta carsologica* 33/1, Ljubljana, 291–299.

JAMNIK, P. in F. KLJUN 2004, Nova najdba kosti Evropskega losa (*Alces alces* L.*)* v novoodkriti jami nad Glažuto pri Ribnici. – *Proteus* 66/7, Ljubljana, 264–268.

JAMNIK, P., P. LEBEN - SELJAK, J. BIZJAK in B. HORVAT 2002, Koblarska jama na Kočevskem – prazgodovinsko grobišče in kultni prostor. – *Arheološki vestnik* 53, Ljubljana, 31–49.

JOSIPOVIČ, D. 1983, Paleolitske najdbe v jamah Dolenjske. – *Naše jame* 25, Ljubljana, 11–15.

JOSIPOVIČ, D. 1984, Kamena industrija z Luž pri Šenčurju in neo-eneolitska naselbina na Štefanji gori. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 12, Ljubljana, 73–89.

JOSIPOVIČ, D. 1987, Ponovno o Hajdučki pečini pri izviru Kolpe. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 15, Ljubljana, 7–10.

KALICZ, N. 1991, Beiträge zur Kenntnis der Kupferzeit im ungarischen Transdanubien. – *Saarbrücker Beiträge zur Altertumskunde* 55/1, 347–387.

KALICZ, N. 1992, The oldest metal finds in southeastern Europe and the Carpathian Basin from the 6th to 5th millennia BC. – *Archaeologiai értesitő* 119, 3–14.

KALICZ, N. 1998, *Figürliche Kunst und bemalte Keramik aus dem Neolithikum Westungarns.* – Archaeolingua (Series Minor) 10.

KALICZ, N. 2002, Über die Absolutchronologie der Kupferzeit Ungarns und die Doppelspiralkopfnadeln von Südosteuropa bis zum Nahen Osten. – *Antaeus* 25, 377–404.

KAVUR, B. 2005, Kamnita orodja na najdišču Čatež – Sredno polje. – V: Guštin 2005a, 131–144.

KAVUR, B. 2006, Prazgodovinsko naselje v Zagoncah. – V: Tomaž 2006, 109–112.

KAVUR, B. 2010, Polomljena kolesa in pozabljene živali. Odsevi predmetov na razpotjih kultur. – *Zbornik soboškega muzeja* 15, Murska Sobota, 63–75.

KAVUR, B., A. TOMAŽ in Z. MILEUSNIĆ 2006, Sodolek – naselje bakrene dobe. – V: Tomaž 2006, 121–128.

KERMAN, B. 2010, Glinena figurica s Kalimovnjeka pri Turnišču. – *Zbornik soboškega muzeja* 15, Murska Sobota, 49–61.

KIENLIN, T. L. 2008, Von Schmieden und Stämmen – Anmerkungen zur kupferzeitlichen Matallurgie Südosteuropas. – *Germania* 86, 503–540.

KLADNIK, D. 2001, Velika gora, Stojna in Goteniška gora. – V: D. Perko et al. (ur.), *Slovenija, pokrajine in ljudje,* Ljubljana, 414–424.

KLADNIK, D. in D. PERKO 2001, Zgodovina regionalizacije Slovenije. – V: D. Perko et al. (ur.), *Slovenija, pokrajine in ljudje,* Ljubljana, 20–25.

KLASSEN, L. 2010, Karpaten oder Alpen? Zur Herkunft der Kupferscheibe aus Hornstaad (Lkr. Konstanz). – *Archäologisches Korrespondenzblatt* 40/1, 29–48.

KOROŠEC, J. 1964, Kulturne ostaline na kolišču ob Resnikovem prekopu odkrite v letu 1962. – *Poročilo o raziskovanju neolita in eneolita v Sloveniji* 1, Ljubljana, 25–46.

KOROŠEC, J. 1965, Neo- in eneolitski elementi na Ptujskem gradu. – *Poročilo o raziskovanju neolita in eneolita v Sloveniji* 2, Ljubljana, 5–53.

KOROŠEC, P. 1975, Poročilo o raziskovanju v Ajdovski jami 1967. leta. – *Poročilo o raziskovanju neolita in eneolita v Sloveniji* 4, Ljubljana, 170–209.

KOROŠEC, P. in J. KOROŠEC 1969, *Najdbe s koliščarskih naselbin pri Igu na Ljubljanskem barju*. – Arheološki katalogi Slovenije 3, Ljubljana.

KOS, F. 1921–1923, Evropski los *Alces alces* L. iz jame "pri Glažuti". – *Glasnik Muzejskega društva Slovenije* 2/3, Ljubljana, 25–33.

KOS, P. 1988, *Die Fundmünzen der römischen Zeit in Slowenien* (I). – Berlin.

KRANJC, A. 1980, Prispevek k poznavanju razvoja krasa v Ribniški Mali gori. – *Acta carsologica* 9, Ljubljana, 30–85.

KRAUß, R. 2008, Karanovo und das südosteuropäische Chronologiesystem aus heutiger Sicht. – *Eurasia Antiqua* 14, 117–149.

KRIŽ, B. 2009a, Zgodovina raziskav. – V: B. Križ et al., *Arheološka podoba Dolenjske,* Katalog stalne arheološke razstave, Novo mesto, 43–45.

KRIŽ, B. 2009b, Kamena doba. – V: B. Križ et al., *Arheološka podoba Dolenjske,* Katalog stalne arheološke razstave, Novo mesto, 47–59.

KRIŽ, B. 2009c, Bakrena doba. – V: B. Križ et al., *Arheološka podoba Dolenjske,* Katalog stalne arheološke razstave, Novo mesto, 61–63.

KRYŠTUFEK, B. 1991, *Sesalci Slovenije*. – Ljubljana.

KRZNARIĆ - ŠKRIVANKO, M. 2006, Istraživanja na Sopotu. – V: Tomaž 2006, 11–19.

KRZNARIĆ - ŠKRIVANKO, M. 2007, Redni broj: 22; lokalitet: Sopot. – *Hrvatski arheološki godišnjak* 4, Zagreb, 64–68.

KUNA, M. 1981, Zur neolithischen und äneolithischen Kupferverarbeitung im Gebiet Jugoslawiens. – *Godišnjak Centra za balkanološka ispitivanja* 19, Sarajevo, 13–82.

KUNAVER, P. 1932, V prepadih. – *Mladika* 3/8, Celje, 292–295.

LEBEN, F. 1967, Stratigrafija in časovna uvrstitev jamskih najdb na Tržaškem Krasu. – *Arheološki vestnik* 18, Ljubljana, 43–109.

LEBEN, F. 1970, Arheološka podoba dolenjskih jam. – *Naše jame* 11, Ljubljana, 25–40.

LEBEN, F. 1971, *Kulturna pripadnost jamskih najdb na področju jugovzhodnih Alp v prazgodovinskem obdobju.* – Doktorska disertacija, Filozofski fakultet, Sveučilište u Zagrebu.

LEBEN, F. 1979, Progress and achievements of thirty years of research into early prehistory in Slovenia. – *Arheološki vestnik* 30, Ljubljana, 29–40.

LUBŠINA - TUŠEK, M. 1993, Kamnito orodje v severovzhodni Sloveniji. – V: B. Lamut (ur.), *Ptujski arheološki zbornik ob 100-letnici muzeja in muzejskega društva,* Ptuj, 31–158.

LYMAN, R. L. 1999, *Vertebrate taphonomy.* – Cambridge Manuals in Archaeology, Cambridge.

MARKOVIĆ, Z. 1994, *Sjeverna Hrvatska od neolita do brončanog doba. Problem kontinuiteta stanovništva i kultura sjeverne Hrvatske od ranog neolita do početka brončanog doba.* – Koprivnica.

MARKOVIĆ, Z. in K. BOTIĆ 2008, O neolitičkoj keramici iz Novih Perkovaca kod Đakova. – *Prilozi Instituta za arheologiju u Zagrebu* 25/1, Zagreb, 15–32.

MASON, Ph. F. J., 1994, Neolitska in eneolitska naselja v Beli krajini – naselje v Gradcu in izraba prostora v času od 5. do 3. tisočletja BC. – *Poročilo o raziskovanju paleolitika, neolitika in eneolitika v Sloveniji* 22, Ljubljana, 183–199.

MASON, Ph. 2008, Bela krajina v prazgodovini in rimskem obdobju. – V: J. Weiss (ur.), *Črnomaljski zbornik,* Zbornik historičnih razprav ob 780-letnici prve omembe naselja in 600-letnici prve omembe Črnomlja kot mesta, Črnomelj, 17–47.

MASON, Ph. in M. ANDRIČ 2009, Neolithic/eneolithic settlement patterns and Holocene environmental changes in Bela krajina (South-Eastern Slovenia). – *Documenta Praehistorica* 36, Ljubljana, 327–335.

MASON, Ph. in M. BRICELJ 2000–2004, 61. Dragatuš – arheološko najdišče Ržišče. – *Varstvo spomenikov* (Poročila) 39–41, Ljubljana, 41–42.

MATUSCHIK, I. 1997, Eine donauländische Axt von Typ Şiria aus Überlingen am Bodensee – Ein Beitrag zur Kenntnis des frühesten kupferführenden Horizontes im zentralen Nordalpengebiet. – *Praehistorische Zeitschrift* 72/1, 81–105.

MIHALJEVIĆ, M. 2006, Istraživanje nalazišta Slavča-Nova Gradiška. – V: Tomaž 2006, 29–34.

MIHOVILIĆ, K. 1992, Nalazi prahistorijskih ostava na području Istre. – *Arheološki vestnik* 42, Ljubljana, 207–218.

MINICHREITER, K. in Z. MARKOVIĆ 2009, Prapovijesno i ranosrednjovjekovno naselje Bentež kod Beketinaca. – *Prilozi Instituta za arheologiju u Zagrebu* 26/1, Zagreb, 21–44.

MIRACLE, P., N. GALANIDOU in S. FORENBAHER 2000, Pioneers in the hills – early Mesolithic foragers at Šebrn Abri (Istria, Croatia). – *European Journal of Archaeology* 3/3, 293–329.

MONTAGNARI - KOKELJ, E. 2003, Why settling a Karstic area? Considerations on the Trieste Karst (north-eastern Italy) in the Late Prehistory. – *Histria Antiqua* 11, Pula, 75–93.

MOTTANA, A., R. CRESPI in G. LIBORIO 1987, *The Macdonald Encyclopedia of Rocks and Minerals.* – London.

OBELIĆ, B. 1989, The radiocarbon data base at Rudjer Bošković Institute radiocarbon laboratory. – *Radiocarbon* 31, 1057–1062.

OBELIĆ, B. 2009, Radiokarbonske analize. –V: Tomažič, Olić 2009, 47.

OBELIĆ, B., M. KRZNARIĆ - ŠKRIVANKO, B. MARIJAN in I. KRAJCAR - BRONIĆ 2004, Radiocarbon dating of Sopot culture sites (Late Neolithic) in Eastern Croatia. – *Radiocarbon* 46, 245–258.

OLIĆ, S. 2009, Terenske raziskave. – V: Tomažič, Olić 2009, 11–18.

OTOREPEC, B. 1996, Dobrepoljska in Struška dolina v srednjem veku. – V: *Dobrepoljsko-struški zbornik,* Ljubljana, 88–93.

PAHIČ, S. 1976, Seliščne najdbe v zahodnih Slovenskih goricah – Andrenci, Spodnji Duplek, Spodnji Porčič, Vumpah. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 5, Ljubljana, 29–83.

PARZINGER, H. 1984, Die Stellung der Uferrandsiedlungen bei Ljubljana im äneolitischen und frühbronzezeitlichen Kultursystem der mittleren Donauländer. – *Arheološki vestnik* 35, Ljubljana, 13–75.

PARZINGER, H. 1993, *Studien zur Chronologie und Kulturgeschichte der Jungstein-, Kupfer- und Frühbronzezeit zwischen Karpaten und Mittlerem Taurus.* – Römisch-Germanische Forschungen 52/1.

PAVLIN, P. 2006, Grac pri Selih pri Zajčjem Vrhu. – V: Tomaž 2006, 211–227.

PAVLIN, P. in J. DULAR 2007, Prazgodovinska višinska naselja v Posavskem hribovju. – *Arheološki vestnik* 58, Ljubljana, 65–120.

PAVŠIČ, J. in J. DIRJEC 2004, Morski skat na Ljubljanskem barju. – V: Velušček 2004a, 152–154.

PAVÚK, J. 1981, The present state of knowledge of the Lengyel culture in Slovakia. – *Památky archeologické* 72/2, 255–299.

PAVÚK, J. in J. BÁTORA 1995, *Siedlung und Gräber der Ludanice-Gruppe in Jelšovce.* – Archaeologica Slovaca Monographiae (Studia) 5.

PAYNE, S. in P. J. MUNSON 1985, Ruby and how many squirrels? The destruction of bones by dogs. – V: N. R. J. Fieller et al (ur.), *Palaeobiological investigations,* BAR International series 266, 31–39.

PERKO, P. in D. KLADNIK 2001, Zgodovina regionalizacije Slovenije. – V: D. Perko et al. (ur.), *Slovenija, pokrajine in ljudje,* Ljubljana, 26–31.

PESSINA, A. in C. D'AMICO 1999, L'industria in pietra levigata del sito neolitico di Sammardenchia (Pozzuolo del Friuli, Udine). Aspetti archeologici e petroarcheometrici. – V: A. Ferrari et al. (ur.) *Sammardenchia - Cueis. Contributi per la conoscenza di una comunità del primo Neolitico*, Edizioni del Museo Friulano di Storia Naturale 41, Udine, 23–92.

PETRASCH, J. 1984, Die absolute Datierung der Badener Kultur aus der Sicht des süddeutschen Jungneolithikums. – *Germania* 62/2, 269–287.

PETRU, S. 2008, *Paleolitska umetnost – magija podobe ali podoba magije.* – Ljubljana.

PLESTENJAK, A. 2010, *Gorice pri Turnišču.* – Arheologija na avtocestah Slovenije, Ljubljana.

PODBORSKÝ, V. 1970, Der gegenwärtige Forschungsstand der Kultur mit mährischer bemalter Keramik. – *Slovenská archeológia* 18/2, 235–310.

POHAR, V. 1984, Favnistični ostanki mezolitske postaje na prostem Breg-Škofljica pri Ljubljani. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 12, Ljubljana, 7–27.

POHAR, V. 1986, Kostni ostanki z mezolitskega najdišča Pod Črmukljo pri Šembijah (Ilirska Bistrica). – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 14, Ljubljana, 11–20.

POHAR, V. 1988, Živalski kostni ostanki kot pridatki prazgodovinskih grobov v Ajdovski jami pri Nemški vasi. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 16, Ljubljana, 85–102.

POTREBICA, H. in J. BALEN 2007, Redni broj: 49; lokalitet: Zona Velika – Stražeman. –*Hrvatski arheološki godišnjak* 4, Zagreb, 116–119.

PUŠ, I. 1988–1989, Bronastodobna naselbina pri Žlebiču. – *Arheološki vestnik* 39–40, Ljubljana, 345–366.

RADIVOJEVIĆ, M., T. REHREN, E. PERNICKA, D. ŠLJIVAR in M. BRAUNS 2010, On the origins of extractive metallurgy: new evidence from Europe. – *Journal of Archaeological Science* 37/11, 2775–2787.

RAKOVEC, I. 1939, O diluvialnem kozorogu iz neke kočevske jame. – *Zbornik prirodoslovnega društva* 1, Ljubljana, 59–62.

RAKOVEC, I. 1940, Diluvialni kozorogi iz Slovenije in Dalmacije. – *Razprave SAZU* 1, Ljubljana, 55–76.

RAKOVEC, I. 1973, Razvoj kvartarne sesalske Favne v Sloveniji. – *Arheološki vestnik* 24, Ljubljana, 225–270.

REGENY, J. 2006, Kaposvár-Gyertyános, die Siedlung der Lengyel-Kultur. – V: Tomaž 2006, 67–74.

RENFREW, C. 1973, *Before Civilization. The Radiocarbon Revolution and Prehistoric Europe.* – London.

ROWLEY-CONWY, P. 1996, Resti faunistici del tardiglaciale e dell'olocene. – V: A. Guerreschi (ur.), *Il sito preistorico del Riparo di Biarzo*, Edizioni del Museo Friulano di Storia Naturale 39, Udine, 61–80.

RUS, J. 1939, Jedro kočevskega vprašanja. – V: *Kočevski zbornik,* Ljubljana, 131–173.

RUTTKAY, E. 1991, Das Ende der Donauländischen Welt und Südosteuropa. – *Mitteilungen der Antropologischen Gesellschaft in Wien* 121, 161–181.

RUTTKAY, E. 1995, Spätneolithikum. – V: E. Lenneis et al. (ur.), *Jungsteinzeit im osten Österreichs*, Wissenschaftliche Schriftenreihe Niederösterreich 102–105, St. Pölten, Wien, 108–209.

SAMONIG, B. 2003, *Studien zur Pfahlbauforschung in Österreich. Materialen* 2. *Die Pfahlbaustation des Keutschacher Sees.* – Mitteilungen der Prähistorischen Kommission der Österreichischen Akademie der Wissenschaften 51.

SAVIG, D. in S. DOZET 1976, Tolmač za list Delnice. – V: *Osnovna geološka karta 1 : 100.000,* Beograd.

SCHMID, R. 1981, Descriptive nomenclature and classification of pyroclastic deposits and fragments – recomendations of the IUGS Subcommission on the Systematics of Igneous Rocks. – *Geology* 9, 41–43.

SCHMITSBERGER, O. 2009, Erste AMS-^{14}C-Datierungen zu den Ausgrabungen auf der Trasse der Ortsumfahrung Maissau. – *Fundberichte aus Österreich* 48, 345–348.

SCHUBERT, F. 1965, Zu den südosteuropäischen Kupferäxten. – *Germania* 43, 274–295.

SIMONIČ, I. 1939, Zgodovina kočevskega ozemlja. – V: *Kočevski zbornik,* Ljubljana, 45–130.

SIMONITI, V. 1999, Turški vpadi. – V: J. Batis et al. (ur.), *Enciklopedija Slovenije,* knj. 13 (Š–T), Ljubljana, 412–413.

SKABERNE, D. in A. MLADENOVIČ 2004, Opredelitev materiala ogrličnega obročka s Hočevarice. – V: Velušček 2004a, 65–68.

SLABE, M. 1996, Arheološka podoba Dobrepolja. – V: *Dobrepoljsko-struški zbornik,* Ljubljana, 81–87.

SMERDEL, I. 1989, *Ovčarstvo na Pivki. Transhumanca od srede 19. stoletja do srede 20. stoletja ali trije "ovčarji".* – Koper.

SMERDEL, I. 1999, The three "sheepmasters" – Transhumance in Pivka (Slovenia) from the middle of 19th to the middle of the 20th century. – V: L. Bartosiewicz et al (ur.), *Transhumant pastoralism in Southern Europe*, Archaeolingua (Series minor) 11, 197–212.

SMERDEL, I. 2002, Mati naša, daj nam danes naš vsakdanji kruh! O izdelovanju, prodaji in rabi žrmelj v odmaknjenih predelih Slovenije. – *Etnolog* (Nova vrsta) 12, Ljubljana, 141–225.

SOMOGYI, K. 2000, Die Funde der Balaton-Lasinja Kultur im Komitat Somogy. – Communicationes Archaeologicae Hungariae, 5–48.

SOMOGYI, K. 2002, Neuere Daten zur hochkupferzeitlichen Kupferindustrie im Komitat Somogy (Südwestungarn). – *Antaeus* 25, 337–353.

SRDOČ, D., B. OBELIĆ, A. SLIEPČEVIĆ, I. KRAJCAR - BRONIĆ in N. HORVATINČIĆ 1987, Rudjer Bošković Institute radiocarbon measurements X. – *Radiocarbon* 29, 135–147.

STADLER, P. 1995, Ein Beitrag zur Absolutchronologie des Neolithikums in Ostösterreich aufgrund der ^{14}C-Daten. – V: E. Lenneis et al. (ur.), *Jungsteinzeit im osten Österreichs*, Wissenschaftliche Schriftenreihe Niederösterreich 102–105, St. Pölten, Wien, 210–224.

STADLER, P., E. RUTTKAY, M. DONEUS, H. FRIESINGER, E. LAUERMANN, W. KUTSCHERA, I. MATEICIUCOVÁ, W. NEUBAUER, Ch. NEUGEBAUER - MARESCH, G. TRNKA, F. WENINGER in E. M. WILD 2006, Absolutechronologie der Mährisch-Ostösterreichischen Gruppe (MOG) der bemalten Keramik aufgrund von neuen ^{14}C-Datierungen. – *Archäologie Österreichs* 17/2, 41–69.

STRAUS, L. G. 1997, Convenient Cavities – Some Human Uses of Caves and Rockshelters. – V: C. Bonsall et al. (ur.), *The Human Use of Caves,* BAR International Series 667, 1–8.

SUTER, P. J. 2002, Vom Spät- zum Endneolithikum Wandel und Kontinuität um 2700 v. Chr. in Mitteleuropa. – *Archäologisches Korrespondenzblatt* 32/4, 533–541.

SZAKMÁNY, G., E. STARNINI, F. HORVÁTH, V. SZILÁGYI in Z. KASZTOVSZKY 2009, Investigating trade an d exchange patterns during the Late Neolithic – first results of the archaeometric analyses of the raw materials for the polished and ground stone tools from Tell Gorzsa (SE Hungary). – V: I. Gábor (ur.) *Raw materials and trade,* Proceedings of the 6th Meeting for the Researchers of Prehistory, Szombathely, 369–384.

ŠAVEL, I. 1992, Bukovnica – rezultati terenskih raziskav v letih 1987–1988. – *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 20, Ljubljana, 57–85.

ŠAVEL, I. 2006, Prekmurje v mlajši kameni dobi. – V: Tomaž 2006, 89–94.

ŠAVEL, I. 2009a, *Pod Kotom – jug pri Krogu, zv. I/II.* – Arheologija na avtocestah Slovenije, Ljubljana.

ŠAVEL, I. 2009b, *Pod Kotom – jug pri Krogu (Gradivo), zv. II/II.* – Arheologija na avtocestah Slovenije, Ljubljana.

ŠAVEL, I. in M. GUŠTIN 2006, Kultura keramike z brazdastim vrezom v Prekmurju. – V: Tomaž 2006, 203–210.

ŠEMROV, A. 2004, *Die Fundmünzen der römischen Zeit in Slowenien* (V). – Berlin.

ŠIMEK, M., D. KURTANJER in M. PAUNOVIĆ 2002, Eneolitičke glačane kamene alatke iz špilje Vindije (SZ Hrvatska). – *Opuscula archaeologica* 26, Zagreb, 39–55.

ŠINKOVEC, I. 1995, Katalog posameznih kovinskih najdb bakrene in bronaste dobe. – V: B. Teržan (ur.), *Depojske in posamezne kovinske najdbe bakrene in bronaste dobe na Slovenskem*, Katalogi in monografije 29/1, Ljubljana, 29–127.

ŠMIT, Ž. 2004, Preiskava eneolitskih metalurških sledov s Hočevarice z metodo PIXE. – V: Velušček 2004a, 69–71.

TERŽAN, B. 1984, O jantarju z Debelega vrha nad Predgradom. – *Arheološki vestnik* 35, Ljubljana, 110–118.

TEŽAK - GREGL, T. 2001, The Lengyel culture in Croatia. – V: J. Regenye (ur.), *Sites and Stones. Lengyel Culture in Western Hungary and beyond,* Veszprém, 27–35.

TEŽAK - GREGL, T. 2005, Ozalj-Stari grad, neolitička naseobina. – V: Guštin 2005a, 155–162.

TEŽAK - GREGL, T. 2006, Proučavanje neolitika i eneolitika u zrcalu članaka objavljivanih tijekom 50 godina časopisa Opuscula archaeologica**.** – *Opuscula archaeologica* 30, Zagreb, 93–122.

TEŽAK - GREGL, T. 2007, Ponovo o lasinjskoj bočici iz Vrlovke. – *Prilozi Instituta za arheologiju u Zagrebu* 24/1, Zagreb, 35–40.

TIEFENGRABER, G. 2004, Jungneolitische Funde vom Rabenstein bei St. Paul im Lavanttal. – *Carinthia* I 194, Klagenfurt, 185–253.

TIEFENGRABER, G. 2006a, Zum Forschungsstand des Neolithikums in der Steiermark. – V: Tomaž 2006, 81–87.

TIEFENGRABER, G. 2006b, Neo- und eneolithische Funde aus Nova tabla bei Murska Sobota. – V: Tomaž 2006, 99–102.

TIEFENGRABER, G. 2006c, Jungneolithische Funde aus Čatež – Sredno polje. – V: Tomaž 2006, 229–234.

TOČÍK, A. 1991, Der Forschungsstand der Lengyel-Kultur in der Slowakei. Ein Rückblick und Ausblick. – *Saarbrücker Beiträge zur Altertumskunde* 55/1, 301–317.

TOMANIČ - JEVREMOV, M., A. TOMAŽ in B. KAVUR 2006a, Ormož – Škoršičev vrt, bakrenodobna jama. – V: Tomaž 2006, 155–174.

TOMANIČ - JEVREMOV, M., A. TOMAŽ in B. KAVUR 2006b, Neolitske in bakrenodobne najdbe s Ptujskega gradu. – V: Tomaž 2006, 175–194.

TOMAŽ, A. 1999, *Časovna in prostorska strukturiranost neolitskega lončarstva – Bela krajina, Ljubljansko barje, Dinarski kras.* – Magistrska naloga, Filozofska fakulteta, Univerza v Ljubljani.

TOMAŽ, A. 2005a, Čatež – Sredno polje, analiza neolitske keramike iz objektov 055 in 093. – V: Guštin 2005a, 113–129.

TOMAŽ, A. 2005b, Miniature vessels from the Neolithic site at Čatež – Sredno polje. Were they meant for every day use or for something else? – *Documenta Praehistorica* 32, Ljubljana, 261–267.

TOMAŽ, A. (ur.) 2006, *Od Sopota do Lengyela.* – Annales Mediterranea, Koper.

TOMAŽ, A. 2008, Prva dama iz Murske Sobote. – V: A. Tomaž, *Prva dama,* Annales Mediterranea, Koper, 47–66.

TOMAŽ, A. in B. KAVUR 2006, *Zemlja in ogenj.* – Koper.

TOMAŽ, A. in A. VELUŠČEK 2005, Resnikov prekop na Ljubljanskem barju 1962 in 2002. – V: Guštin 2005a, 87–99.

TOMAŽIČ, S. 2009a, Sklep. – V: Tomažič, Olić 2009, 49–50.

TOMAŽIČ, S. 2009b, Gradivo. – V: Tomažič, Olić 2009, 51–151.

TOMAŽIČ, S. in S. OLIĆ 2009, *Šiman pri Gotovljah.* – Arheologija na avtocestah Slovenije, Ljubljana.

TOPOLE, M. 2001, Ribniško-Kočevsko podolje. – V: D. Perko et al. (ur.), *Slovenija, pokrajine in ljudje,* Ljubljana, 426–434.

TOŠKAN, B. 2005, Živalski ostanki iz bronastodobnih naselbin pri Iški Loki in Žlebiču. – *Arheološki vestnik* 56, Ljubljana, 91–97.

TOŠKAN, B. 2008a, Živalstvo v koliščarski dobi. – V: J. Pavšič (ur.), *Ljubljansko barje – neživi svet, rastlinstvo, živalstvo*, Ljubljana, 153–158.

TOŠKAN, B. 2008b, Sesalska favna z bronastodobnega kolišča Mali Otavnik pri Bistri na Ljubljanskem barju. – *Arheološki vestnik* 59, Ljubljana, 91–110.

TOŠKAN, B. 2010, Živalski ostanki kot surovina za izdelavo artefaktov. Primer koliščarskih naselbin z Ljubljanskega barja. – *Argo* 53/1, Ljubljana, 90–97.

TOŠKAN, B. in J. DIRJEC 2004a, Hočevarica – analiza ostankov makrofavne. – V: Velušček 2004a, 76–132.

TOŠKAN, B. in J. DIRJEC 2004b, Ostanki velikih sesalcev v Viktorjevem spodmolu. – V: I. Turk (ur.), *Viktorjev spodmol in Mala Triglavca. Prispevki k poznavanju mezolitskega obdobja v Sloveniji*, Opera Instituti Archaeologici Sloveniae 9, Ljubljana, 135–167.

TOŠKAN, B. in J. DIRJEC 2006, Ostanki sesalske favne na Resnikovem prekopu, Ljubljansko barje. – V: Velušček 2006a, 139–154.

TURK, I. 1999, Starejša in srednja kamena doba. – V: D. Božič et al. (ur.), *Zakladi tisočletij,* Ljubljana, 22–51.

TURK, I., Z. MODRIJAN, T. PRUS, M. CULIBERG, A. ŠERCELJ, V. PERKO, J. DIRJEC in P. PAVLIN 1993, Podmol pri Kastelcu – novo večplastno arheološko najdišče na Krasu, Slovenija. – *Arheološki vestnik* 44, Ljubljana, 45–96.

TURK, I., B. TOŠKAN in J. DIRJEC 2004, Sesalska favna. – V: I. Turk (ur.), *Viktorjev spodmol in Mala Triglavca. Prispevki k poznavanju mezolitskega obdobja v Sloveniji,* Opera Instituti Archaeologici Sloveniae 9, Ljubljana, 201–203.

TURK, I., A. VELUŠČEK, J. DIRJEC in P. JAMNIK 1996, Lukova jama v dolini Kolpe, v Sloveniji. Novo arheološko in paleontološko najdišče. – *Arheološki vestnik* 41, Ljubljana, 41–53.

TURK, I. in D. VUGA 1984, Zamedvedica pri Plešivici, novo eneolitsko naselje na Ljubljanskem barju. – *Arheološki vestnik* 35, Ljubljana, 76–89.

TURK, J. 2009, Petrološka sestava in izvor kamnitih najdb z najdišč Stare gmajne in Blatna Brezovica. – V: Velušček 2009a, 281–286.

TURK, P. 2010, Priložnosti in pasti radiokarbonske datacije iz neolitske naselbine v Dragomlju. – *Argo* 53/1, Ljubljana, 41–44.

10. LITERATURA / REFERENCES

TURK, P. in V. SVETLIČIČ 2005, Neolitska naselbina v Dragomlju. – V: Guštin 2005a, 65–79.

TUŠEK, I., B. KAVUR in A. TOMAŽ 2006, Najstarejša poselitev v Ivankovcih. – V: Tomaž 2006, 113–119.

VANN, S. in J. GRIMM 2010, Post-medieval sheep (*Ovis aries*) metapodia from southern Britain. – *Journal of Archaeological Science* 37, 1532–1542.

VELUŠČEK, A. 1996, Kostel, prazgodovinska naselbina. – *Arheološki vestnik* 47, Ljubljana, 55–134.

VELUŠČEK, A. 1999a, Neolithic and Eneolithic Investigations in Slovenia. – *Arheološki vestnik* 50, Ljubljana, 59–79.

VELUŠČEK, A. 1999b, Mlajša kamena in bakrena doba. – V: D. Božič et al. (ur.), *Zakladi tisočletij,* Ljubljana, 52–75.

VELUŠČEK, A. 2001, *Srednja bakrena doba v osrednji Sloveniji*. – Doktorska disertacija, Filozofska fakulteta, Univerza v Ljubljani.

VELUŠČEK, A. (ur.) 2004a, *Hočevarica – eneolitsko kolišče na Ljubljanskem barju.* – Opera Instituti Archaeologici Sloveniae 8, Ljubljana.

VELUŠČEK, A. 2004b, Tipologija keramičnega gradiva. – V: Velušček 2004a, 184–212.

VELUŠČEK, A. 2004c, Hočevarica in horizont keramike z brazdastim vrezom (HKBV) v osrednji Sloveniji in sosednjih pokrajinah. – V: Velušček 2004a, 231–262.

VELUŠČEK, A. 2004d, Interpretacija rezultatov absolutnega datiranja Hočevarice in absolutno datiranje horizonta keramike z brazdastim vrezom (HKBV) v Sloveniji. – V: Velušček 2004a, 290–295.

VELUŠČEK, A. 2004e, Hočevarica in začetki uporabe bakra v Sloveniji. – V: Velušček 2004a, 297–306.

VELUŠČEK, A. 2005a, Kraška planota jugozahodne Slovenije in Ljubljansko barje v neo-eneolitski dobi – primerjalna študija. – V: A. Mihevc (ur.), *Kras, voda in življenje v kamniti pokrajini,* Ljubljana, 199–219.

VELUŠČEK, A. 2005b, Kratna nad Kamnikom, Gradišče pri Stiški vasi. – V: Guštin 2005a, 23–28.

VELUŠČEK, A. (ur.) 2006a, *Resnikov prekop, najstarejša koliščarska naselbina na Ljubljanskem barju.* – Opera Instituti Archaeologici Sloveniae 10, Ljubljana.

VELUŠČEK, A. 2006b, Resnikov prekop – sondiranje, arheološke najdbe, kulturna opredelitev in časovna uvrstitev. – V: Velušček 2006a, 19–85.

VELUŠČEK, A. 2007, Figuralna vaza s kolišča pri Igu, Ljubljansko barje, Slovenija. – V: M. Blečić et al. (ur.), *Scripta praehistorica in honorem Biba Teržan*, Situla 44, Ljubljana, 151–168.

VELUŠČEK, A. (ur.) 2009a, *Koliščarska naselbina Stare gmajne in njen čas.* – Opera Instituti Archaeologici Sloveniae 16, Ljubljana.

VELUŠČEK, A. 2009b, Koliščarska naselbina Stare gmajne in njen čas. – V: Velušček 2009a, 11–34.

VELUŠČEK, A. 2009c, Koliščarska naselbina Stare gmajne pri Vedru. – V: Velušček 2009a, 49–121.

VELUŠČEK, A. 2010, *Koliščarji, o koliščarjih in koliščarski kulturi Ljubljanskega barja.* – Ljubljana.

VELUŠČEK, A. 2011, Keramika iz Ciganske jame pri Željnah. – *Arheološki vestnik* 62, Ljubljana, v tisku.

VELUŠČEK, A. in K. ČUFAR 2003, Založnica pri Kamniku pod Krimom na Ljubljanskem barju – naselbina kulture Somogyvár-Vinkovci. – *Arheološki vestnik* 54, Ljubljana, 123–158.

VELUŠČEK, A. in K. ČUFAR 2008, Novoopredeljeni najdišči keramike z brazdastim vrezom na Ljubljanskem barju. – *Arheološki vestnik* 59, Ljubljana, 31–48.

VELUŠČEK, A. in K. ČUFAR 2010, Dating of the pile dwellings at the Ljubljansko barje, Slovenia – the situation in 2008. – V: I. Matuschik et al. (ur.), *Vernetzungen – Aspekte siedlungsarchäologischer Forschung,* Festschrift für Helmut Schlichtherle zum. 60. Geburtstag, Freiburg im Breisgau, 345–355.

VELUŠČEK, A., K. ČUFAR, M. CULIBERG, B. TOŠKAN, J. DIRJEC, V. MALEZ, F. JANŽEKOVIČ in M. GOVEDIČ 2004, Črešnja pri Bistri, novoodkrito kolišče na Ljubljanskem barju. – *Arheološki vestnik* 55, Ljubljana, 39–54.

10. LITERATURA / REFERENCES

VELUŠČEK, A. in T. GREIF 1998, Talilnik in livarski kalup z Maharskega prekopa na Ljubljanskem barju. – *Arheološki vestnik* 49, Ljubljana, 31–53.

YERKES, R. W., A. GYUCHA in W. PARKINSON 2009, A Multiscalar Approach to Modeling the End of the Neolithic on the Great Hungarian Plain Using Calibrated Radiocarbon Dates. – *Radiocarbon* 51/3, 1071–1109.

ZALAI - GAÁL, I. 2003, Das Henkelgefäß aus Györe. Ein Beitrag zu den chronologischen und kulturellen Beziehungen der Lengyel-Kultur. – V: E. Jerem et al. (ur.), *Morgenrot der Kulturen. Frühe Etappen der Menschheitsgeschichte in Mittel- und Südosteuropa,* Archaeolingua 15, 285–309.

ŽIBRAT - GAŠPARIČ, A. 2008, Strukturna analiza neolitske keramike in lončarske tehnologije. – Doktorska disertacija, Filozofska fakulteta, Univerza v Ljubljani.

ŽIŽEK, I. 2006a, Eneolitska naselbina Hardek. – V: Tomaž 2006, 129–140.

ŽIŽEK, I. 2006b, Hajndl pri Ormožu, naselje bakrene dobe. – V: Tomaž 2006, 141–153.

ŽORŽ, A. in B. NADBATH 2010, Arheološke ostaline s Spodnjih Škovc pri Dolskem. – V: S. Omerzu (ur.), *Iz dežele Jurija Vege,* Zbornik občine Dol pri Ljubljani 2, 341–381.

11. AVTORJI / CONTRIBUTORS

Antonio Alberti
Dipartimento di Geoscienze
Università degli Studi di Trieste
Via Weiss 8
I-34127 Trieste
alberti@units.it

Federico Bernardini
Dipartimento di Storia e Culture dall'Antichità al Mondo contemporaneo
Università degli Studi di Trieste
Via del Lazzaretto Vecchio 6
I-34123 Trieste
bernardinifederico@hotmail.com

Gabriella Demarchi
Dipartimento di Geoscienze
Università degli Studi di Trieste
Via Weiss 8
I-34127 Trieste
demarchi@units.it

Angelo De Min
Dipartimento di Geoscienze
Università degli Studi di Trieste
Via Weiss 8
I-34127 Trieste
demin@univ.trieste.it

Maruska Di Remigio
Viale Duodo 15/C
I-33100 Udine
maruskadr@hotmail.it
maruskadr@libero.it

Pavel Jamnik
Kočna 5
SI-4273 Blejska Dobrava
pavel.jamnik@telemach.net

Emanuela Montagnari - Kokelj
Dipartimento di Storia e Culture dall'Antichità al Mondo contemporaneo
Università degli Studi di Trieste
Via del Lazzaretto Vecchio 6
I-34123 Trieste
montagna@units.it

Borut Toškan
Inštitut za arheologijo
Znanstvenoraziskovalni center SAZU
Novi trg 2
SI-1000 Ljubljana
borut.toskan@zrc-sazu.si

Janez Turk
Inštitut za raziskovanje krasa
Znanstvenoraziskovalni center SAZU
Titov trg 2
SI-6230 Postojna
janez.turk@zrc-sazu.si

Matija Turk
Lunačkova 4
SI-1000 Ljubljana
matijaturkow@gmail.com

Anton Velušček
Inštitut za arheologijo
Znanstvenoraziskovalni center SAZU
Novi trg 2
SI-1000 Ljubljana
anton.veluscek@zrc-sazu.si

Opera Instituti Archaeologici Sloveniae

1. Janez Dular, Slavko Ciglenečki, Anja Dular, Kučar. Železnodobno naselje in zgodnjekrščanski stavbni kompleks na Kučarju pri Podzemlju / Eisenzeitliche Siedlung und frühchristlicher Gebäudekomplex auf dem Kučar bei Podzemelj, 1995. (EUR 14.60)

2. Ivan Turk (ed.), Moustérienska "koščena piščal" in druge najdbe iz Divjih bab I v Sloveniji / Mousterian "bone flute" and other finds from Divje Babe I cave site in Slovenia, 1996. (EUR 14.60)

3. Jana Horvat (with contributions by Vesna Svetličič, Meta Bole, Metka Culiberg, Draško Josipović, Marko Stokin, Nina Zupančič), Sermin. Prazgodovinska in zgodnjerimska naselbina v severozahodni Istri / A Prehistoric and Early Roman Settlement in Northwestern Istria, 1997. (EUR 14.60)

4. Slavko Ciglenečki (with contributions by Zvezdana Modrijan, Andreja Dolenc Vičič, Ivan Turk), Tinje nad Loko pri Žusmu. Poznoantična in zgodnjesrednjeveška naselbina / Tinje oberhalb von Loka pri Žusmu. Spätantike und frühmittelalterliche Siedlung, 2000. (EUR 14.60)

5. Janez Dular, Irena Šavel, Sneža Tecco Hvala, Bronastodobno naselje Oloris pri Dolnjem Lakošu / Bronzezeitliche Siedlung Oloris bei Dolnji Lakoš, 2002. (EUR 14.60)

6. Janez Dular, Halštatske nekropole Dolenjske / Die hallstattzeitlichen Nekropolen in Dolenjsko, 2003. (EUR 20.70)

7. Irena Lazar, Rimsko steklo Slovenije / The Roman glass of Slovenia, 2003. (EUR 27.40)

8. Anton Velušček (ed.), Hočevarica. Eneolitsko kolišče na Ljubljanskem barju / An eneolithic pile dwelling in the Ljubljansko barje, 2004. (EUR 52.40)

9. Ivan Turk (ed.), Viktorjev spodmol in / and Mala Triglavca. Prispevki k poznavanju mezolitskega obdobja v Sloveniji / Contributions to understanding the Mesolithic period in Slovenia, 2004. (EUR 42.40)

10. Anton Velušček (ed.), Resnikov prekop. Najstarejša koliščarska naselbina na ljubljanskem barju / The oldest pile-dwelling settlement in the Ljubljansko barje, 2005. (EUR 40.00)

11. Andrej Gaspari (ed.), Zalog pri Verdu. Tabor kamenodobnih lovcev na zahodnem robu Ljubljanskega barja / Zalog near Verd. Stone Age hunters' camp at the western edge of the Ljubljansko barje, 2006. (EUR 43.00)

12. Janez Dular, Sneža Tecco Hvala, South-Eastern Slovenia in the Early Iron Age. Settlement – Economy – Society / Jugovzhodna Slovenija v starejši železni dobi. Poselitev – gospodarstvo – družba, 2007. (EUR 58.00)

13. Ivan Turk (ed.), Divje babe I. Paleolitsko najdišče mlajšega pleistocena v Sloveniji. I. del: Geologija in paleontologija / Divje babe I. Upper Pleistocene Palaeolithic site in Slovenia. Part I: Geology and Palaeontology, 2007. (EUR 82.00)

14. Andrej Pleterski (with Timotej Knific, Borut Toškan, Janez Dirjec, Benjamin Štular and Mateja Belak), Zgodnjesrednjeveška naselbina na blejski Pristavi. Najdbe / Frühmittelalterliche Siedlung Pristava in Bled. Funde, 2008. (EUR 51.00)

15. Benjamin Štular, Mali grad. Visokosrednjeveški grad v Kamniku / Mali grad. High Medieval Castle in Kamnik, 2008. (EUR 51.00)

16. Anton Velušček (ed.), Koliščarska naselbina Stare gmajne in njen čas. Ljubljansko barje v 2. polovici 4. tisočletja pr. Kr. / Stare gmajne pile-dwelling settlement and its era. The Ljubljansko barje in the 2nd half of the 4th millennium BC, 2009. (EUR 56.00)

17. Jana Horvat, Alma Bavdek, OKRA. Vrata med Sredozemljem in Srednjo Evropo / OCRA. The gateway between the Mediterranean and Central Europe (2009). (EUR 51.00)

18. Janez Dular, Marjana Tomanič Jevremov (with contributions by Borut Toškan and Janez Dirjec) ORMOŽ. Utrjeno naselje iz pozne bronaste in starejše železne dobe / ORMOŽ. Befestigte Siedlung aus der späten Bronze- und der älteren Eisenzeit (2010). (EUR 57.00)

19. Andrej Pleterski (with contributions by Igor Bahor, Vid Pleterski, Mark Žagar and Veronika Pflaum), Zgodnjesrednjeveška naselbina na blejski Pristavi. Tafonomija, predmeti in čas. / Frühmittelalterliche Siedlung Pristava in Bled. Taphonomie, Fundgegenstände und zeitliche Einordnung (2010). (EUR 39.00)

20. Jana Horvat and Andreja Dolenc Vičič (with the contribution of Marjana Tomanič Jevremov, Marija Lubšina Tušek), Arheološka najdišča Ptuja. Rabelčja vas / Archaeological Sites of Ptuj. Rabelčja vas (2010). (EUR 45.00)

21. Borut Toškan (ed.), DROBCI LEDENODOBNEGA OKOLJA. Zbornik ob življenjskem jubileju Ivana Turka / FRAGMENTS OF ICE AGE ENVIRONMENTS. Proceedings in Honour of Ivan Turk's Jubilee (2011). (EUR 45.00)

Anton Velušček (ed.)

HOČEVARICA - ENEOLITSKO KOLIŠČE NA LJUBLJANSKEM BARJU
HOČEVARICA - AN ENEOLITHIC PILE DWELLING IN THE LJUBLJANSKO BARJE

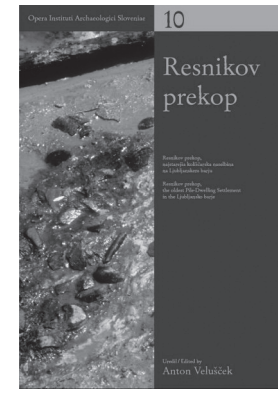
The monograph presents the entire course of archaeological and dendrochronological investigations of two piledwelling cycles at the Hočevarica site in the Ljubjansko barje, which occurred approximately in the 37th and the first half of the 36th century BC.

In addition to artefacts from Hočevarica (A. Velušček), the results from paleobotanical investigations (M. Jeraj), a classification of the material from a necklace ring (D. Skaberne and A. Mladenovič), analyses of metallurgic instruments (Ž. Šmit) as well as organic remains of mammals (B. Toškan and J. Dirjec), fish (M. Govedič, J. Pavšič and J. Dirjec) and birds (F. Janžekovič and V. Malez) are also presented.

2004, (Opera Instituti Archaeologici Sloveniae, 8), 328 str., 208 črno-belih in barvnih risb, fotografij in zemljevidov, 21 x 29,5 cm, trda vezava, ISBN 961-6500-28-7.

Price: EUR 52.40

Anton Velušček (ed.)



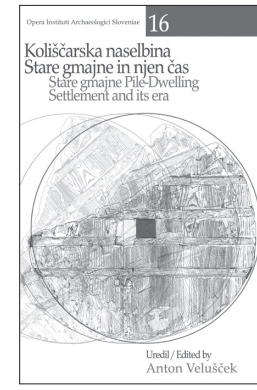
RESNIKOV PREKOP. Najstarejša koliščarska naselbina na Ljubljanskem barju
RESNIKOV PREKOP. The oldest pile-dwelling settlement in the Ljubljansko barje

In the monograph the results of the most recent research of the prehistoric pile-dwelling settlement Resnikov prekop near Ig on the southeastern part of the Ljubljansko barje are presented.

2006, (Opera Instituti Archaeologici Sloveniae, 10), 156 pp., 88 b/w drawings, photos, tables, graphs and maps, 21 x 29,5 cm, hardcover, ISBN 961-6568-40-X.

Price: EUR 40.00

Anton Velušček (ed.)



KOLIŠČARSKA NASELBINA STARE GMAJNE IN NJEN ČAS.
Ljubljansko barje v 2. polovici 4. tisočletja pr. Kr.
STARE GMAJNE PILE-DWELLING SETTLEMENT AND ITS ERA.
The Ljubljansko barje in the 2nd half of the 4th millennium BC

In the collected papers, entitled Stare gmajne pile-dwelling settlement and its era. The Ljubljansko barje in the 2nd half of the 4th millennium BC, a presentation is given of the results of multi-disciplinary research into the pile-dwelling settlements of Stare gmajne, Otavnik Ib and Blatna Brezovica.

Special chapters are devoted to sedimentological and dendrochronological research studies, to archaeological finds – prominent among which are the wooden wheel with the axle, and the remains of yarn – and also to analysis of the raw materials used for smoothing stone tools and querns.

The site Stare gmajne near Verd was populated twice, in the late 34th century BC for the first and in the second half of the 32nd century BC for the second time. Settlements were built on marshy ground, most probably on a lakeshore, which also applies to Blatna Brezovica, which dates to the beginning of the 31st century BC. We have also found out that the pile-dwelling settlement Veliki Otavnik Ib and the later settlement Stare gmajne were contemporary.

2009, (Opera Instituti Archaeologici Sloveniae, 16), 366 pages, 258 b-w drawings, photos, tables, graphs and maps, 45 plates, 3 appendices; 21 × 29,5 cm, hardcover, ISBN 978-961-254-155-2.

Price: EUR 56.00

Založba ZRC / ZRC Publishing
http://zalozba.zrc-sazu.si
ISSN 1408-5208

47 €